



## FCC PART 22H, PART 24E

## FCC PART 27

# MEASUREMENT AND TEST REPORT

For

## POSH Mobile Limited

1011A, 10/F., Harbour Centre Tower 1, No. 1 Hok Cheung St., Hung Hom, Kowloon, Hong Kong

**FCC ID: 2AG8KL600**

<b>Report Type:</b> Original Report	<b>Product Type:</b> Memo Pro LTE
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<b>Report Number:</b> <u>RDG160615001-00C</u>	
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**Note:** This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Dongguan).

## TABLE OF CONTENTS

<b>GENERAL INFORMATION.....</b>	<b>4</b>
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT) .....	.4
OBJECTIVE .....	.4
RELATED SUBMITTAL(S)/GRANT(S).....	.4
TEST METHODOLOGY .....	.4
TEST FACILITY .....	.5
<b>SYSTEM TEST CONFIGURATION.....</b>	<b>6</b>
JUSTIFICATION .....	.6
EQUIPMENT MODIFICATIONS .....	.6
SUPPORT EQUIPMENT LIST AND DETAILS .....	.6
CONFIGURATION OF TEST SETUP .....	.6
BLOCK DIAGRAM OF TEST SETUP .....	.7
<b>SUMMARY OF TEST RESULTS .....</b>	<b>8</b>
<b>FCC §1.1310 &amp; §2.1093- RF EXPOSURE .....</b>	<b>9</b>
APPLICABLE STANDARD .....	.9
TEST RESULT .....	.9
<b>FCC §2.1047 - MODULATION CHARACTERISTIC .....</b>	<b>10</b>
<b>FCC § 2.1046, § 22.913 (A) &amp; § 24.232 (C) &amp; § 27.50 - RF OUTPUT POWER.....</b>	<b>11</b>
APPLICABLE STANDARD .....	.11
TEST PROCEDURE .....	.11
TEST EQUIPMENT LIST AND DETAILS.....	.16
TEST DATA .....	.16
<b>FCC §2.1049, §22.917, §22.905 &amp; §24.238 &amp; §27.53- OCCUPIED BANDWIDTH.....</b>	<b>72</b>
APPLICABLE STANDARD .....	.72
TEST PROCEDURE .....	.72
TEST EQUIPMENT LIST AND DETAILS.....	.72
TEST DATA .....	.73
<b>FCC §2.1051, §22.917(A) &amp; §24.238(A) &amp; §27.53- SPURIOUS EMISSIONS AT ANTENNA TERMINALS.</b>	<b>104</b>
APPLICABLE STANDARD .....	.104
TEST PROCEDURE .....	.104
TEST EQUIPMENT LIST AND DETAILS.....	.104
TEST DATA .....	.105
<b>FCC §2.1053, §22.917 &amp; §24.238 &amp; §27.53- SPURIOUS RADIATED EMISSIONS.....</b>	<b>133</b>
APPLICABLE STANDARD .....	.133
TEST PROCEDURE .....	.133
TEST EQUIPMENT LIST AND DETAILS.....	.133
TEST DATA .....	.134
<b>FCC §22.917(A) &amp; §24.238(A) &amp; §27.53- BAND EDGES.....</b>	<b>138</b>
APPLICABLE STANDARD .....	.138
TEST PROCEDURE .....	.138
TEST EQUIPMENT LIST AND DETAILS.....	.139
TEST DATA .....	.139

FCC §2.1055, §22.355 & §24.235 & §27.54 - FREQUENCY STABILITY.....	197
APPLICABLE STANDARD .....	197
TEST PROCEDURE .....	197
TEST EQUIPMENT LIST AND DETAILS.....	198
TEST DATA .....	198

## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

The *POSH Mobile Limited*'s product, model number: *L600A*(FCC ID: 2AG8KL600) (the "EUT") in this report was a *Memo Pro LTE*, which was measured approximately: 161 mm (L) x 86 mm (W) x 80 mm (H), rated input voltage: DC 3.8V rechargeable Li-ion battery or DC5V from adapter.

Adapter information:

PART NO.: K-T100502000U

MODEL: AC 100~240V, 50-60Hz, 0.35A Max

INPUT: 100-240V ~ 50/60Hz 0.3A

OUTPUT: DC 5.0V, 2000mA

*Note: The series product, model L600, L600A, L600B, L600C are electrically identical, the difference between them just is the model name, we selected L600A for fully testing, the details was explained in the declaration letter.*

*All measurement and test data in this report was gathered from production sample serial number: 160615001 (Assigned by BACL, Dongguan). The EUT was received on 2016-06-17.*

### Objective

This report is prepared on behalf of *POSH Mobile Limited* in accordance with: Part 2-Subpart J, Part 22-Subpart H, Part 24-Subpart E and part 27 of the Federal Communications Commission's rules.

The objective is to determine compliance with FCC rules for output power, modulation characteristic, occupied bandwidth, spurious emissions at antenna terminal, spurious radiated emission, frequency stability and band edge.

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

FCC Part 15B JBP submissions with FCC ID: 2AG8KL600

FCC Part 15C DSS submissions with FCC ID: 2AG8KL600

FCC Part 15C DTS submissions with FCC ID: 2AG8KL600

### Test Methodology

All tests and measurements indicated in this document were performed in accordance with the Code of Federal Regulations Title 47 Part 2, Sub-part J as well as the following parts:

Part 22 Subpart H - Public Mobile Services

Part 24 Subpart E - Personal Communication Services

Part 27 – Miscellaneous wireless communications services

Applicable Standards: TIA/EIA 603-D-2010.

All radiated and conducted emissions measurements were performed at Bay Area Compliance Laboratories Corp.(Dongguan).

## Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.69 Pulongcun, Puxinhu Industrial Zone, Tangxia, Dongguan, Guangdong, China

Test site at Bay Area Compliance Laboratories Corp. (Dongguan) has been fully described in reports submitted to the Federal Communications Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on February 06, 2015.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 273710. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

## SYSTEM TEST CONFIGURATION

### Justification

The EUT was configured for testing according to TIA/EIA-603-D-2010.

The test items were performed with the EUT operating at testing mode.

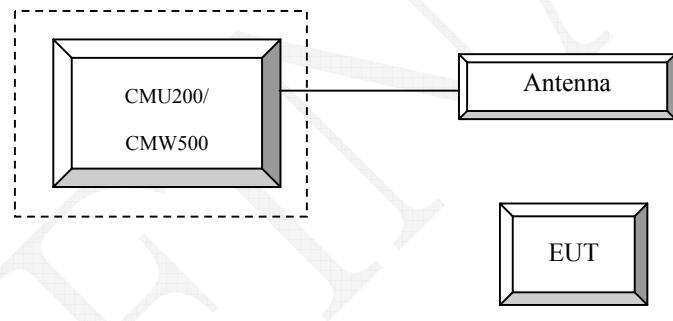
### Equipment Modifications

No modification was made to the EUT.

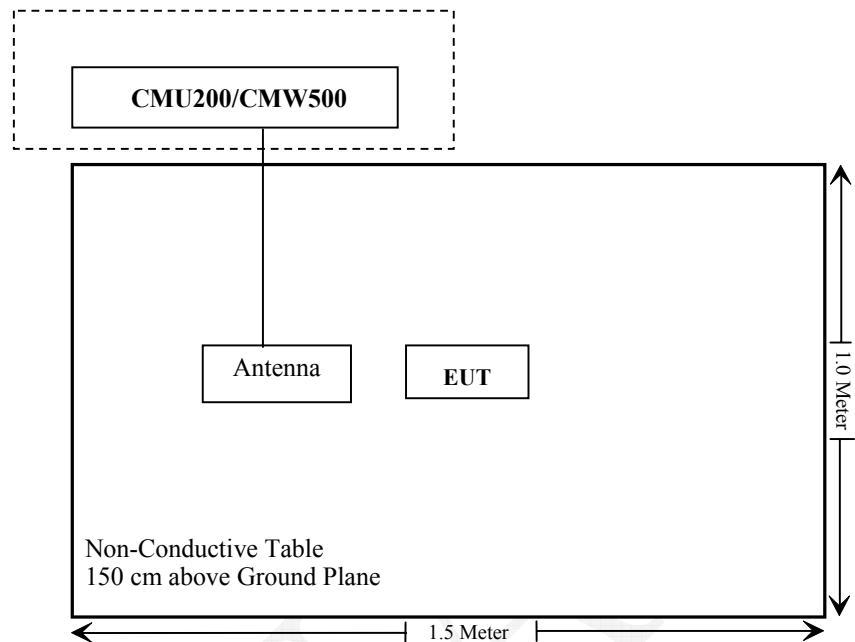
### Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
R&S	Universal Radio Communication Tester	CMU200	109038
R&S	Wideband Radio Communication Tester	CMW500	106891
N/A	ANTENNA	N/A	N/A

### Configuration of Test Setup



### Block Diagram of Test Setup



## SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1310, §2.1093	RF Exposure	Compliance
§2.1046; § 22.913 (a); § 24.232 (c); §27.50	RF Output Power	Compliance
§ 2.1047	Modulation Characteristics	Not Applicable
§ 2.1049; § 22.905 § 22.917; § 24.238; §27.53	Occupied Bandwidth	Compliance
§ 2.1051, § 22.917 (a); § 24.238 (a); §27.53	Spurious Emissions at Antenna Terminal	Compliance
§ 2.1053 § 22.917 (a); § 24.238 (a); §27.53	Spurious Radiation Emissions	Compliance
§ 22.917 (a); § 24.238 (a); §27.53	Out of band emission, Band Edge	Compliance
§ 2.1055 § 22.355; § 24.235; §27.54	Frequency stability vs. temperature Frequency stability vs. voltage	Compliance

## **FCC §1.1310 & §2.1093- RF EXPOSURE**

### **Applicable Standard**

FCC§1.1310 and §2.1093.

### **Test Result**

Compliant, please refer to the SAR report: RDG160615001-20.

## **FCC §2.1047 - MODULATION CHARACTERISTIC**

According to FCC § 2.1047(d), Part 22H & 24E, Part 27 there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

## FCC § 2.1046, § 22.913 (a) & § 24.232 (c) & § 27.50 - RF OUTPUT POWER

### Applicable Standard

According to FCC §2.1046 and §22.913 (a), the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

According to FCC §2.1046 and §24.232 (C), mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications..

According to FCC §2.1046 and §27.50 (d), (4) Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP. Fixed stations operating in the 1710-1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

According to §24.232 (d) Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of §24.51. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

### Test Procedure

#### GSM/GPRS/EGPRS

Function: Menu select > GSM Mobile Station > GSM 850/1900

Press Connection control to choose the different menus

Press RESET > choose all the reset all settings

Connection Press Signal Off to turn off the signal and change settings

Network Support > GSM + GPRS or GSM + EGSM

Main Service > Packet Data

Service selection > Test Mode A – Auto Slot Config. off

MS Signal Press Slot Config Bottom on the right twice to select and change the number of time slots and power setting

> Slot configuration > Uplink/Gamma

> 33 dBm for GPRS 850

> 30 dBm for GPRS 1900

> 27 dBm for EGPRS 850

> 26 dBm for EGPRS 1900

BS Signal Enter the same channel number for TCH channel (test channel) and BCCH channel

Frequency Offset > + 0 Hz

Mode > BCCH and TCH

BCCH Level > -85 dBm (May need to adjust if link is not stable)

BCCH Channel > choose desire test channel [Enter the same channel number for TCH channel (test channel) and BCCH channel]

Channel Type > Off

P0 >	4 dB
Slot Config >	Unchanged (if already set under MS signal)
TCH >	choose desired test channel
Hopping >	Off
Main Timeslot >	3
Network	Coding Scheme > CS4 (GPRS) and MCS5 (EGPRS)
Bit Stream >	2E9-1 PSR Bit Stream
AF/RF Connection	Enter appropriate offsets for Ext. Att. Output and Ext. Att. Input Press Signal on to turn on the signal and change settings

### WCDMA-Release 99

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification. The EUT has a nominal maximum output power of 24dBm (+1.7/-3.7).

<b>WCDMA General Settings</b>	Loopback Mode	Test Mode 1		
	Rel99 RMC	12.2kbps RMC		
	Power Control Algorithm	Algorithm2		
	$\beta_c / \beta_d$	8/15		

### WCDMA HSDPA

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification.

	Mode	HSDPA	HSDPA	HSDPA	HSDPA
	Subset	1	2	3	4
WCDMA General Settings	Loopback Mode	Test Mode 1			
	Rel99 RMC	12.2kbps RMC			
	HSDPA FRC	H-Set1			
	Power Control Algorithm	Algorithm2			
	$\beta_c$	2/15	12/15	15/15	15/15
	$\beta_d$	15/15	15/15	8/15	4/15
	$\beta_d$ (SF)	64			
	$\beta_c / \beta_d$	2/15	12/15	15/8	15/4
	$\beta_{hs}$	4/15	24/15	30/15	30/15
	MPR(dB)	0	0	0.5	0.5
HSDPA Specific Settings	DACK	8			
	DNAK	8			
	DCQI	8			
	Ack-Nack repetition factor	3			
	CQI Feedback	4ms			
	CQI Repetition Factor	2			
	$A_{hs} = \beta_{hs} / \beta_c$	30/15			

## WCDMA HSUPA

The following tests were conducted according to the test requirements outlined in section 5.2 of the 3GPP TS34.121-1 specification.

	<b>Mode</b>	<b>HSUPA</b>	<b>HSUPA</b>	<b>HSUPA</b>	<b>HSUPA</b>	<b>HSUPA</b>
	<b>Subset</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>WCDM A General Settings</b>	Loopback Mode	Test Mode 1				
	Rel99 RMC	12.2kbps RMC				
	HSDPA FRC	H-Set1				
	HSUPA Test	HSUPA Loopback				
	Power Control Algorithm	Algorithm2				
	$\beta_c$	11/15	6/15	15/15	2/15	15/15
	$\beta_d$	15/15	15/15	9/15	15/15	0
	$\beta_{ec}$	209/225	12/15	30/15	2/15	5/15
	$\beta_c / \beta_d$	11/15	6/15	15/9	2/15	-
<b>HSDPA Specific Settings</b>	$\beta_{hs}$	22/15	12/15	30/15	4/15	5/15
	CM(dB)	1.0	3.0	2.0	3.0	1.0
	MPR(dB)	0	2	1	2	0
	DACK				8	
	DNAK				8	
	DCQI				8	
<b>HSUPA Specific Settings</b>	Ack-Nack repetition factor				3	
	CQI Feedback				4ms	
	CQI Repetition Factor				2	
	$A_{hs} = \beta_{hs} / \beta_c$				30/15	
	DE-DPCCH	6	8	8	5	7
	DHARQ	0	0	0	0	0
	AG Index	20	12	15	17	21
	ETFCI	75	67	92	71	81
	Associated Max UL Data Rate kbps	242.1	174.9	482.8	205.8	308.9
	Reference E_FCI	E-TFCI 11 E E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO23 E-TFCI 75 E-TFCI PO26 E-TFCI 81 E-TFCI PO 27	E-TFCI 11 E-TFCI PO 4 E-TFCI 67 E-TFCI PO4 E-TFCI 71 E-TFCI 92 E-TFCI PO 18	E-TFCI 11 E E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO23 E-TFCI 75 E-TFCI PO26 E-TFCI 81 E-TFCI PO 27		

**HSPA+**

The following tests were conducted according to the test requirements in Table C.11.1.4 of 3GPP TS 34.121-1

<b>Sub-test</b>	$\beta_c$ (Note 3)	$\beta_d$	$\beta_{HS}$ (Note 1)	$\beta_{ec}$	$\beta_{ed}$ (2xSF2) (Note 4)	$\beta_{ed}$ (2xSF4) (Note 4)	<b>CM</b> (dB) (Note 2)	<b>MPR</b> (dB) (Note 2)	<b>AG Index</b> (Note 4)	<b>E-TFCI</b> (Note 5)	<b>E-TFCI</b> (boost)
1	1	0	30/15	30/15	$\beta_{ed1}: 30/15$ $\beta_{ed2}: 30/15$	$\beta_{ed3}: 24/15$ $\beta_{ed4}: 24/15$	3.5	2.5	14	105	105

Note 1:  $\Delta_{ACK}, \Delta_{NACK}$  and  $\Delta_{CQI} = 30/15$  with  $\beta_{hs} = 30/15 * \beta_c$ .

Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).

Note 3: DPDCH is not configured, therefore the  $\beta_c$  is set to 1 and  $\beta_d = 0$  by default.

Note 4:  $\beta_{ed}$  can not be set directly; it is set by Absolute Grant Value.

Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signalled to use the extrapolation algorithm.

**DC-HSDPA**

The following tests were conducted according to the test requirements in Table C.8.1.12 of 3GPP TS 34.121-1

**Table C.8.1.12: Fixed Reference Channel H-Set 12**

<b>Parameter</b>	<b>Unit</b>	<b>Value</b>
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Proces ses	6
Information Bit Payload ( $N_{INF}$ )	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK
Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.		
Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.		

**LTE:**

The following tests were conducted according to the test requirements in 3GPP TS36.101

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS36.101 specification.

UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

**Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3**

Modulation	Channel bandwidth / Transmission bandwidth (RB)						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

The allowed A-MPR values specified below in Table 6.2.4.-1 of 3GPP TS36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signalling Value of "NS\_01".

**Table 6.2.4-1: Additional Maximum Power Reduction (A-MPR)**

Network Signalling value	Requirements (sub-clause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks ( $N_{RB}$ )	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	1.4, 3, 5, 10, 15, 20	Table 5.6-1	NA
NS_03	6.6.2.2.1	2, 4, 10, 23, 25, 35, 36	3	>5	≤ 1
			5	>6	≤ 1
			10	>6	≤ 1
			15	>8	≤ 1
			20	>10	≤ 1
NS_04	6.6.2.2.2	41	5	>6	≤ 1
			10, 15, 20	See Table 6.2.4-4	
NS_05	6.6.3.3.1	1	10, 15, 20	≥ 50	≤ 1
NS_06	6.6.2.2.3	12, 13, 14, 17	1.4, 3, 5, 10	Table 5.6-1	n/a
NS_07	6.6.2.2.3 6.6.3.3.2	13	10	Table 6.2.4-2	Table 6.2.4-2
NS_08	6.6.3.3.3	19	10, 15	> 44	≤ 3
NS_09	6.6.3.3.4	21	10, 15	> 40	≤ 1
NS_10		20	15, 20	Table 6.2.4-3	Table 6.2.4-3
NS_11	6.6.2.2.1	23 <sup>1</sup>	1.4, 3, 5, 10	Table 6.2.4-5	Table 6.2.4-5
..					
NS_32	*	*	*	*	*

Note 1: Applies to the lower block of Band 23, i.e. a carrier placed in the 2000-2010 MHz region.

*Radiated method:*

ANSI/TIA 603-D section 2.2.17

## Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCI	100224	2015-08-03	2016-08-02
Sunol Sciences	Antenna	JB3	A060611-3	2014-11-06	2017-11-05
HP	Amplifier	8447E	2434A02181	2015-09-01	2016-09-01
R&S	Spectrum Analyzer	FSEM	831259/019	2015-07-28	2016-07-27
ETS LINDGREN	Horn Antenna	3115	000 527 35	2015-09-06	2018-09-06
Mini-Circuit	Amplifier	ZVA-213-S+	054201245	2016-02-19	2017-02-19
Giga	Signal Generator	1026	320408	2015-11-23	2016-11-22
EMCO	Adjustable Dipole Antenna	3121C	9109-753	N/A	N/A
TDK RF	Horn Antenna	HRN-0118	130 084	2015-09-06	2018-09-06
N/A	Coaxial Cable	14m	N/A	2016-05-06	2017-05-06
N/A	Coaxial Cable	8m	N/A	2016-05-06	2017-05-06
N/A	Coaxial Cable	0.1m	N/A	2016-05-06	2017-05-06
E-Microwave	DC Blocking	EMDCB-00036	0E01201047	2016-05-06	2017-05-06
E-Microwave	Attenuator	EMCA10-5RN	OE01203239	2016-05-08	2017-05-08
Pasternack	RF Coaxial Cable	RF-01	N/A	2016-05-06	2017-05-06
Pasternack	RF Coaxial Cable	RF-02	N/A	2016-05-06	2017-05-06
N/A	Two-way Splitter	ODP-1-6-2S	OE0120142	2016-05-06	2017-05-06

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

## Test Data

### Environmental Conditions

<b>Temperature:</b>	26.3 ~ 27.2 °C
<b>Relative Humidity:</b>	56 ~ 57%
<b>ATM Pressure:</b>	99.9 ~ 100 kPa

The testing was performed by Lion Xiao from 2016-06-13 to 2016-06-14.

**Conducted Power****Cellular Band (Part 22H) & PCS Band (Part 24E)**

Band	Channel No.	Peak Output Power (dBm)									
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot	
Cellular	128	32.80	32.61	31.25	30.08	28.73	26.41	25.29	24.23	24.06	
	190	32.75	32.64	31.33	30.13	28.95	26.67	25.53	24.48	23.23	
	251	32.83	32.71	31.43	30.21	29.07	26.24	25.08	23.95	22.80	
PCS	512	30.36	30.11	29.89	28.65	27.42	25.52	24.75	22.84	21.62	
	661	29.43	29.27	29.05	27.90	26.78	25.58	24.80	23.09	22.08	
	810	29.48	29.01	28.81	27.69	26.43	25.56	24.87	23.17	22.11	

**WCDMA Band II (Part 24E)**

Mode	3GPP Sub Test	Average Output Power (dBm)					
		Low Channel (Ave. Power)	Low Channel (PAR)	Middle Channel (Ave. Power)	Middle Channel (PAR)	High Channel (Ave. Power)	High Channel (PAR)
Rel 99 (QPSK)	1	22.59	2.32	22.57	2.60	22.62	2.56
HSDPA (QPSK)	1	21.53	2.30	21.46	2.63	21.59	2.50
	2	21.59	2.27	21.41	2.66	21.50	2.64
	3	21.55	2.29	21.49	2.52	21.55	2.53
	4	21.52	2.22	21.51	2.51	21.51	2.60
HSUPA (QPSK)	1	21.54	2.27	21.47	2.53	21.37	2.50
	2	21.48	2.20	21.50	2.64	21.32	2.65
	3	21.50	2.38	21.42	2.52	21.41	2.61
	4	21.41	2.34	21.48	2.70	21.45	2.53
	5	21.47	2.26	21.45	2.62	21.33	2.53
DC-HSDPA (QPSK)	1	21.43	2.39	21.33	2.72	21.29	2.61
	2	21.48	2.25	21.30	2.52	21.25	2.58
	3	21.40	2.27	21.39	2.75	21.20	2.47
	4	21.32	2.32	21.35	2.68	21.27	2.49
HSPA+ (16QAM)	1	21.37	2.26	21.21	2.72	21.15	2.45

**WCDMA Band IV(Part 27)**

Mode	3GPP Sub Test	Average Output Power (dBm)					
		Low Channel (Ave. Power)	Low Channel (PAR)	Middle Channel (Ave. Power)	Middle Channel (PAR)	High Channel (Ave. Power)	High Channel (PAR)
Rel 99 (QPSK)	1	23.37	2.20	23.24	2.20	23.39	2.40
HSDPA (QPSK)	1	22.42	2.14	22.21	2.26	22.35	2.46
	2	22.40	2.12	22.16	2.32	22.30	2.41
	3	22.32	2.09	22.20	2.11	22.37	2.33
	4	22.37	2.11	22.19	2.26	22.34	2.29
HSUPA (QPSK)	1	22.44	2.18	22.24	2.17	22.38	2.47
	2	22.39	2.30	22.18	2.31	22.30	2.30
	3	22.30	2.25	22.22	2.08	22.25	2.42
	4	22.35	2.23	22.15	2.20	22.31	2.39
DC-HSDPA (QPSK)	1	22.32	2.15	22.10	2.17	22.34	2.31
	2	22.25	2.17	22.03	2.25	22.28	2.44
	3	22.21	2.13	22.00	2.31	22.20	2.43
	4	22.28	2.17	22.07	2.17	22.26	2.38
	5	22.23	2.14	22.05	2.11	22.21	2.28
HSPA+ (16QAM)	1	22.16	2.30	21.98	2.27	22.17	2.31

**WCDMA Band V(Part 22H)**

Mode	3GPP Sub Test	Average Output Power (dBm)					
		Low Channel (Ave. Power)	Low Channel (PAR)	Middle Channel (Ave. Power)	Middle Channel (PAR)	High Channel (Ave. Power)	High Channel (PAR)
Rel 99 (QPSK)	1	22.30	3.08	22.50	2.96	22.56	3.08
HSDPA (QPSK)	1	21.19	2.97	21.35	2.93	21.41	2.96
	2	21.12	3.10	21.30	2.98	21.34	3.04
	3	21.17	3.01	21.34	2.90	21.30	3.13
	4	21.10	3.12	21.39	2.96	21.38	3.18
HSUPA (QPSK)	1	21.16	3.13	21.25	3.04	21.35	3.05
	2	21.13	2.96	21.20	2.91	21.31	3.02
	3	21.08	3.06	21.28	3.04	21.36	2.97
	4	21.01	2.98	21.24	2.85	21.30	3.12
DC-HSDPA (QPSK)	1	21.09	3.15	21.19	3.03	21.27	3.19
	2	20.92	3.00	21.16	3.07	21.19	3.17
	3	20.98	2.96	21.10	2.88	21.23	3.14
	4	20.93	3.16	21.17	2.90	21.16	3.09
	5	20.97	3.09	21.15	2.85	21.11	3.06
HSPA+ (16QAM)	1	20.81	3.14	21.09	2.95	21.05	3.12

**LTE Band II (PART 24)**

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4MHz	QPSK	1#0	22.41	22.24	22.22
		1#3	22.55	22.36	22.49
		1#5	22.37	22.36	22.48
		3#0	22.30	22.08	21.83
		3#1	22.30	22.11	21.80
		3#3	22.16	22.19	21.84
		6#0	21.34	21.06	21.08
	16QAM	1#0	22.51	22.00	22.04
		1#3	22.58	22.06	21.85
		1#5	22.41	22.05	21.99
		3#0	21.69	21.56	21.45
		3#1	21.71	21.51	21.67
		3#3	21.64	21.47	21.63
		6#0	21.02	20.52	20.85

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
3 MHz	QPSK	1#0	22.61	22.33	22.32
		1#7	22.55	22.26	22.15
		1#14	22.57	22.45	22.00
		8#0	21.89	21.99	21.88
		8#4	21.88	22.12	21.76
		8#7	21.89	21.85	21.74
		15#0	21.42	21.18	21.08
	16QAM	1#0	22.35	21.93	21.76
		1#7	22.42	21.86	21.63
		1#14	22.38	21.76	21.62
		8#0	21.74	21.47	21.20
		8#4	21.70	21.34	21.17
		8#7	21.69	21.41	21.40
		15#0	20.79	20.70	20.78
5 MHz	QPSK	1#0	22.66	22.29	22.11
		1#12	22.51	22.08	22.08
		1#24	22.33	20.21	22.05
		12#0	21.71	21.57	21.51
		12#6	21.80	21.49	21.51
		12#11	21.60	21.34	21.56
		25#0	21.41	21.09	20.73
	16QAM	1#0	21.75	21.61	21.71
		1#12	21.74	21.58	21.88
		1#24	21.70	21.67	21.70
		12#0	21.57	21.46	21.11
		12#6	21.47	21.41	21.13
		12#11	21.45	21.38	20.92
		25#0	20.80	20.65	20.56
10 MHz	QPSK	1#0	22.53	22.19	22.10
		1#24	22.64	22.16	22.14
		1#49	22.46	22.23	22.15
		25#0	21.81	21.46	21.61
		25#12	21.67	21.47	21.60
		25#24	21.67	21.49	21.48
		50#0	21.12	20.73	20.84
	16QAM	1#0	22.04	21.71	21.61
		1#24	22.16	21.57	21.69
		1#49	21.05	21.78	21.53
		25#0	21.31	21.27	20.84
		25#12	21.35	21.38	21.07
		25#24	21.36	21.31	21.01
		50#0	20.93	20.49	20.24

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
15 MHz	QPSK	1#0	22.46	22.23	22.24
		1#37	22.24	22.41	22.20
		1#74	22.36	22.30	22.41
		36#0	21.49	21.89	21.68
		36#17	21.64	21.73	21.80
		36#35	21.64	21.87	21.83
		75#0	21.17	20.89	20.62
	16QAM	1#0	21.96	21.64	21.67
		1#37	21.95	21.78	21.47
		1#74	21.95	21.61	21.46
		36#0	21.51	21.19	20.80
		36#17	21.55	21.03	20.85
		36#35	21.38	21.21	20.75
		75#0	20.75	20.40	19.95
20 MHz	QPSK	1#0	22.28	21.98	21.97
		1#49	22.30	22.03	21.96
		1#99	22.32	22.08	22.23
		50#0	21.80	21.78	21.33
		50#24	21.56	21.34	21.80
		50#49	21.71	21.52	21.78
		100#0	20.80	20.77	20.82
	16QAM	1#0	21.67	21.78	21.76
		1#49	21.61	21.61	21.72
		1#99	21.59	21.73	21.65
		50#0	21.16	21.22	21.02
		50#24	21.16	21.15	20.88
		50#49	21.09	21.06	20.99
		100#0	20.68	20.57	20.30

**LTE Band IV (PART 27)**

<b>Channel Bandwidth</b>	<b>Modulation</b>	<b>Resource Block &amp; RB offset</b>	<b>Low Channel (dBm)</b>	<b>Middle Channel (dBm)</b>	<b>High Channel (dBm)</b>
1.4MHz	QPSK	1#0	22.40	22.13	22.56
		1#3	22.23	21.99	22.48
		1#5	22.51	22.07	22.35
		3#0	21.87	21.46	21.89
		3#1	21.82	21.29	21.70
		3#3	21.74	21.36	21.71
		6#0	21.22	20.62	21.13
	16QAM	1#0	22.00	21.49	21.91
		1#3	21.89	21.66	21.96
		1#5	21.98	21.64	22.05
		3#0	21.41	21.06	21.29
		3#1	21.38	20.98	21.32
		3#3	21.47	20.95	21.35
		6#0	20.69	20.46	20.58
3 MHz	QPSK	1#0	22.20	21.81	22.28
		1#7	22.37	21.82	22.18
		1#14	22.30	21.76	22.36
		8#0	21.74	21.35	21.58
		8#4	21.80	21.30	21.49
		8#7	21.75	21.41	21.50
		15#0	21.05	20.60	21.12
	16QAM	1#0	21.79	21.42	21.76
		1#7	21.98	21.35	22.00
		1#14	21.85	21.46	21.99
		8#0	21.10	20.64	21.24
		8#4	21.11	20.76	21.28
		8#7	21.10	20.82	21.29
		15#0	19.48	20.32	20.53

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
5 MHz	QPSK	1#0	22.11	21.70	22.40
		1#12	22.10	21.70	22.29
		1#24	22.08	21.75	22.37
		12#0	21.39	21.33	21.65
		12#6	22.41	21.30	21.68
		12#11	21.37	21.29	21.49
		25#0	20.50	20.56	20.99
	16QAM	1#0	21.75	21.25	21.79
		1#12	21.78	21.29	21.58
		1#24	21.79	21.43	21.63
		12#0	21.16	20.72	21.06
		12#6	21.29	20.77	21.11
		12#11	21.21	20.67	21.09
		25#0	20.46	20.35	20.51
10 MHz	QPSK	1#0	21.88	21.47	21.96
		1#24	21.90	21.69	22.07
		1#49	21.83	21.48	22.04
		25#0	21.47	21.11	21.30
		25#12	21.39	21.08	21.26
		25#24	21.41	20.86	21.26
		50#0	20.66	20.46	20.80
	16QAM	1#0	21.73	21.22	21.57
		1#24	21.80	21.48	21.49
		1#49	21.73	21.38	21.55
		25#0	20.98	20.67	21.06
		25#12	20.97	20.79	21.09
		25#24	21.15	20.87	21.19
		50#0	20.34	20.20	20.44

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
15 MHz	QPSK	1#0	22.20	21.71	21.98
		1#37	21.98	21.46	21.88
		1#74	22.01	21.51	21.83
		36#0	21.46	21.16	21.33
		36#17	21.40	20.99	21.22
		36#35	21.50	21.02	21.36
		75#0	20.67	20.38	20.64
	16QAM	1#0	21.52	21.35	21.58
		1#37	21.42	21.36	21.57
		1#74	21.56	21.30	21.47
		36#0	20.98	20.93	20.92
		36#17	20.89	20.88	20.97
		36#35	20.75	21.00	21.09
		75#0	20.36	20.10	20.41
20 MHz	QPSK	1#0	22.20	22.10	22.08
		1#49	22.21	22.06	21.93
		1#99	22.07	22.26	22.08
		50#0	21.59	21.66	21.75
		50#24	21.73	21.61	21.34
		50#49	21.75	21.50	21.34
		100#0	21.17	20.65	20.93
	16QAM	1#0	21.57	21.37	21.50
		1#49	21.46	21.24	21.53
		1#99	21.45	21.31	21.54
		50#0	20.69	20.85	20.92
		50#24	20.64	20.68	20.83
		50#49	20.70	20.71	20.85
		100#0	20.19	20.27	20.38

**LTE Band V (PART 22)**

<b>Channel Bandwidth</b>	<b>Modulation</b>	<b>Resource Block &amp; RB offset</b>	<b>Low Channel (dBm)</b>	<b>Middle Channel (dBm)</b>	<b>High Channel (dBm)</b>
1.4MHz	QPSK	1#0	22.64	22.41	22.47
		1#3	22.50	22.29	22.61
		1#5	22.60	22.34	22.35
		3#0	22.26	22.17	22.20
		3#1	22.33	22.04	22.30
		3#3	22.27	22.17	22.05
		6#0	21.87	21.89	21.35
	16QAM	1#0	22.03	21.85	21.81
		1#3	21.87	22.00	21.73
		1#5	21.82	21.79	21.98
		3#0	21.44	21.55	21.51
		3#1	21.60	21.63	21.46
		3#3	21.71	21.82	21.51
		6#0	20.79	21.20	20.92
3 MHz	QPSK	1#0	22.62	22.88	22.52
		1#7	22.84	23.00	22.55
		1#14	22.84	22.74	22.69
		8#0	22.41	22.41	22.24
		8#4	22.30	22.33	22.25
		8#7	22.32	22.56	22.18
		15#0	21.98	22.01	21.82
	16QAM	1#0	21.94	22.25	21.86
		1#7	21.96	22.18	21.90
		1#14	21.98	22.06	21.75
		8#0	21.65	21.64	21.24
		8#4	21.50	21.78	21.35
		8#7	21.56	21.82	21.31
		15#0	21.02	21.26	21.07

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
5 MHz	QPSK	1#0	22.86	22.85	22.75
		1#12	22.97	22.68	22.73
		1#24	22.79	22.85	22.89
		12#0	22.37	22.62	22.49
		12#6	22.29	22.54	22.25
		12#11	22.34	22.69	22.41
		25#0	21.78	21.69	21.48
	16QAM	1#0	22.15	22.24	21.79
		1#12	21.86	22.12	21.73
		1#24	22.07	22.14	21.73
		12#0	21.51	21.90	21.41
		12#6	21.54	21.83	21.34
		12#11	21.52	21.81	21.34
		25#0	21.05	21.14	20.88
10 MHz	QPSK	1#0	22.59	22.97	22.69
		1#24	22.70	22.91	22.67
		1#49	22.69	22.83	22.64
		25#0	22.33	22.55	22.18
		25#12	22.38	22.57	21.97
		25#24	22.22	22.57	21.98
		50#0	21.58	21.95	21.47
	16QAM	1#0	22.18	22.35	21.77
		1#24	22.23	22.38	21.81
		1#49	22.16	22.30	21.80
		25#0	21.63	21.97	21.47
		25#12	21.58	22.01	21.56
		25#24	21.79	21.83	21.33
		50#0	20.75	21.08	20.79

**LTE Band VII (PART 27)**

<b>Channel Bandwidth</b>	<b>Modulation</b>	<b>Resource Block &amp; RB offset</b>	<b>Low Channel (dBm)</b>	<b>Middle Channel (dBm)</b>	<b>High Channel (dBm)</b>
5 MHz	QPSK	1#0	22.58	22.44	22.15
		1#12	22.53	22.56	22.12
		1#24	22.45	22.50	22.12
		12#0	21.75	21.76	21.47
		12#6	21.74	21.81	21.44
		12#11	19.73	21.77	21.55
		25#0	20.94	21.44	21.20
	16QAM	1#0	21.63	21.84	21.90
		1#12	21.60	21.89	21.73
		1#24	21.74	21.96	21.76
		12#0	21.15	21.45	20.97
		12#6	21.04	21.35	20.86
		12#11	21.17	21.33	21.04
		25#0	20.63	20.82	20.38
10 MHz	QPSK	1#0	22.60	22.50	22.20
		1#24	22.64	22.55	22.21
		1#49	2.57	22.55	22.24
		25#0	21.56	21.84	21.43
		25#12	21.55	21.67	21.48
		25#24	21.74	21.74	21.49
		50#0	21.07	21.47	21.07
	16QAM	1#0	21.52	21.89	21.88
		1#24	21.54	22.03	21.77
		1#49	21.54	22.02	21.89
		25#0	21.03	21.22	20.72
		25#12	20.92	21.20	20.89
		25#24	21.04	21.36	20.88
		50#0	20.46	20.51	20.41

Channel Bandwidth	Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
15 MHz	QPSK	1#0	22.44	22.53	22.00
		1#37	22.54	22.62	22.11
		1#74	22.50	22.47	22.16
		36#0	21.80	21.76	21.49
		36#17	21.91	21.74	21.63
		36#35	22.04	21.87	21.52
		75#0	21.08	21.15	21.00
	16QAM	1#0	21.71	21.89	21.58
		1#37	21.81	21.92	21.56
		1#74	21.81	21.93	21.55
		36#0	21.11	21.15	20.73
		36#17	21.04	21.17	20.88
		36#35	20.95	21.35	20.74
		75#0	20.58	20.50	20.18
20 MHz	QPSK	1#0	22.58	22.45	22.18
		1#49	22.57	22.68	22.05
		1#99	22.44	22.48	22.30
		50#0	21.88	21.93	21.69
		50#24	21.77	21.94	21.55
		50#49	21.86	21.90	21.54
		100#0	21.13	21.23	21.09
	16QAM	1#0	21.91	21.82	21.57
		1#49	21.83	21.93	21.54
		1#99	21.74	21.83	21.61
		50#0	20.89	21.24	21.02
		50#24	20.71	21.19	21.03
		50#49	20.87	21.15	20.92
		100#0	20.48	20.41	20.34

**LTE Band 17 (PART 27)**

<b>Channel Bandwidth</b>	<b>Modulation</b>	<b>Resource Block &amp; RB offset</b>	<b>Low Channel (dBm)</b>	<b>Middle Channel (dBm)</b>	<b>High Channel (dBm)</b>
5 MHz	QPSK	1#0	22.51	22.48	22.55
		1#12	22.56	22.53	22.59
		1#24	22.57	22.54	22.51
		12#0	22.01	21.91	21.88
		12#6	21.95	21.79	21.94
		12#11	22.03	21.86	21.88
		25#0	21.73	21.43	21.53
	16QAM	1#0	21.71	21.65	21.97
		1#12	21.60	21.58	21.84
		1#24	21.82	21.69	21.80
		12#0	20.93	21.17	21.37
		12#6	21.07	21.34	21.26
		12#11	21.15	21.18	21.32
		25#0	20.40	20.57	20.72
10 MHz	QPSK	1#0	22.41	22.38	22.31
		1#24	22.33	22.39	22.36
		1#49	22.40	22.36	22.34
		25#0	21.84	21.80	21.81
		25#12	21.82	21.79	21.96
		25#24	21.87	21.80	21.96
		50#0	20.49	21.22	21.36
	16QAM	1#0	21.85	21.57	21.90
		1#24	21.55	21.66	21.95
		1#49	21.45	21.71	21.90
		25#0	21.17	21.11	21.42
		25#12	21.15	21.03	21.42
		25#24	21.00	21.01	21.24
		50#0	20.47	20.57	20.72

**Band II**

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1 RB	20 MHz	3.00	3.96	3.84	13
	100 RB		6.36	6.36	6.28	13
16QAM	1 RB	20 MHz	4.00	4.32	4.60	13
	100 RB		7.00	7.16	7.04	13

**Band IV**

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1 RB	20 MHz	2.80	3.44	3.24	13
	100 RB		6.36	6.36	6.24	13
16QAM	1 RB	20 MHz	3.08	3.28	3.64	13
	100 RB		6.84	6.92	6.88	13

**Band V**

Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1 RB	10 MHz	5.00	4.20	4.72	13
	50 RB		5.88	5.48	5.60	13
16QAM	1 RB	10 MHz	5.92	5.04	5.60	13
	50 RB		6.84	6.36	6.52	13

**Band VII**

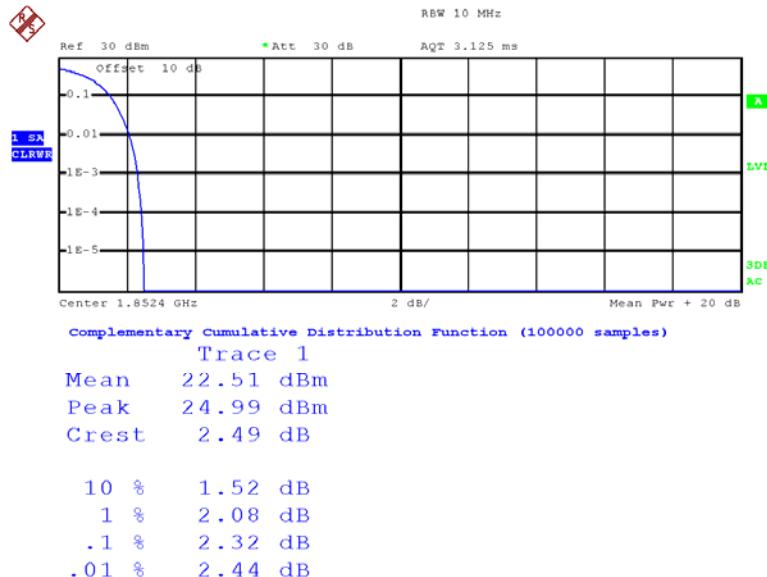
Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1 RB	20 MHz	2.72	2.88	3.00	13
	100 RB		6.36	6.36	6.40	13
16QAM	1 RB	20 MHz	3.36	3.44	3.88	13
	100 RB		6.96	7.00	7.08	13

**Band 17**

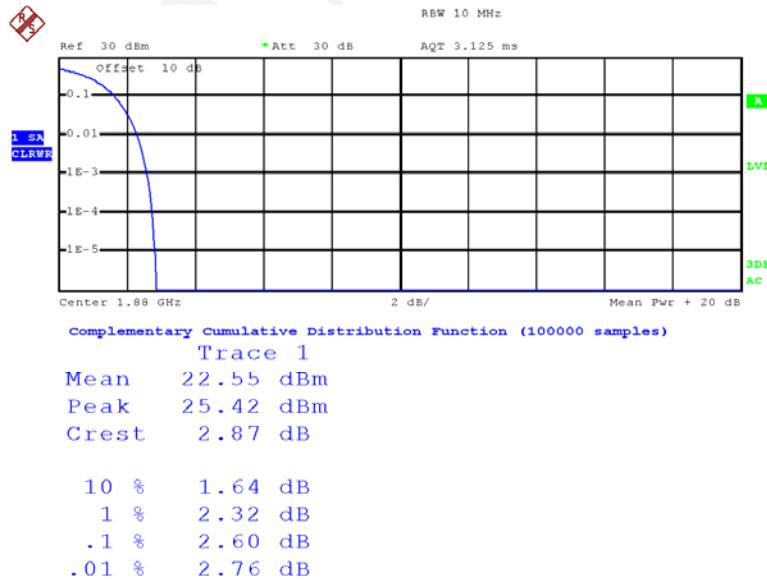
Test Modulation		Channel Bandwidth	Low Channel PAR (dB)	Middle Channel PAR (dB)	High Channel PAR (dB)	Limit (dB)
QPSK	1 RB	10 MHz	3.96	3.72	3.56	13
	100 RB		5.08	5.12	5.08	13
16QAM	1 RB	10 MHz	4.96	4.64	4.36	13
	100 RB		6.00	6.08	5.96	13

Note: peak-to-average ratio (PAR) <13 dB.

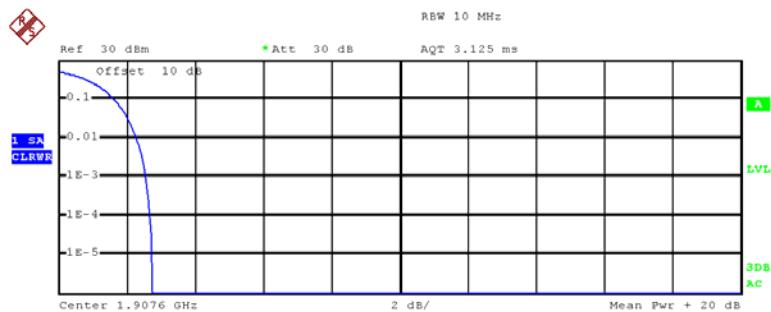
Peak-to-average ratio (PAR)

**WCDMA Band II****Low Channel**

Date: 13.JUN.2016 22:29:26

**Middle Channel**

Date: 13.JUN.2016 22:29:13

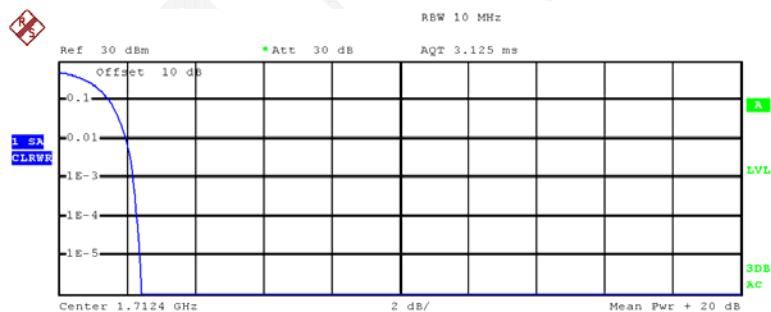
**High Channel**

complementary Cumulative Distribution Function (100000 samples)

Trace 1  
Mean 21.54 dBm  
Peak 24.29 dBm  
Crest 2.75 dB

10 %	1.64 dB
1 %	2.28 dB
.1 %	2.56 dB
.01 %	2.68 dB

Date: 13.JUN.2016 22:29:36

**WCDMA Band IV****Low Channel**

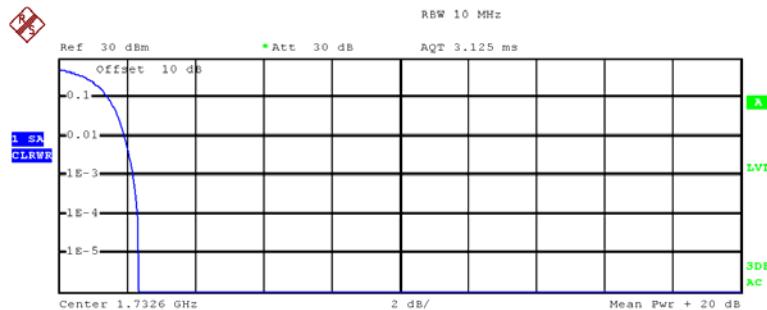
complementary Cumulative Distribution Function (100000 samples)

Trace 1  
Mean 23.50 dBm  
Peak 25.91 dBm  
Crest 2.41 dB

10 %	1.48 dB
1 %	2.00 dB
.1 %	2.20 dB
.01 %	2.32 dB

Date: 13.JUN.2016 22:28:45

### Middle Channel



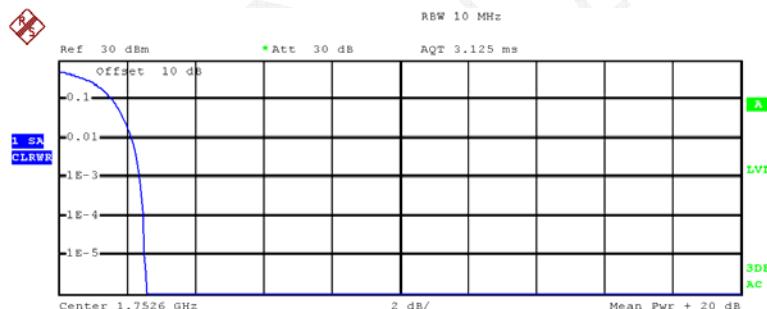
complementary Cumulative Distribution Function (100000 samples)

Trace 1  
Mean 23.21 dBm  
Peak 25.56 dBm  
Crest 2.35 dB

10 % 1.48 dB  
1 % 1.96 dB  
.1 % 2.20 dB  
.01 % 2.32 dB

Date: 13.JUN.2016 22:28:29

### High Channel

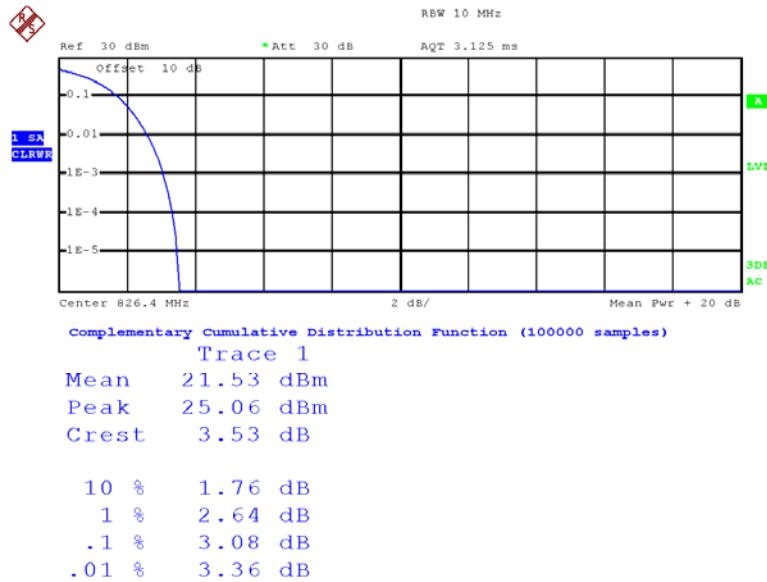


complementary Cumulative Distribution Function (100000 samples)

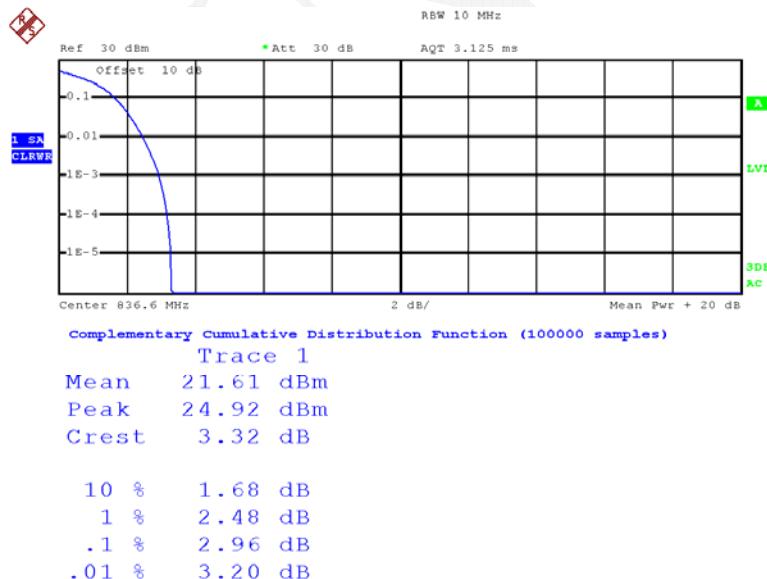
Trace 1  
Mean 23.33 dBm  
Peak 25.91 dBm  
Crest 2.59 dB

10 % 1.60 dB  
1 % 2.16 dB  
.1 % 2.40 dB  
.01 % 2.48 dB

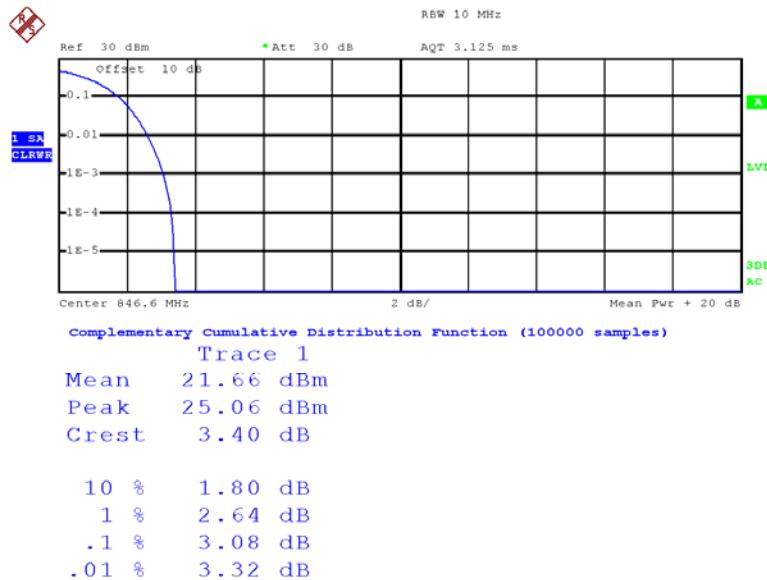
Date: 13.JUN.2016 22:28:55

**WCDMA Band V****Low Channel**

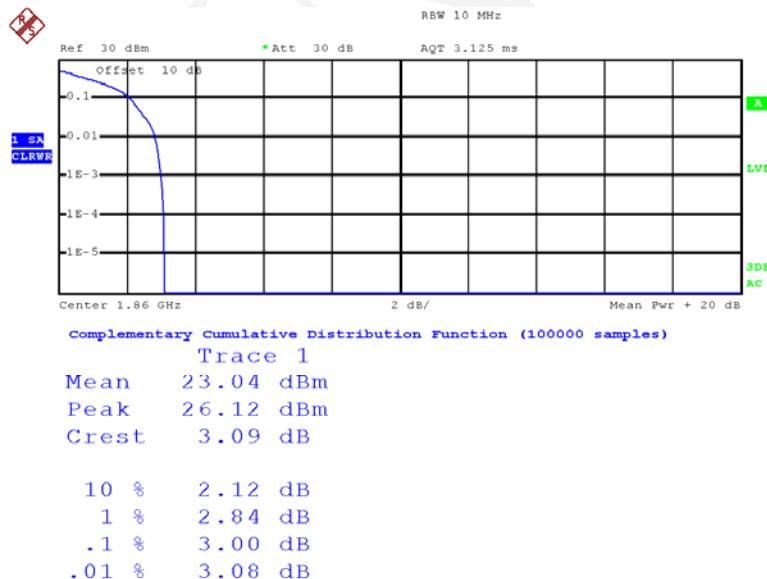
Date: 13.JUN.2016 22:27:38

**Middle Channel**

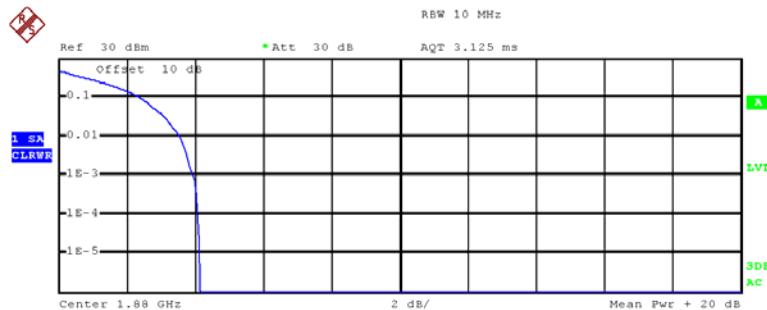
Date: 13.JUN.2016 22:27:11

**High Channel**

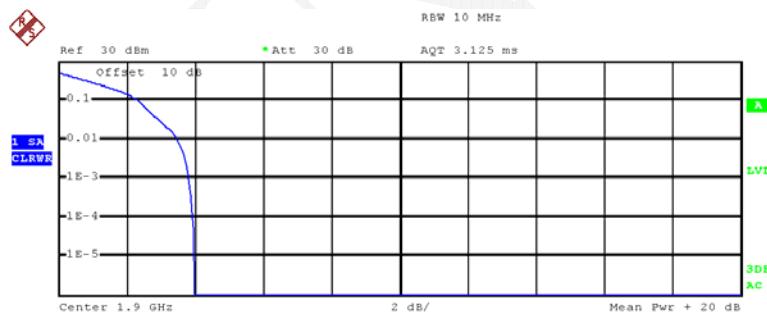
Date: 13.JUN.2016 22:27:56

**LTE Band II****QPSK\_20MHz\_1RB\_Low Channel**

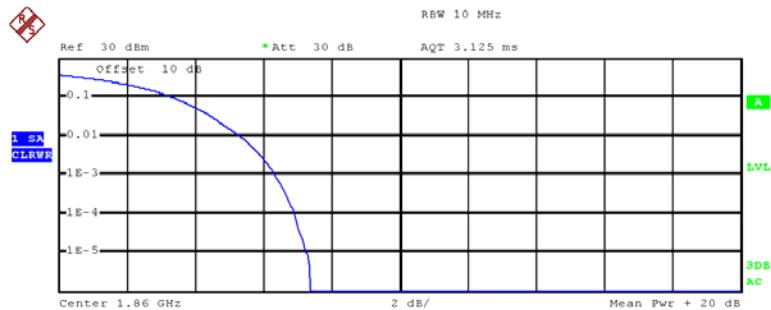
Date: 14.JUN.2016 22:02:08

**QPSK\_20MHz\_1RB Middle Channel**

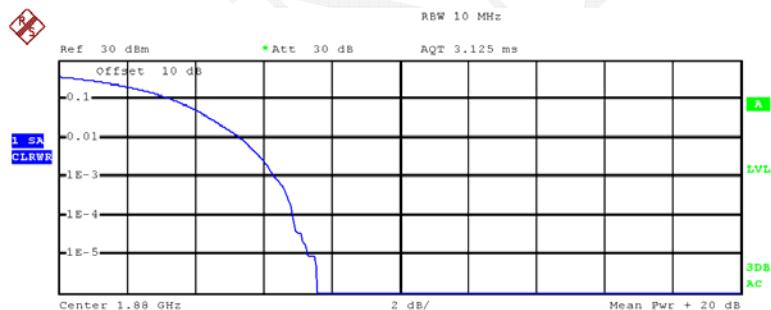
Date: 14.JUN.2016 22:00:38

**QPSK\_20MHz\_1RB High Channel**

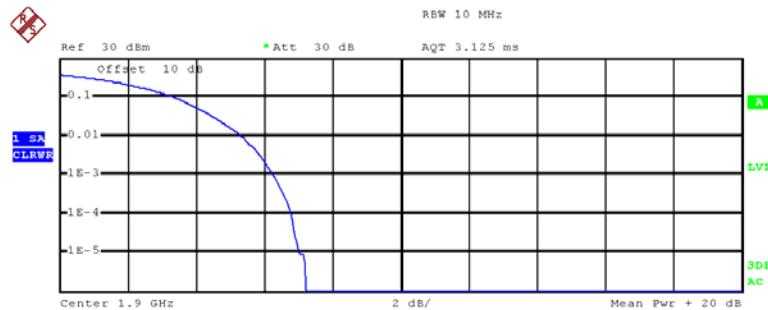
Date: 14.JUN.2016 22:04:56

**QPSK\_20MHz\_FULL RB Low Channel**

Date: 14.JUN.2016 22:02:23

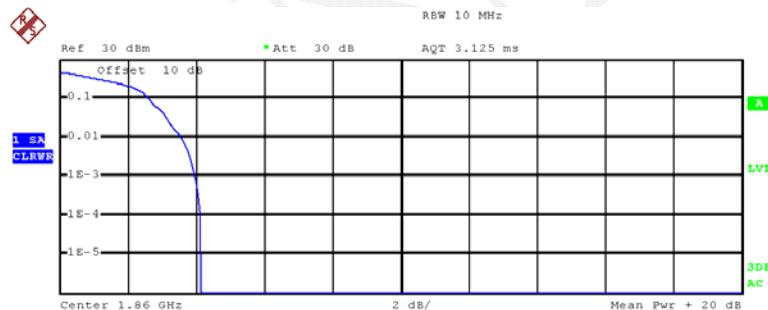
**QPSK\_20MHz\_FULL RB Middle Channel**

Date: 14.JUN.2016 22:00:12

**QPSK 20MHz\_FULL RB High Channel**

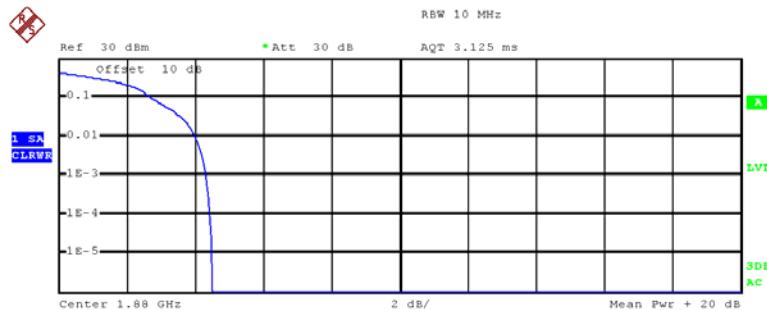
complementary Cumulative Distribution Function (100000 samples)  
Trace 1  
Mean 19.53 dBm  
Peak 26.76 dBm  
Crest 7.23 dB  
  
10 % 3.44 dB  
1 % 5.36 dB  
.1 % 6.28 dB  
.01 % 6.80 dB

Date: 14.JUN.2016 22:04:42

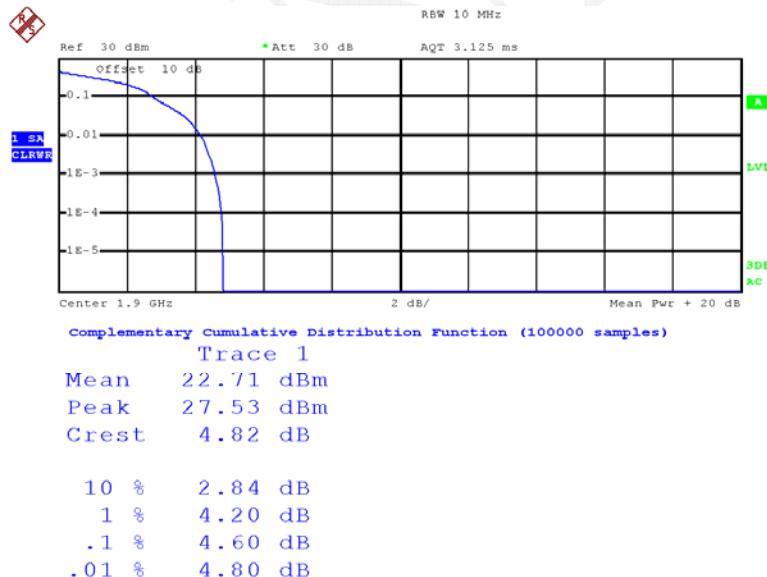
**16QAM\_20MHz\_1RB\_Low Channel**

complementary Cumulative Distribution Function (100000 samples)  
Trace 1  
Mean 22.12 dBm  
Peak 26.26 dBm  
Crest 4.15 dB  
  
10 % 2.64 dB  
1 % 3.60 dB  
.1 % 4.00 dB  
.01 % 4.12 dB

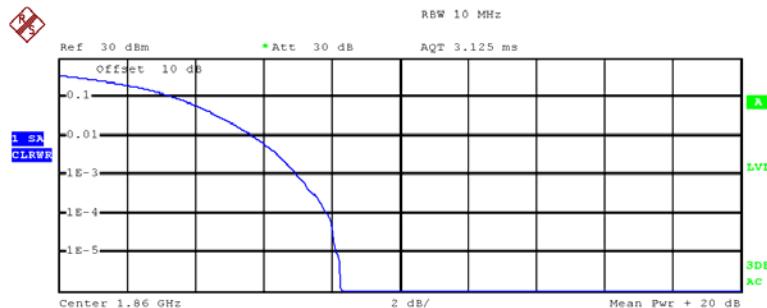
Date: 14.JUN.2016 22:01:58

**16QAM 20MHz\_1RB Middle Channel**

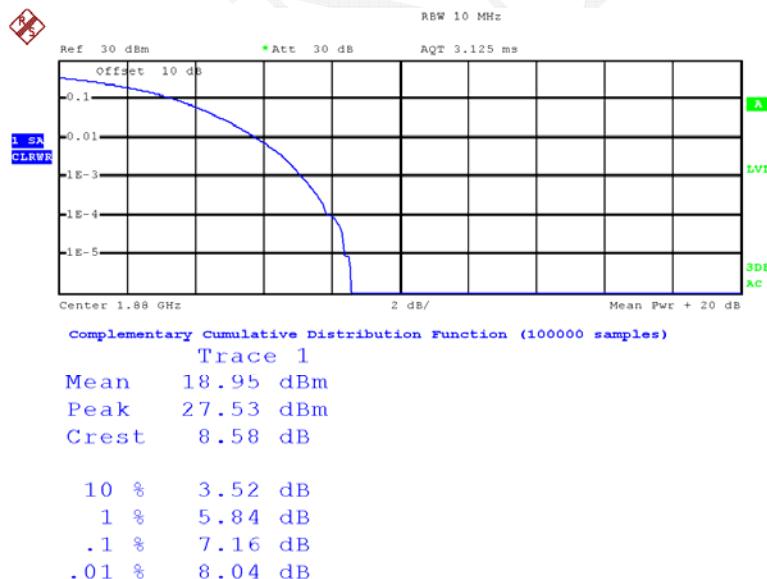
Date: 14.JUN.2016 22:00:44

**16QAM 20MHz\_1RB High Channel**

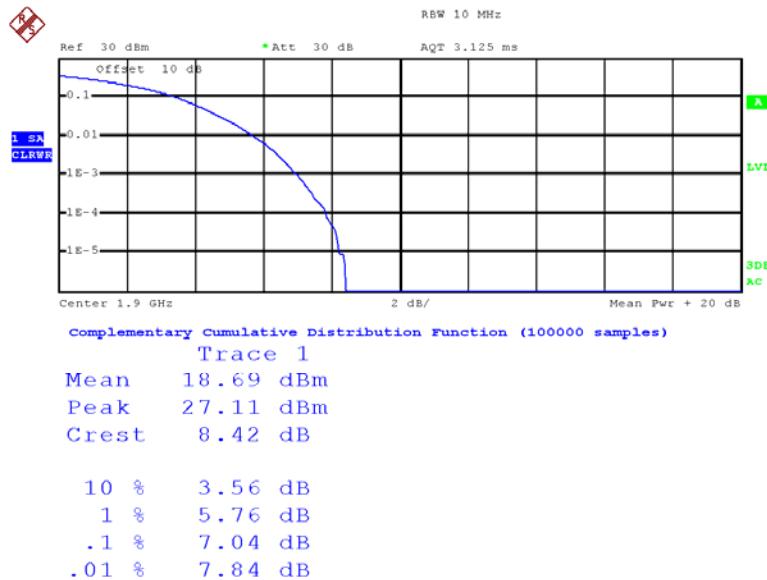
Date: 14.JUN.2016 22:05:01

**16QAM 20MHz\_FULL RB Low Channel**

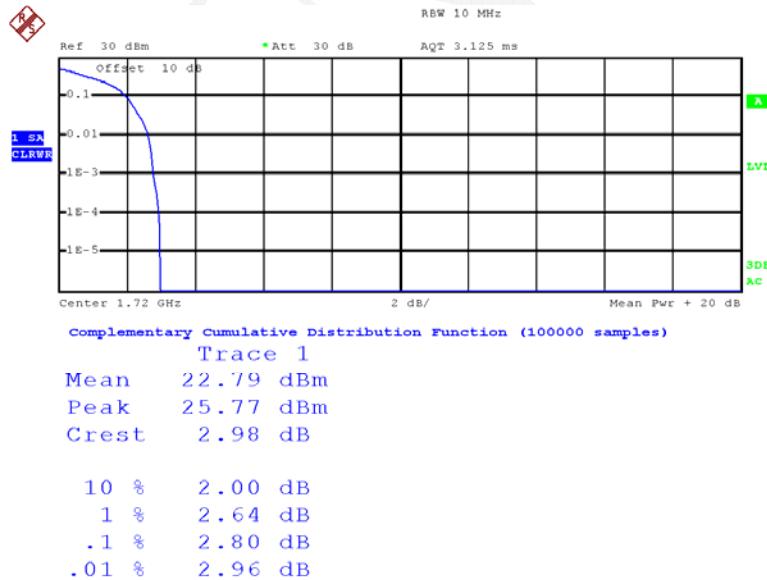
Date: 14.JUN.2016 22:02:30

**16QAM 20MHz\_FULL RB Middle Channel**

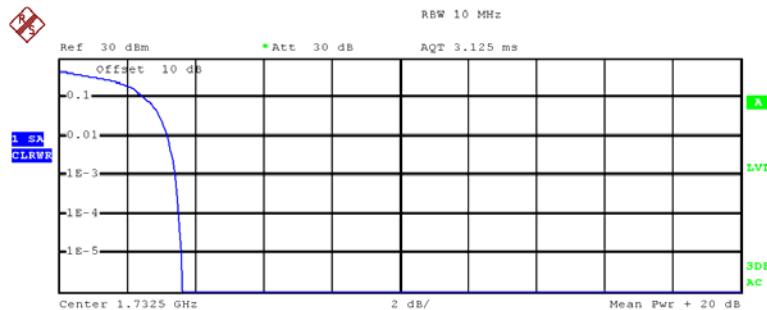
Date: 14.JUN.2016 21:59:53

**16QAM 20MHz\_FULL RB High Channel**

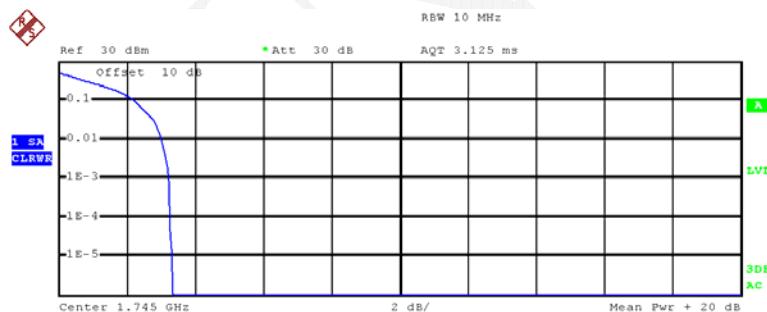
Date: 14.JUN.2016 22:04:35

**LTE Band IV****QPSK\_20MHz\_1RB\_Low Channel**

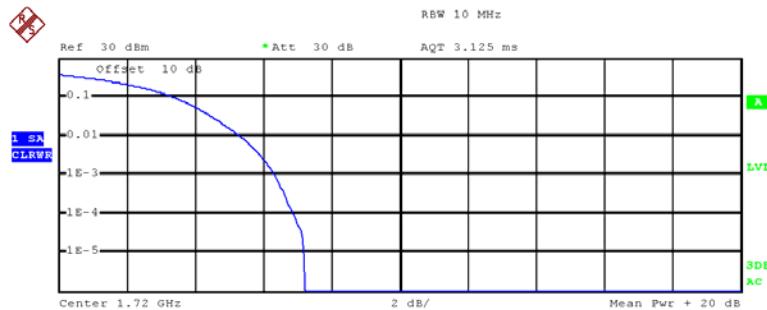
Date: 14.JUN.2016 21:55:47

**QPSK\_20MHz\_1RB Middle Channel**

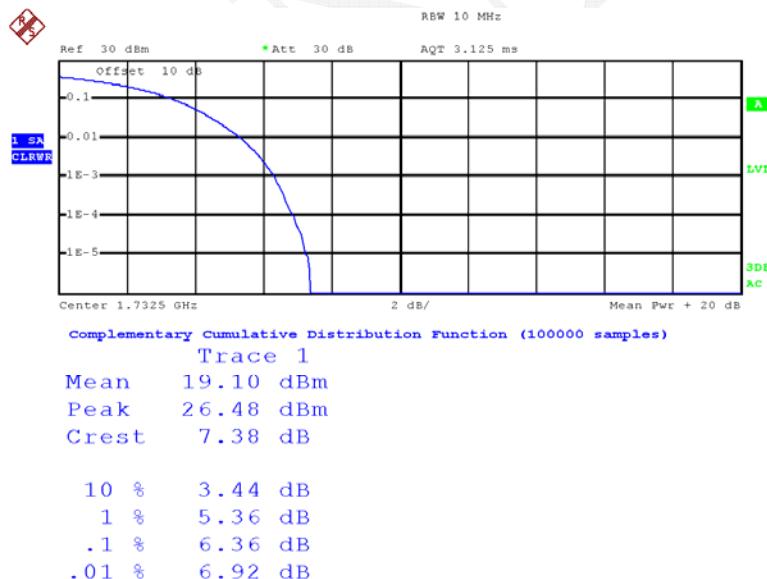
Date: 14.JUN.2016 21:53:06

**QPSK\_20MHz\_1RB High Channel**

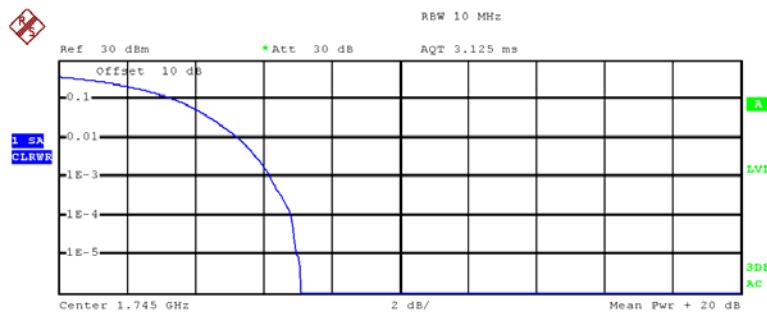
Date: 14.JUN.2016 21:58:04

**QPSK\_20MHz\_FULL RB Low Channel**

Date: 14.JUN.2016 21:55:35

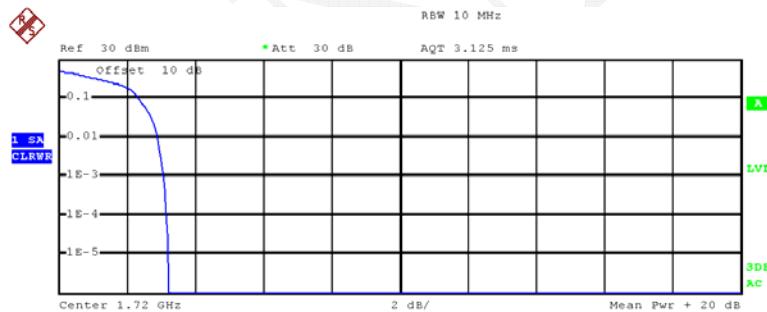
**QPSK\_20MHz\_FULL RB Middle Channel**

Date: 14.JUN.2016 21:53:53

**QPSK 20MHz\_FULL RB High Channel**

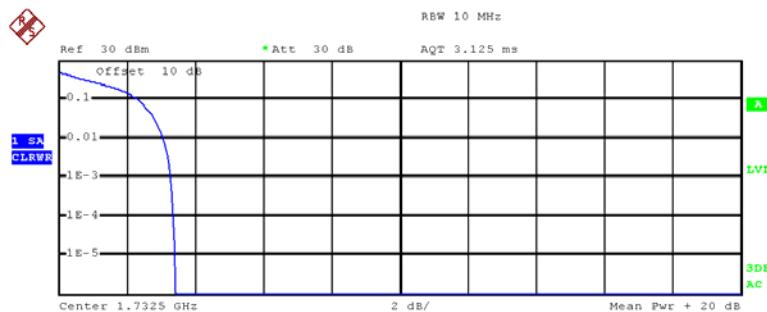
complementary Cumulative Distribution Function (100000 samples)  
Trace 1  
Mean 18.59 dBm  
Peak 25.70 dBm  
Crest 7.10 dB  
  
10 % 3.48 dB  
1 % 5.28 dB  
.1 % 6.24 dB  
.01 % 6.84 dB

Date: 14.JUN.2016 21:58:13

**16QAM\_20MHz\_1RB\_Low Channel**

complementary Cumulative Distribution Function (100000 samples)  
Trace 1  
Mean 22.61 dBm  
Peak 25.84 dBm  
Crest 3.23 dB  
  
10 % 2.36 dB  
1 % 2.92 dB  
.1 % 3.08 dB  
.01 % 3.16 dB

Date: 14.JUN.2016 21:55:54

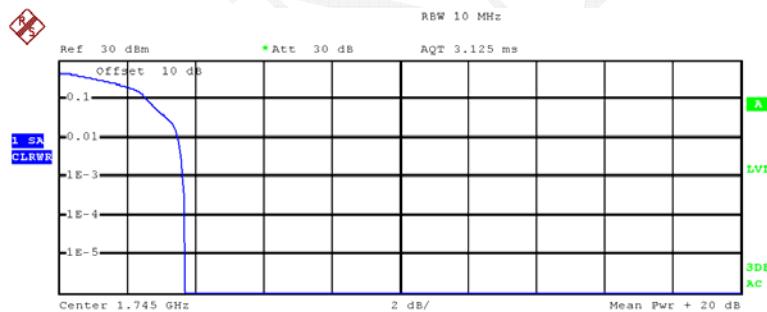
**16QAM 20MHz\_1RB Middle Channel**

complementary Cumulative Distribution Function (100000 samples)

Trace 1  
Mean 22.22 dBm  
Peak 25.63 dBm  
Crest 3.40 dB

10 %	2.36 dB
1 %	3.08 dB
.1 %	3.28 dB
.01 %	3.36 dB

Date: 14.JUN.2016 21:53:43

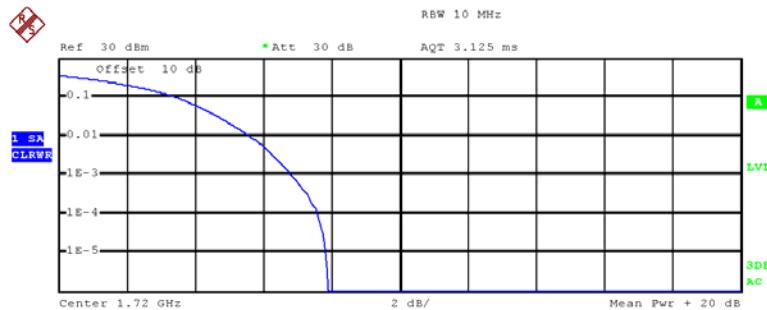
**16QAM 20MHz\_1RB High Channel**

complementary Cumulative Distribution Function (100000 samples)

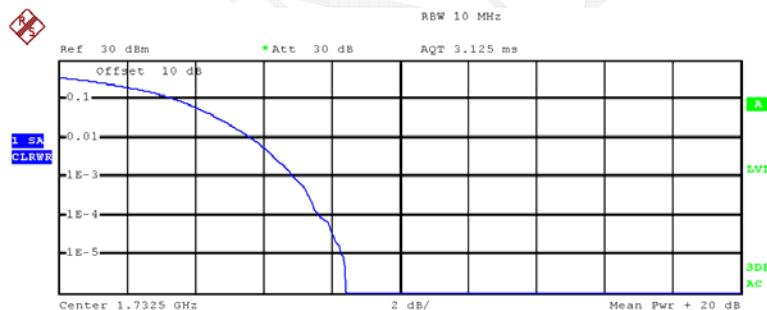
Trace 1  
Mean 21.44 dBm  
Peak 25.13 dBm  
Crest 3.70 dB

10 %	2.60 dB
1 %	3.52 dB
.1 %	3.64 dB
.01 %	3.72 dB

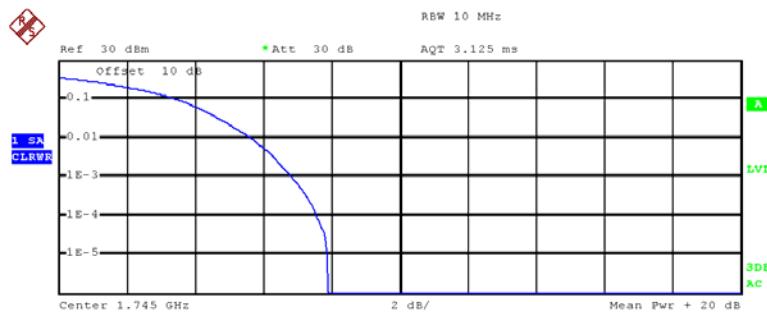
Date: 14.JUN.2016 21:57:55

**16QAM 20MHz\_FULL RB Low Channel**

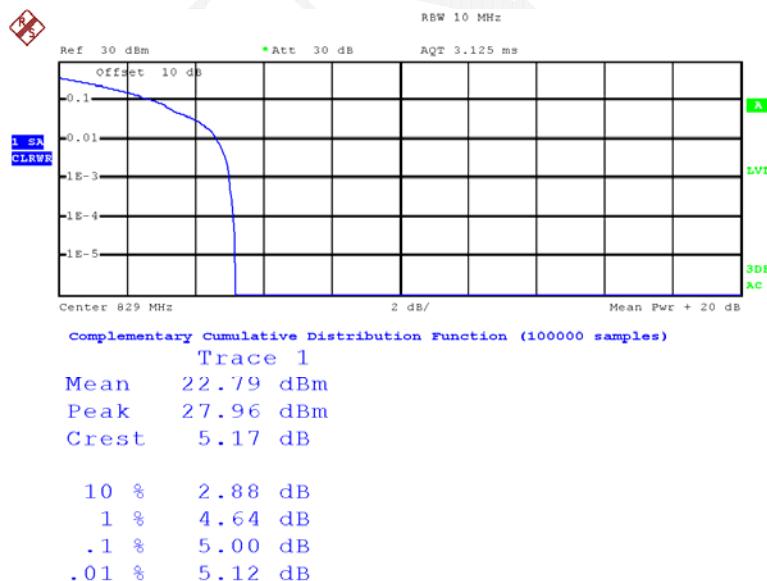
Date: 14.JUN.2016 21:55:28

**16QAM 20MHz\_FULL RB Middle Channel**

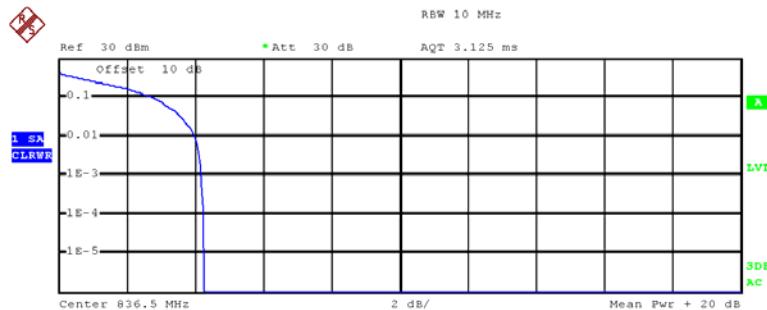
Date: 14.JUN.2016 21:54:01

**16QAM 20MHz\_FULL RB High Channel**

Date: 14.JUN.2016 21:58:20

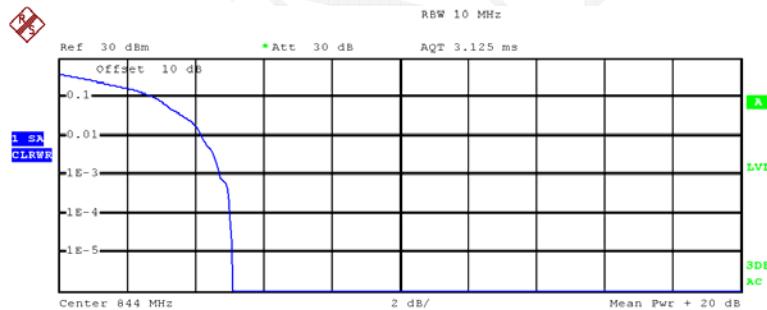
**LTE Band V****QPSK\_10MHz\_1RB\_Low Channel**

Date: 14.JUN.2016 00:46:20

**QPSK\_10MHz\_1RB Middle Channel**

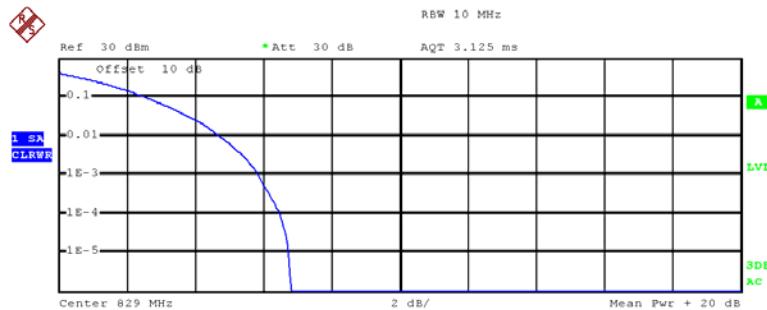
10 % 2.84 dB  
1 % 4.00 dB  
.1 % 4.20 dB  
.01 % 4.24 dB

Date: 14.JUN.2016 00:42:28

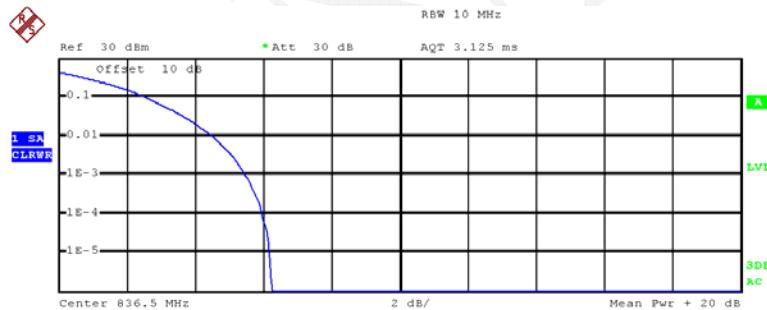
**QPSK\_10MHz\_1RB High Channel**

10 % 2.84 dB  
1 % 4.20 dB  
.1 % 4.72 dB  
.01 % 5.04 dB

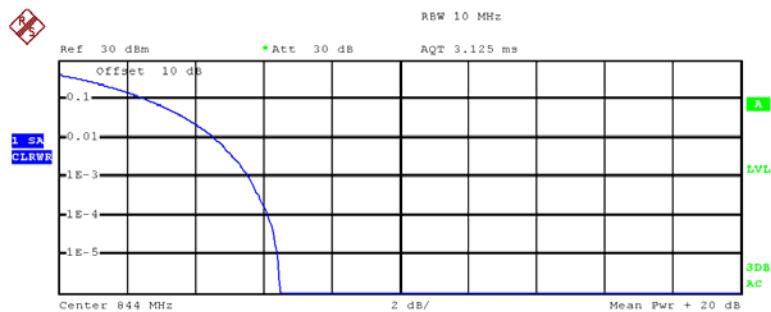
Date: 14.JUN.2016 00:44:37

**QPSK\_10MHz\_FULL RB Low Channel**

Date: 14.JUN.2016 00:46:29

**QPSK\_10MHz\_FULL RB Middle Channel**

Date: 14.JUN.2016 00:42:40

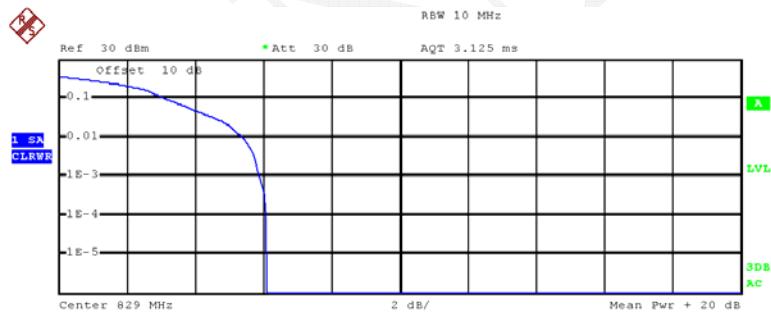
**QPSK 10MHz\_FULL RB High Channel**

complementary Cumulative Distribution Function (100000 samples)

Trace 1  
Mean 21.26 dBm  
Peak 27.75 dBm  
Crest 6.48 dB

10 %	2.64 dB
1 %	4.60 dB
.1 %	5.60 dB
.01 %	6.16 dB

Date: 14.JUN.2016 00:44:27

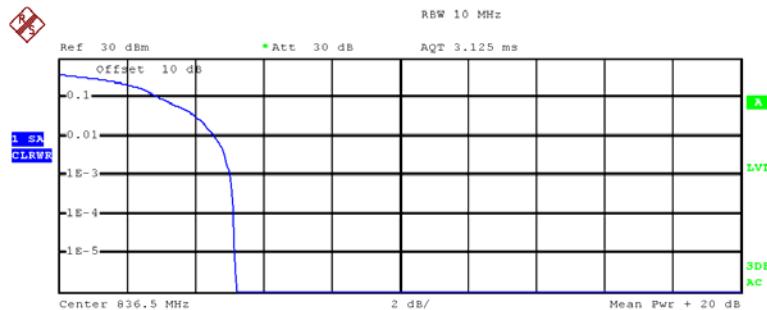
**16QAM\_10MHz\_1RB\_Low Channel**

complementary Cumulative Distribution Function (100000 samples)

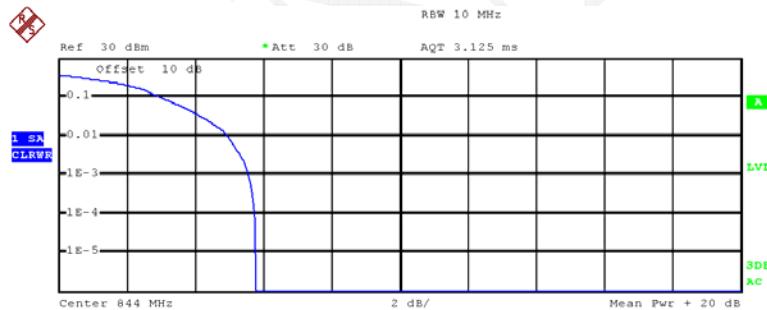
Trace 1  
Mean 21.94 dBm  
Peak 28.03 dBm  
Crest 6.09 dB

10 %	3.20 dB
1 %	5.44 dB
.1 %	5.92 dB
.01 %	6.08 dB

Date: 14.JUN.2016 00:46:10

**16QAM 10MHz\_1RB Middle Channel**

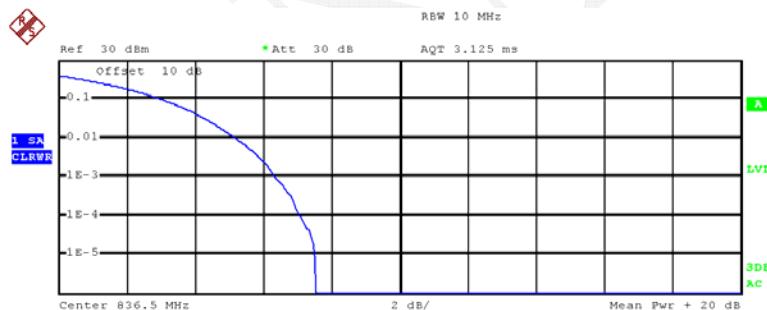
Date: 14.JUN.2016 00:42:20

**16QAM 10MHz\_1RB High Channel**

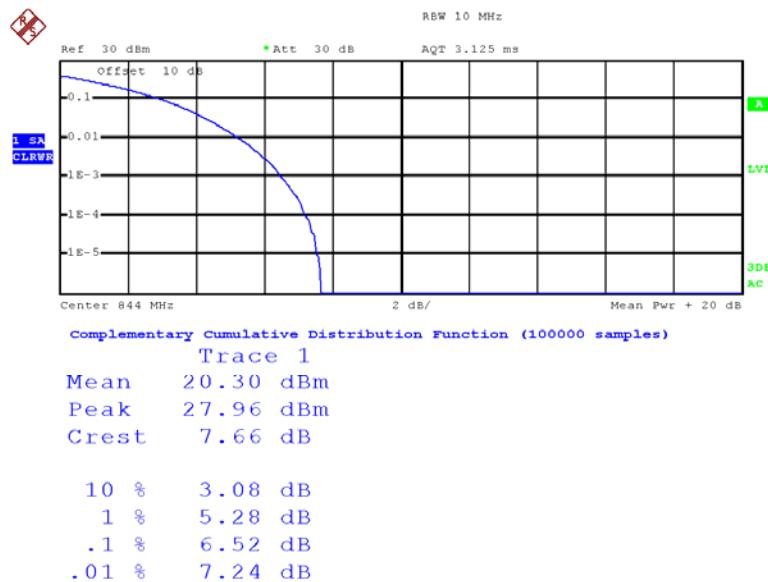
Date: 14.JUN.2016 00:44:43

**16QAM 10MHz\_FULL RB Low Channel**

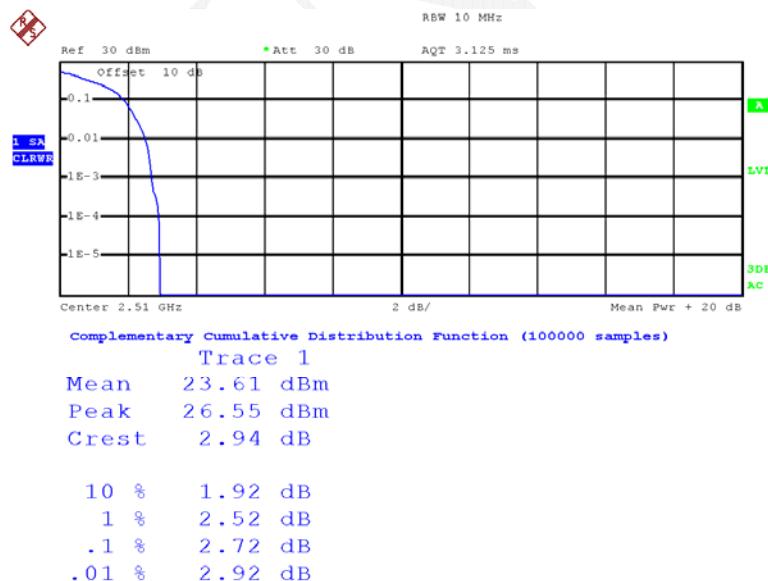
Date: 14.JUN.2016 00:46:35

**16QAM 10MHz\_FULL RB Middle Channel**

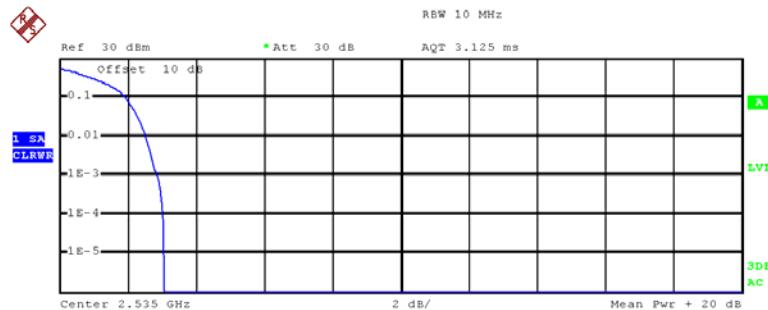
Date: 14.JUN.2016 00:42:49

**16QAM 10MHz\_FULL RB High Channel**

Date: 14.JUN.2016 00:44:11

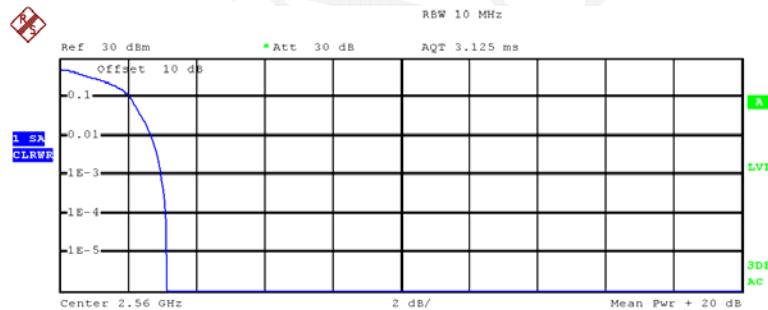
**LTE Band VII****QPSK\_20MHz\_1RB\_Low Channel**

Date: 14.JUN.2016 00:34:46

**QPSK\_20MHz\_1RB Middle Channel**

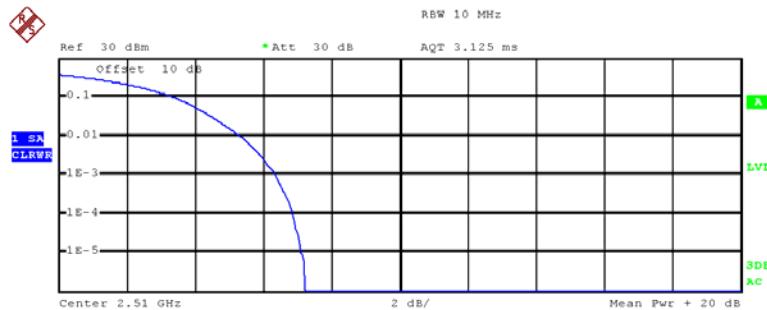
10 % 1.96 dB  
1 % 2.52 dB  
.1 % 2.88 dB  
.01 % 3.04 dB

Date: 14.JUN.2016 00:33:18

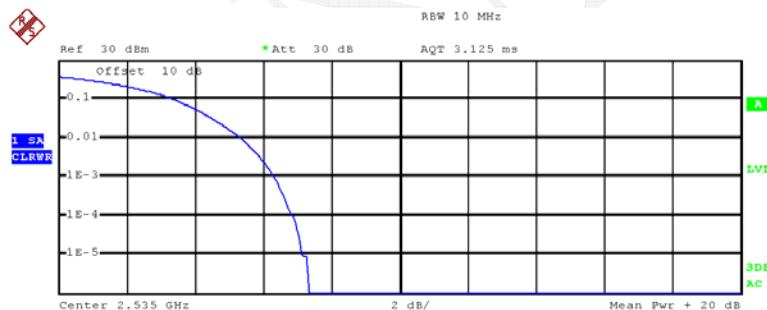
**QPSK\_20MHz\_1RB High Channel**

10 % 2.08 dB  
1 % 2.68 dB  
.1 % 3.00 dB  
.01 % 3.12 dB

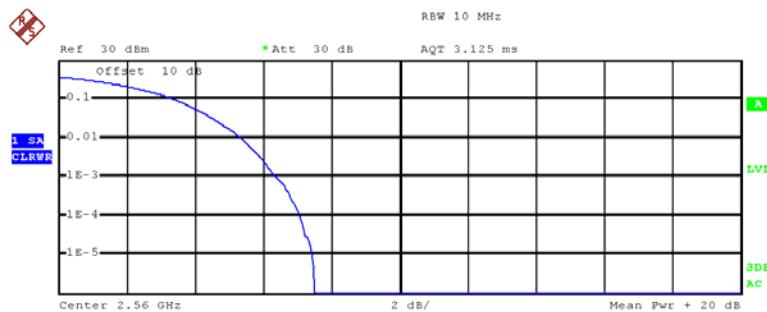
Date: 14.JUN.2016 00:36:59

**QPSK\_20MHz\_FULL RB Low Channel**

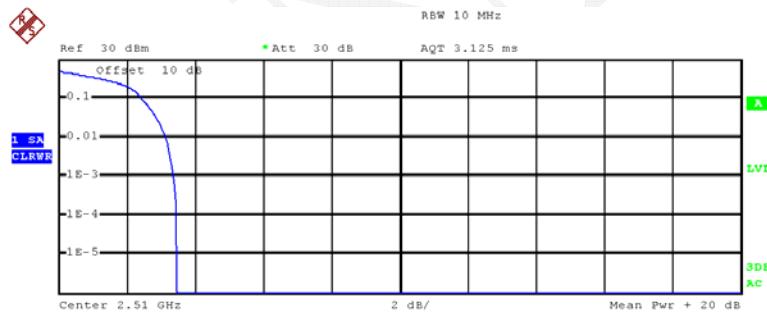
Date: 14.JUN.2016 00:34:55

**QPSK\_20MHz\_FULL RB Middle Channel**

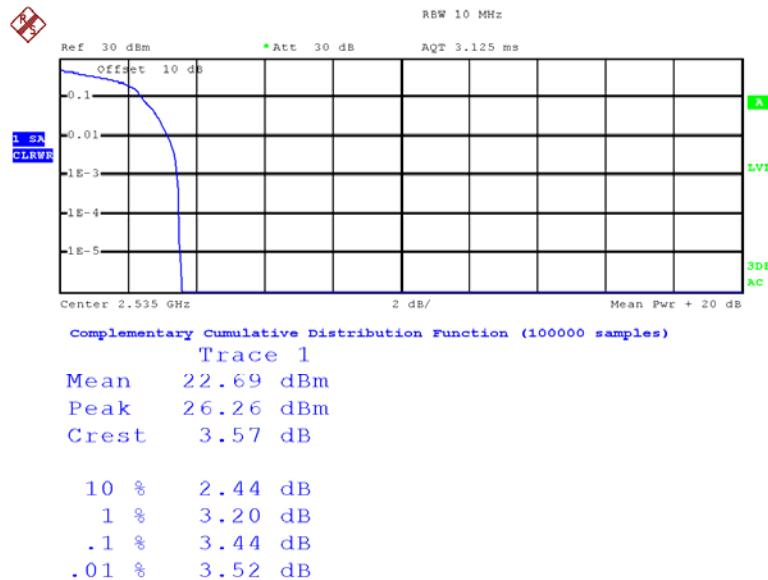
Date: 14.JUN.2016 00:32:56

**QPSK 20MHz\_FULL RB High Channel**

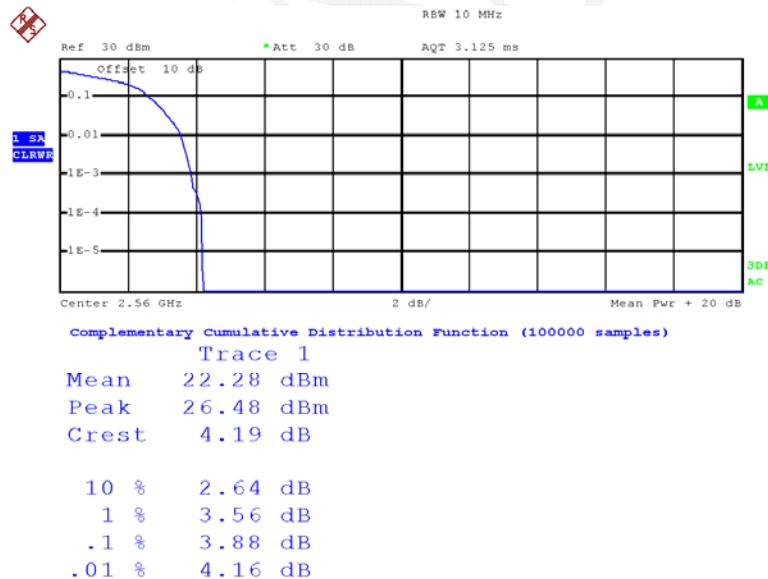
Date: 14.JUN.2016 00:36:38

**16QAM\_20MHz\_1RB\_Low Channel**

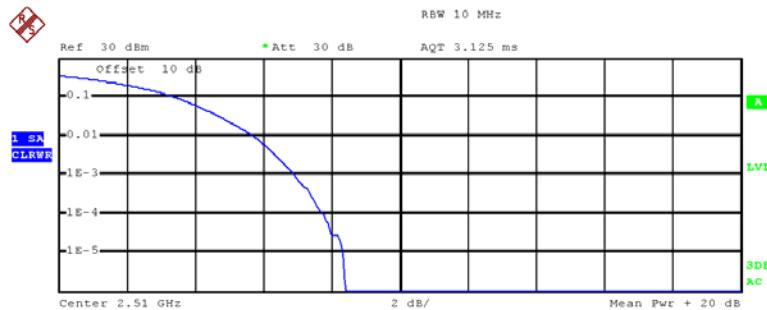
Date: 14.JUN.2016 00:34:32

**16QAM 20MHz\_1RB Middle Channel**

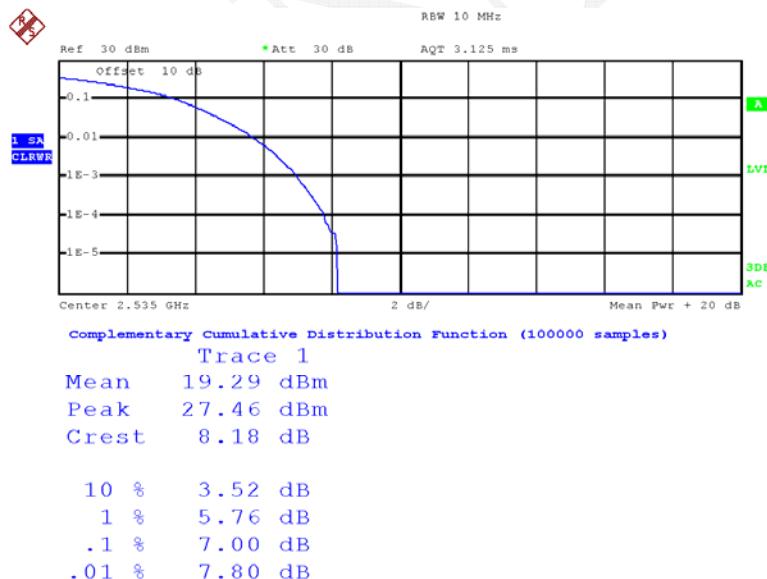
Date: 14.JUN.2016 00:33:24

**16QAM 20MHz\_1RB High Channel**

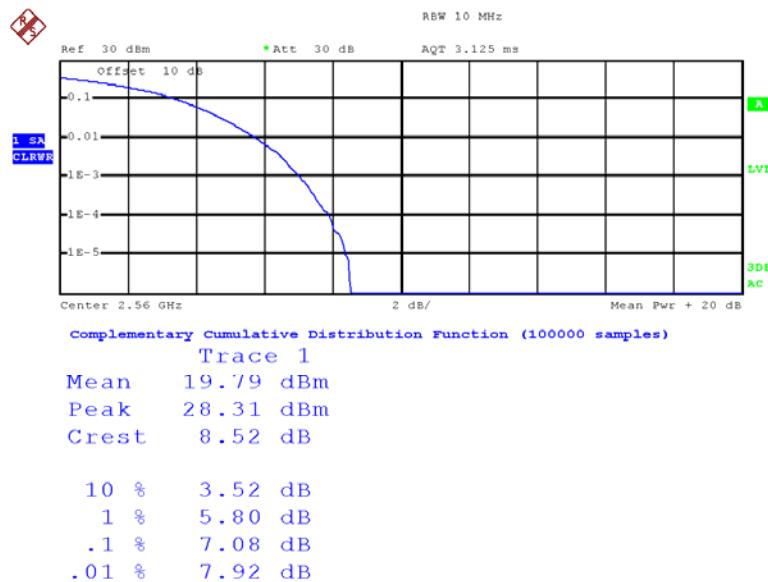
Date: 14.JUN.2016 00:37:07

**16QAM 20MHz\_FULL RB Low Channel**

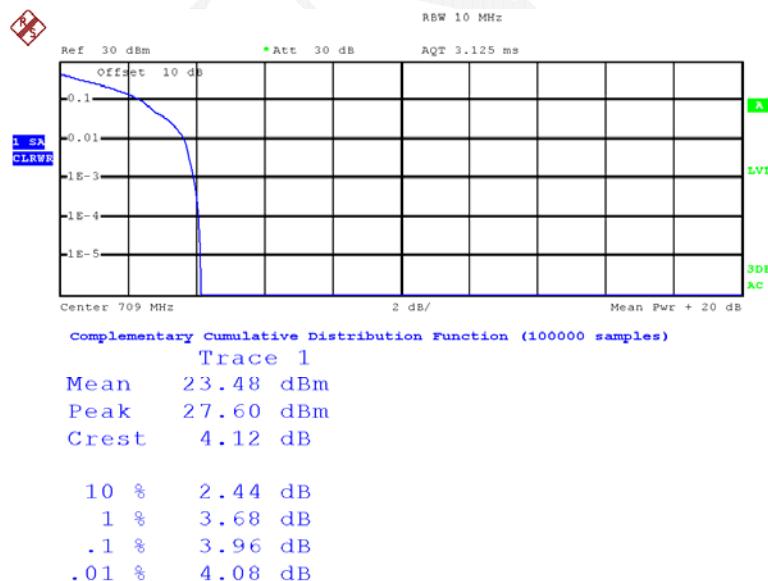
Date: 14.JUN.2016 00:35:01

**16QAM 20MHz\_FULL RB Middle Channel**

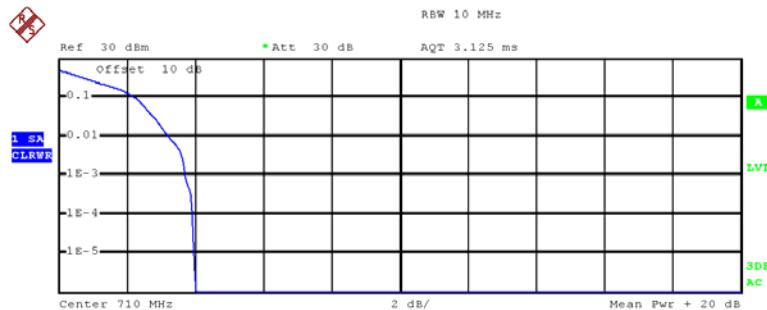
Date: 14.JUN.2016 00:32:44

**16QAM 20MHz\_FULL RB High Channel**

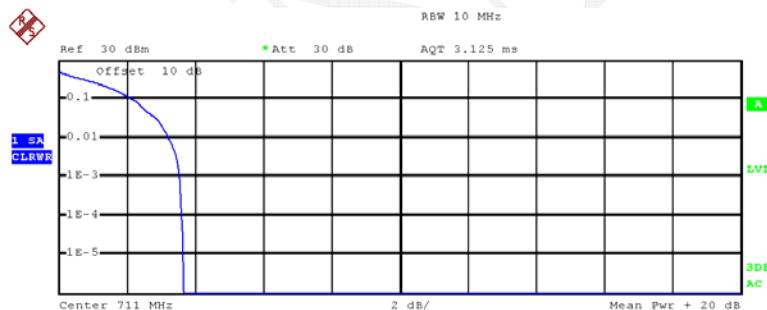
Date: 14.JUN.2016 00:36:29

**LTE Band 17****QPSK\_10MHz\_1RB\_Low Channel**

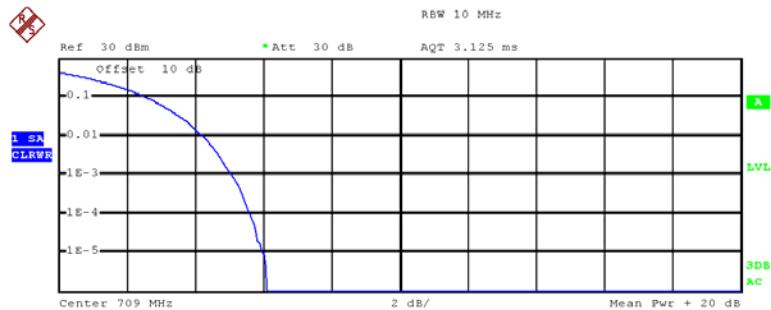
Date: 14.JUN.2016 00:28:28

**QPSK\_10MHz\_1RB Middle Channel**

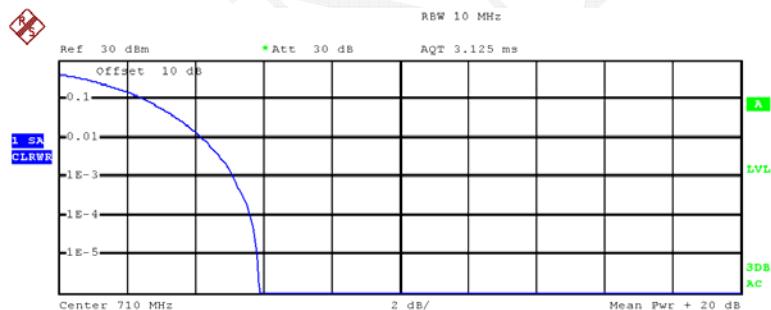
Date: 14.JUN.2016 00:26:24

**QPSK\_10MHz\_1RB High Channel**

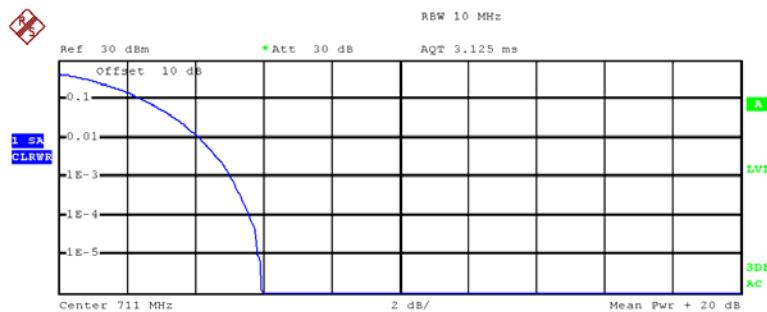
Date: 14.JUN.2016 00:30:42

**QPSK\_10MHz\_FULL RB Low Channel**

Date: 14.JUN.2016 00:28:37

**QPSK\_10MHz\_FULL RB Middle Channel**

Date: 14.JUN.2016 00:25:36

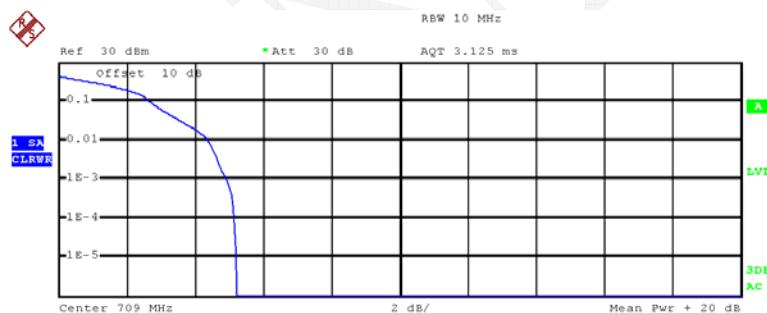
**QPSK 10MHz\_FULL RB High Channel**

complementary Cumulative Distribution Function (100000 samples)

Trace 1  
Mean 22.00 dBm  
Peak 27.96 dBm  
Crest 5.96 dB

10 %	2.52 dB
1 %	4.16 dB
.1 %	5.08 dB
.01 %	5.60 dB

Date: 14.JUN.2016 00:30:30

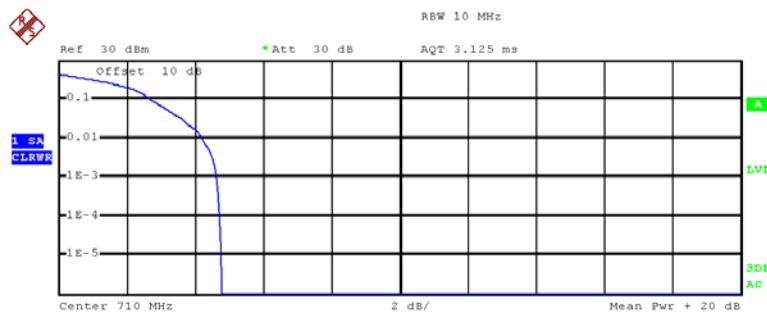
**16QAM\_10MHz\_1RB\_Low Channel**

complementary Cumulative Distribution Function (100000 samples)

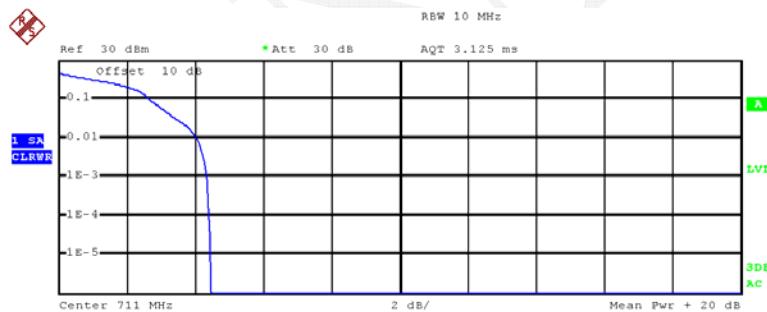
Trace 1  
Mean 22.47 dBm  
Peak 27.67 dBm  
Crest 5.20 dB

10 %	2.72 dB
1 %	4.40 dB
.1 %	4.96 dB
.01 %	5.16 dB

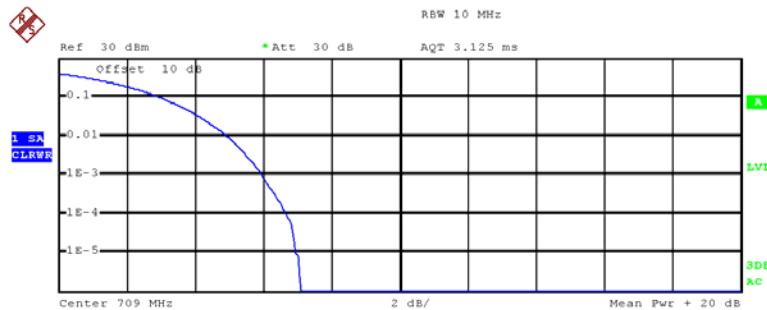
Date: 14.JUN.2016 00:28:15

**16QAM 10MHz\_1RB Middle Channel**

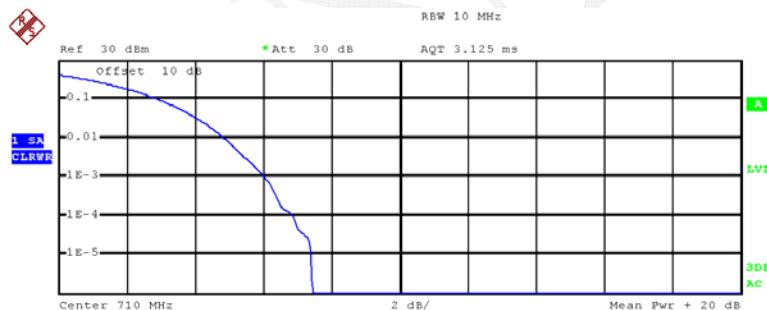
Date: 14.JUN.2016 00:26:39

**16QAM 10MHz\_1RB High Channel**

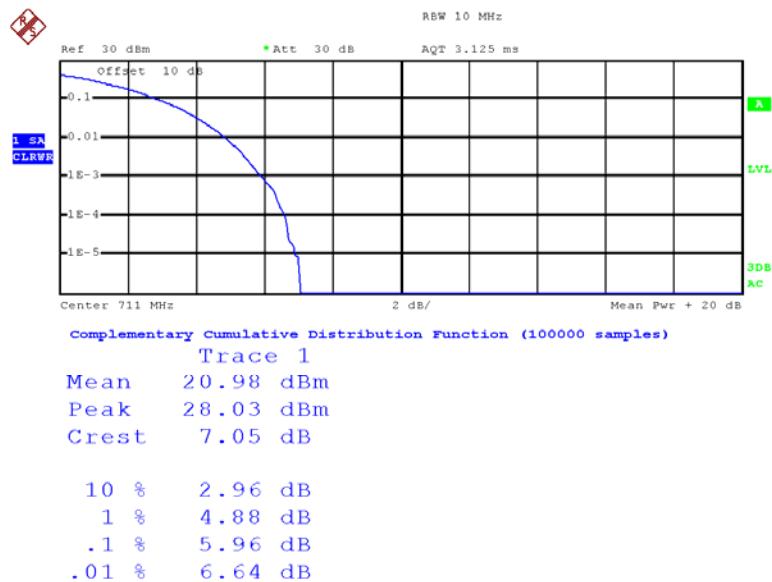
Date: 14.JUN.2016 00:30:48

**16QAM 10MHz\_FULL RB Low Channel**

Date: 14.JUN.2016 00:28:44

**16QAM 10MHz\_FULL RB Middle Channel**

Date: 14.JUN.2016 00:25:13

**16QAM 10MHz\_FULL RB High Channel**

Date: 14.JUN.2016 00:30:20

## ERP &amp; EIRP

Frequency (MHz)	Polar (H/V)	Receiver Reading (dB $\mu$ V)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			S.G. Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
<b>GSM 850 Middle Channel</b>								
836.600	H	97.94	23	0.0	1	22.0	38.45	16.5
836.600	V	103.69	31.9	0.0	1	30.9	38.45	7.6
<b>EGPRS 850 Middle Channel</b>								
836.600	H	95.60	20.7	0.0	1	19.7	38.45	18.8
836.600	V	96.47	24.7	0.0	1	23.7	38.45	14.8
<b>WCDMA Band V Middle Channel</b>								
836.600	H	90.56	15.6	0.0	1	14.6	38.45	23.9
836.600	V	91.68	19.9	0.0	1	18.9	38.45	19.6
<b>PCS 1900 Middle Channel</b>								
1880.000	H	89.93	18.3	11.7	1.4	28.6	33.0	4.4
1880.000	V	86.00	14.5	11.7	1.4	24.8	33.0	8.2
<b>EGPRS 1900 Middle Channel</b>								
1880.000	H	86.28	14.7	11.7	1.4	25.0	33.0	8.0
1880.000	V	82.54	11.1	11.7	1.4	21.4	33.0	11.6
<b>WCDMA Band II Middle Channel</b>								
1880.000	H	84.04	12.4	11.7	1.4	22.7	33.0	10.3
1880.000	V	81.19	9.7	11.7	1.4	20.0	33.0	13.0
<b>WCDMA Band IV Middle Channel</b>								
1732.600	V	84.72	11.4	10.9	1.4	20.9	30.0	9.1
1732.600	V	81.84	8.5	10.9	1.4	18.0	30.0	12.0

**LTE Band II**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dB $\mu$ V)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			S.G. Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
<b>QPSK 1.4 MHz Middle Channel</b>								
1880.000	H	83.64	12	11.7	1.4	22.3	33.00	10.7
1880.000	V	81.86	10.4	11.7	1.4	20.7	33.00	12.3
<b>QPSK 3 MHz Middle Channel</b>								
1880.000	H	82.78	11.2	11.7	1.4	21.5	33.00	11.5
1880.000	V	80.83	9.4	11.7	1.4	19.7	33.00	13.3
<b>QPSK 5 MHz Middle Channel</b>								
1880.000	H	81.61	10	11.7	1.4	20.3	33.00	12.7
1880.000	V	79.23	7.8	11.7	1.4	18.1	33.00	14.9
<b>QPSK 10 MHz Middle Channel</b>								
1880.000	H	82.17	10.6	11.7	1.4	20.9	33.00	12.1
1880.000	V	79.04	7.6	11.7	1.4	17.9	33.00	15.1
<b>QPSK 15 MHz Middle Channel</b>								
1880.000	H	81.17	9.6	11.7	1.4	19.9	33.00	13.1
1880.000	V	77.05	5.6	11.7	1.4	15.9	33.00	17.1
<b>QPSK 20 MHz Middle Channel</b>								
1880.000	H	80.47	8.9	11.7	1.4	19.2	33.00	13.8
1880.000	V	76.04	4.6	11.7	1.4	14.9	33.00	18.1
<b>16QAM 1.4 MHz Middle Channel</b>								
1880.000	H	82.49	10.9	11.7	1.4	21.2	33.00	11.8
1880.000	V	80.65	9.2	11.7	1.4	19.5	33.00	13.5
<b>16QAM 3 MHz Middle Channel</b>								
1880.000	H	81.63	10	11.7	1.4	20.3	33.00	12.7
1880.000	V	79.43	8	11.7	1.4	18.3	33.00	14.7
<b>16QAM 5 MHz Middle Channel</b>								
1880.000	H	82.15	10.6	11.7	1.4	20.9	33.00	12.1
1880.000	V	78.65	7.2	11.7	1.4	17.5	33.00	15.5
<b>16QAM 10 MHz Middle Channel</b>								
1880.000	H	81.53	9.9	11.7	1.4	20.2	33.00	12.8
1880.000	V	77.11	5.7	11.7	1.4	16.0	33.00	17.0
<b>16QAM 15 MHz Middle Channel</b>								
1880.000	H	80.26	8.7	11.7	1.4	19.0	33.00	14.0
1880.000	V	76.25	4.8	11.7	1.4	15.1	33.00	17.9
<b>16QAM 20 MHz Middle Channel</b>								
1880.000	H	80.41	8.8	11.7	1.4	19.1	33.00	13.9
1880.000	V	75.97	4.5	11.7	1.4	14.8	33.00	18.2

**LTE Band IV**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dB $\mu$ V)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			S.G. Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
<b>QPSK 1.4 MHz Middle Channel</b>								
1732.500	H	85.50	12.5	10.9	1.4	22.0	30.00	8.0
1732.500	V	83.54	10.2	10.9	1.4	19.7	30.00	10.3
<b>QPSK 3 MHz Middle Channel</b>								
1732.500	H	84.43	11.4	10.9	1.4	20.9	30.00	9.1
1732.500	V	82.36	9	10.9	1.4	18.5	30.00	11.5
<b>QPSK 5 MHz Middle Channel</b>								
1732.500	H	83.45	10.4	10.9	1.4	19.9	30.00	10.1
1732.500	V	81.48	8.2	10.9	1.4	17.7	30.00	12.3
<b>QPSK 10 MHz Middle Channel</b>								
1732.500	H	82.93	9.9	10.9	1.4	19.4	30.00	10.6
1732.500	V	80.24	6.9	10.9	1.4	16.4	30.00	13.6
<b>QPSK 15 MHz Middle Channel</b>								
1732.500	H	82.34	9.3	10.9	1.4	18.8	30.00	11.2
1732.500	V	77.21	3.9	10.9	1.4	13.4	30.00	16.6
<b>QPSK 20 MHz Middle Channel</b>								
1732.500	H	82.25	9.2	10.9	1.4	18.7	30.00	11.3
1732.500	V	76.11	2.8	10.9	1.4	12.3	30.00	17.7
<b>16QAM 1.4 MHz Middle Channel</b>								
1732.500	H	84.89	11.9	10.9	1.4	21.4	30.00	8.6
1732.500	V	82.76	9.4	10.9	1.4	18.9	30.00	11.1
<b>16QAM 3 MHz Middle Channel</b>								
1732.500	H	83.40	10.4	10.9	1.4	19.9	30.00	10.1
1732.500	V	81.21	7.9	10.9	1.4	17.4	30.00	12.6
<b>16QAM 5 MHz Middle Channel</b>								
1732.500	H	82.47	9.5	10.9	1.4	19.0	30.00	11.0
1732.500	V	80.27	6.9	10.9	1.4	16.4	30.00	13.6
<b>16QAM 10 MHz Middle Channel</b>								
1732.500	H	82.08	9.1	10.9	1.4	18.6	30.00	12.4
1732.500	V	79.22	5.9	10.9	1.4	15.4	30.00	14.6
<b>16QAM 15 MHz Middle Channel</b>								
1732.500	H	82.55	9.5	10.9	1.4	19.0	30.00	11.0
1732.500	V	76.16	2.8	10.9	1.4	12.3	30.00	17.7
<b>16QAM 20 MHz Middle Channel</b>								
1732.500	H	81.29	8.3	10.9	1.4	17.8	30.00	12.2
1732.500	V	75.13	1.8	10.9	1.4	11.3	30.00	18.7

**LTE Band V**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dB $\mu$ V)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			S.G. Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
<b>QPSK 1.4 MHz Middle Channel</b>								
836.500	H	90.72	15.8	0.0	1	14.8	38.45	23.65
836.500	V	93.97	22.2	0.0	1	21.2	38.45	17.25
<b>QPSK 3 MHz Middle Channel</b>								
836.500	H	89.63	14.7	0.0	1	13.7	38.45	24.75
836.500	V	92.56	20.8	0.0	1	19.8	38.45	18.65
<b>QPSK 5 MHz Middle Channel</b>								
836.500	H	88.52	13.6	0.0	1	12.6	38.45	25.85
836.500	V	92.66	20.9	0.0	1	19.9	38.45	18.55
<b>QPSK 10 MHz Middle Channel</b>								
836.500	H	87.26	12.3	0.0	1	11.3	38.45	27.15
836.500	V	92.60	20.8	0.0	1	19.8	38.45	18.65
<b>16QAM 1.4 MHz Middle Channel</b>								
836.500	H	89.94	15	0.0	1	14	38.45	24.45
836.500	V	92.78	21	0.0	1	20	38.45	18.45
<b>16QAM 3 MHz Middle Channel</b>								
836.500	H	88.80	13.9	0.0	1	12.9	38.45	25.55
836.500	V	91.89	20.1	0.0	1	19.1	38.45	19.35
<b>16QAM 5 MHz Middle Channel</b>								
836.500	H	87.79	12.9	0.0	1	11.9	38.45	26.55
836.500	V	92.42	20.6	0.0	1	19.6	38.45	18.85
<b>16QAM 10 MHz Middle Channel</b>								
836.500	H	86.43	11.5	0.0	1	10.5	38.45	27.95
836.500	V	92.19	20.4	0.0	1	19.4	38.45	19.05

**LTE Band VII**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dB $\mu$ V)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			S.G. Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
<b>QPSK 5 MHz Middle Channel</b>								
2535.000	H	83.45	12.2	13.1	2.5	22.8	33.00	10.2
2535.000	V	76.23	6.5	13.1	2.5	17.1	33.00	15.9
<b>QPSK 10 MHz Middle Channel</b>								
2535.000	H	82.80	11.6	13.1	2.5	22.2	33.00	10.8
2535.000	V	75.65	5.9	13.1	2.5	16.5	33.00	16.5
<b>QPSK 15 MHz Middle Channel</b>								
2535.000	H	81.65	10.4	13.1	2.5	21.0	33.00	12.0
2535.000	V	74.71	5	13.1	2.5	15.6	33.00	17.4
<b>QPSK 20 MHz Middle Channel</b>								
2535.000	H	80.69	9.5	13.1	2.5	20.1	33.00	12.9
2535.000	V	73.78	4	13.1	2.5	14.6	33.00	18.4
<b>16QAM 5 MHz Middle Channel</b>								
2535.000	H	82.66	11.5	13.1	2.5	22.1	33.00	10.9
2535.000	V	75.42	5.7	13.1	2.5	16.3	33.00	16.7
<b>16QAM 10 MHz Middle Channel</b>								
2535.000	H	81.12	9.9	13.1	2.5	20.5	33.00	12.5
2535.000	V	74.93	5.2	13.1	2.5	15.8	33.00	17.2
<b>16QAM 15 MHz Middle Channel</b>								
2535.000	H	80.53	9.3	13.1	2.5	19.9	33.00	13.1
2535.000	V	73.67	3.9	13.1	2.5	14.5	33.00	18.5
<b>16QAM 20 MHz Middle Channel</b>								
2535.000	H	79.03	7.8	13.1	2.5	18.4	33.00	14.6
2535.000	V	72.22	2.5	13.1	2.5	13.1	33.00	19.9

**LTE Band 17**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dB $\mu$ V)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			S.G. Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
<b>QPSK 5 MHz Middle Channel</b>								
710.000	H	89.43	12.6	0.0	0.9	11.7	33.00	21.3
710.000	V	95.89	21.5	0.0	0.9	20.6	33.00	12.4
<b>QPSK 10 MHz Middle Channel</b>								
710.000	H	88.28	11.5	0.0	0.9	10.6	33.00	22.4
710.000	V	94.13	19.8	0.0	0.9	18.9	33.00	14.1
<b>16QAM 5 MHz Middle Channel</b>								
710.000	H	88.60	11.8	0.0	0.9	10.9	33.00	22.1
710.000	V	94.75	20.4	0.0	0.9	19.5	33.00	13.5
<b>16QAM 10 MHz Middle Channel</b>								
710.000	H	87.61	10.8	0.0	0.9	9.9	33.00	23.1
710.000	V	93.46	19.1	0.0	0.9	18.2	33.00	14.8

## **FCC §2.1049, §22.917, §22.905 & §24.238 & §27.53- OCCUPIED BANDWIDTH**

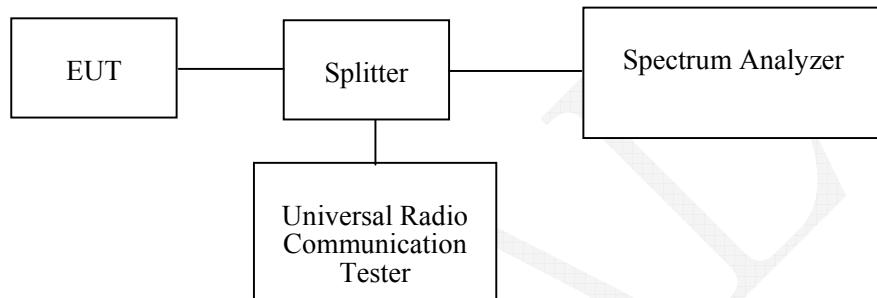
### **Applicable Standard**

FCC §2.1049, §22.917, §22.905, §24.238 and §27.53.

### **Test Procedure**

The RF output of the transmitter was connected to the simulator and the spectrum analyzer through sufficient attenuation.

The 26 dB & 99% bandwidth was recorded.



### **Test Equipment List and Details**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2015-11-23	2016-11-22
R&S	Spectrum Analyzer	FSEM	831259/019	2015-07-28	2016-07-27
R&S	Universal Radio Communication Tester	CMU200	109 038	2015-07-28	2016-07-27
R&S	Wideband Radio Communication Tester	CMW500	106891	2015-11-23	2016-11-23
N/A	Coaxial Cable	0.1m	N/A	2016-05-06	2017-05-06
E-Microwave	DC Blocking	EMDCB-00036	0E01201047	2016-05-06	2017-05-06
E-Microwave	Attenuator	EMCA10-5RN	OE01203239	2016-05-08	2017-05-08
Pasternack	RF Coaxial Cable	RF-01	N/A	2016-05-06	2017-05-06
Pasternack	RF Coaxial Cable	RF-02	N/A	2016-05-06	2017-05-06
N/A	Two-way Spliter	ODP-1-6-2S	OE0120142	2016-05-06	2017-05-06

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

## Test Data

### Environmental Conditions

<b>Temperature:</b>	26.3 ~ 27.2 °C
<b>Relative Humidity:</b>	56 ~ 57%
<b>ATM Pressure:</b>	99.9 ~ 100 kPa

The testing was performed by Lion Xiao from 2016-06-13 to 2016-06-14.

Test Mode: Transmitting

Test Result: Compliant. Please refer to the following table and plots.

Band	Channel No.	Mode	99% Occupied Bandwidth (MHz)	26 dB Occupied Bandwidth (MHz)
Cellular	190	GSM	0.248	0.322
		EDGE	0.244	0.318
PCS	661	PCS	0.244	0.312
		EDGE	0.246	0.316
WCDMA Band II	9400	Rel 99	4.220	4.900
	9400	HSDPA	4.220	4.900
	9400	HSUPA	4.200	4.900
WCDMA Band IV	1413	Rel 99	4.240	4.900
	1413	HSDPA	4.240	5.000
	1413	HSUPA	4.240	4.900
WCDMA Band V	4175	Rel 99	4.200	4.900
	4175	HSDPA	4.220	4.800
	4175	HSUPA	4.200	4.880

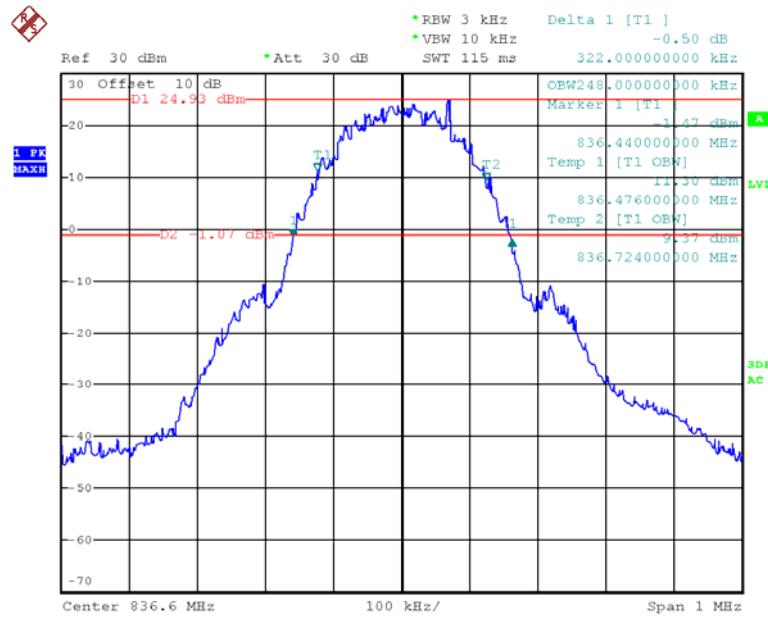
Band	Test Modulation	Test Bandwidth (MHz)	Test Channel	99% Occupied Bandwidth (MHz)	26 dB Occupied Bandwidth (MHz)
LTE Band II	QPSK	1.4	M	1.104	1.326
		3		2.760	3.072
		5		4.560	5.120
		10		9.160	10.400
		15		13.620	15.240
		20		18.000	19.840
	16QAM	1.4	M	1.110	1.314
		3		2.760	3.060
		5		4.560	5.120
		10		9.120	10.360
		15		13.560	15.120
		20		18.000	19.600

Band	Test Modulation	Test Bandwidth (MHz)	Test Channel	99% Occupied Bandwidth (MHz)	26 dB Occupied Bandwidth (MHz)
LTE Band IV	QPSK	1.4	M	1.098	1.296
		3		2.740	3.096
		5		4.520	5.040
		10		9.080	10.400
		15		13.500	15.060
		20		17.920	19.520
	16QAM	1.4	M	1.110	1.308
		3		2.748	3.084
		5		4.520	5.060
		10		9.120	10.280
		15		13.500	14.940
		20		18.000	19.600

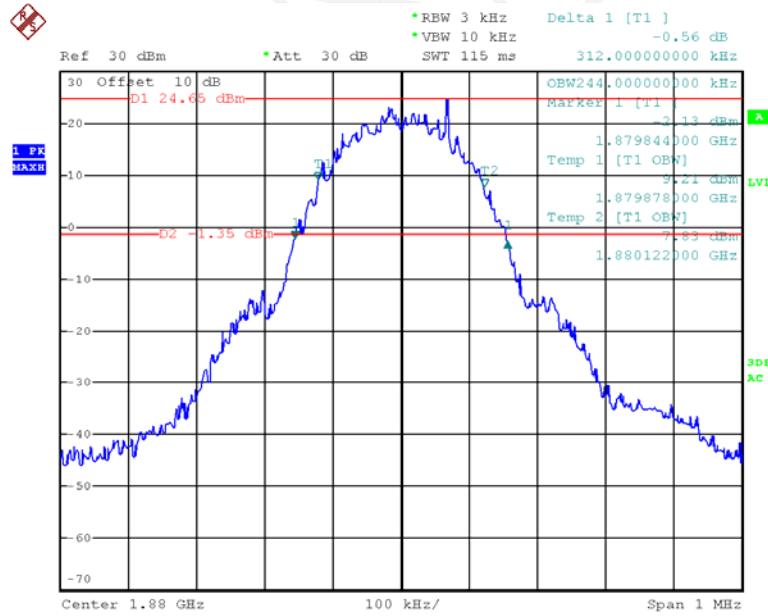
Band	Test Modulation	Test Bandwidth (MHz)	Test Channel	99% Occupied Bandwidth (MHz)	26 dB Occupied Bandwidth (MHz)
LTE Band V	QPSK	1.4	M	1.098	1.278
		3		2.736	3.072
		5		4.540	5.040
		10		9.120	10.320
	16QAM	1.4	M	1.104	1.290
		3		2.748	3.060
		5		4.540	5.140
		10		9.120	10.280

Band	Test Modulation	Test Bandwidth (MHz)	Test Channel	99% Occupied Bandwidth (MHz)	26 dB Occupied Bandwidth (MHz)
LTE Band VII	QPSK	5	M	4.560	5.160
		10		9.160	10.400
		15		13.620	15.240
		20		18.080	19.840
	16QAM	5	M	4.560	5.200
		10		9.160	10.440
		15		13.620	15.180
		20		18.080	19.760

Band	Test Modulation	Test Bandwidth (MHz)	Test Channel	99% Occupied Bandwidth (MHz)	26 dB Occupied Bandwidth (MHz)
LTE Band XVII	QPSK	5	M	4.520	5.060
		10		9.080	10.360
	16QAM	5	M	4.520	5.120
		10		9.080	10.200

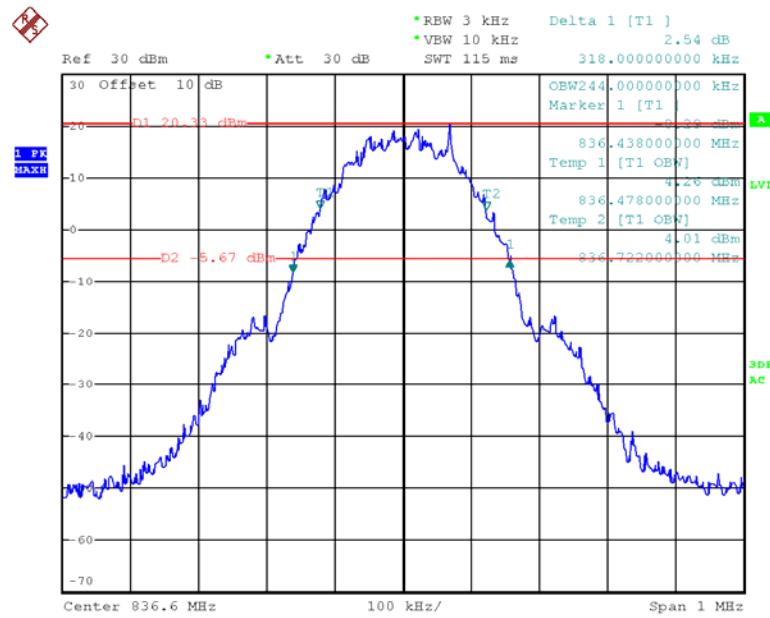
**GMSK 850 Cellular Band**

Date: 13.JUN.2016 22:43:19

**GMSK PCS Band**

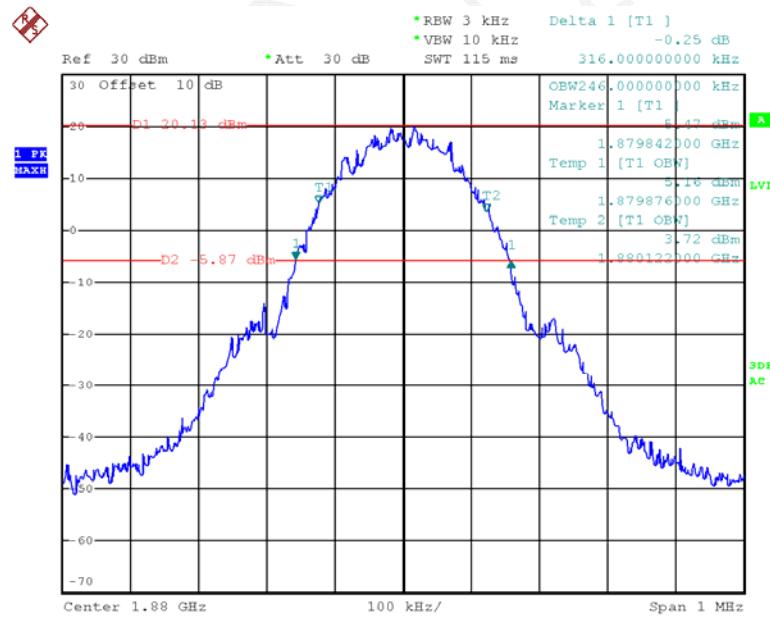
Date: 13.JUN.2016 22:37:46

### EDGE 850 Cellular Band



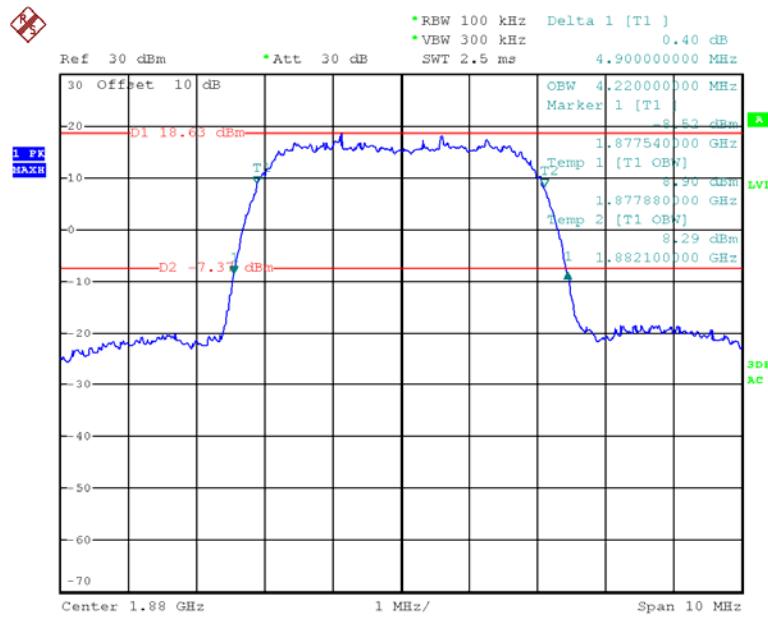
Date: 13.JUN.2016 22:47:14

### EDGE PCS Band



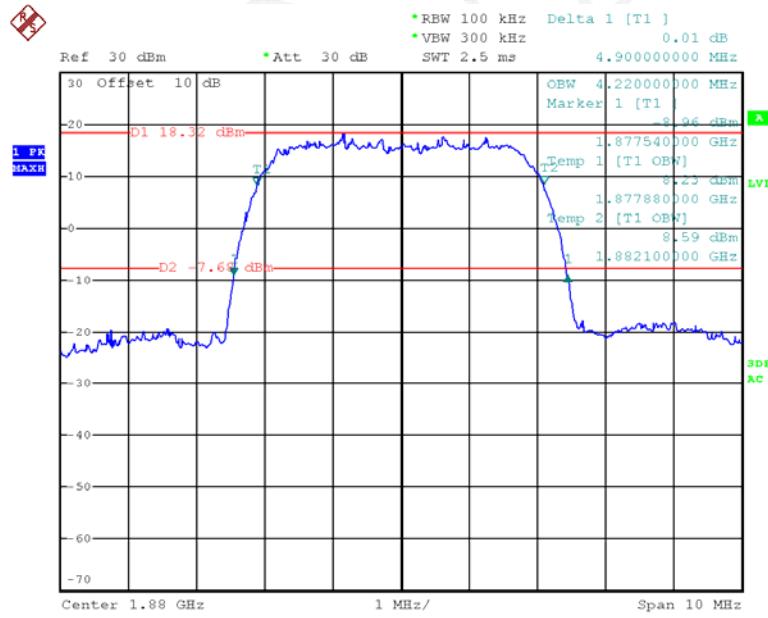
Date: 13.JUN.2016 22:41:48

### REL99 Band II

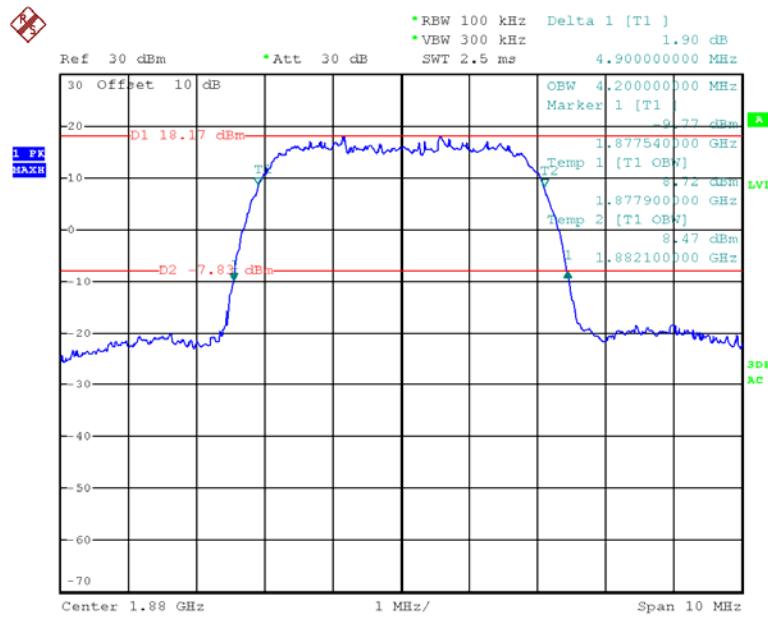


Date: 13.JUN.2016 22:06:06

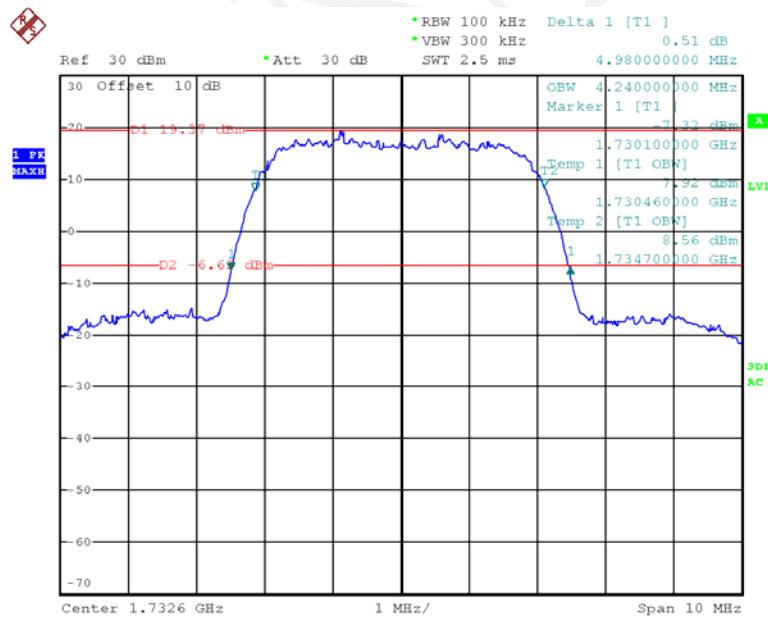
### HSDPA Band II



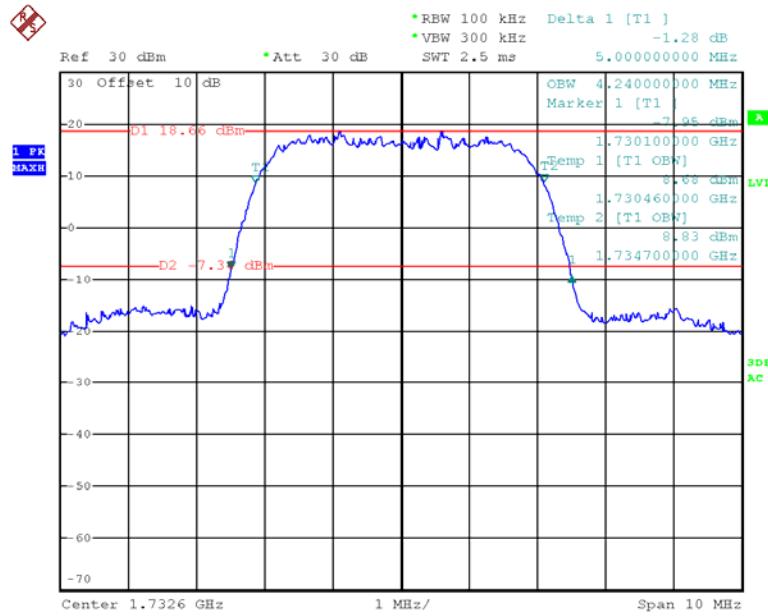
Date: 13.JUN.2016 22:02:51

**HSUPA Band II**

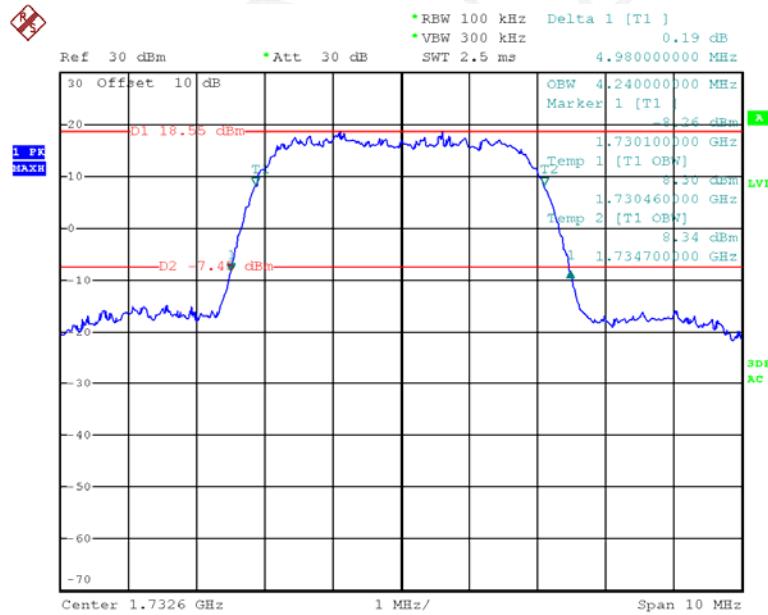
Date: 13.JUN.2016 22:08:49

**REL99 Band IV**

Date: 13.JUN.2016 22:11:02

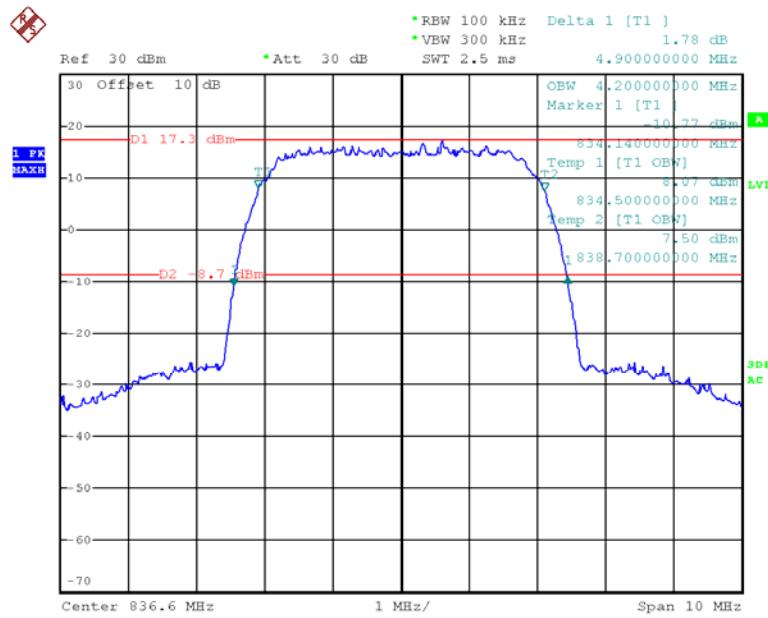
**HSDPA Band IV**

Date: 13.JUN.2016 22:15:25

**HSUPA Band IV**

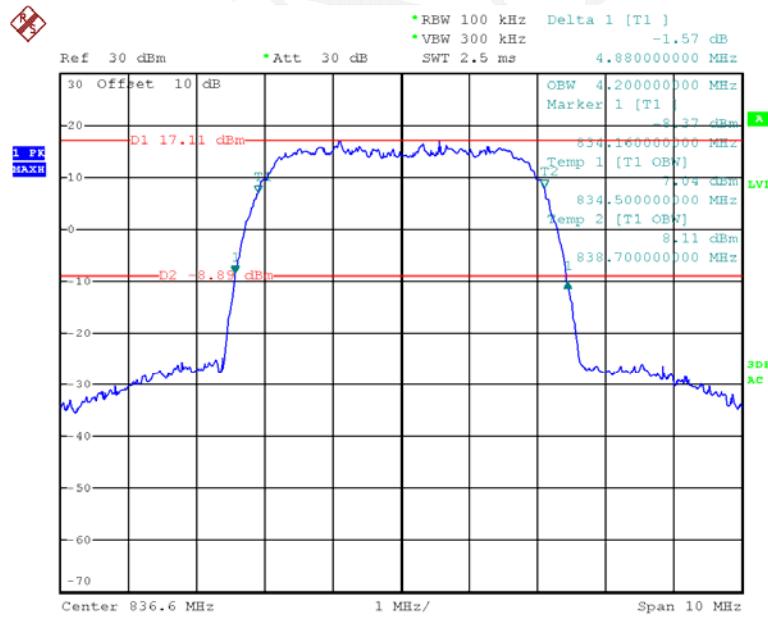
Date: 13.JUN.2016 22:13:48

## REL99 Band V

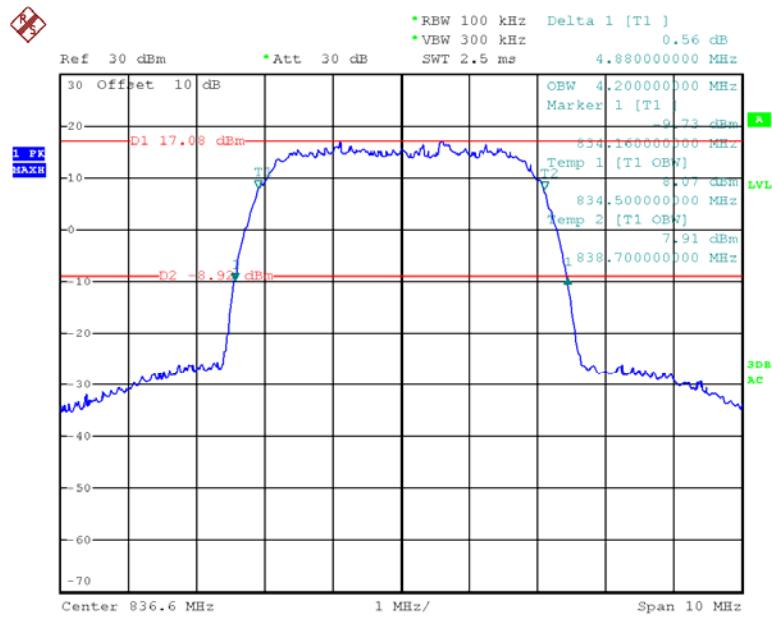


Date: 13.JUN.2016 22:19:00

## HSDPA Band V



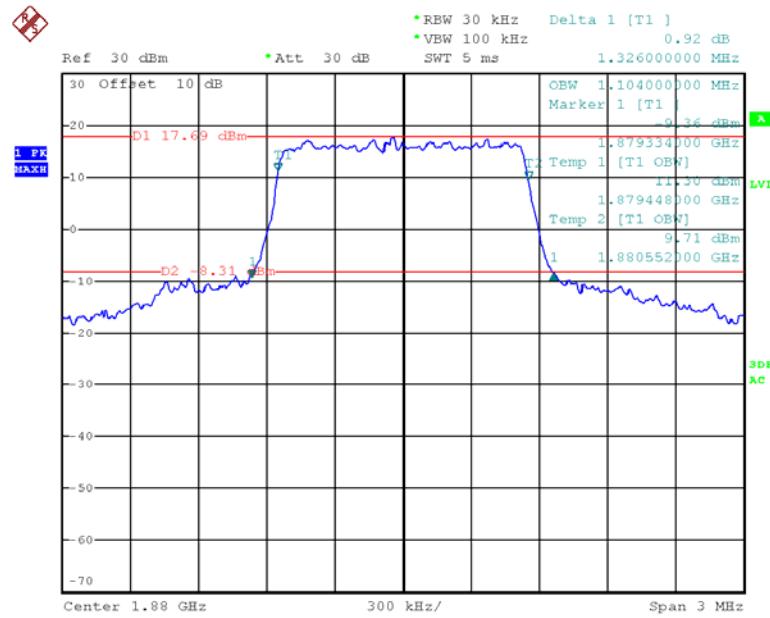
Date: 13.JUN.2016 22:20:39

**HSUPA Band V**

Date: 13.JUN.2016 22:23:45

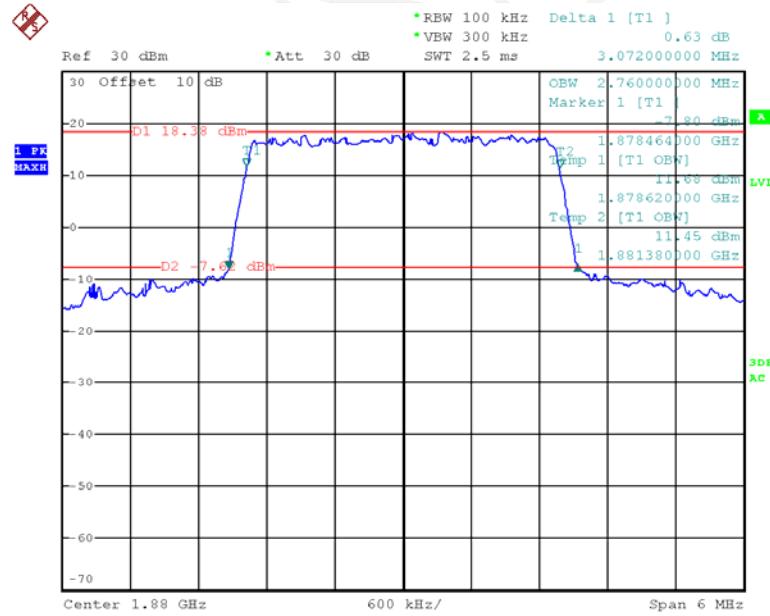
## LTE Band II

## QPSK\_1.4 MHz

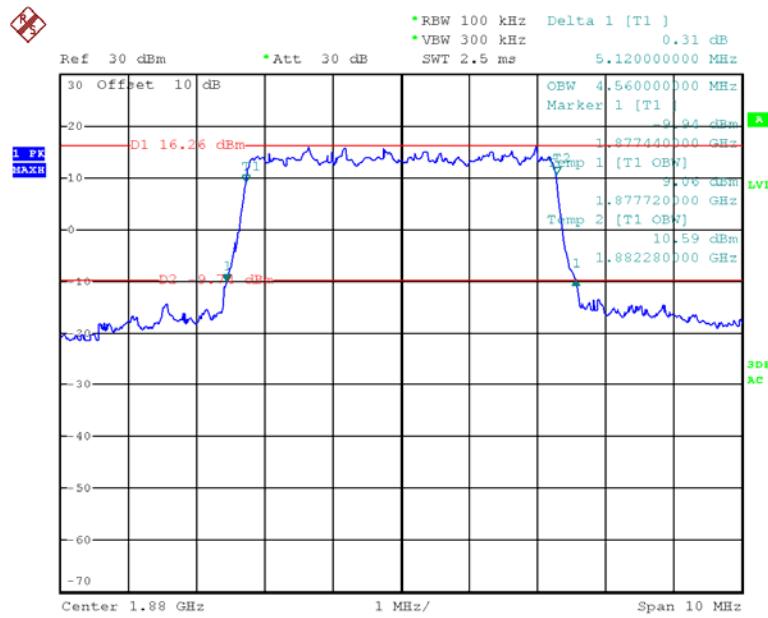


Date: 13.JUN.2016 23:08:41

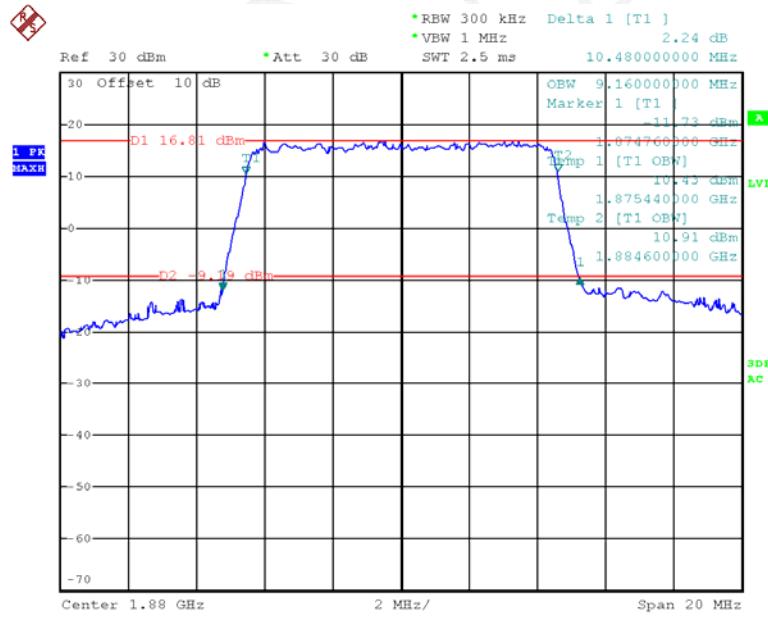
## QPSK\_3 MHz



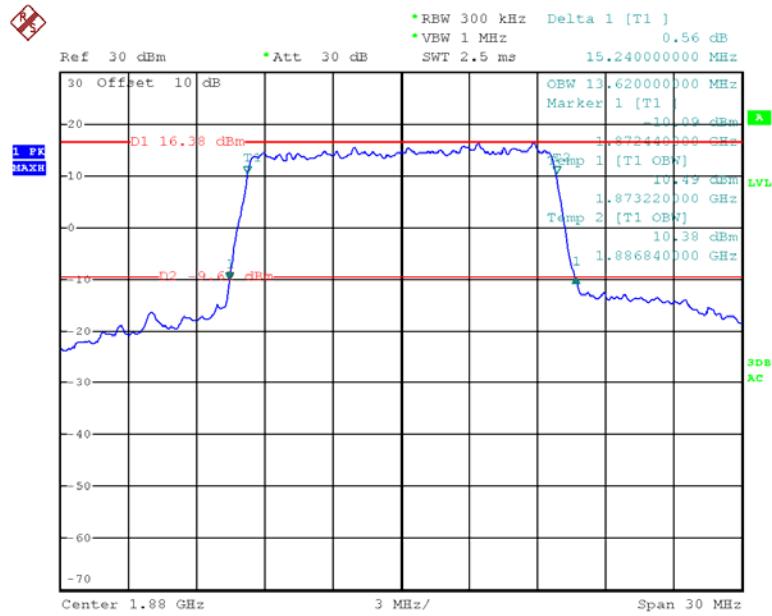
Date: 13.JUN.2016 23:11:03

**QPSK\_5 MHz**

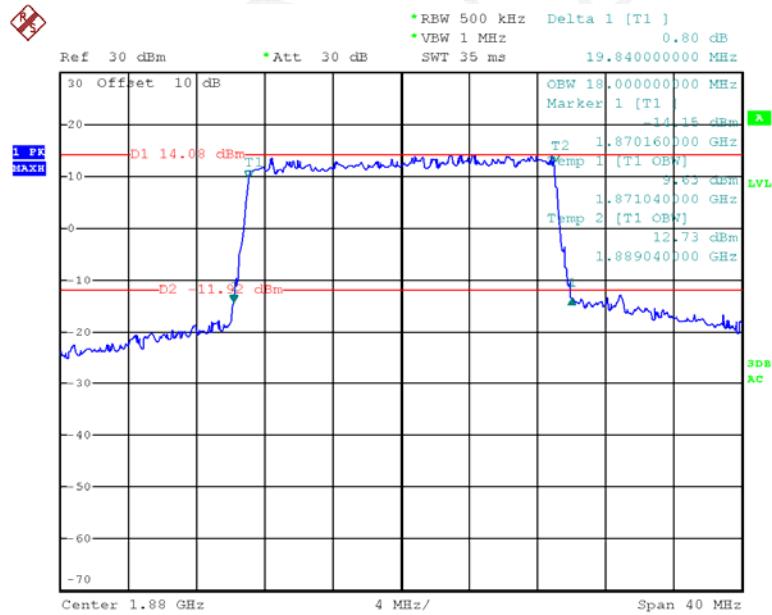
Date: 13.JUN.2016 23:38:21

**QPSK\_10 MHz**

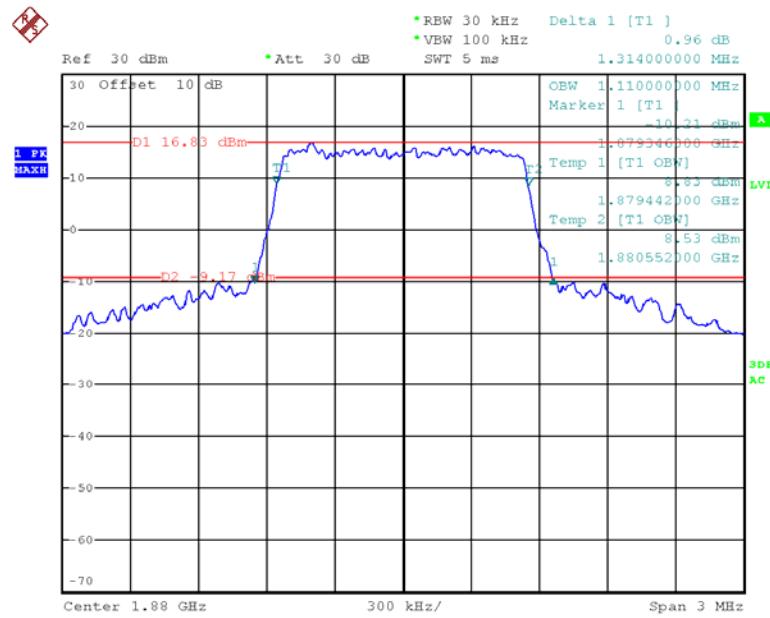
Date: 13.JUN.2016 23:41:09

**QPSK\_15 MHz**

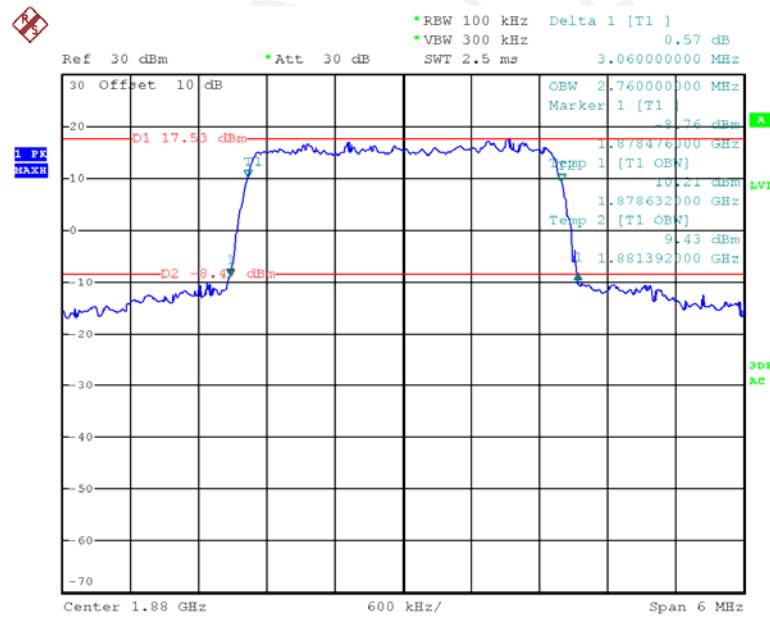
Date: 13.JUN.2016 23:47:21

**QPSK\_20 MHz**

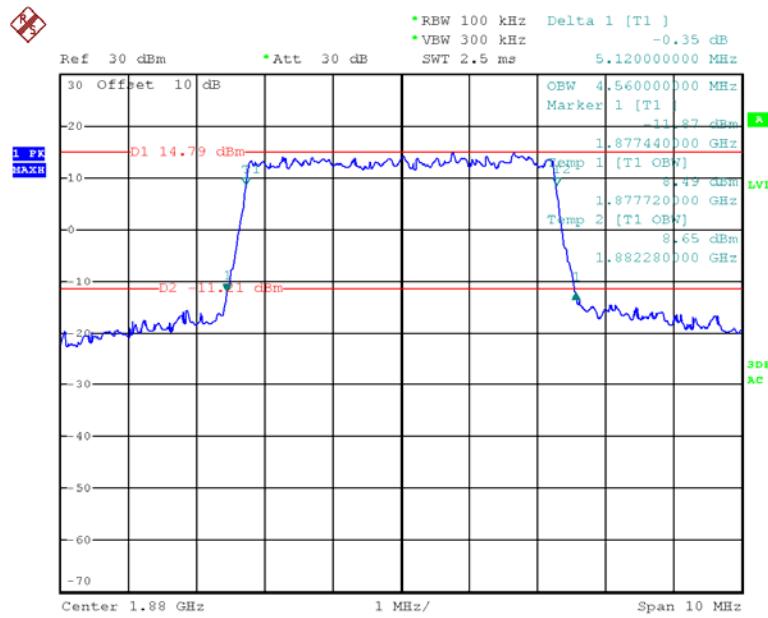
Date: 13.JUN.2016 23:53:16

**16QAM\_1.4 MHz**

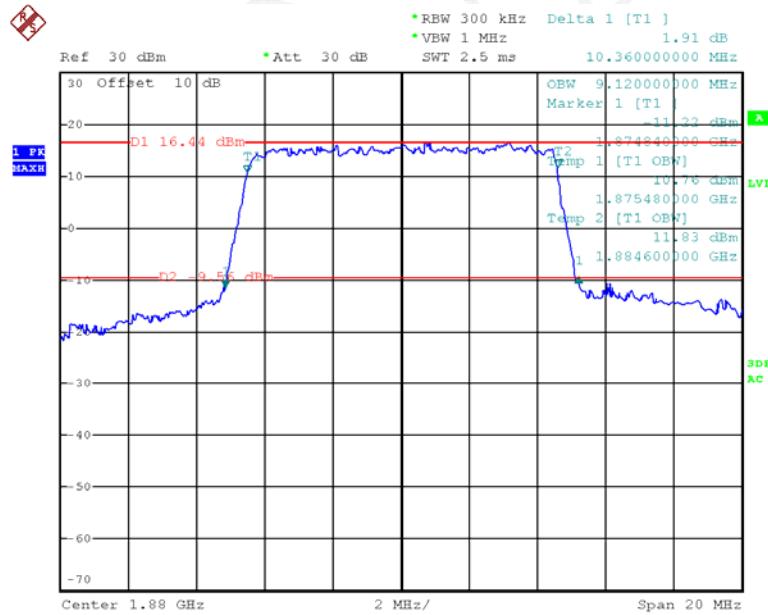
Date: 13.JUN.2016 23:09:52

**16QAM\_3 MHz**

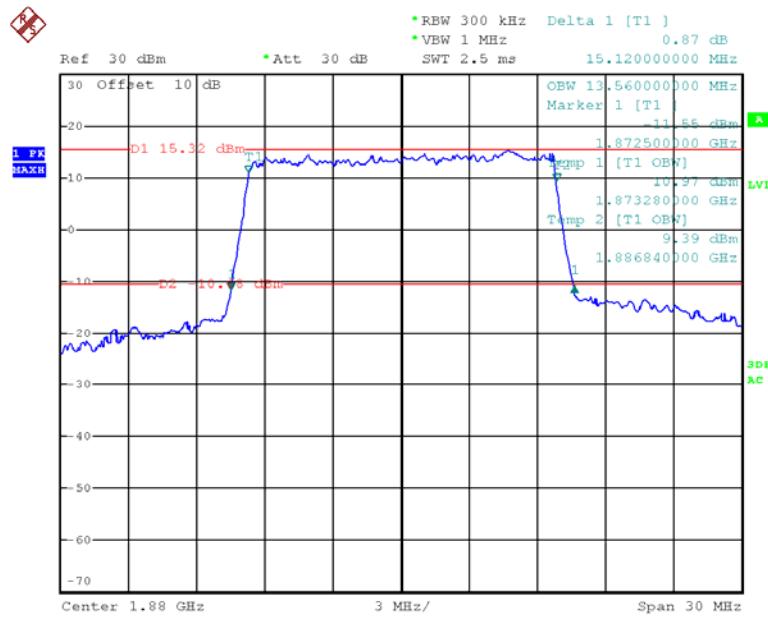
Date: 13.JUN.2016 23:37:13

**16QAM\_5 MHz**

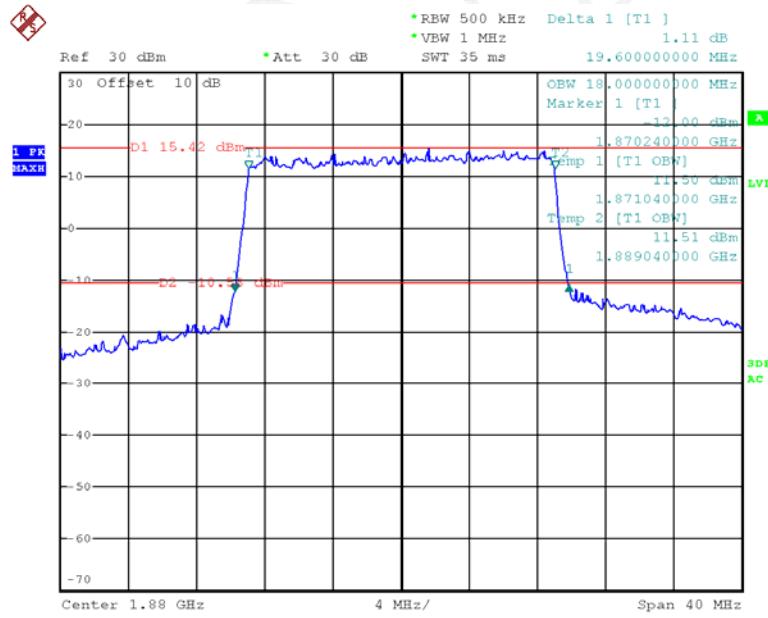
Date: 13.JUN.2016 23:39:20

**16QAM\_10 MHz**

Date: 13.JUN.2016 23:40:20

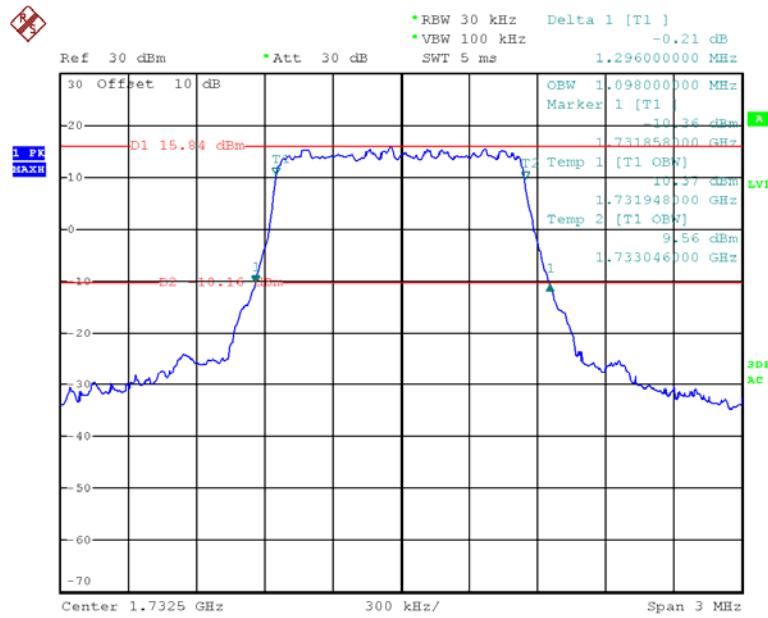
**16QAM\_15 MHz**

Date: 13.JUN.2016 23:48:42

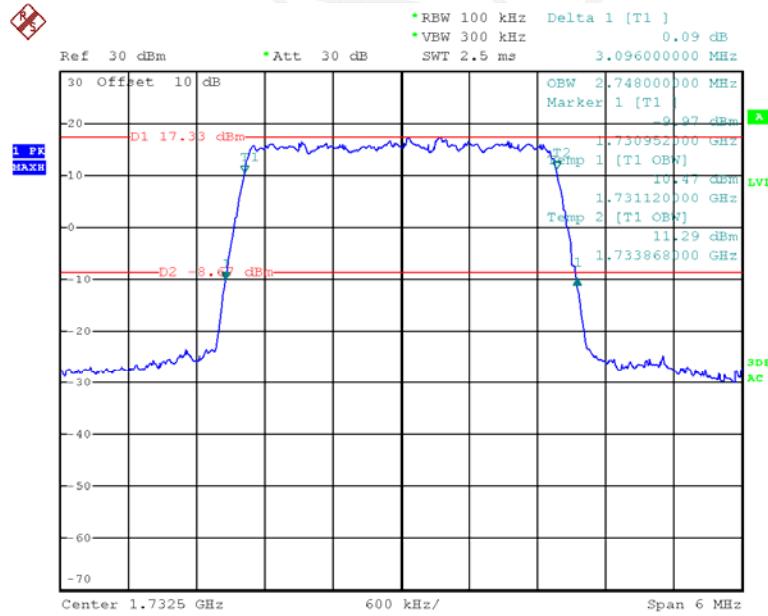
**16QAM\_20 MHz**

Date: 13.JUN.2016 23:54:18

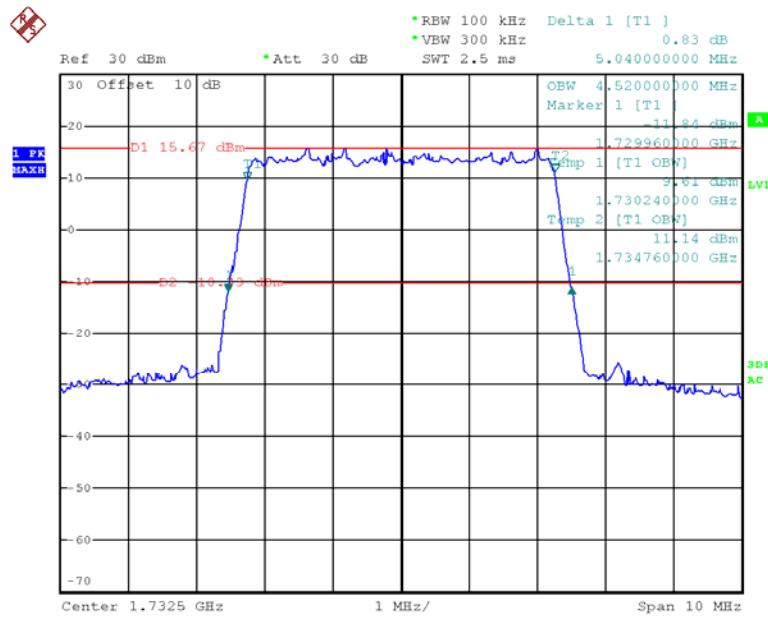
## LTE Band IV

**QPSK\_1.4 MHz**

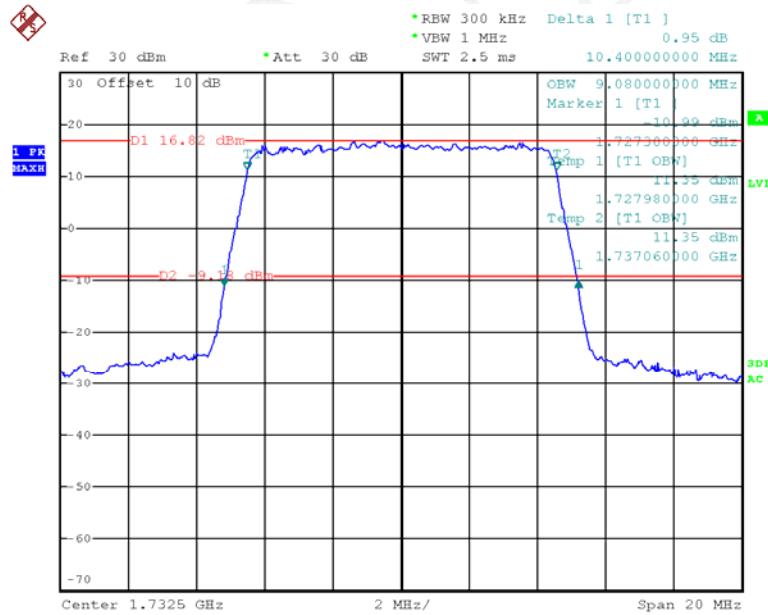
Date: 14.JUN.2016 22:14:17

**QPSK\_3 MHz**

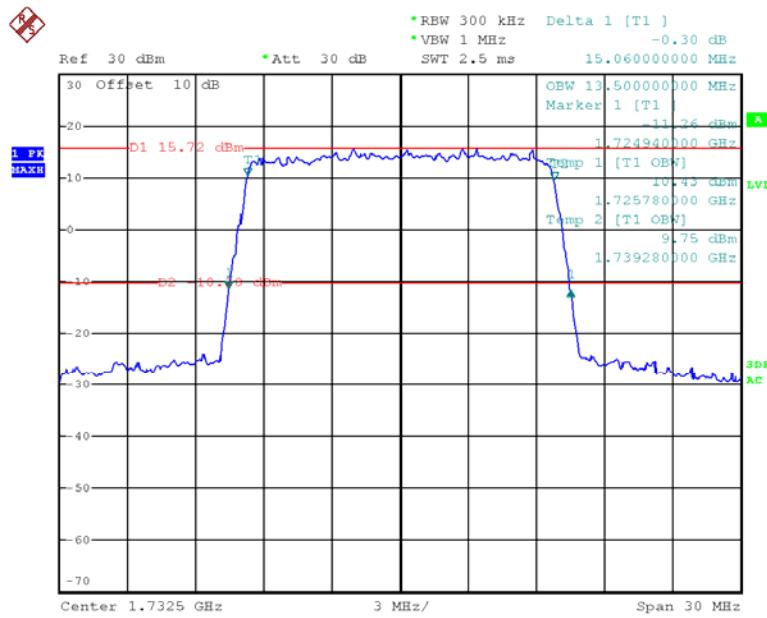
Date: 14.JUN.2016 22:16:19

**QPSK\_5 MHz**

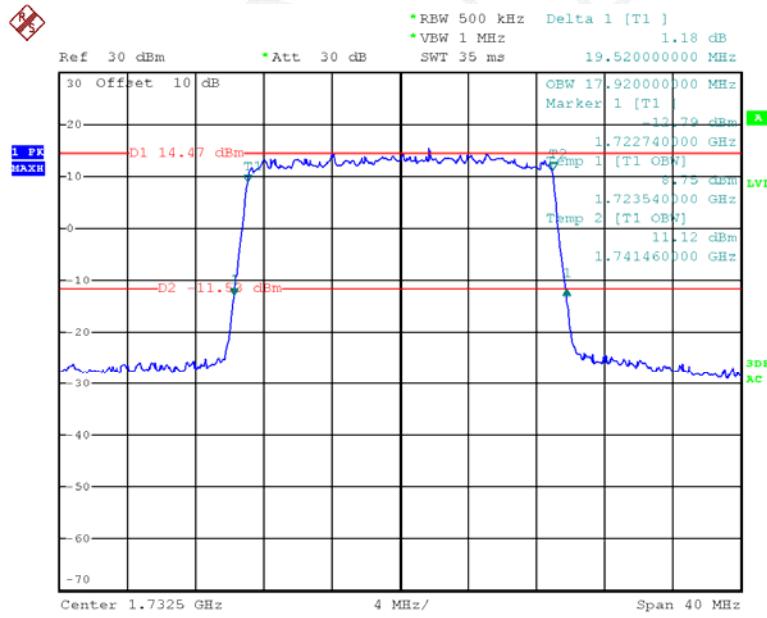
Date: 14.JUN.2016 22:18:13

**QPSK\_10 MHz**

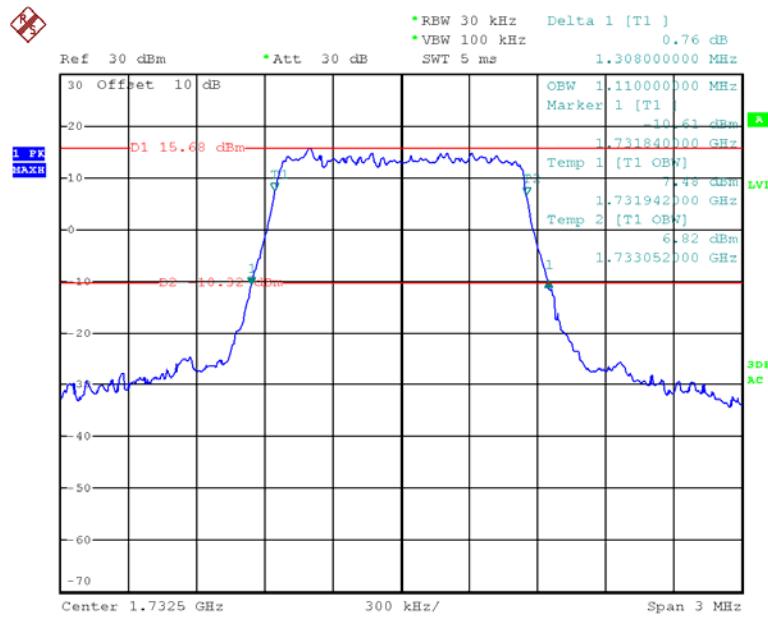
Date: 14.JUN.2016 22:21:44

**QPSK\_15 MHz**

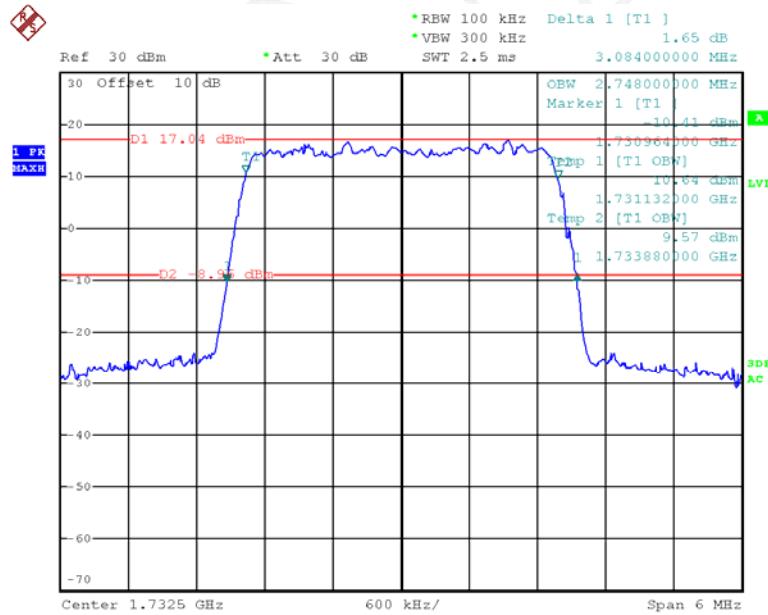
Date: 14.JUN.2016 22:23:03

**QPSK\_20 MHz**

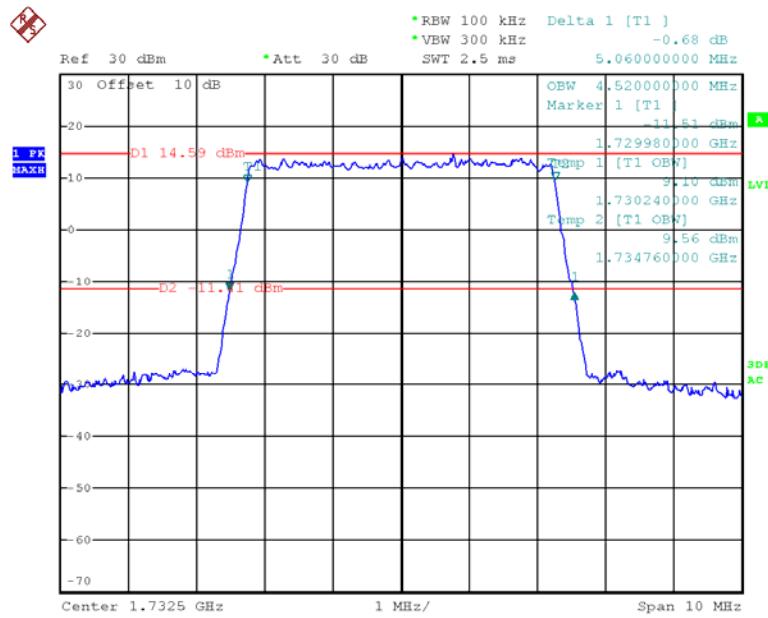
Date: 14.JUN.2016 22:26:16

**16QAM\_1.4 MHz**

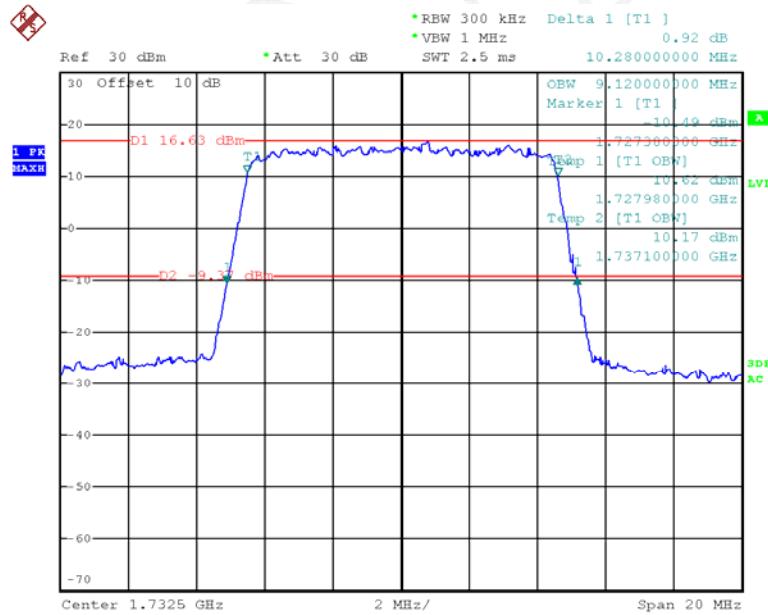
Date: 14.JUN.2016 22:15:21

**16QAM\_3 MHz**

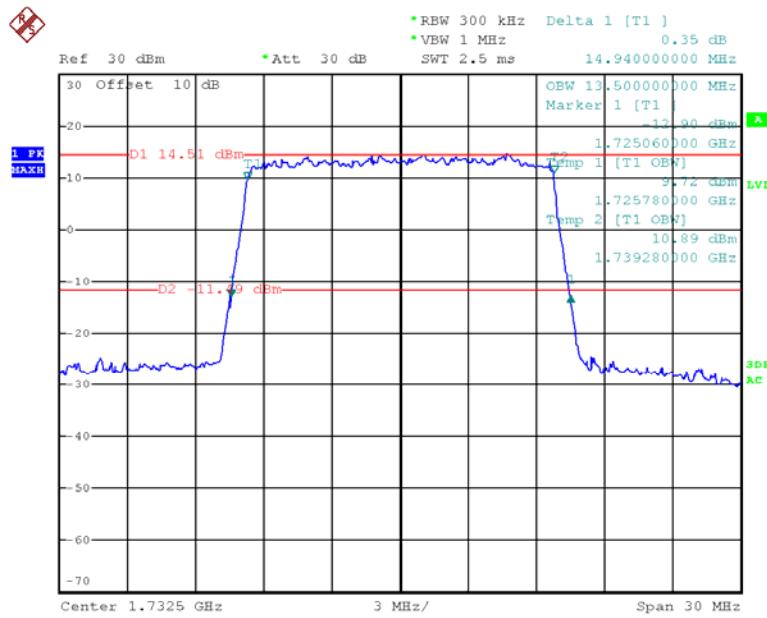
Date: 14.JUN.2016 22:17:14

**16QAM\_5 MHz**

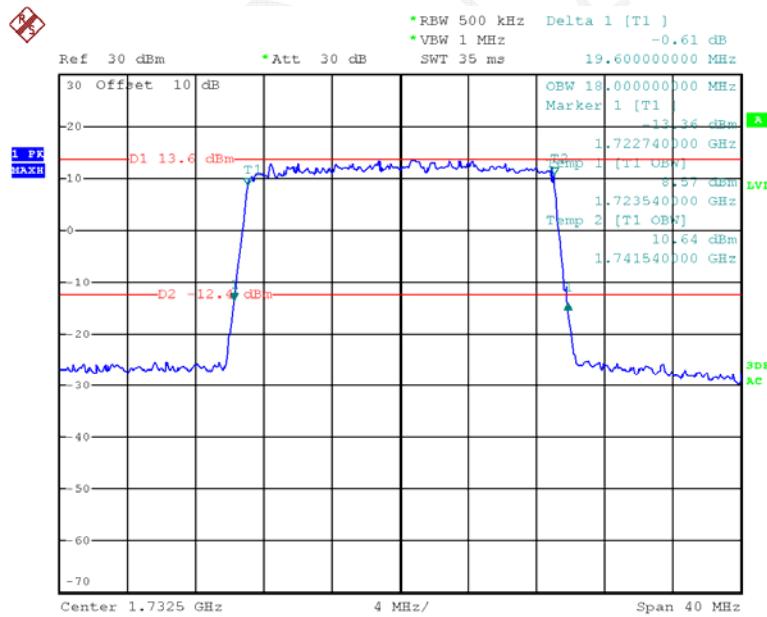
Date: 14.JUN.2016 22:19:18

**16QAM\_10 MHz**

Date: 14.JUN.2016 22:20:32

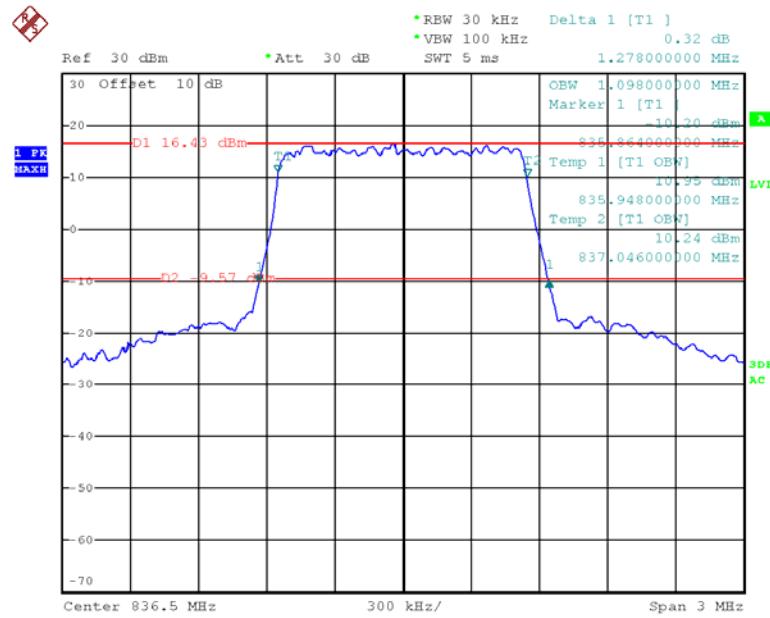
**16QAM\_15 MHz**

Date: 14.JUN.2016 22:23:56

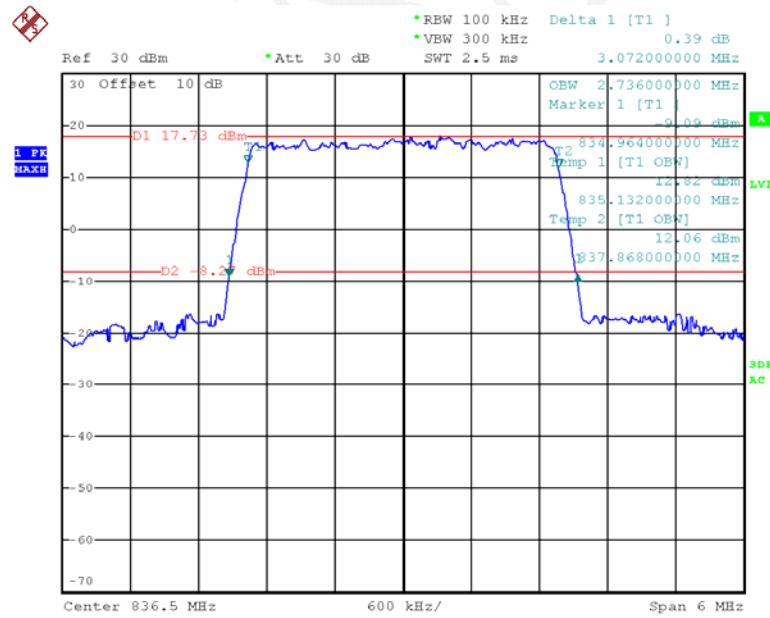
**16QAM\_20 MHz**

Date: 14.JUN.2016 22:25:07

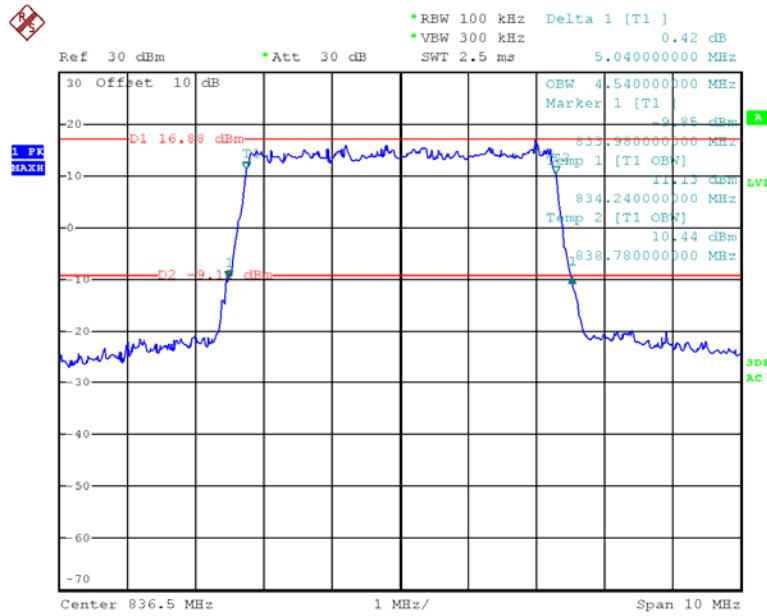
## LTE Band V

**QPSK\_1.4 MHz**

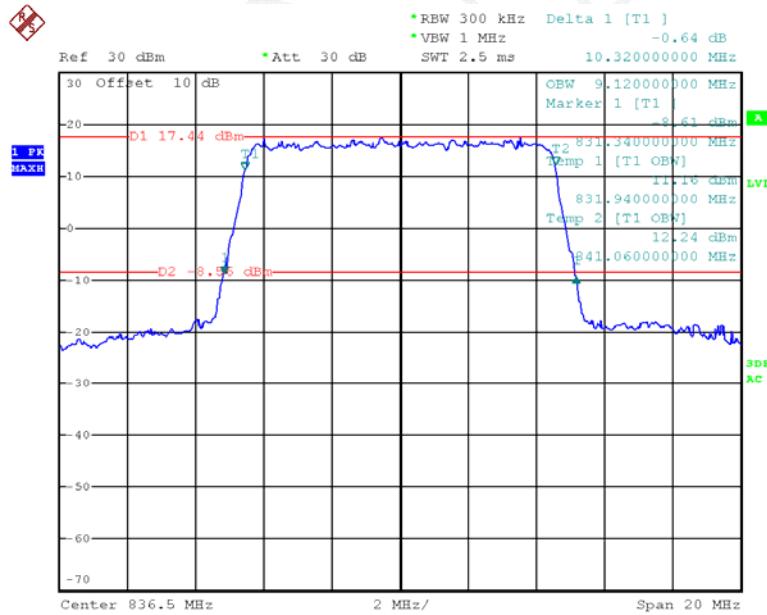
Date: 14.JUN.2016 00:02:39

**QPSK\_3 MHz**

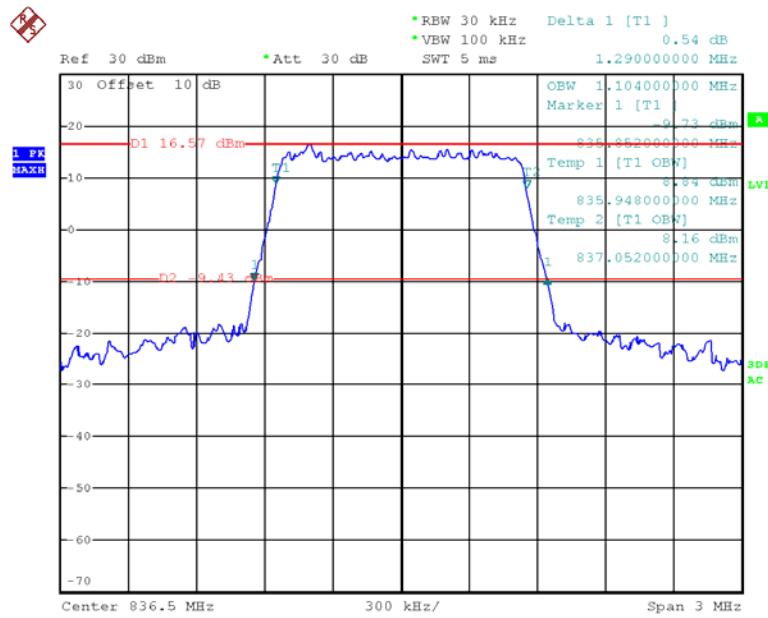
Date: 14.JUN.2016 00:04:30

**QPSK\_5 MHz**

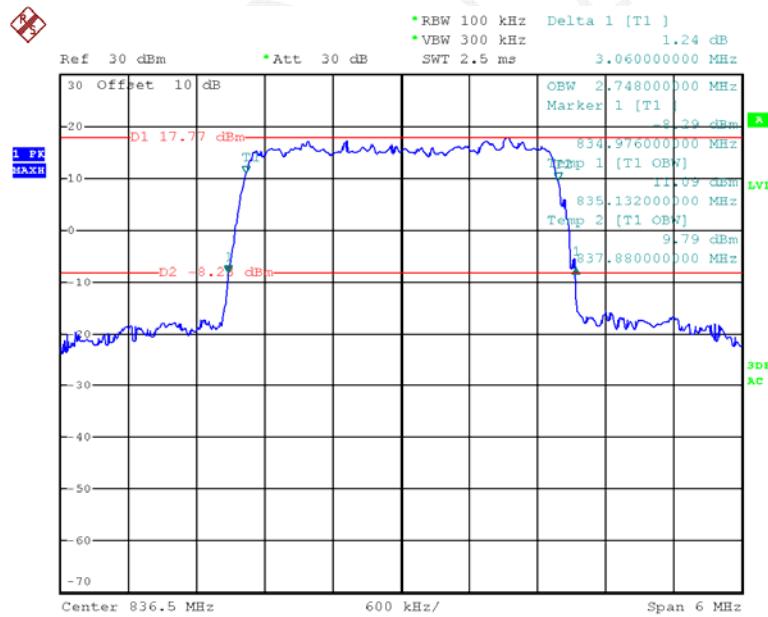
Date: 14.JUN.2016 00:06:25

**QPSK\_10 MHz**

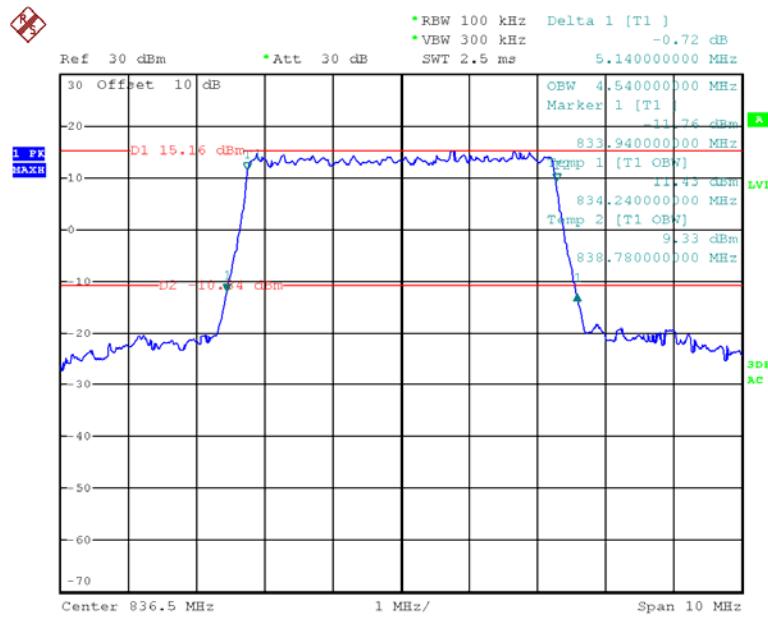
Date: 14.JUN.2016 00:07:19

**16QAM\_1.4 MHz**

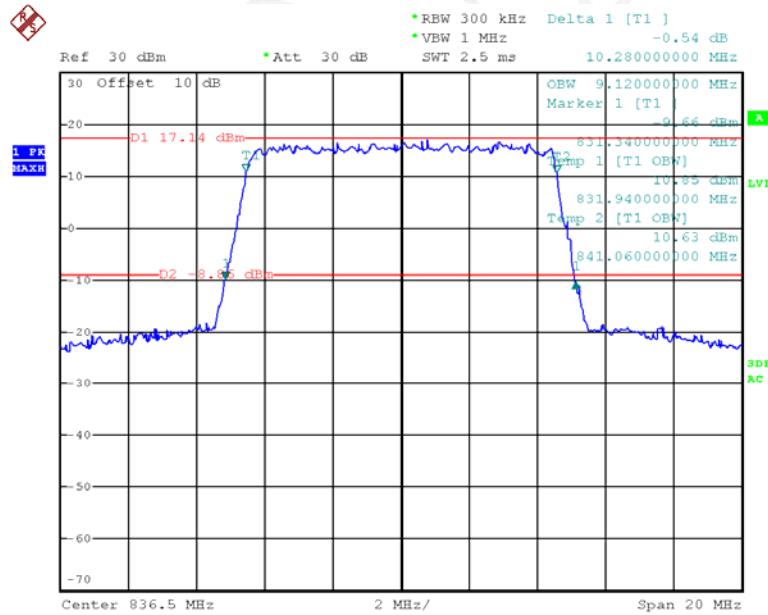
Date: 14.JUN.2016 00:01:26

**16QAM\_3 MHz**

Date: 14.JUN.2016 00:03:36

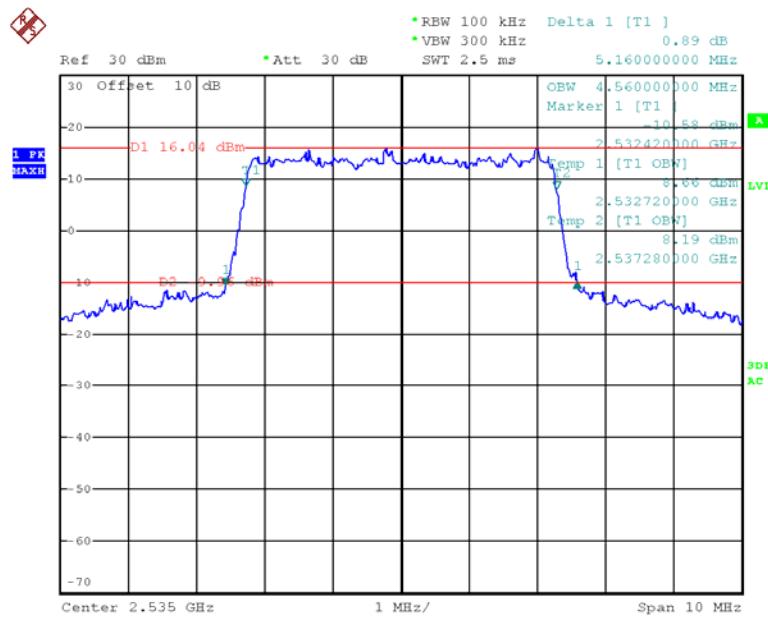
**16QAM\_5 MHz**

Date: 14.JUN.2016 00:05:49

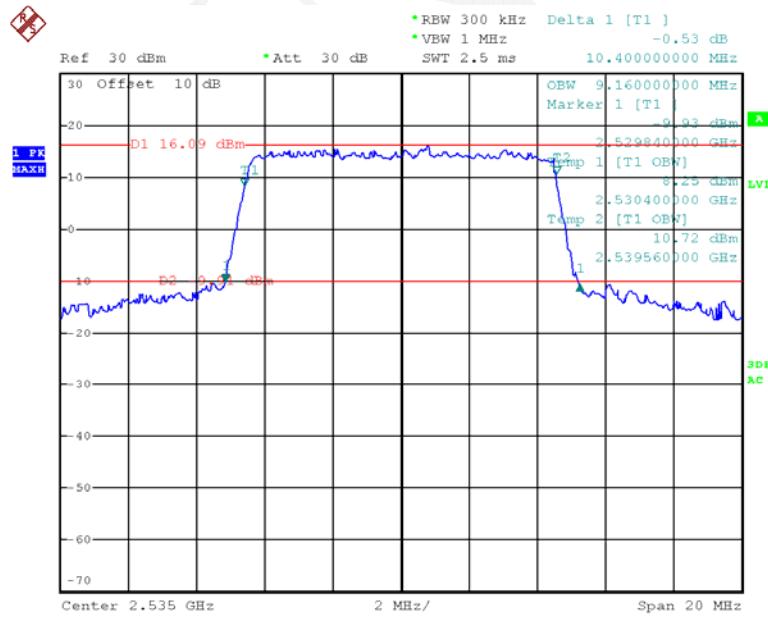
**16QAM\_10 MHz**

Date: 14.JUN.2016 00:07:53

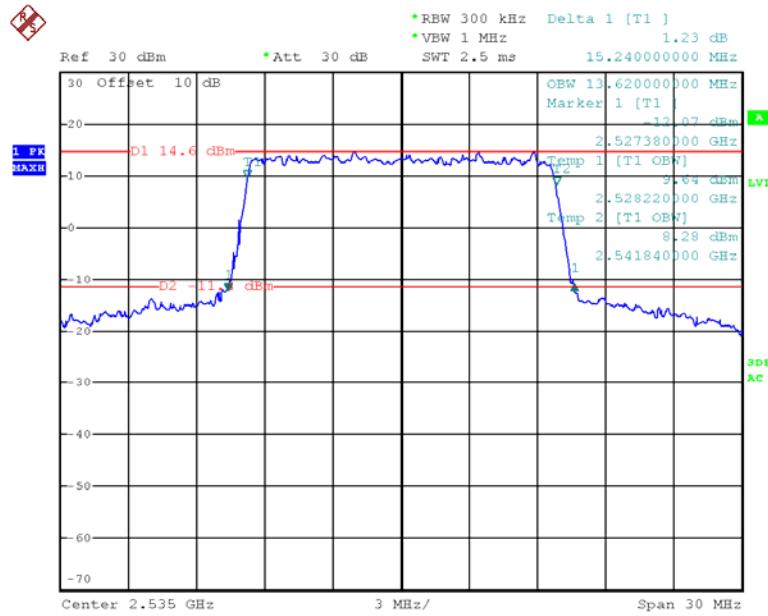
## LTE Band VII

**QPSK\_5 MHz**

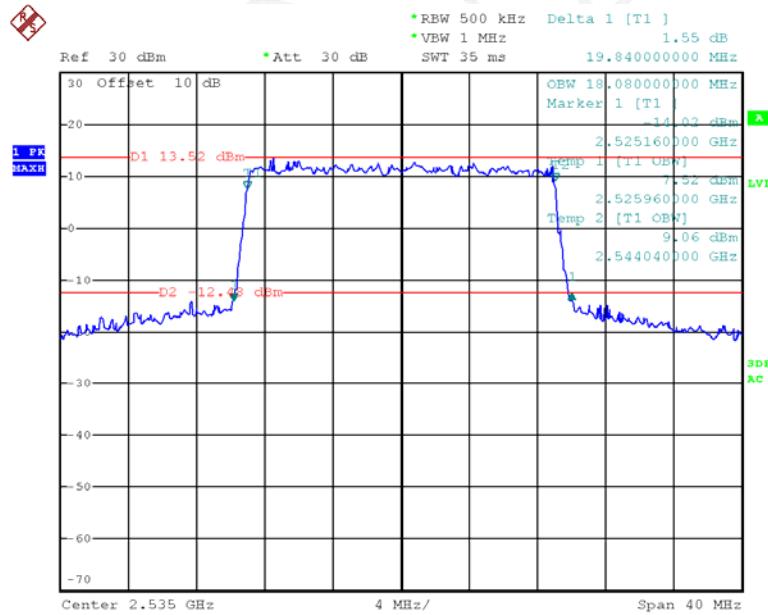
Date: 14.JUN.2016 00:11:19

**QPSK\_10 MHz**

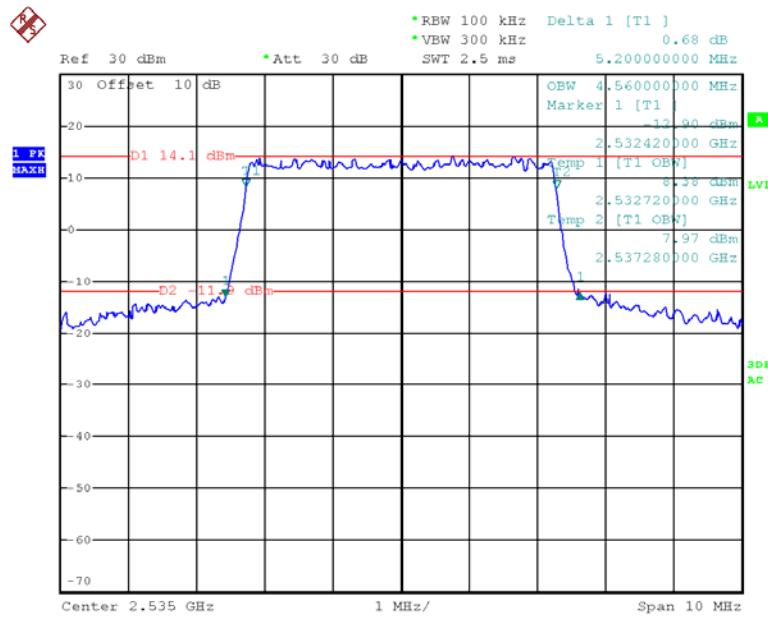
Date: 14.JUN.2016 00:13:35

**QPSK\_15 MHz**

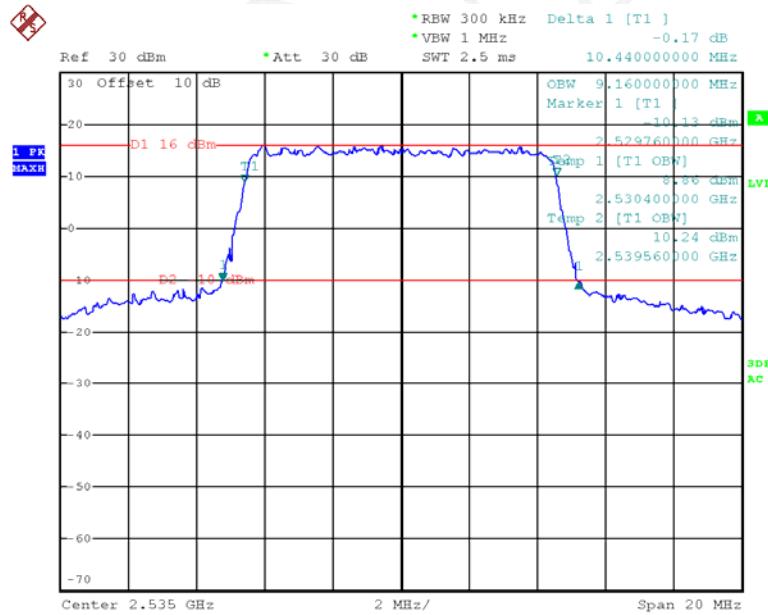
Date: 14.JUN.2016 00:15:38

**QPSK\_20 MHz**

Date: 14.JUN.2016 00:18:21

**16QAM\_5 MHz**

Date: 14.JUN.2016 00:12:32

**16QAM\_10 MHz**

Date: 14.JUN.2016 00:14:30