

FCC RF Test Report

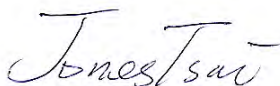
APPLICANT : BYD Precision Manufacture Co., Ltd.
EQUIPMENT : HP Slate 6 VoiceTab Plus
BRAND NAME : HP
MODEL NAME : HSTNH-B406M
FCC ID : ZW9HSTNH-B406M
STANDARD : 47 CFR Part 2, 22(H), 24(E), 27(L) , 27(H) , 27(M)
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Jun. 09, 2014 and testing was completed on Sep. 02, 2014. We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA / EIA-603-C-2004 and the testing has shown the tested sample to be in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL (KUNSHAN) INC., the test report shall not be reproduced except in full.



Reviewed by: Joseph Lin / Supervisor



Approved by: Jones Tsai / Manager



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG460901B	Rev. 01	Initial issue of report	Sep. 03, 2014

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	§2.1046	Conducted Output Power	Reporting Only	PASS	-
3.2	§24.232(d)	Peak-to-Average Ratio	<13 dB	PASS	-
3.3	§22.913(a)(2)	Effective Radiated Power (Band 5) (Band 26)	ERP < 7 Watt	PASS	-
	§27.50(b)(10) §27.50(c)(10) §27.50(c)(9)	Effective Radiated Power (Band 12) (Band 17)	ERP < 3 Watt		
	§24.232(c) §27.50(h)(2)	Equivalent Isotropic Radiated Power (Band 2)(Band 25) (Band 7)	EIRP < 2Watt		
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4)	EIRP < 1Watt		
3.4	§2.1049 §22.917(b) §24.238(b) §27.53(h)(3) §27.53(m)(6)	Occupied Bandwidth	Reporting Only	PASS	-
3.5	§2.1051 §22.917(a) §24.238(a) §27.53(g) §27.53(h) §27.53(m)(4)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 12) (Band 17) (Band 25) (Band 26) (Band 7)	< 43+10log ₁₀ (P[Watt])	PASS	-



Report Section	FCC Rule	Description	Limit	Result	Remark
3.6	§2.1051 §22.917(a) §24.238(a) §27.53(g) §27.53(h)	Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 17) (Band 25) (Band 26)	$< 43+10\log_{10}(P[\text{Watts}])$	PASS	-
	§2.1051 §27.53(m)(4)	Conducted Spurious Emission (Band 7)	$< 55+10\log_{10}(P[\text{Watts}])$	PASS	-
3.7	§2.1053 §22.917(a) §24.238(a) §27.53(g) §27.53(h)	Radiated Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 17) (Band 25) (Band 26)	$< 43+10\log_{10}(P[\text{Watts}])$	PASS	Under limit 23.04 dB at 5193.000 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (Band 7)	$< 55+10\log_{10}(P[\text{Watts}])$	PASS	
3.8	§2.1055 §22.355 §24.235 §27.54	Frequency Stability Temperature & Voltage	$< 2.5 \text{ ppm}$	PASS	



1 General Description

1.1 Applicant

BYD Precision Manufacture Co., Ltd.

No. 3001, Baohe Road, Baolong Industrial, Longgang, Shenzhen, P.R.China

1.2 Manufacturer

Hewlett-Packard Company

1501 Page Mill Road Palo Alto, CA 94304 USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	HP Slate 6 VoiceTab Plus
Brand Name	HP
Model Name	HSTNH-B406M
FCC ID	ZW9HSTNH-B406M
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/LTE WLAN2.4GHz 802.11b/g/n HT20 Bluetooth v3.0+EDR Bluetooth v4.0 LE
HW Version	MV
SW Version	V1.00.00
EUT Stage	Pre-Production

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

1.4 Product Specification subjective to this standard

Product Specification subjective to this standard	
Tx Frequency	LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 5 : 824.7 MHz ~ 848.3 MHz LTE Band 7 : 2502.5 MHz ~ 2567.5 MHz LTE Band 12 : 699.7 MHz ~ 715.3 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz LTE Band 25 : 1850.7MHz ~ 1914.3 MHz LTE Band 26 : 824.7MHz ~ 848.3 MHz
Rx Frequency	LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 7 : 2622.5MHz ~ 2687.5 MHz LTE Band 12 : 729.7 MHz ~ 745.3 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz LTE Band 25 : 1930.7MHz ~ 1994.3 MHz LTE Band 26 : 869.7 MHz ~ 893.3 MHz
Bandwidth	LTE Band 2 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 5 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 7 : 5MHz / 10MHz / 15MHz / 20MHz LTE Band 12 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 17 : 5MHz / 10MHz LTE Band 25 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 26 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz
Maximum Output Power to Antenna	LTE Band 2 : 23.89 dBm LTE Band 4 : 23.97 dBm LTE Band 5 : 23.57 dBm LTE Band 7 : 21.84 dBm LTE Band 12 : 23.83 dBm LTE Band 17 : 23.62 dBm LTE Band 25 : 24.25 dBm LTE Band 26 : 23.56 dBm
Antenna Type	Monopole Antenna
Type of Modulation	QPSK / 16QAM



1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Maximum ERP/EIRP Power, Frequency Tolerance, and Emission Designator

FCC Rule	System	Type of Modulation	BW	Emission Designator	Frequency Tolerance (ppm)	Maximum ERP/EIRP
Part 24	LTE Band 2	QPSK	1.4 MHz	1M10G7D	-	0.2966 W
Part 24	LTE Band 2	16QAM	1.4 MHz	1M10W7D	-	0.2355 W
Part 24	LTE Band 2	QPSK	3 MHz	2M72G7D	-	-
Part 24	LTE Band 2	16QAM	3 MHz	2M73W7D	-	-
Part 24	LTE Band 2	QPSK	5 MHz	4M49G7D	-	-
Part 24	LTE Band 2	16QAM	5 MHz	4M49W7D	-	-
Part 24	LTE Band 2	QPSK	10 MHz	9M07G7D	0.0048 ppm	-
Part 24	LTE Band 2	16QAM	10 MHz	8M97W7D	-	-
Part 24	LTE Band 2	QPSK	15 MHz	13M4G7D	-	-
Part 24	LTE Band 2	16QAM	15 MHz	13M4W7D	-	-
Part 24	LTE Band 2	QPSK	20 MHz	18M2G7D	-	0.3098 W
Part 24	LTE Band 2	16QAM	20 MHz	18M2W7D	-	0.2287 W
Part 27	LTE Band 4	QPSK	1.4 MHz	1M10G7D	-	0.1966 W
Part 27	LTE Band 4	16QAM	1.4 MHz	1M10W7D	-	0.1889 W
Part 27	LTE Band 4	QPSK	3 MHz	2M74G7D	-	-
Part 27	LTE Band 4	16QAM	3 MHz	2M72W7D	-	-
Part 27	LTE Band 4	QPSK	5MHz	4M49G7D	-	-
Part 27	LTE Band 4	16QAM	5MHz	4M50W7D	-	-
Part 27	LTE Band 4	QPSK	10MHz	9M05G7D	0.0162 ppm	-
Part 27	LTE Band 4	16QAM	10MHz	8M99W7D	-	-
Part 27	LTE Band 4	QPSK	15MHz	13M4G7D	-	-
Part 27	LTE Band 4	16QAM	15MHz	13M4W7D	-	-
Part 27	LTE Band 4	QPSK	20MHz	18M3G7D	-	0.1894 W
Part 27	LTE Band 4	16QAM	20MHz	18M3W7D	-	0.1507 W



FCC Rule	System	Type of Modulation	BW	Emission Designator	Frequency Tolerance (ppm)	Maximum ERP/EIRP
Part 22	LTE Band 5	QPSK	1.4 MHz	1M09G7D	-	0.0627 W
Part 22	LTE Band 5	16QAM	1.4 MHz	1M09W7D	-	0.0614 W
Part 22	LTE Band 5	QPSK	3 MHz	2M72G7D	-	-
Part 22	LTE Band 5	16QAM	3 MHz	2M72W7D	-	-
Part 22	LTE Band 5	QPSK	5 MHz	4M49G7D	-	-
Part 22	LTE Band 5	16QAM	5 MHz	4M49W7D	-	-
Part 22	LTE Band 5	QPSK	10 MHz	9M09G7D	0.0024 ppm	0.0589 W
Part 22	LTE Band 5	16QAM	10 MHz	9M01W7D	-	0.0449 W
Part 27	LTE Band 7	QPSK	5MHz	4M50G7D	-	0.1680 W
Part 27	LTE Band 7	16QAM	5MHz	4M50W7D	-	0.1333 W
Part 27	LTE Band 7	QPSK	10MHz	9M05G7D	0.0027 ppm	-
Part 27	LTE Band 7	16QAM	10MHz	9M01W7D	-	-
Part 27	LTE Band 7	QPSK	15MHz	13M4G7D	-	-
Part 27	LTE Band 7	16QAM	15MHz	13M4W7D	-	-
Part 27	LTE Band 7	QPSK	20MHz	18M3G7D	-	0.1716 W
Part 27	LTE Band 7	16QAM	20MHz	18M3W7D	-	0.1249 W
Part 27	LTE Band 12	QPSK	1.4 MHz	1M10G7D	-	0.0809 W
Part 27	LTE Band 12	16QAM	1.4 MHz	1M10W7D	-	0.0667 W
Part 27	LTE Band 12	QPSK	3 MHz	2M73G7D	-	-
Part 27	LTE Band 12	16QAM	3 MHz	2M73W7D	-	-
Part 27	LTE Band 12	QPSK	5 MHz	4M50G7D	-	-
Part 27	LTE Band 12	16QAM	5 MHz	4M50W7D	-	-
Part 27	LTE Band 12	QPSK	10 MHz	9M09G7D	0.0012 ppm	0.0837 W
Part 27	LTE Band 12	16QAM	10 MHz	9M01W7D	-	0.0638 W
Part 27	LTE Band 17	QPSK	5MHz	4M50G7D	-	0.0783 W
Part 27	LTE Band 17	16QAM	5MHz	4M49W7D	-	0.0495 W
Part 27	LTE Band 17	QPSK	10MHz	9M05G7D	0.0120 ppm	0.0850 W
Part 27	LTE Band 17	16QAM	10MHz	8M97W7D	-	0.0505 W



FCC Rule	System	Type of Modulation	BW	Emission Designator	Frequency Tolerance (ppm)	Maximum ERP/EIRP
Part 24	LTE Band 25	QPSK	1.4 MHz	1M10G7D	-	0.3524 W
Part 24	LTE Band 25	16QAM	1.4 MHz	1M10W7D	-	0.2412 W
Part 24	LTE Band 25	QPSK	3 MHz	2M72G7D	-	-
Part 24	LTE Band 25	16QAM	3 MHz	2M72W7D	-	-
Part 24	LTE Band 25	QPSK	5 MHz	4M49G7D	-	-
Part 24	LTE Band 25	16QAM	5 MHz	4M50W7D	-	-
Part 24	LTE Band 25	QPSK	10 MHz	9M09G7D	0.0175 ppm	-
Part 24	LTE Band 25	16QAM	10 MHz	9M01W7D	-	-
Part 24	LTE Band 25	QPSK	15MHz	13M5G7D	-	-
Part 24	LTE Band 25	16QAM	15MHz	13M4W7D	-	-
Part 24	LTE Band 25	QPSK	20MHz	18M3G7D	-	0.3423 W
Part 24	LTE Band 25	16QAM	20MHz	18M3W7D	-	0.2310 W
Part 22	LTE Band 26	QPSK	1.4 MHz	1M09G7D	-	0.0844 W
Part 22	LTE Band 26	16QAM	1.4 MHz	1M10W7D	-	0.0533 W
Part 22	LTE Band 26	QPSK	3 MHz	2M72G7D	-	-
Part 22	LTE Band 26	16QAM	3 MHz	2M72W7D	-	-
Part 22	LTE Band 26	QPSK	5 MHz	4M49G7D	-	-
Part 22	LTE Band 26	16QAM	5 MHz	4M49W7D	-	-
Part 22	LTE Band 26	QPSK	10 MHz	9M11G7D	0.0239 ppm	-
Part 22	LTE Band 26	16QAM	10 MHz	9M01W7D	-	-
Part 22	LTE Band 26	QPSK	15MHz	13M5G7D	-	0.0610 W
Part 22	LTE Band 26	16QAM	15MHz	13M5W7D	-	0.0464 W



1.7 Testing Location

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.	
Test Site Location	No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan warehouse, Nanshan District, Shenzhen, Guangdong, P.R.C. TEL: +86-755- 3320-2398	
Test Site No.	Sporton Site No.	FCC Registration No.
	TH01-SZ	831040

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.	
Test Site Location	No. 101, Complex Building C, Guanlong Village, Xili Town, Nanshan District, Shenzhen, Guangdong, P.R.C. TEL:+86-755-8637-9589 FAX: +86-755-8637-9595	
Test Site No.	Sporton Site No.	
	OTA01-SZ	

Test Site	SPORTON INTERNATIONAL (KUNSHAN) INC.	
Test Site Location	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C. TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958	
Test Site No.	Sporton Site No.	FCC Registration No.
	03CH01-KS	149928



1.8 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR Part 2, 22(H), 24(E), 27(L), 27(H), 27(M)
- ♦ ANSI / TIA / EIA-603-C-2004
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v02r01

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



2 Test Configuration of Equipment Under Test

2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v02r01 with maximum output power.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

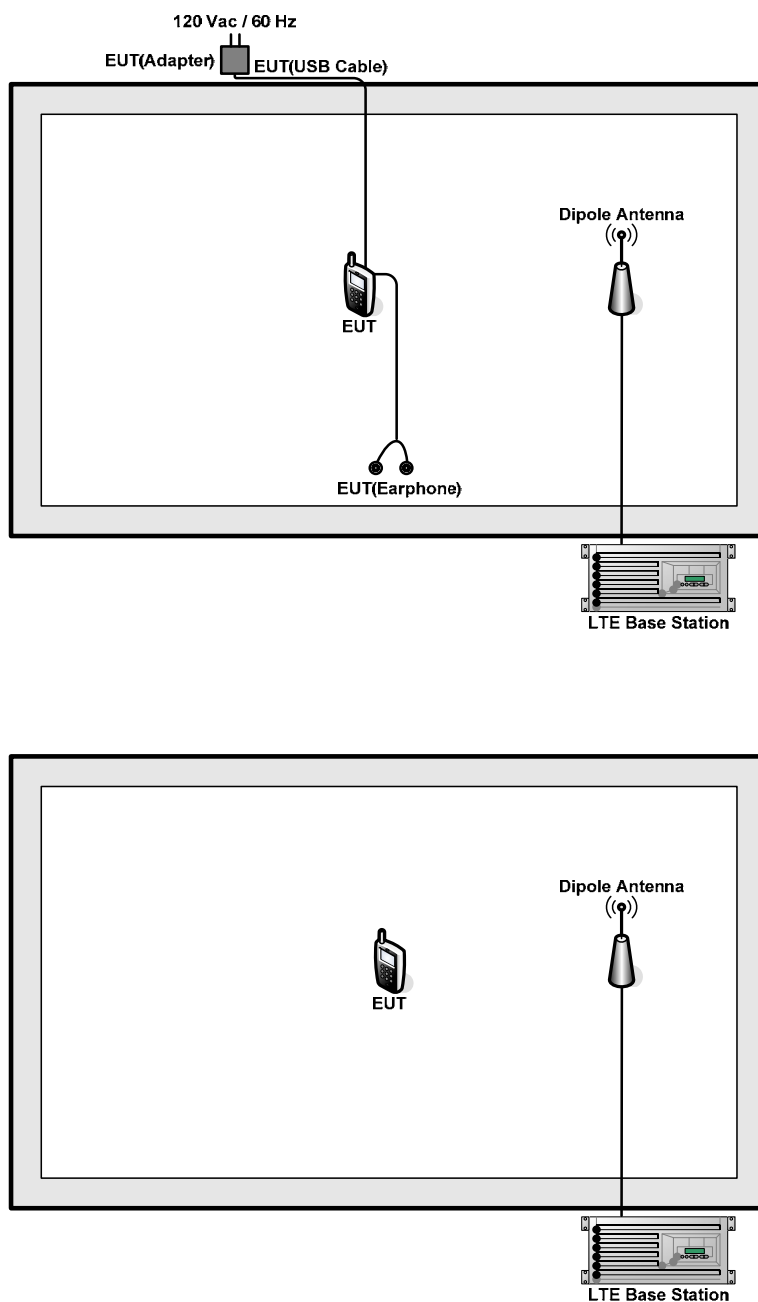
Test Items	Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Max. Output Power	2	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	5	v	v	v	v	-	-	v	v	v	v	v	v	v	v
	7	-	-	v	v	v	v	v	v	v	v	v	v	v	v
	12	v	v	v	v	-	-	v	v	v	v	v	v	v	v
	17	-	-	v	v	-	-	v	v	v	v	v	v	v	v
	25	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	26	v	v	v	v	v	-	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	2						v		v	v		v	v	v	v
	4						v		v	v		v	v	v	v
	5				v	-	-		v	v		v	v	v	v
	7	-	-				v		v	v		v	v	v	v
	12				v	-	-		v	v		v	v	v	v
	17	-	-		v	-	-		v	v		v	v	v	v
	25						v		v	v		v	v	v	v
	26					v	-		v	v		v	v	v	v
26dB and 99% Bandwidth	2	v	v	v	v	v	v	v	v			v		v	
	4	v	v	v	v	v	v	v	v			v		v	
	5	v	v	v	v	-	-	v	v			v		v	
	7	-	-	v	v	v	v	v	v			v		v	
	12	v	v	v	v	-	-	v	v			v		v	
	17	-	-	v	v	-	-	v	v			v		v	
	25	v	v	v	v	v	v	v	v			v		v	
	26	v	v	v	v	v	-	v	v			v		v	



Test Items	Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Conducted Band Edge	2	V	V	V	V	V	V	V	V	V		V	V		V
	4	V	V	V	V	V	V	V	V	V		V	V		V
	5	V	V	V	V	-	-	V	V	V		V	V		V
	7	-	-	V	V	V	V	V	V	V		V	V		V
	12	V	V	V	V	-	-	V	V	V		V	V		V
	17	-	-	V	V	-	-	V	V	V		V	V		V
	25	V	V	V	V	V	V	V	V	V		V	V		V
	26	V	V	V	V	V	-	V	V	V		V	V		V
Conducted Spurious Emission	2	V	V	V	V	V	V	V	V	V			V	V	V
	4	V	V	V	V	V	V	V	V	V			V	V	V
	5	V	V	V	V	-	-	V	V	V			V	V	V
	7	-	-	V	V	V	V	V	V	V			V	V	V
	12	V	V	V	V	-	-	V	V	V			V	V	V
	17	-	-	V	V	-	-	V	V	V			V	V	V
	25	V	V	V	V	V	V	V	V	V			V	V	V
	26	V	V	V	V	V	-	V	V	V			V	V	V
Frequency Stability	2				V			V				V		V	
	4				V			V				V		V	
	5				V	-	-	V				V		V	
	7	-	-		V			V				V		V	
	12				V	-	-	V				V		V	
	17	-	-		V	-	-	V				V		V	
	25				V			V				V		V	
	26				V		-	V				V		V	
E.R.P./ E.I.R.P.	2	V					V	V	V	V			V	V	V
	4	V					V	V	V	V			V	V	V
	5	V			V	-	-	V	V	V			V	V	V
	7	-	-	V			V	V	V	V			V	V	V
	12	V			V	-	-	V	V	V			V	V	V
	17	-	-	V	V	-	-	V	V	V			V	V	V
	25	V					V	V	V	V			V	V	V
	26	V				V	-	V	V	V			V	V	V

Test Items	Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Radiated Spurious Emission	2	v	v	v	v	v	v	v		v				v	
	4	v	v	v	v	v	v	v		v				v	
	5	v	v	v	v	-	-	v		v				v	
	7	-	-	v	v	v	v	v		v				v	
	12	v	v	v	v	-	-	v		v				v	
	17	-	-	v	v	-	-	v		v				v	
	25	v	v	v	v	v	v	v		v				v	
	26	v	v	v	v	v	-	v		v				v	
Note	1. The mark “v” means that this configuration is chosen for testing 2. The mark “-” means that this bandwidth is not supported. 3. For E.R.P/E.I.R.P. measurement, the widest bandwidth and the bandwidth with the highest conducted power of each band is chosen for testing. Besides, the lowest bandwidth of each band is also measured for reporting only. 4. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.														

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	DC Power Supply	GWINSTEK	GPS-3030D	N/A	N/A	Unshielded, 1.8 m



2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 7.5dB and 10dB attenuator.

Example :

$$\begin{aligned}\text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)} \\ &= 7.5 + 10 = 17.5 \text{ (dB)}\end{aligned}$$

3 Test Result

3.1 Conducted Output Power Measurement

3.1.1 Description of the Conducted Output Power Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

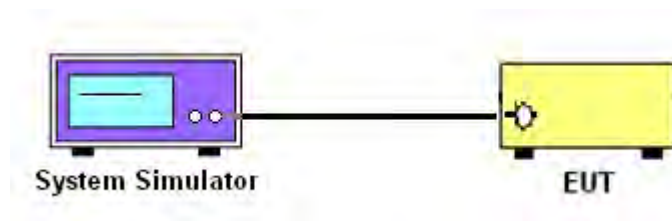
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through the system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.

3.1.4 Test Setup





3.1.5 Test Result of Conducted Output Power

<LTE Band 2 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				18700	18900	19100
Frequency (MHz)				1860	1880	1900
20	QPSK	1	0	23.52	23.68	23.89
20	QPSK	1	49	23.41	23.63	23.75
20	QPSK	1	99	23.50	23.58	23.77
20	QPSK	50	0	23.47	23.63	23.73
20	QPSK	50	24	23.48	23.64	23.78
20	QPSK	50	49	23.44	23.62	23.75
20	QPSK	100	0	23.50	23.63	23.75
20	16QAM	1	0	22.64	22.25	22.46
20	16QAM	1	49	22.63	22.40	22.78
20	16QAM	1	99	22.24	22.70	22.43
20	16QAM	50	0	22.52	22.59	22.77
20	16QAM	50	24	22.53	22.68	22.72
20	16QAM	50	49	22.46	22.64	22.77
20	16QAM	100	0	22.37	22.49	22.75
Channel				18675	18900	19125
Frequency (MHz)				1857.5	1880	1902.5
15	QPSK	1	0	23.43	23.62	23.56
15	QPSK	1	37	23.43	23.63	23.70
15	QPSK	1	74	23.55	23.73	23.68
15	QPSK	36	0	23.47	23.69	23.63
15	QPSK	36	18	23.49	23.64	23.67
15	QPSK	36	37	23.54	23.72	23.65
15	QPSK	75	0	23.51	23.62	23.66
15	16QAM	1	0	22.69	22.81	22.65
15	16QAM	1	37	22.36	22.34	22.52
15	16QAM	1	74	22.40	22.56	22.76
15	16QAM	36	0	22.53	22.50	22.73
15	16QAM	36	18	22.37	22.74	22.64
15	16QAM	36	37	22.61	22.69	22.72
15	16QAM	75	0	22.61	22.54	22.60



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				18650	18900	19150
Frequency (MHz)				1855	1880	1905
10	QPSK	1	0	23.36	23.64	23.55
10	QPSK	1	24	23.48	23.54	23.51
10	QPSK	1	49	23.39	23.55	23.64
10	QPSK	25	0	23.39	23.61	23.62
10	QPSK	25	12	23.44	23.61	23.55
10	QPSK	25	24	23.46	23.56	23.62
10	QPSK	50	0	22.48	22.61	22.66
10	16QAM	1	0	22.63	22.78	22.37
10	16QAM	1	24	22.24	22.35	22.77
10	16QAM	1	49	22.57	22.46	22.32
10	16QAM	25	0	22.62	22.65	22.74
10	16QAM	25	12	22.34	22.53	22.63
10	16QAM	25	24	22.42	22.63	22.74
10	16QAM	50	0	21.55	21.79	21.63
Channel				18625	18900	19175
Frequency (MHz)				1852.5	1880	1907.5
5	QPSK	1	0	23.38	23.72	23.47
5	QPSK	1	12	23.47	23.73	23.57
5	QPSK	1	24	23.42	23.63	23.42
5	QPSK	12	0	23.42	23.71	23.55
5	QPSK	12	6	23.44	23.62	23.54
5	QPSK	12	11	23.41	23.63	23.55
5	QPSK	25	0	22.41	22.67	22.61
5	16QAM	1	0	22.30	22.71	22.31
5	16QAM	1	12	22.46	22.40	22.42
5	16QAM	1	24	22.62	22.37	22.68
5	16QAM	12	0	22.60	22.67	22.67
5	16QAM	12	6	22.52	22.67	22.57
5	16QAM	12	11	22.39	22.64	22.62
5	16QAM	25	0	21.45	21.69	21.64



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				18615	18900	19185
Frequency (MHz)				1851.5	1880	1908.5
3	QPSK	1	0	23.57	23.72	23.51
3	QPSK	1	7	23.49	23.67	23.49
3	QPSK	1	14	23.52	23.70	23.42
3	QPSK	8	0	22.46	22.66	22.54
3	QPSK	8	4	22.48	22.57	22.53
3	QPSK	8	7	22.48	22.70	22.52
3	QPSK	15	0	22.43	22.61	22.57
3	16QAM	1	0	22.19	22.77	22.38
3	16QAM	1	7	22.26	22.78	22.72
3	16QAM	1	14	22.24	22.85	22.62
3	16QAM	8	0	21.56	21.72	21.57
3	16QAM	8	4	21.53	21.81	21.56
3	16QAM	8	7	21.54	21.73	21.58
3	16QAM	15	0	21.46	21.73	21.62
Channel				18607	18900	19193
Frequency (MHz)				1850.7	1880	1909.3
1.4	QPSK	1	0	23.43	23.74	23.48
1.4	QPSK	1	2	23.60	23.83	23.63
1.4	QPSK	1	5	23.50	23.70	23.56
1.4	QPSK	3	0	23.48	23.72	23.60
1.4	QPSK	3	1	23.47	23.80	23.59
1.4	QPSK	3	2	23.47	23.80	23.60
1.4	QPSK	6	0	23.57	23.79	23.58
1.4	16QAM	1	0	22.59	22.43	22.43
1.4	16QAM	1	2	22.32	22.53	22.37
1.4	16QAM	1	5	22.57	22.71	22.57
1.4	16QAM	3	0	22.46	22.61	22.40
1.4	16QAM	3	1	22.45	22.69	22.40
1.4	16QAM	3	2	22.56	22.40	22.30
1.4	16QAM	6	0	22.36	22.51	22.44

**<LTE Band 4 Conducted Power>**

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20050	20175	20300
Frequency (MHz)				1720	1732.5	1745
20	QPSK	1	0	23.51	23.54	23.76
20	QPSK	1	49	23.55	23.77	23.97
20	QPSK	1	99	23.51	23.63	23.78
20	QPSK	50	0	22.72	22.79	22.93
20	QPSK	50	24	22.57	22.75	22.89
20	QPSK	50	49	22.64	22.77	22.89
20	QPSK	100	0	22.60	22.75	22.85
20	16QAM	1	0	22.23	23.01	22.94
20	16QAM	1	49	22.38	22.63	22.93
20	16QAM	1	99	22.89	22.94	22.71
20	16QAM	50	0	21.57	21.75	21.79
20	16QAM	50	24	21.59	21.67	21.85
20	16QAM	50	49	21.63	21.77	21.84
20	16QAM	100	0	21.57	21.68	21.81
Channel				20025	20175	20325
Frequency (MHz)				1717.5	1732.5	1747.5
15	QPSK	1	0	23.61	23.60	23.58
15	QPSK	1	37	23.43	23.71	23.84
15	QPSK	1	74	23.44	23.67	23.71
15	QPSK	36	0	22.62	22.77	22.84
15	QPSK	36	18	22.58	22.76	22.89
15	QPSK	36	37	22.56	22.74	22.88
15	QPSK	75	0	22.59	22.76	22.91
15	16QAM	1	0	22.76	22.57	23.03
15	16QAM	1	37	22.10	22.66	23.09
15	16QAM	1	74	22.07	22.92	22.78
15	16QAM	36	0	21.46	21.73	21.84
15	16QAM	36	18	21.49	21.73	21.77
15	16QAM	36	37	21.49	21.70	21.83
15	16QAM	75	0	21.58	21.71	21.81



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20000	20175	20350
Frequency (MHz)				1715	1732.5	1750
10	QPSK	1	0	23.44	23.70	23.92
10	QPSK	1	24	23.41	23.68	23.75
10	QPSK	1	49	23.52	23.72	23.76
10	QPSK	25	0	22.54	22.76	22.85
10	QPSK	25	12	22.52	22.69	22.89
10	QPSK	25	24	22.54	22.80	22.80
10	QPSK	50	0	22.64	22.82	22.95
10	16QAM	1	0	22.67	22.75	22.64
10	16QAM	1	24	22.61	22.32	22.65
10	16QAM	1	49	22.28	22.79	22.46
10	16QAM	25	0	21.60	21.73	21.96
10	16QAM	25	12	21.64	21.75	21.82
10	16QAM	25	24	21.52	21.75	21.84
10	16QAM	50	0	21.52	21.74	21.79
Channel				19975	20175	20375
Frequency (MHz)				1712.5	1732.5	1752.5
5	QPSK	1	0	23.47	23.61	23.82
5	QPSK	1	12	23.45	23.68	23.67
5	QPSK	1	24	23.41	23.73	23.78
5	QPSK	12	0	22.51	22.77	22.82
5	QPSK	12	6	22.51	22.80	22.78
5	QPSK	12	11	22.61	22.73	22.77
5	QPSK	25	0	22.55	22.78	22.75
5	16QAM	1	0	22.67	22.96	22.60
5	16QAM	1	12	22.69	22.27	22.49
5	16QAM	1	24	22.19	22.51	22.55
5	16QAM	12	0	21.61	21.71	21.86
5	16QAM	12	6	21.46	21.62	21.69
5	16QAM	12	11	21.50	21.75	21.72
5	16QAM	25	0	21.53	21.72	21.70



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				19965	20175	20385
Frequency (MHz)				1711.5	1732.5	1753.5
3	QPSK	1	0	23.56	23.65	23.78
3	QPSK	1	7	23.53	23.67	23.80
3	QPSK	1	14	23.52	23.69	23.78
3	QPSK	8	0	22.51	22.71	22.76
3	QPSK	8	4	22.51	22.77	22.78
3	QPSK	8	7	22.55	22.71	22.80
3	QPSK	15	0	22.57	22.70	22.83
3	16QAM	1	0	22.31	22.55	22.49
3	16QAM	1	7	22.57	22.95	23.03
3	16QAM	1	14	22.58	22.60	23.06
3	16QAM	8	0	21.63	21.80	21.82
3	16QAM	8	4	21.64	21.68	21.88
3	16QAM	8	7	21.43	21.72	21.75
3	16QAM	15	0	21.42	21.66	21.78
Channel				19957	20175	20393
Frequency (MHz)				1710.7	1732.5	1754.3
1.4	QPSK	1	0	23.55	23.70	23.81
1.4	QPSK	1	2	23.59	23.82	23.78
1.4	QPSK	1	5	23.49	23.79	23.85
1.4	QPSK	3	0	23.53	23.78	23.82
1.4	QPSK	3	1	23.57	23.77	23.82
1.4	QPSK	3	2	23.56	23.77	23.81
1.4	QPSK	6	0	23.57	23.76	23.81
1.4	16QAM	1	0	22.72	22.97	22.61
1.4	16QAM	1	2	22.63	22.84	23.01
1.4	16QAM	1	5	22.41	22.91	22.94
1.4	16QAM	3	0	22.55	22.74	22.85
1.4	16QAM	3	1	22.52	22.73	22.67
1.4	16QAM	3	2	22.50	22.55	22.67
1.4	16QAM	6	0	22.49	22.55	22.66



<LTE Band 5 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20450	20525	20600
Frequency (MHz)				829	836.5	844
10	QPSK	1	0	23.44	23.17	23.42
10	QPSK	1	24	23.46	23.46	23.57
10	QPSK	1	49	23.26	23.40	23.39
10	QPSK	25	0	22.57	22.36	22.39
10	QPSK	25	12	22.58	22.29	22.43
10	QPSK	25	24	22.44	22.38	22.46
10	QPSK	50	0	22.49	22.37	22.51
10	16QAM	1	0	22.33	22.23	22.16
10	16QAM	1	24	22.62	22.19	22.56
10	16QAM	1	49	22.45	22.49	22.54
10	16QAM	25	0	21.50	21.42	21.46
10	16QAM	25	12	21.54	21.36	21.44
10	16QAM	25	24	21.47	21.42	21.51
10	16QAM	50	0	21.56	21.45	21.48
Channel				20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	23.38	23.22	23.34
5	QPSK	1	12	23.37	23.25	23.36
5	QPSK	1	24	23.46	23.30	23.34
5	QPSK	12	0	22.57	22.35	22.41
5	QPSK	12	6	22.54	22.30	22.48
5	QPSK	12	11	22.39	22.31	22.45
5	QPSK	25	0	22.54	22.36	22.45
5	16QAM	1	0	22.60	22.06	22.68
5	16QAM	1	12	22.06	22.46	22.20
5	16QAM	1	24	22.84	22.59	22.06
5	16QAM	12	0	21.68	21.37	21.46
5	16QAM	12	6	21.67	21.48	21.40
5	16QAM	12	11	21.49	21.38	21.51
5	16QAM	25	0	21.52	21.40	21.47



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20415	20525	20635
Frequency (MHz)				825.5	836.5	847.5
3	QPSK	1	0	23.44	23.29	23.50
3	QPSK	1	7	23.49	23.15	23.37
3	QPSK	1	14	23.36	23.39	23.26
3	QPSK	8	0	22.58	22.32	22.49
3	QPSK	8	4	22.55	22.37	22.45
3	QPSK	8	7	22.55	22.34	22.46
3	QPSK	15	0	22.54	22.38	22.49
3	16QAM	1	0	22.55	22.56	22.17
3	16QAM	1	7	22.24	22.53	22.25
3	16QAM	1	14	22.44	22.57	22.67
3	16QAM	8	0	21.49	21.38	21.60
3	16QAM	8	4	21.57	21.32	21.54
3	16QAM	8	7	21.61	21.45	21.49
3	16QAM	15	0	21.56	21.31	21.32
Channel				20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	23.41	23.25	23.42
1.4	QPSK	1	2	23.39	23.41	23.42
1.4	QPSK	1	5	23.52	23.28	23.47
1.4	QPSK	3	0	23.45	23.38	23.43
1.4	QPSK	3	1	23.45	23.34	23.39
1.4	QPSK	3	2	23.40	23.34	23.39
1.4	QPSK	6	0	22.47	22.37	22.43
1.4	16QAM	1	0	22.34	22.04	22.71
1.4	16QAM	1	2	22.36	22.38	22.40
1.4	16QAM	1	5	22.65	22.03	22.33
1.4	16QAM	3	0	22.30	22.28	22.36
1.4	16QAM	3	1	22.45	22.26	22.46
1.4	16QAM	3	2	22.22	22.36	22.45
1.4	16QAM	6	0	21.34	21.37	21.53

**<LTE Band 7 Conducted Power>**

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20850	21100	21350
Frequency (MHz)				2510	2535	2560
20	QPSK	1	0	20.79	21.46	21.52
20	QPSK	1	49	21.49	21.59	21.84
20	QPSK	1	99	20.88	21.55	21.39
20	QPSK	50	0	20.90	21.31	21.36
20	QPSK	50	24	20.95	21.34	21.40
20	QPSK	50	49	20.93	21.30	21.39
20	QPSK	100	0	20.88	21.30	21.38
20	16QAM	1	0	19.80	20.34	20.71
20	16QAM	1	49	20.02	20.65	20.67
20	16QAM	1	99	19.99	20.32	20.40
20	16QAM	50	0	19.86	20.35	20.57
20	16QAM	50	24	19.93	20.41	20.53
20	16QAM	50	49	19.86	20.45	20.49
20	16QAM	100	0	19.75	20.42	20.62
Channel				20825	21100	21375
Frequency (MHz)				2507.5	2535	2562.5
15	QPSK	1	0	20.89	21.49	21.51
15	QPSK	1	37	20.85	21.69	21.66
15	QPSK	1	74	20.87	21.59	21.71
15	QPSK	36	0	20.88	21.44	21.37
15	QPSK	36	18	20.85	21.35	21.49
15	QPSK	36	37	20.88	21.42	21.47
15	QPSK	75	0	20.87	21.47	21.50
15	16QAM	1	0	19.51	20.64	20.33
15	16QAM	1	37	19.59	20.77	20.83
15	16QAM	1	74	19.98	20.48	20.68
15	16QAM	36	0	19.95	20.74	20.79
15	16QAM	36	18	19.92	20.75	20.79
15	16QAM	36	37	19.92	20.67	20.69
15	16QAM	75	0	19.74	20.74	20.79



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20800	21100	21400
Frequency (MHz)				2505	2535	2565
10	QPSK	1	0	20.85	21.47	21.76
10	QPSK	1	24	20.79	21.65	21.64
10	QPSK	1	49	20.68	21.64	21.79
10	QPSK	25	0	20.84	21.44	21.47
10	QPSK	25	12	20.78	21.40	21.42
10	QPSK	25	24	20.82	21.44	21.41
10	QPSK	50	0	19.82	20.50	20.81
10	16QAM	1	0	19.59	20.70	20.74
10	16QAM	1	24	19.88	20.88	20.60
10	16QAM	1	49	19.52	20.47	20.86
10	16QAM	25	0	19.72	20.68	20.82
10	16QAM	25	12	19.75	20.79	20.84
10	16QAM	25	24	19.79	20.68	20.85
10	16QAM	50	0	19.62	19.68	19.80
Channel				20775	21100	21425
Frequency (MHz)				2502.5	2535	2567.5
5	QPSK	1	0	20.86	21.74	21.79
5	QPSK	1	12	20.82	21.67	21.77
5	QPSK	1	24	20.75	21.70	21.67
5	QPSK	12	0	20.83	21.43	21.46
5	QPSK	12	6	20.82	21.44	21.46
5	QPSK	12	11	20.70	21.42	21.42
5	QPSK	25	0	19.74	20.42	20.90
5	16QAM	1	0	19.80	20.33	20.98
5	16QAM	1	12	19.99	20.56	20.74
5	16QAM	1	24	19.55	20.88	20.51
5	16QAM	12	0	19.94	20.81	20.97
5	16QAM	12	6	19.86	20.63	20.87
5	16QAM	12	11	19.84	20.76	20.93
5	16QAM	25	0	19.77	19.83	20.00

**<LTE Band 12 Conducted Power>**

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				23060	23095	23130
Frequency (MHz)				704	707.5	711
10	QPSK	1	0	23.33	23.28	23.49
10	QPSK	1	24	23.48	23.54	23.58
10	QPSK	1	49	23.54	23.62	23.83
10	QPSK	25	0	22.60	22.53	22.54
10	QPSK	25	12	22.46	22.55	22.58
10	QPSK	25	24	22.49	22.62	22.57
10	QPSK	50	0	22.59	22.58	22.59
10	16QAM	1	0	22.42	22.00	22.15
10	16QAM	1	24	22.07	22.16	22.61
10	16QAM	1	49	22.44	22.43	22.51
10	16QAM	25	0	21.62	21.44	21.65
10	16QAM	25	12	21.61	21.56	21.63
10	16QAM	25	24	21.59	21.64	21.60
10	16QAM	50	0	21.60	21.62	21.58
Channel				23035	23095	23155
Frequency (MHz)				701.5	707.5	713.5
5	QPSK	1	0	23.42	23.39	23.38
5	QPSK	1	12	23.33	23.64	23.35
5	QPSK	1	24	23.72	23.35	23.66
5	QPSK	12	0	22.48	22.48	22.48
5	QPSK	12	6	22.42	22.53	22.50
5	QPSK	12	11	22.55	22.53	22.53
5	QPSK	25	0	22.33	22.58	22.57
5	16QAM	1	0	22.56	22.54	22.37
5	16QAM	1	12	22.03	22.30	22.64
5	16QAM	1	24	22.26	22.69	22.24
5	16QAM	12	0	21.86	21.56	21.54
5	16QAM	12	6	21.48	21.60	21.51
5	16QAM	12	11	21.58	21.65	21.47
5	16QAM	25	0	21.47	21.56	21.71



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				23025	23095	23165
Frequency (MHz)				700.5	707.5	714.5
3	QPSK	1	0	23.31	23.30	23.41
3	QPSK	1	7	23.45	23.31	23.50
3	QPSK	1	14	23.38	23.42	23.49
3	QPSK	8	0	22.57	22.49	22.47
3	QPSK	8	4	22.53	22.55	22.44
3	QPSK	8	7	22.56	22.61	22.44
3	QPSK	15	0	22.56	22.54	22.49
3	16QAM	1	0	22.47	22.67	22.15
3	16QAM	1	7	22.33	22.70	22.27
3	16QAM	1	14	22.30	22.32	22.52
3	16QAM	8	0	21.60	21.34	21.57
3	16QAM	8	4	21.53	21.77	21.62
3	16QAM	8	7	21.60	21.46	21.49
3	16QAM	15	0	21.55	21.73	21.46
Channel				23017	23095	23173
Frequency (MHz)				699.7	707.5	715.3
1.4	QPSK	1	0	23.59	23.37	23.44
1.4	QPSK	1	2	23.40	23.44	23.34
1.4	QPSK	1	5	23.32	23.52	23.50
1.4	QPSK	3	0	23.55	23.47	23.40
1.4	QPSK	3	1	23.36	23.49	23.48
1.4	QPSK	3	2	23.57	23.47	23.47
1.4	QPSK	6	0	22.51	22.51	22.77
1.4	16QAM	1	0	22.49	22.28	22.14
1.4	16QAM	1	2	22.43	22.20	22.66
1.4	16QAM	1	5	22.40	22.46	22.69
1.4	16QAM	3	0	22.31	22.43	22.33
1.4	16QAM	3	1	22.46	22.41	22.65
1.4	16QAM	3	2	22.47	22.44	22.18
1.4	16QAM	6	0	21.56	21.42	21.43

**<LTE Band 17 Conducted Power>**

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				23780	23790	23800
Frequency (MHz)				709	710	711
10	QPSK	1	0	23.19	23.27	23.35
10	QPSK	1	24	23.19	23.40	23.33
10	QPSK	1	49	23.62	23.41	23.39
10	QPSK	25	0	22.42	22.41	22.46
10	QPSK	25	12	22.57	22.36	22.64
10	QPSK	25	24	22.51	22.61	22.46
10	QPSK	50	0	22.49	22.46	22.47
10	16QAM	1	0	22.14	22.14	22.27
10	16QAM	1	24	22.66	22.11	22.53
10	16QAM	1	49	22.30	22.31	22.42
10	16QAM	25	0	21.41	21.46	21.45
10	16QAM	25	12	21.64	21.75	21.41
10	16QAM	25	24	21.51	21.74	21.46
10	16QAM	50	0	21.53	21.46	21.51
Channel				23755	23790	23825
Frequency (MHz)				706.5	710	713.5
5	QPSK	1	0	23.22	23.34	23.27
5	QPSK	1	12	23.29	23.13	23.46
5	QPSK	1	24	23.51	23.60	23.41
5	QPSK	12	0	22.30	22.33	22.37
5	QPSK	12	6	22.46	22.42	22.42
5	QPSK	12	11	22.46	22.46	22.39
5	QPSK	25	0	22.46	22.43	22.42
5	16QAM	1	0	22.24	22.29	22.19
5	16QAM	1	12	22.25	22.18	22.26
5	16QAM	1	24	22.53	22.47	22.17
5	16QAM	12	0	21.40	21.45	21.45
5	16QAM	12	6	21.42	21.45	21.19
5	16QAM	12	11	21.55	21.56	21.43
5	16QAM	25	0	21.40	21.40	21.40

**<LTE Band 25 Conducted Power>**

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				26140	26365	26590
Frequency (MHz)				1860	1882.5	1905
20	QPSK	1	0	23.78	23.90	24.01
20	QPSK	1	49	23.79	24.06	24.05
20	QPSK	1	99	23.91	24.22	24.25
20	QPSK	50	0	23.89	24.02	24.11
20	QPSK	50	24	23.82	23.89	24.10
20	QPSK	50	49	23.87	24.06	24.08
20	QPSK	100	0	23.86	24.12	24.17
20	16QAM	1	0	22.61	23.33	22.97
20	16QAM	1	49	22.94	23.18	22.79
20	16QAM	1	99	22.65	23.25	23.27
20	16QAM	50	0	22.77	22.98	23.05
20	16QAM	50	24	22.91	23.03	23.22
20	16QAM	50	49	22.91	23.05	23.13
20	16QAM	100	0	22.93	22.96	23.10
Channel				26115	26365	26615
Frequency (MHz)				1857.5	1882.5	1907.5
15	QPSK	1	0	23.76	23.98	24.12
15	QPSK	1	37	23.89	24.02	24.05
15	QPSK	1	74	23.78	24.05	24.00
15	QPSK	36	0	23.79	24.00	24.11
15	QPSK	36	18	23.83	24.06	24.06
15	QPSK	36	37	23.81	24.02	24.06
15	QPSK	75	0	23.85	24.10	24.04
15	16QAM	1	0	22.79	22.90	22.70
15	16QAM	1	37	22.99	23.08	23.05
15	16QAM	1	74	22.71	23.19	22.81
15	16QAM	36	0	22.96	22.93	23.00
15	16QAM	36	18	22.85	23.03	23.02
15	16QAM	36	37	22.77	23.10	23.03
15	16QAM	75	0	22.75	22.97	22.97



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				26090	26365	26640
Frequency (MHz)				1855	1882.5	1910
10	QPSK	1	0	23.84	24.10	23.99
10	QPSK	1	24	23.73	24.14	23.83
10	QPSK	1	49	23.64	24.11	23.95
10	QPSK	25	0	23.74	24.06	23.98
10	QPSK	25	12	23.82	24.13	23.90
10	QPSK	25	24	23.79	24.07	23.98
10	QPSK	50	0	22.84	24.15	22.91
10	16QAM	1	0	23.05	22.75	22.97
10	16QAM	1	24	22.49	23.06	22.64
10	16QAM	1	49	22.86	22.88	22.70
10	16QAM	25	0	22.80	23.01	22.95
10	16QAM	25	12	22.82	23.17	22.96
10	16QAM	25	24	22.90	23.09	22.95
10	16QAM	50	0	21.79	23.05	22.07
Channel				26065	26365	26665
Frequency (MHz)				1852.5	1882.5	1912.5
5	QPSK	1	0	23.78	24.06	23.97
5	QPSK	1	12	23.72	24.03	23.70
5	QPSK	1	24	23.79	24.06	23.96
5	QPSK	12	0	23.77	24.08	23.95
5	QPSK	12	6	23.78	24.14	23.93
5	QPSK	12	11	23.74	24.08	23.89
5	QPSK	25	0	22.79	24.16	22.88
5	16QAM	1	0	22.43	23.33	22.50
5	16QAM	1	12	22.50	23.28	22.95
5	16QAM	1	24	22.83	23.38	22.57
5	16QAM	12	0	22.82	23.16	22.87
5	16QAM	12	6	22.81	23.11	22.92
5	16QAM	12	11	22.80	23.13	22.92
5	16QAM	25	0	21.75	23.02	22.14



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				26055	26365	26675
Frequency (MHz)				1851.5	1882.5	1913.5
3	QPSK	1	0	23.82	24.12	23.92
3	QPSK	1	7	23.62	24.07	23.75
3	QPSK	1	14	23.75	24.18	23.96
3	QPSK	8	0	22.81	24.10	22.89
3	QPSK	8	4	22.77	24.05	22.85
3	QPSK	8	7	22.81	24.12	22.93
3	QPSK	15	0	22.78	23.22	22.91
3	16QAM	1	0	22.39	22.67	22.70
3	16QAM	1	7	22.70	23.07	22.73
3	16QAM	1	14	22.35	23.00	23.14
3	16QAM	8	0	21.79	23.09	21.92
3	16QAM	8	4	21.87	23.17	22.12
3	16QAM	8	7	21.92	23.00	22.06
3	16QAM	15	0	21.95	22.16	21.91
Channel				26047	26365	26683
Frequency (MHz)				1850.7	1882.5	1914.3
1.4	QPSK	1	0	23.74	24.20	23.95
1.4	QPSK	1	2	23.82	24.18	24.06
1.4	QPSK	1	5	23.90	24.16	23.91
1.4	QPSK	3	0	23.86	24.13	24.03
1.4	QPSK	3	1	23.88	24.18	24.00
1.4	QPSK	3	2	23.85	24.19	24.05
1.4	QPSK	6	0	23.84	23.18	24.04
1.4	16QAM	1	0	22.66	23.04	22.66
1.4	16QAM	1	2	22.65	23.43	22.92
1.4	16QAM	1	5	22.97	23.32	22.77
1.4	16QAM	3	0	22.75	23.09	22.84
1.4	16QAM	3	1	22.73	23.15	22.91
1.4	16QAM	3	2	22.72	23.10	22.83
1.4	16QAM	6	0	22.74	22.28	22.90

**<LTE Band 26 Conducted Power>**

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				26865	26915	26965
Frequency (MHz)				831.5	836.5	841.5
15	QPSK	1	0	23.32	23.24	23.34
15	QPSK	1	37	23.28	23.33	23.26
15	QPSK	1	74	23.36	23.28	23.44
15	QPSK	36	0	22.41	22.54	22.39
15	QPSK	36	18	22.43	22.47	22.39
15	QPSK	36	37	22.42	22.42	22.41
15	QPSK	75	0	22.45	22.42	22.45
15	16QAM	1	0	22.46	22.06	22.11
15	16QAM	1	37	22.19	22.61	22.10
15	16QAM	1	74	22.77	22.30	22.64
15	16QAM	36	0	21.35	21.39	21.40
15	16QAM	36	18	21.36	21.35	21.51
15	16QAM	36	37	21.36	21.33	21.40
15	16QAM	75	0	21.45	21.46	21.46
Channel				26840	26915	26990
Frequency (MHz)				829	836.5	844
10	QPSK	1	0	23.43	23.56	23.52
10	QPSK	1	24	23.46	23.47	23.54
10	QPSK	1	49	23.42	23.54	23.51
10	QPSK	25	0	23.41	23.48	23.53
10	QPSK	25	12	23.37	23.49	23.53
10	QPSK	25	24	23.39	23.46	23.53
10	QPSK	50	0	22.42	22.47	22.55
10	16QAM	1	0	22.41	22.27	22.83
10	16QAM	1	24	22.30	22.59	22.48
10	16QAM	1	49	22.27	22.38	22.78
10	16QAM	25	0	22.30	22.40	22.55
10	16QAM	25	12	22.30	22.49	22.41
10	16QAM	25	24	22.38	22.37	22.39
10	16QAM	50	0	21.45	21.39	21.42



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				26815	26915	27015
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	23.40	23.31	23.41
5	QPSK	1	12	23.33	23.26	23.53
5	QPSK	1	24	23.39	23.26	23.49
5	QPSK	12	0	23.42	22.34	22.49
5	QPSK	12	6	23.46	22.36	22.54
5	QPSK	12	11	23.47	22.32	22.52
5	QPSK	25	0	22.44	22.37	22.52
5	16QAM	1	0	22.32	22.44	22.63
5	16QAM	1	12	22.56	22.24	22.31
5	16QAM	1	24	22.20	22.54	22.71
5	16QAM	12	0	22.48	21.35	21.60
5	16QAM	12	6	22.37	21.47	21.51
5	16QAM	12	11	22.38	21.39	21.51
5	16QAM	25	0	21.17	21.29	21.48
Channel				26805	26915	27025
Frequency (MHz)				825.5	836.5	847.5
3	QPSK	1	0	23.32	23.31	23.44
3	QPSK	1	7	23.29	23.42	23.54
3	QPSK	1	14	23.30	23.48	23.42
3	QPSK	8	0	22.44	22.37	22.58
3	QPSK	8	4	22.42	22.53	22.54
3	QPSK	8	7	22.43	22.52	22.56
3	QPSK	15	0	22.44	22.44	22.60
3	16QAM	1	0	22.43	22.60	22.71
3	16QAM	1	7	22.13	22.20	22.72
3	16QAM	1	14	22.18	22.18	22.36
3	16QAM	8	0	21.47	21.40	21.59
3	16QAM	8	4	21.46	21.56	21.46
3	16QAM	8	7	21.55	21.49	21.51
3	16QAM	15	0	21.49	21.46	21.54
Channel				26797	26915	27033
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	23.33	23.49	23.52
1.4	QPSK	1	2	23.36	23.47	23.54
1.4	QPSK	1	5	23.42	23.54	23.51
1.4	QPSK	3	0	23.41	23.48	23.53
1.4	QPSK	3	1	23.47	23.56	23.53
1.4	QPSK	3	2	23.39	23.46	23.53
1.4	QPSK	6	0	22.42	22.47	22.55
1.4	16QAM	1	0	22.24	22.27	22.83
1.4	16QAM	1	2	22.30	22.59	22.48
1.4	16QAM	1	5	22.27	22.38	22.78
1.4	16QAM	3	0	22.30	22.40	22.55
1.4	16QAM	3	1	22.40	22.49	22.41
1.4	16QAM	3	2	22.38	22.37	22.39
1.4	16QAM	6	0	21.45	21.39	21.42

Note: maximum average power for LTE.

3.2 Peak-to-Average Ratio

3.2.1 Description of the PAR Measurement

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. 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.

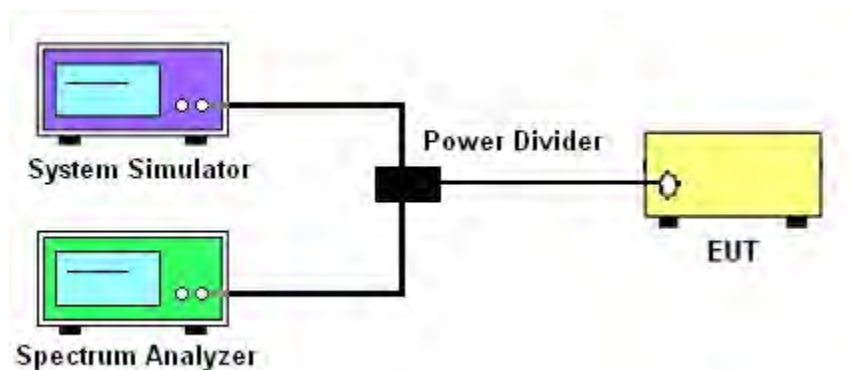
3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

1. The EUT was connected to spectrum and system simulator via a power divider.
2. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
3. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
4. Record the deviation as Peak to Average Ratio.

3.2.4 Test Setup



3.2.5 Test Result of Peak-to-Average Ratio

LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				18700	18900	19100
Frequency (MHz)				1860	1880	1900
20	16QAM	1	0	7.45	6.96	7.57
20	16QAM	100	0	6.41	6.38	6.38

LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20050	20175	20300
Frequency (MHz)				1720	1732.5	1745
20	16QAM	1	0	6.20	6.35	6.35
20	16QAM	100	0	6.14	6.20	6.20

LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20450	20525	20600
Frequency (MHz)				829	836.5	844
10	16QAM	1	0	6.23	5.94	6.20
10	16QAM	50	0	6.43	6.46	6.26

LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20850	21100	21350
Frequency (MHz)				2510	2535	2560
20	16QAM	1	0	6.03	6.29	6.29
20	16QAM	100	0	6.20	6.23	6.29

LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				23060	23095	23130
Frequency (MHz)				704	707.5	711
10	16QAM	1	0	5.88	5.39	6.06
10	16QAM	50	0	6.29	6.23	6.00



LTE Band 17						
BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				23780	23790	23800
Frequency (MHz)				709	710	711
10	16QAM	1	0	6.06	6.03	5.83
10	16QAM	50	0	5.86	5.86	6.00

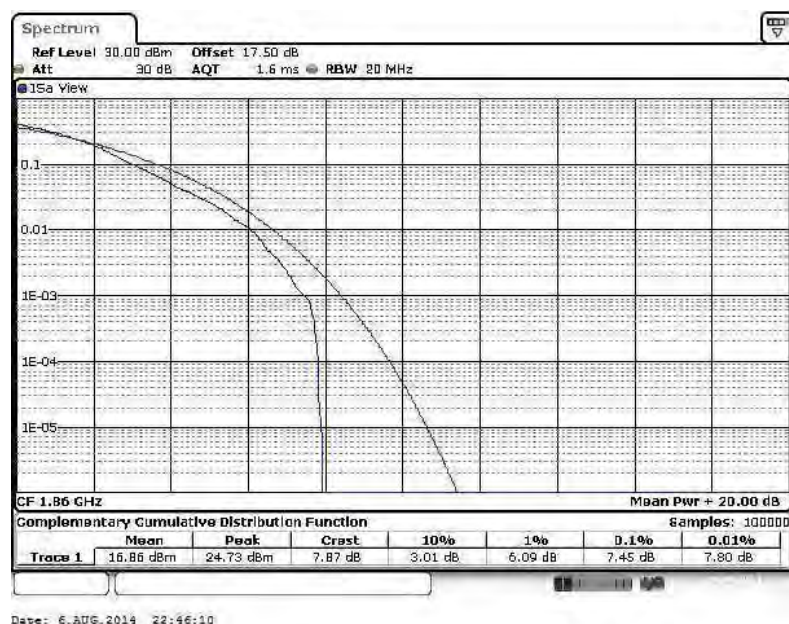
LTE Band 25						
BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				26140	26365	26590
Frequency (MHz)				1860	1882.5	1905
20	16QAM	1	0	6.78	6.49	6.00
20	16QAM	100	0	6.29	6.26	6.20

LTE Band 26						
BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				26865	26915	26965
Frequency (MHz)				831.5	836.5	841.5
15	16QAM	1	0	5.83	5.86	7.16
15	16QAM	75	0	6.32	6.49	6.26

3.2.6 Peak to Average Power Ratio

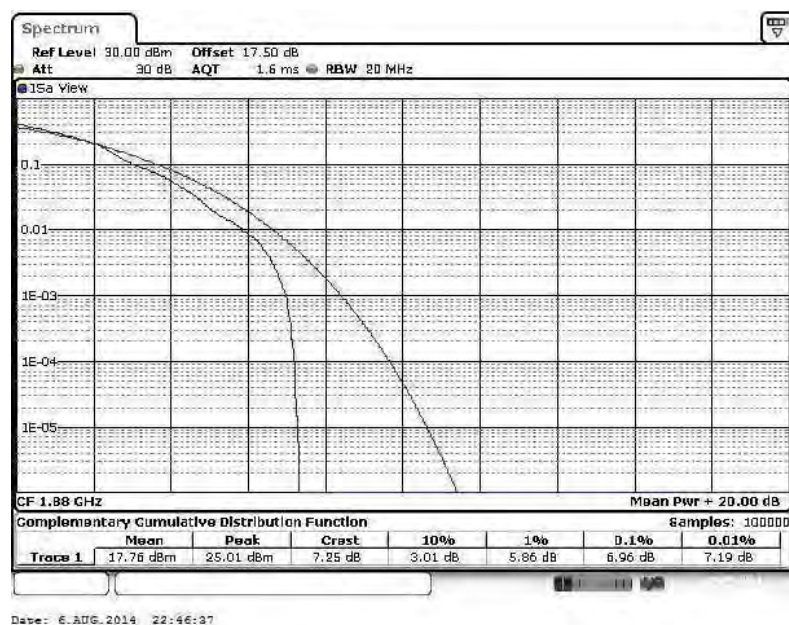
Peak-to-Average Ratio on LTE Band 2

20MHz / 16QAM in Ch. 18700 (1RB Size)



Peak-to-Average Ratio on LTE Band 2

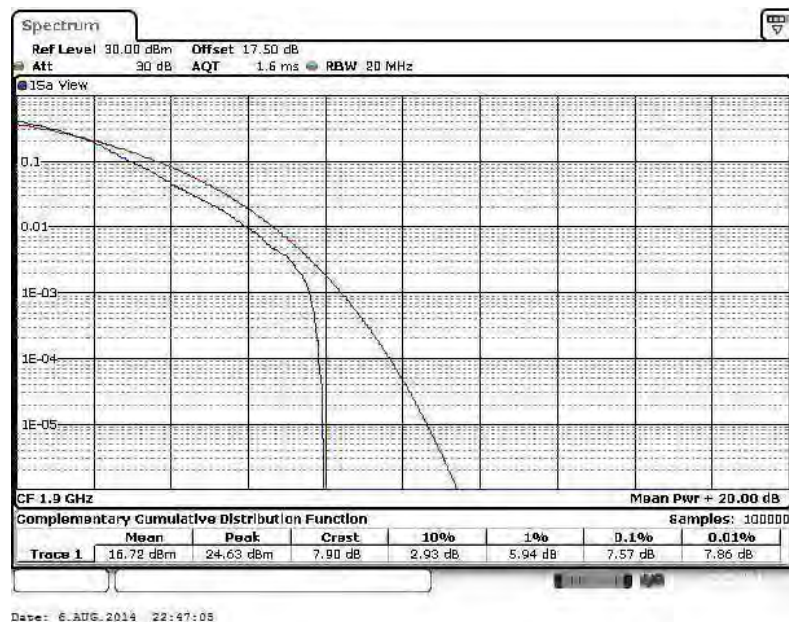
20MHz / 16QAM in Ch. 18900 (1RB Size)





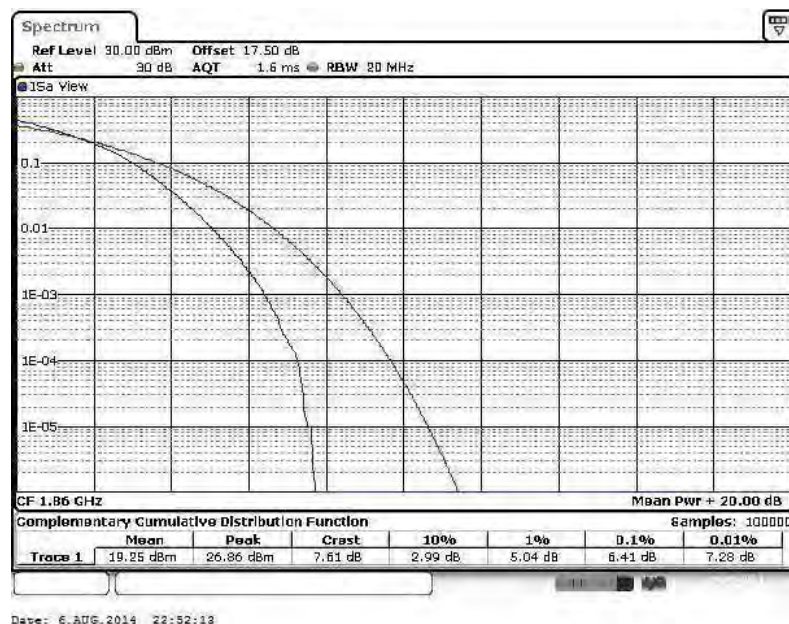
Peak-to-Average Ratio on LTE Band 2

20MHz / 16QAM in Ch. 19100 (1RB Size)

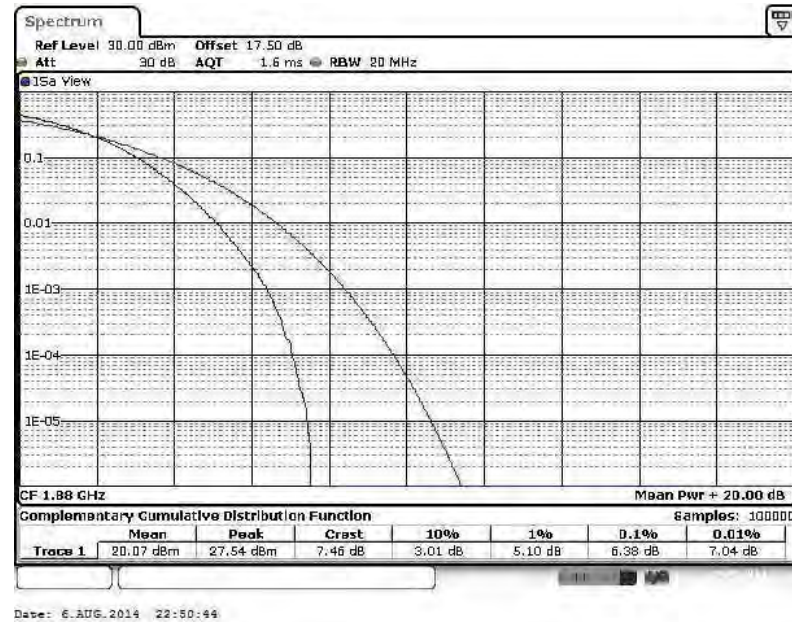


Peak-to-Average Ratio on LTE Band 2

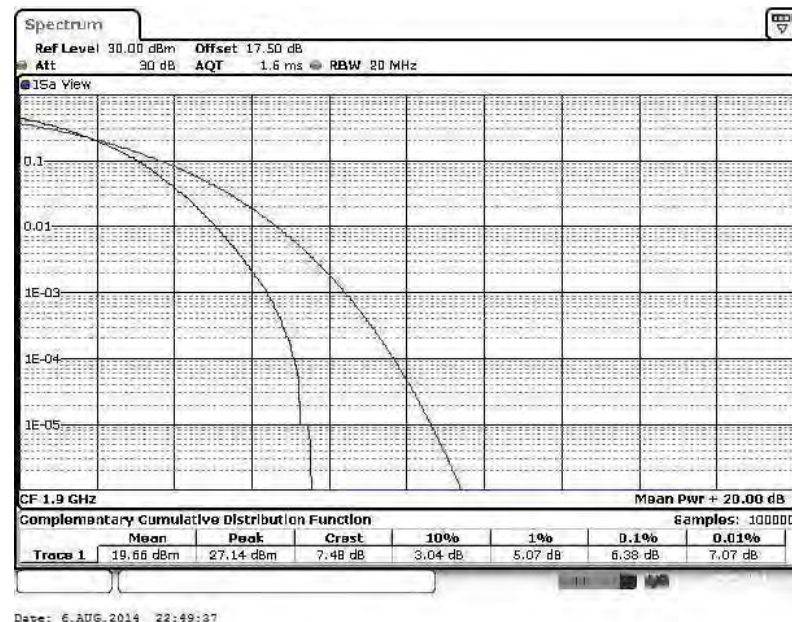
20MHz / 16QAM in Ch. 18700 (100RB Size)



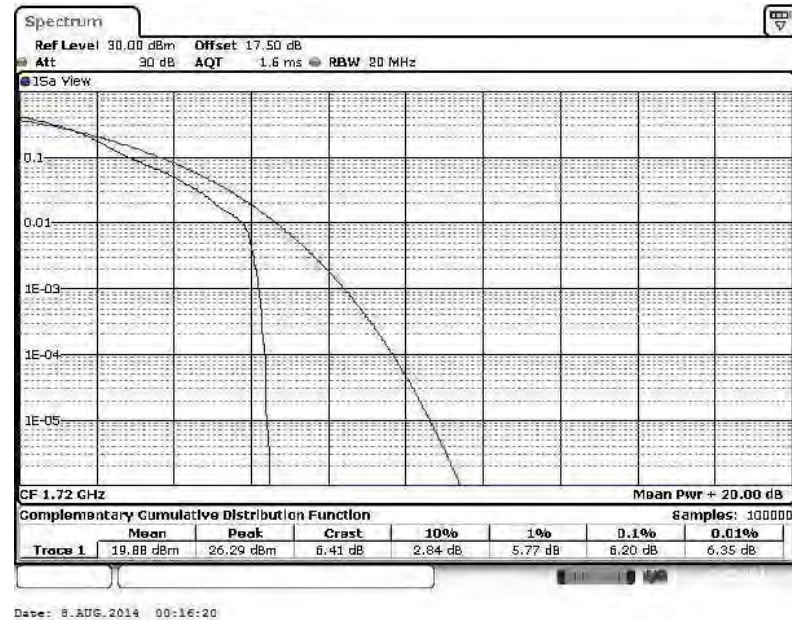
Peak-to-Average Ratio on LTE Band 2
20MHz / 16QAM in Ch. 18900 (100RB Size)



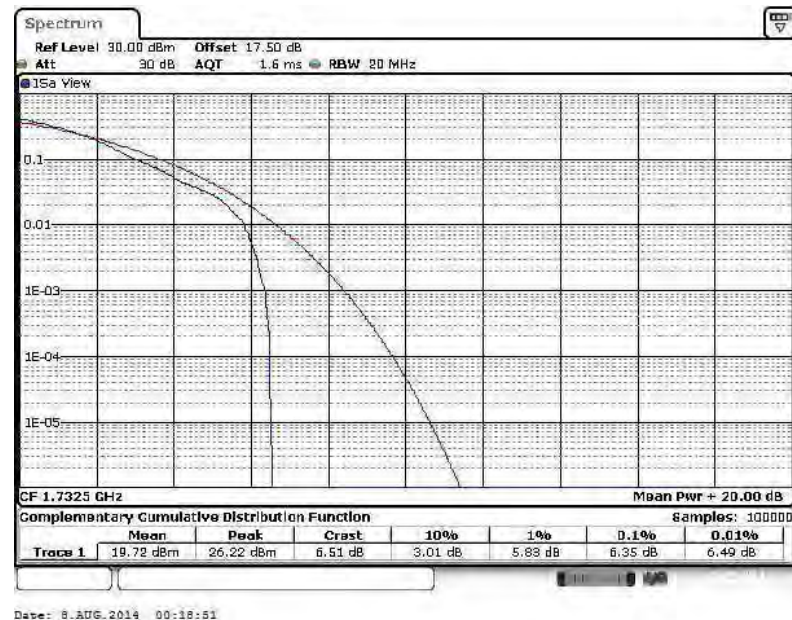
Peak-to-Average Ratio on LTE Band 2
20MHz / 16QAM in Ch. 19100 (100RB Size)



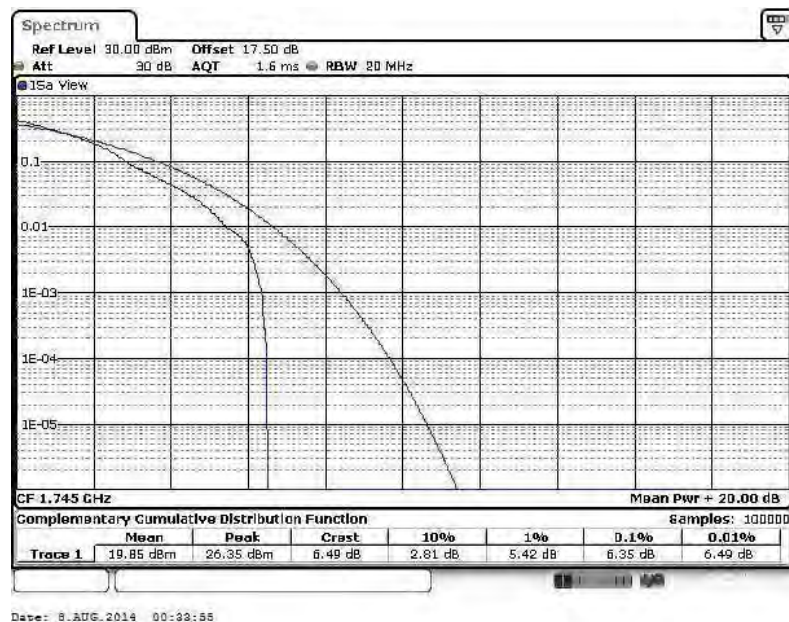
Peak-to-Average Ratio on LTE Band 4
20MHz / 16QAM in Ch. 20050 (1RB Size)



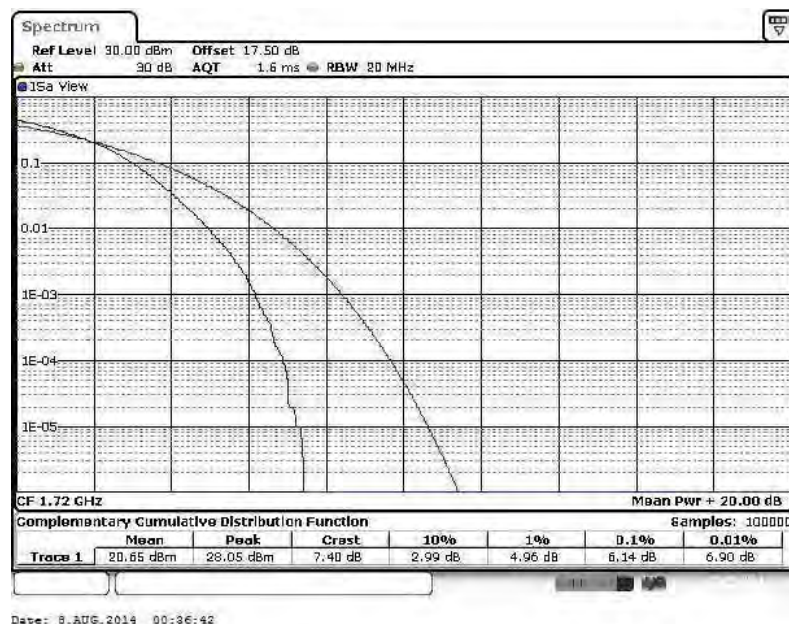
Peak-to-Average Ratio on LTE Band 4
20MHz / 16QAM in Ch. 20175 (1RB Size)



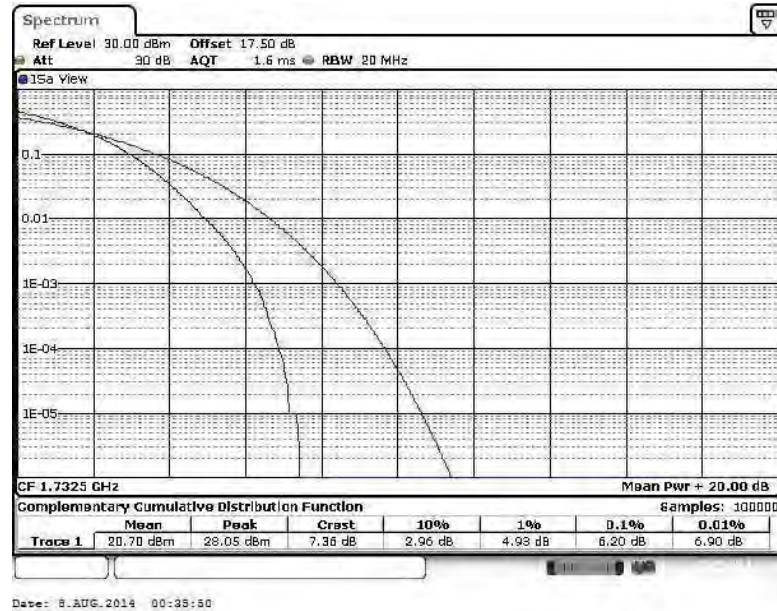
Peak-to-Average Ratio on LTE Band 4
20MHz / 16QAM in Ch. 20300 (1RB Size)



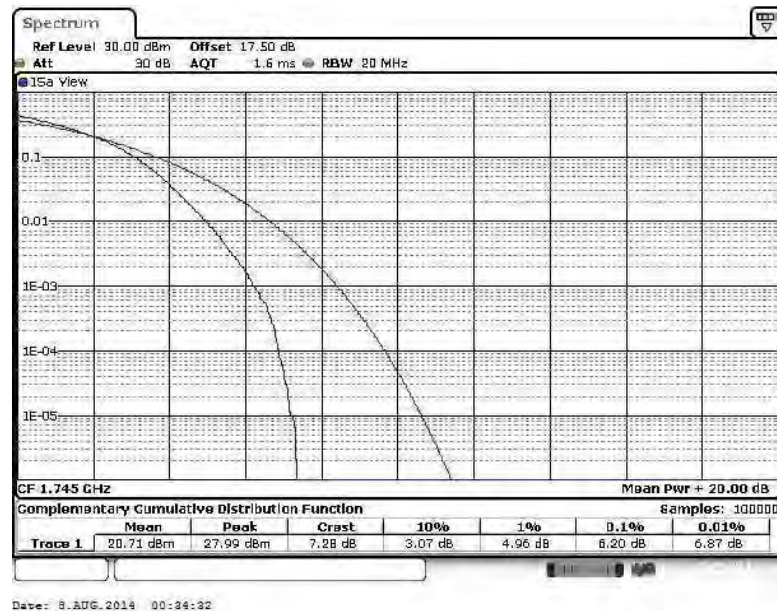
Peak-to-Average Ratio on LTE Band 4
20MHz / 16QAM in Ch. 20500 (100RB Size)



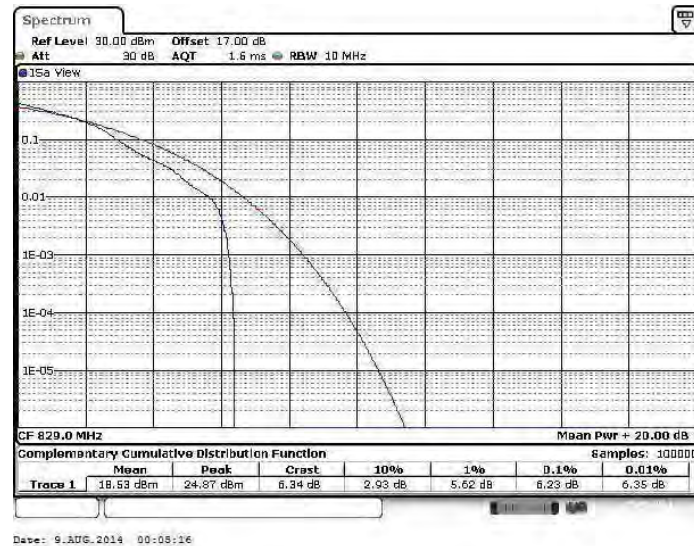
Peak-to-Average Ratio on LTE Band 4
20MHz / 16QAM in Ch. 201750 (100RB Size)



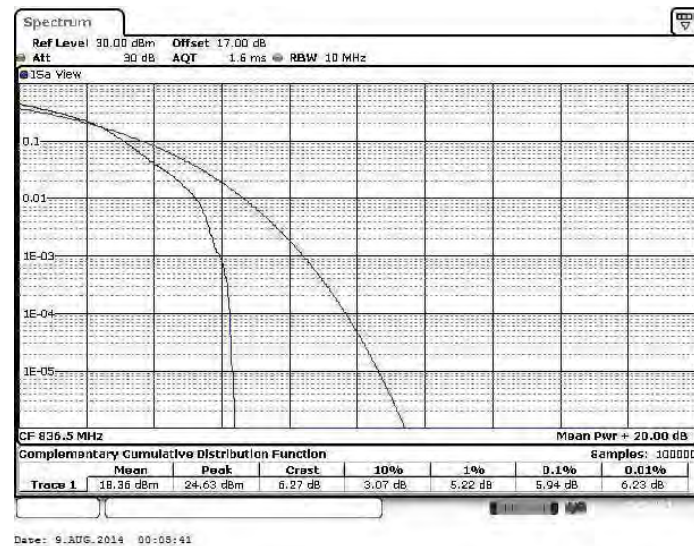
Peak-to-Average Ratio on LTE Band 4
20MHz / 16QAM in Ch. 20300 (100RB Size)

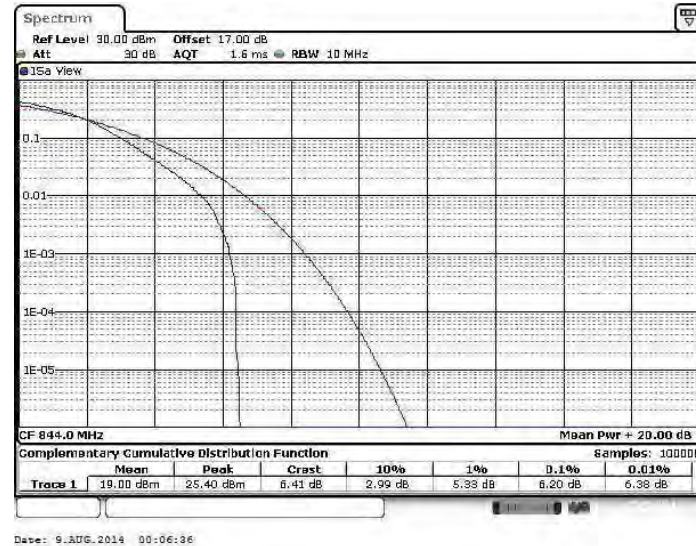
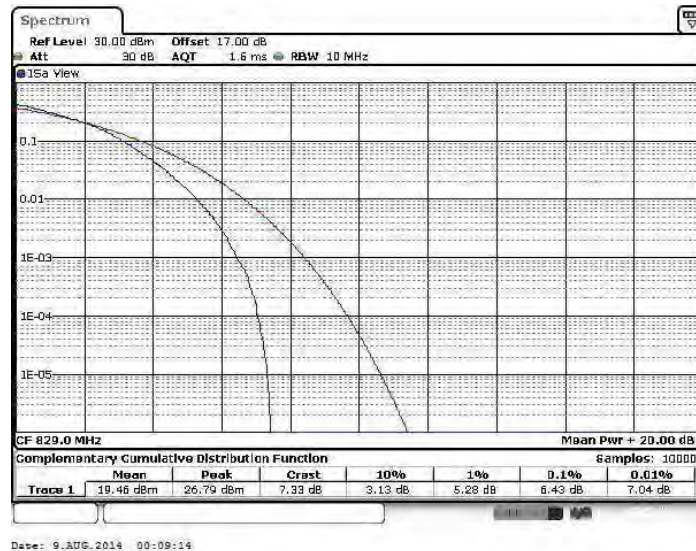


Peak-to-Average Ratio on LTE Band 5
10MHz / 16QAM in Ch. 20450 (1RB Size)

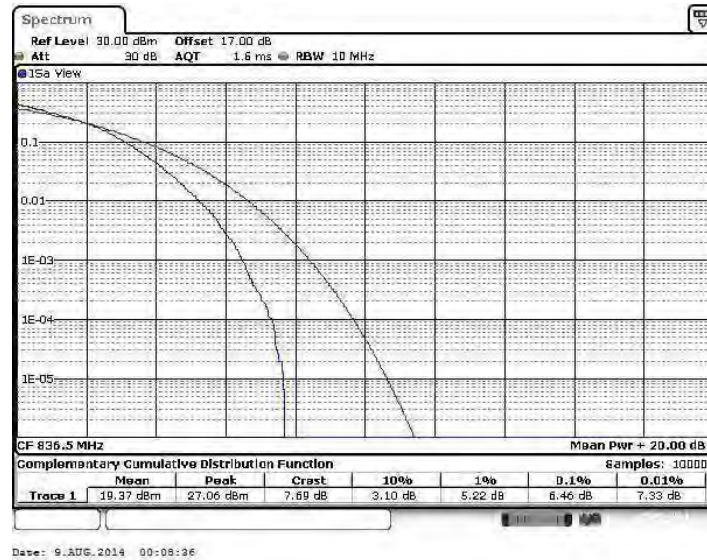


Peak-to-Average Ratio on LTE Band 5
10MHz / 16QAM in Ch. 20525 (1RB Size)

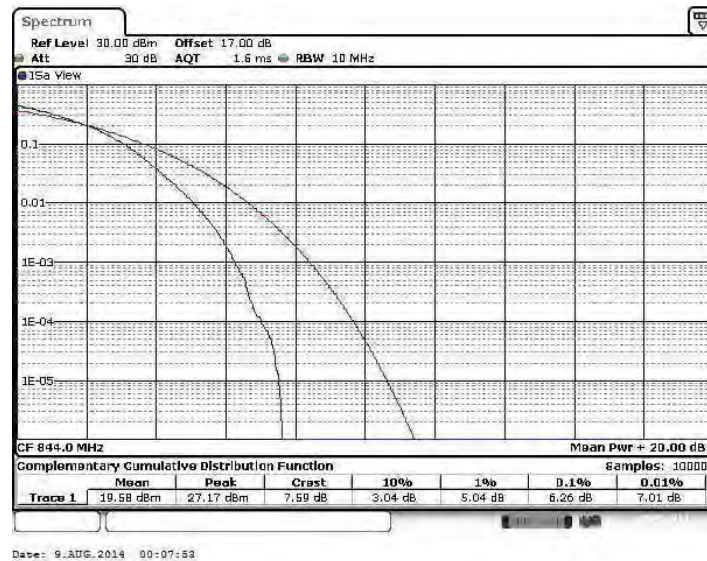


Peak-to-Average Ratio on LTE Band 5
10MHz / 16QAM in Ch. 20600 (1RB Size)

Peak-to-Average Ratio on LTE Band 5
10MHz / 16QAM in Ch. 20450 (50RB Size)


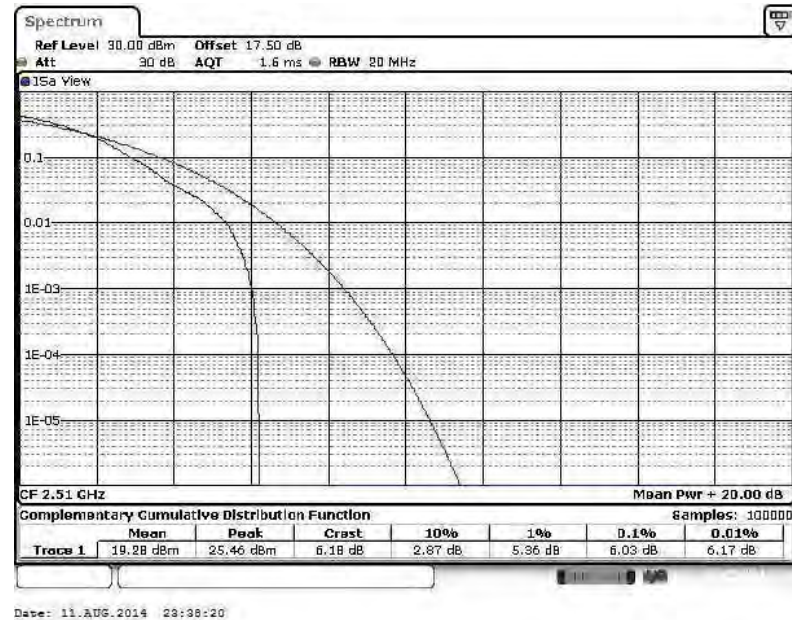
Peak-to-Average Ratio on LTE Band 5
10MHz / 16QAM in Ch. 20525 (50RB Size)



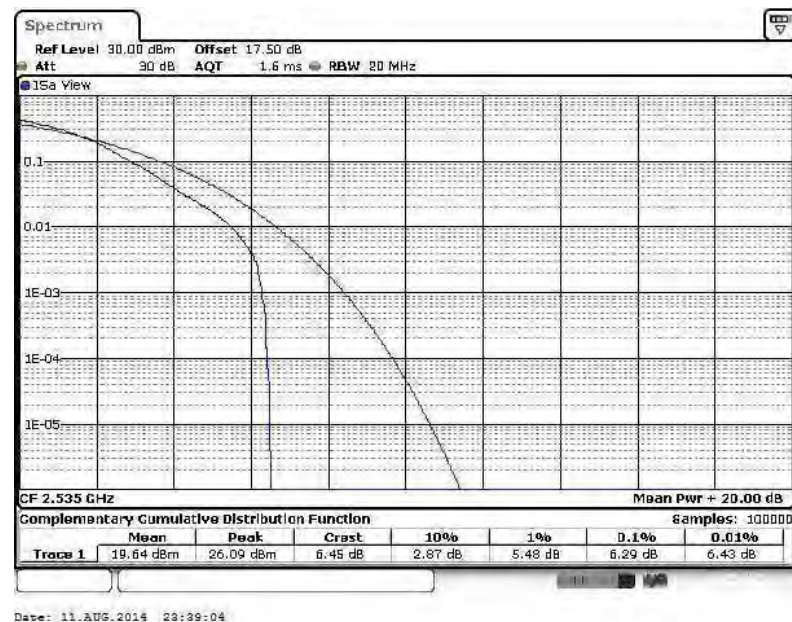
Peak-to-Average Ratio on LTE Band 5
10MHz / 16QAM in Ch. 206000 (50RB Size)



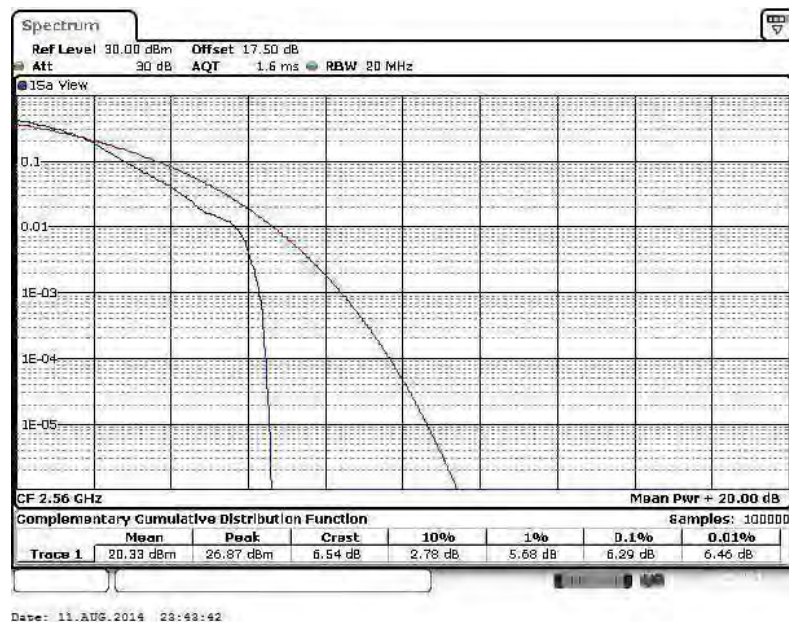
Peak-to-Average Ratio on LTE Band 7
20MHz / 16QAM in Ch. 20850 (1RB Size)



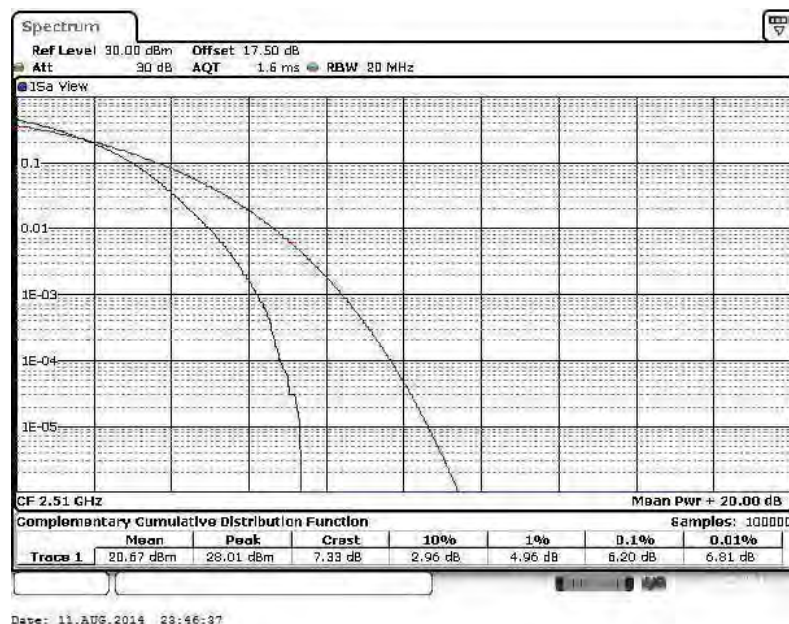
Peak-to-Average Ratio on LTE Band 7
20MHz / 16QAM in Ch. 21100 (1RB Size)



Peak-to-Average Ratio on LTE Band 7
20MHz / 16QAM in Ch. 21350 (1RB Size)

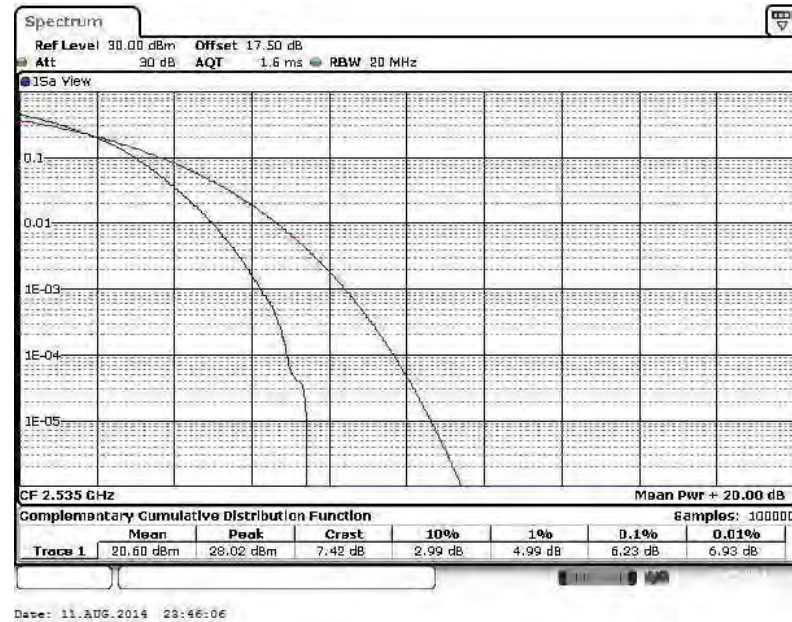


Peak-to-Average Ratio on LTE Band 7
20MHz / 16QAM in Ch. 20850 (100RB Size)

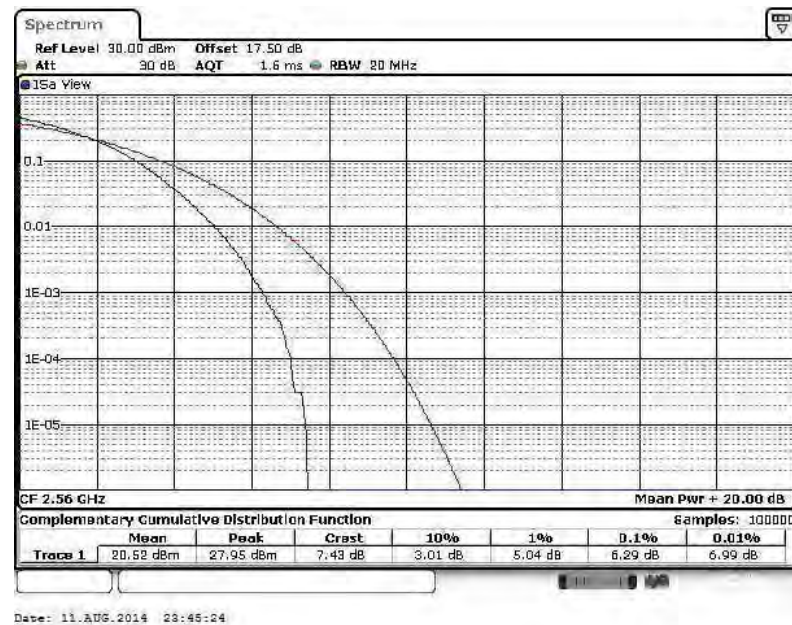




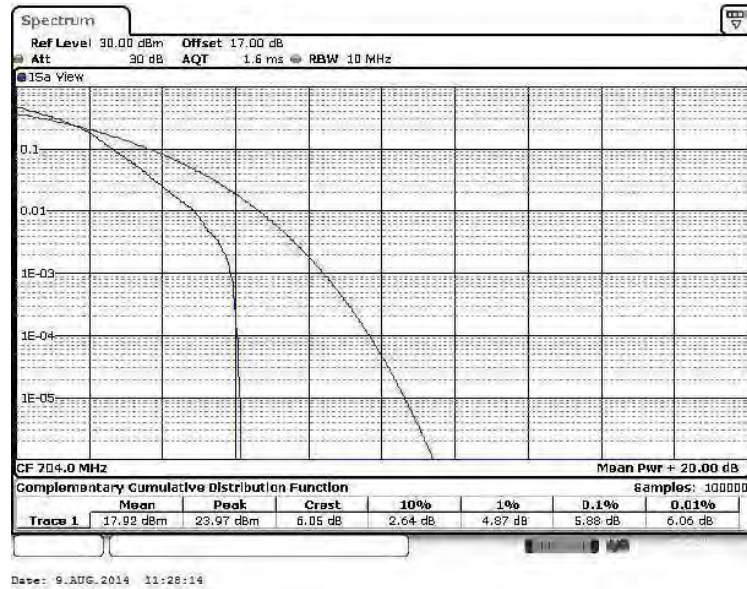
Peak-to-Average Ratio on LTE Band 7
20MHz / 16QAM in Ch. 21100 (100RB Size)



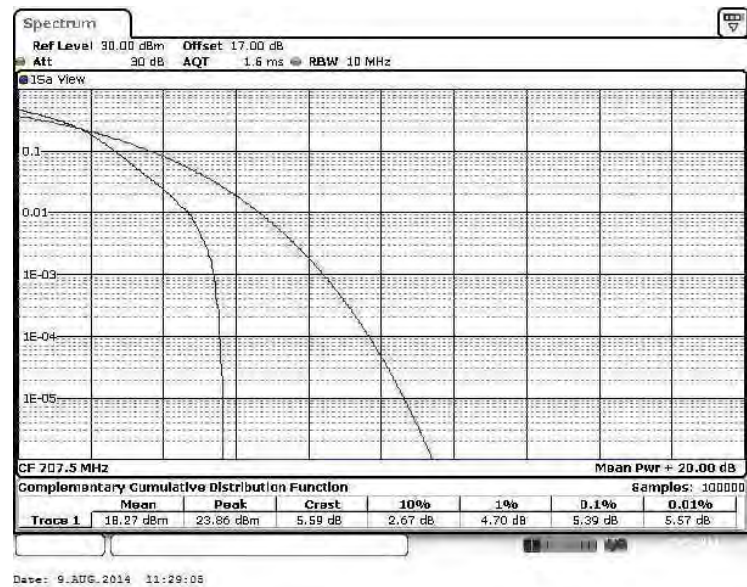
Peak-to-Average Ratio on LTE Band 7
20MHz / 16QAM in Ch. 21350 (100RB Size)



Peak-to-Average Ratio on LTE Band 12
10MHz / 16QAM in Ch. 23060 (1RB Size)

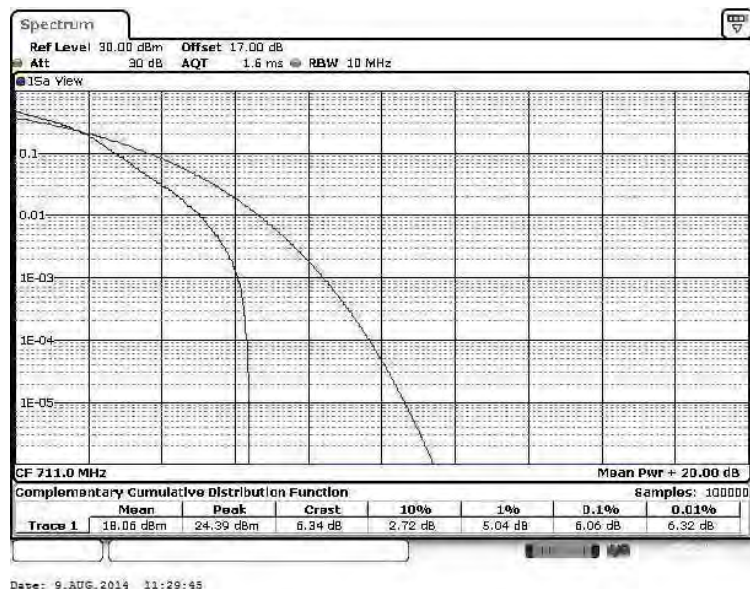


Peak-to-Average Ratio on LTE Band 12
10MHz / 16QAM in Ch. 23095 (1RB Size)

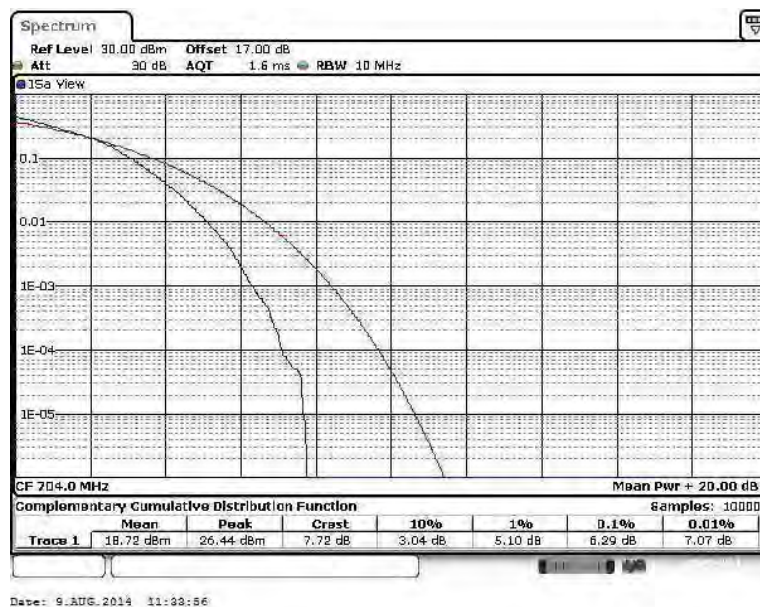




Peak-to-Average Ratio on LTE Band 12
10MHz / 16QAM in Ch. 23130 (1RB Size)

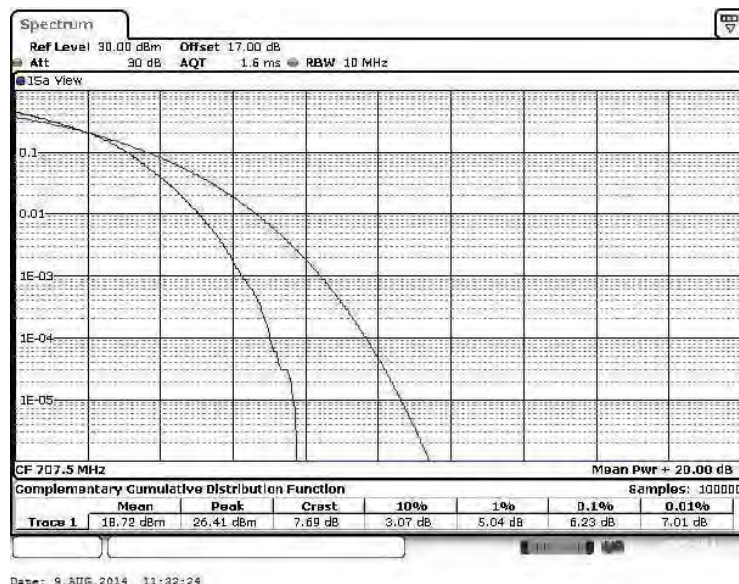


Peak-to-Average Ratio on LTE Band 12
10MHz / 16QAM in Ch. 23060 (50RB Size)

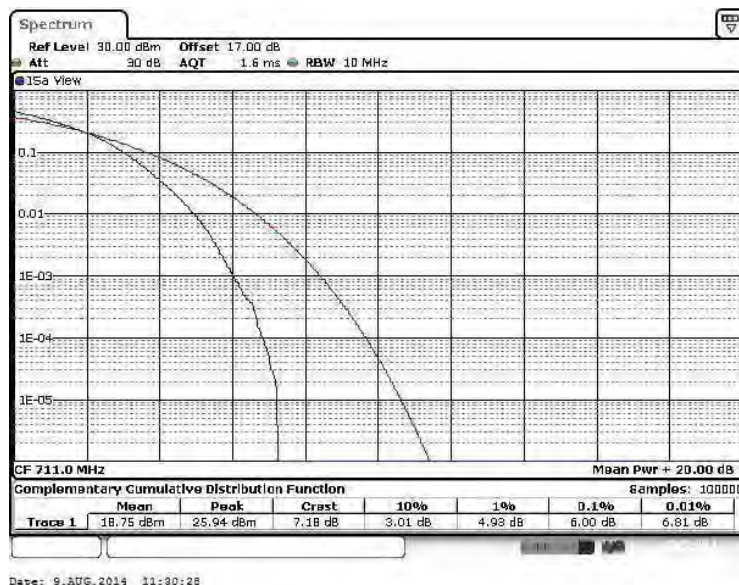




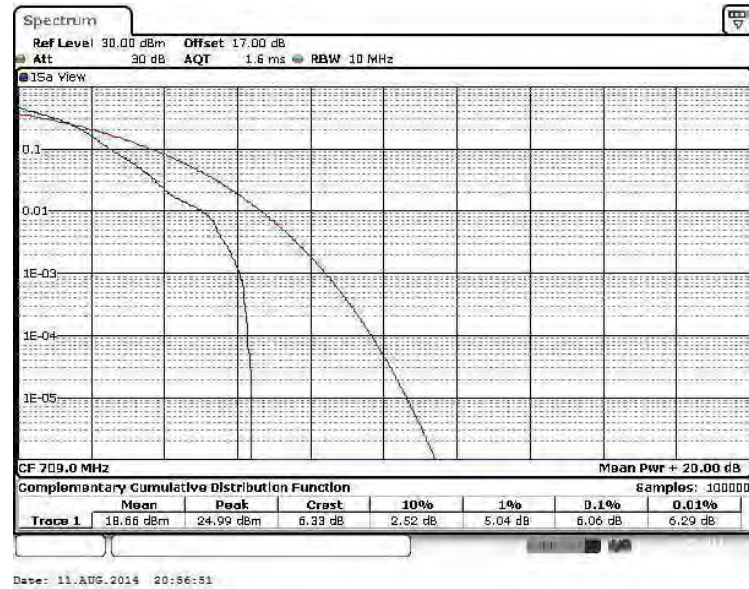
Peak-to-Average Ratio on LTE Band 12
10MHz / 16QAM in Ch. 23095 (50RB Size)



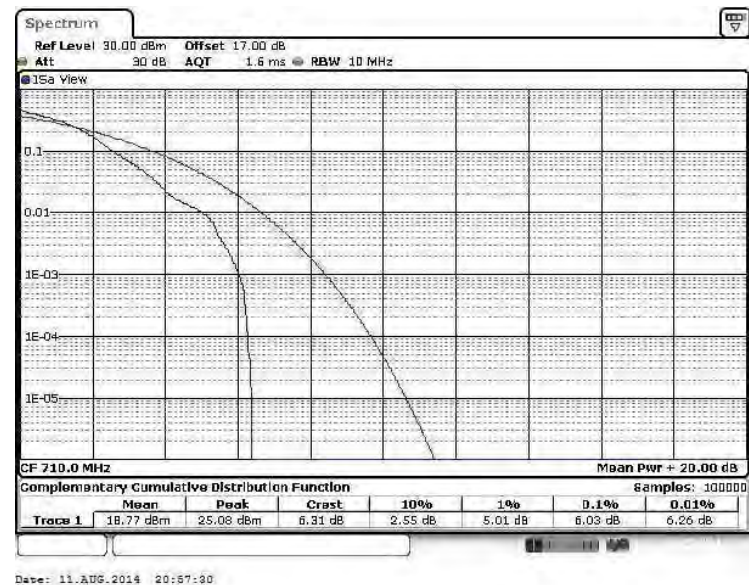
Peak-to-Average Ratio on LTE Band 12
10MHz / 16QAM in Ch. 23130 (50RB Size)



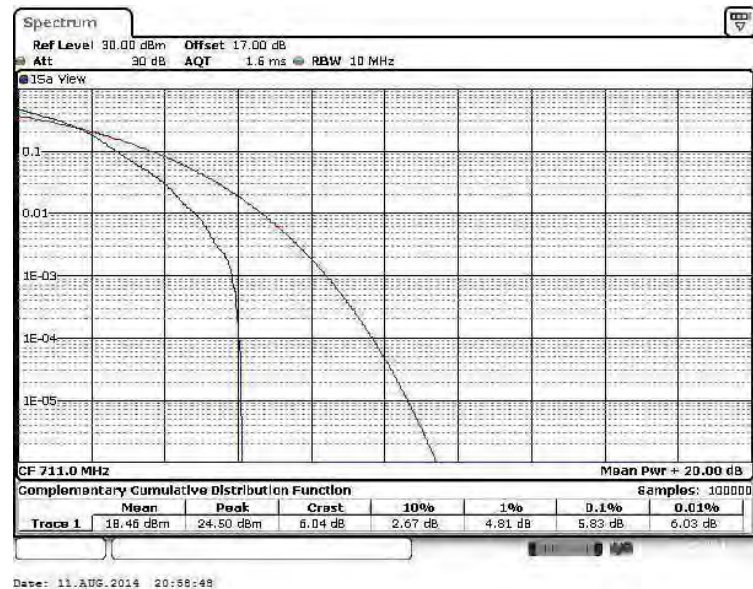
Peak-to-Average Ratio on LTE Band 17
10MHz / 16QAM in Ch. 23780 (1RB Size)



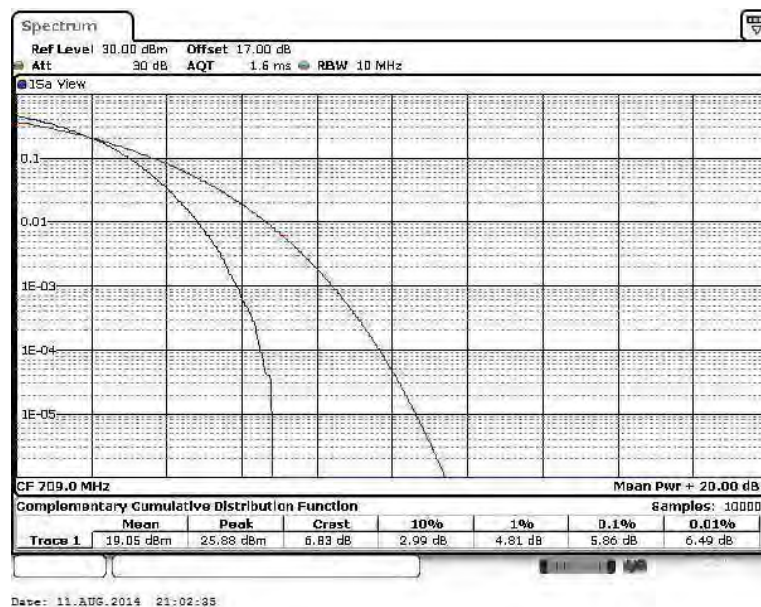
Peak-to-Average Ratio on LTE Band 17
10MHz / 16QAM in Ch. 23790 (1RB Size)



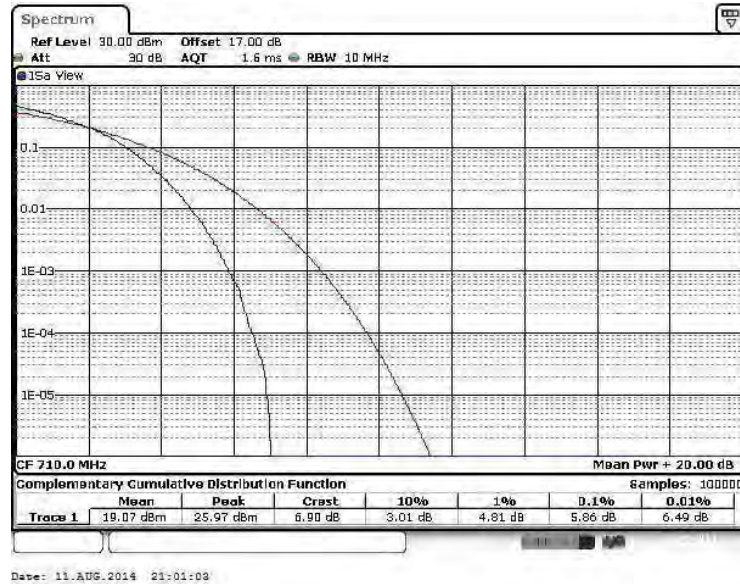
Peak-to-Average Ratio on LTE Band 17
10MHz / 16QAM in Ch. 23800 (1RB Size)



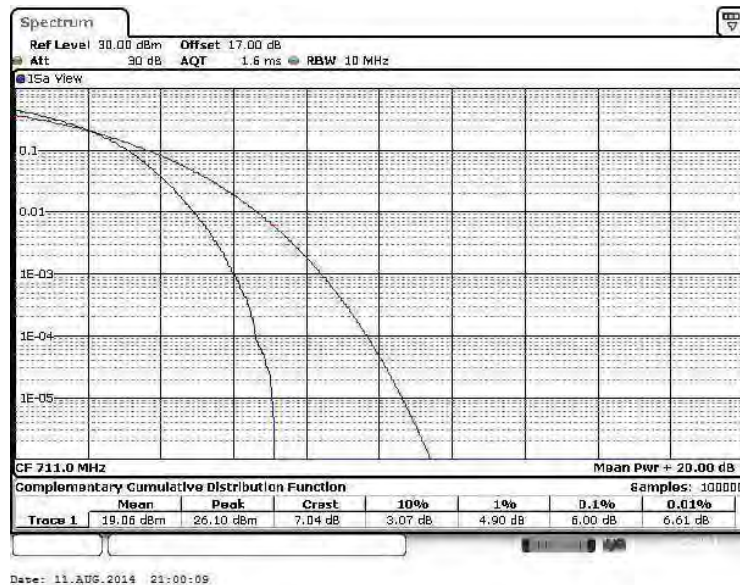
Peak-to-Average Ratio on LTE Band 17
10MHz / 16QAM in Ch. 23780 (50RB Size)



Peak-to-Average Ratio on LTE Band 17
10MHz / 16QAM in Ch. 23790 (50RB Size)

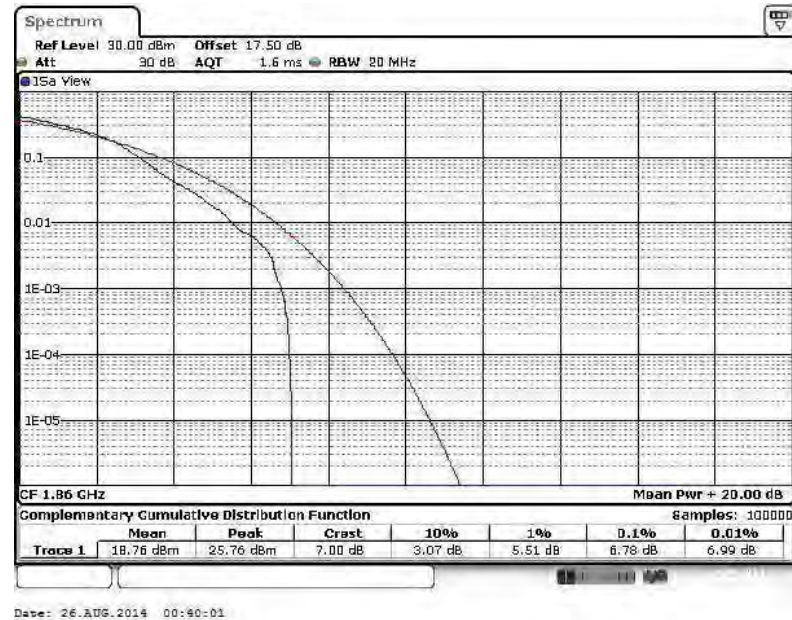


Peak-to-Average Ratio on LTE Band 17
10MHz / 16QAM in Ch. 23800 (50RB Size)

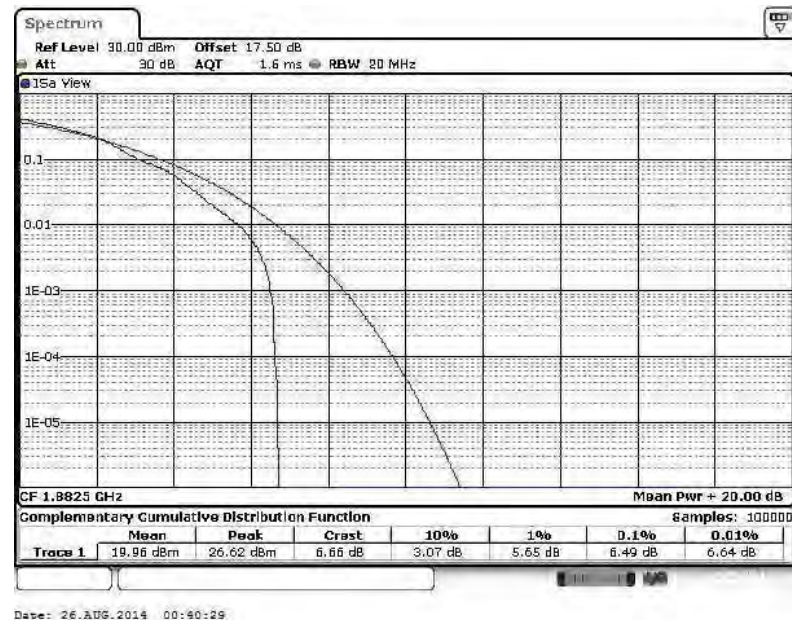




Peak-to-Average Ratio on LTE Band 25
20MHz / 16QAM in Ch. 26140 (1RB Size)



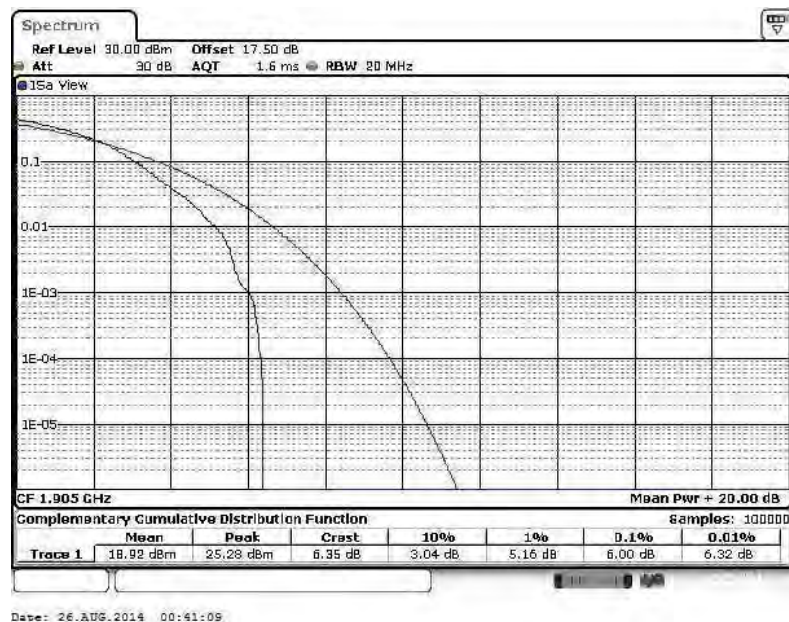
Peak-to-Average Ratio on LTE Band 25
20MHz / 16QAM in Ch. 26365 (1RB Size)





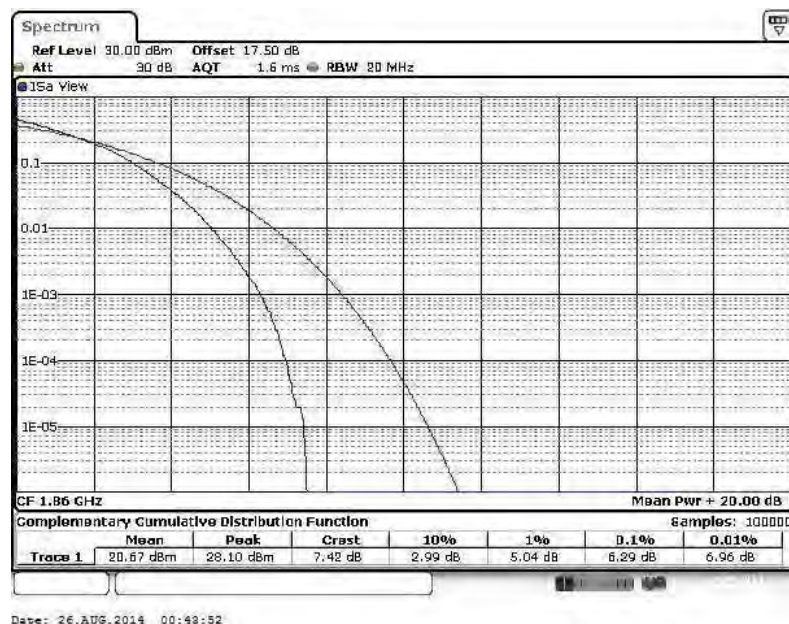
Peak-to-Average Ratio on LTE Band 25

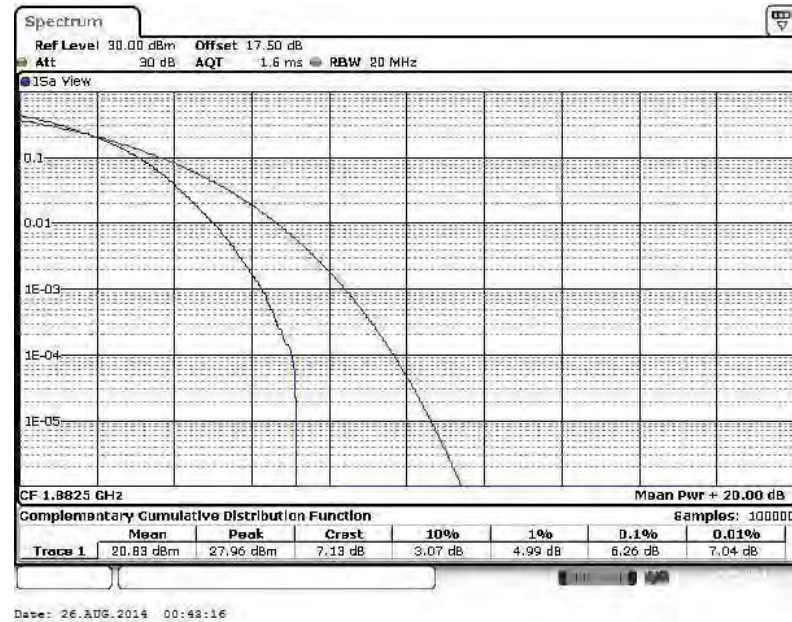
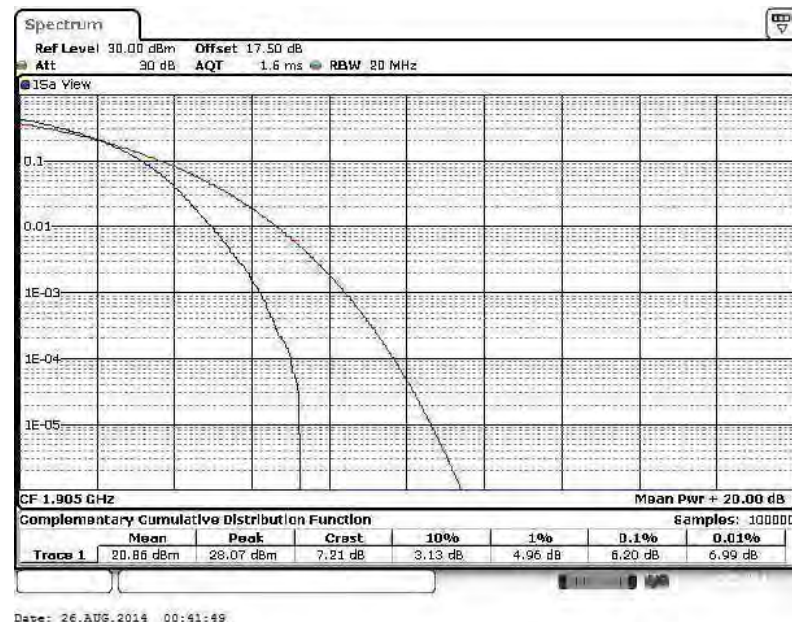
20MHz / 16QAM in Ch. 26590 (1RB Size)



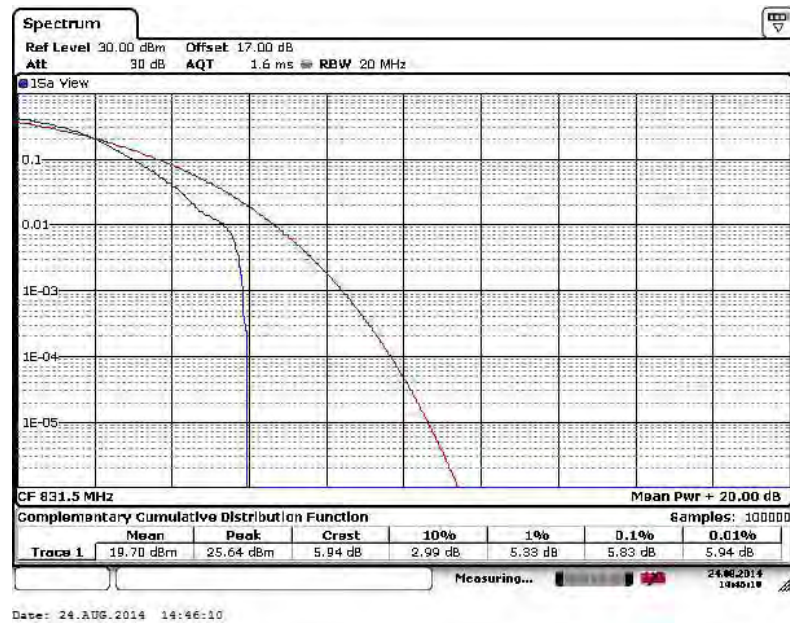
Peak-to-Average Ratio on LTE Band 25

20MHz / 16QAM in Ch. 26140 (100RB Size)

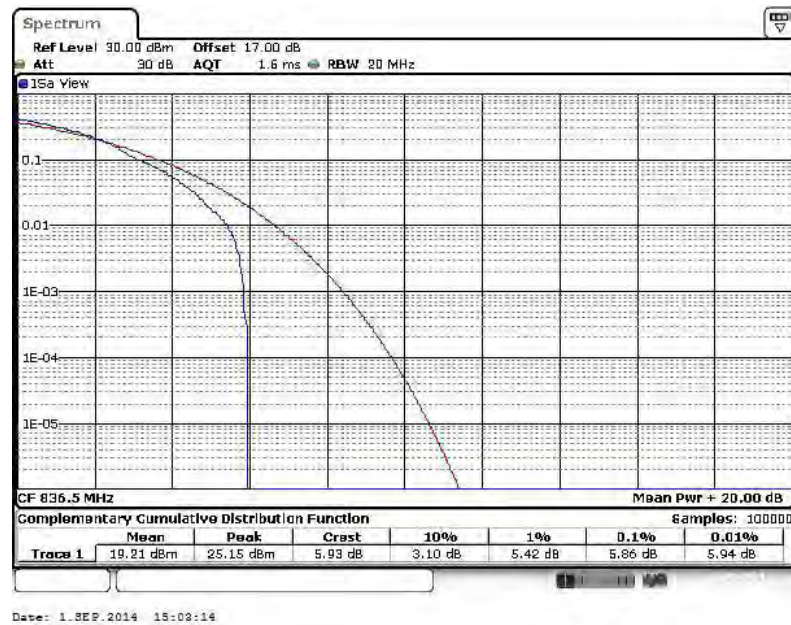


Peak-to-Average Ratio on LTE Band 25
20MHz / 16QAM in Ch. 26365 (100RB Size)

Peak-to-Average Ratio on LTE Band 25
20MHz / 16QAM in Ch. 26590 (100RB Size)


Peak-to-Average Ratio on LTE Band 26
15MHz / 16QAM in Ch. 26865 (1RB Size)

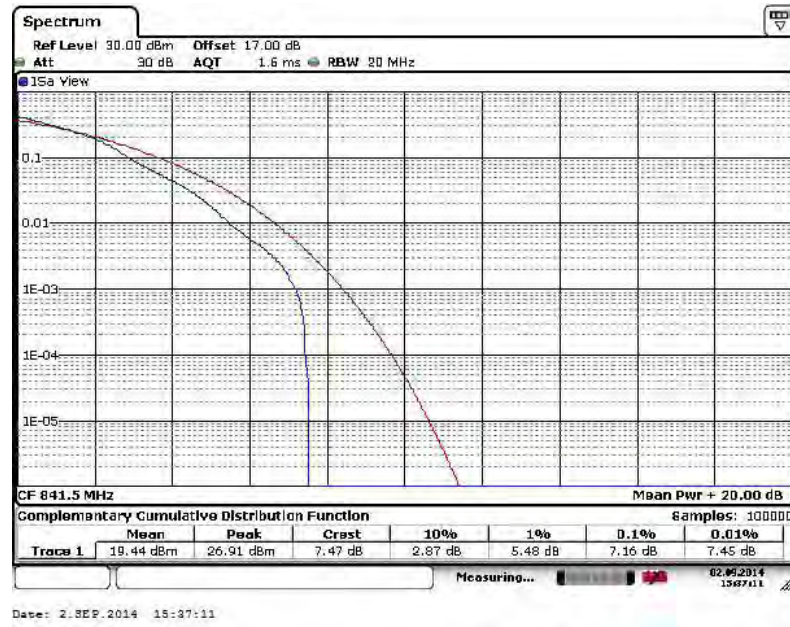


Peak-to-Average Ratio on LTE Band 26
15MHz / 16QAM in Ch. 26915 (1RB Size)

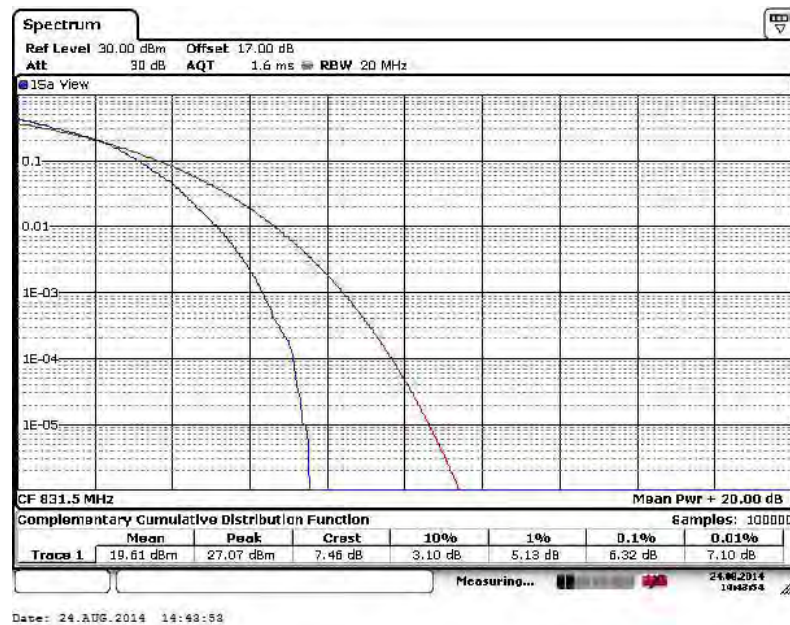




Peak-to-Average Ratio on LTE Band 26
15MHz / 16QAM in Ch. 26965 (1RB Size)

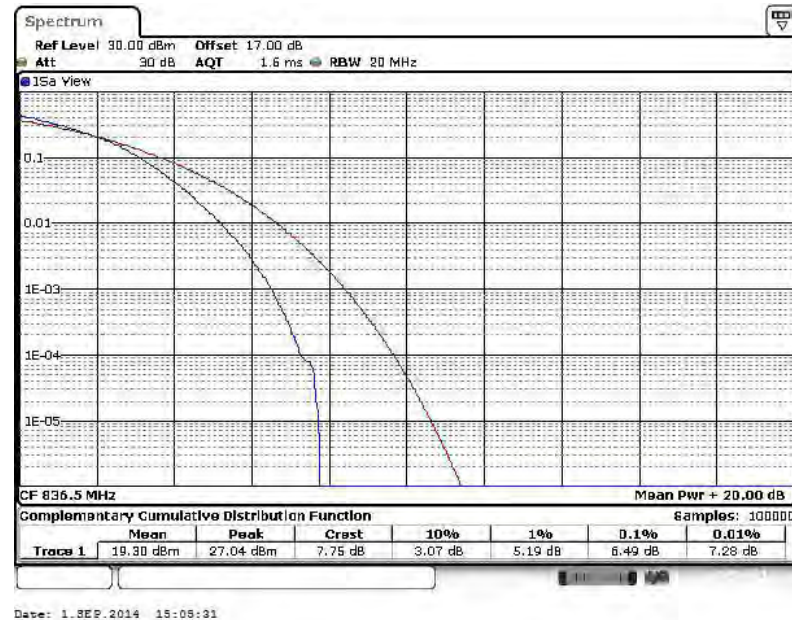


Peak-to-Average Ratio on LTE Band 26
15MHz / 16QAM in Ch. 26865(75RB Size)

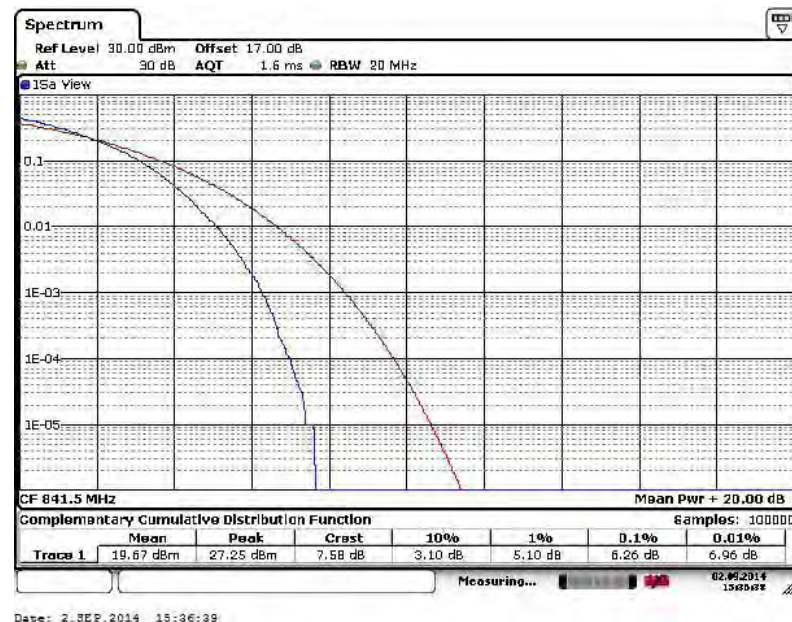




Peak-to-Average Ratio on LTE Band 26
15MHz / 16QAM in Ch. 26915 (75RB Size)



Peak-to-Average Ratio on LTE Band 26
15MHz / 16QAM in Ch. 26965 (75RB Size)



3.3 Effective Radiated Power and Equivalent Isotropic Radiated Power Measurement

3.3.1 Description of the ERP/EIRP Measurement

Effective radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-C-2004, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r01. Mobile and portable (hand-held) stations operating are limited to average ERP of 7 watts with LTE band 5 / 26 and 3 watts with LTE band 12 / 17.

Equivalent isotropic radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-C-2004, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r01. Mobile and portable (hand-held) stations operating are limited to average EIRP of 2 watts with LTE band 2 / 25 / 7 and 1 watt with LTE band 4.

3.3.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.3.3 Test Procedures

1. The EUT was placed on a turntable with 1.5 meter height in a fully anechoic chamber.
2. The EUT was set at 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer which used a channel power option across EUT's signal bandwidth per section 4.0 of KDB 971168 D01.
4. The table was rotated 360 degrees to determine the position of the highest radiated power.
5. The height of the receiving antenna is adjusted to look for the maximum ERP/EIRP.
6. Taking the record of maximum ERP/EIRP.
7. A dipole antenna was substituted in place of the EUT and was driven by a signal generator.
8. The conducted power at the terminal of the dipole antenna is measured.
9. Repeat step 3 to step 5 to get the maximum ERP/EIRP of the substitution antenna.
10. $ERP/EIRP = P_s + E_t - E_s + G_s = P_s + R_t - R_s + G_s$

P_s (dBm) : Input power to substitution antenna.

G_s (dBi or dBd) : Substitution antenna Gain.

$E_t = R_t + AF$

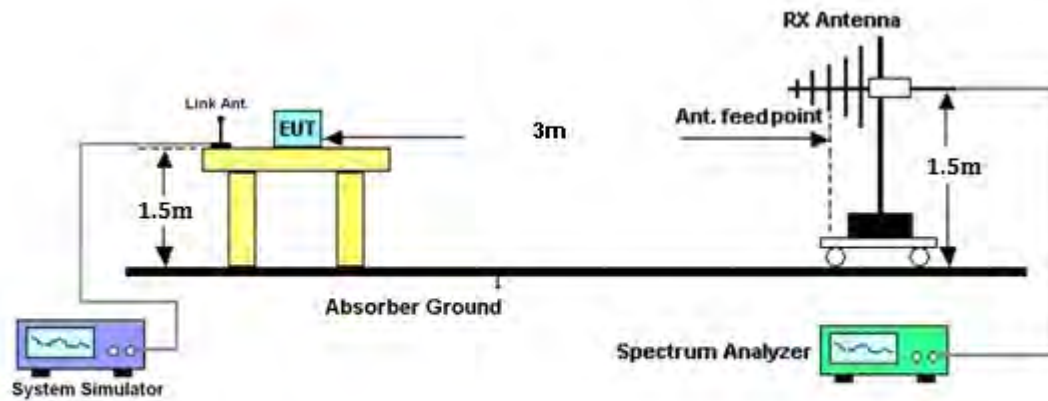
$E_s = R_s + AF$

AF (dB/m) : Receive antenna factor

R_t : The highest received signal in spectrum analyzer for EUT.

R_s : The highest received signal in spectrum analyzer for substitution antenna.

3.3.4 Test Setup



3.3.5 Test Result of ERP/EIRP

LTE Band 2 Radiated Power EIRP								
LTE Band	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	EIRP (W)	H/V
			RB Size	RB Offset				
2	1.4	QPSK	1	2	1850.7	23.94	0.2477	H
2	1.4	QPSK	1	2	1880	24.21	0.2638	H
2	1.4	QPSK	1	2	1909.3	23.96	0.2487	H
2	1.4	QPSK	1	2	1850.7	24.38	0.2739	V
2	1.4	QPSK	1	2	1880	24.72	0.2966	V
2	1.4	QPSK	1	2	1909.3	24.61	0.2889	V
2	1.4	16QAM	1	0	1850.7	23.27	0.2125	H
2	1.4	16QAM	1	5	1880	23.43	0.2205	H
2	1.4	16QAM	1	5	1909.3	23.02	0.2004	H
2	1.4	16QAM	1	0	1850.7	23.47	0.2224	V
2	1.4	16QAM	1	5	1880	23.72	0.2355	V
2	1.4	16QAM	1	5	1909.3	23.35	0.2164	V
2	20	QPSK	1	0	1860	24.18	0.2619	H
2	20	QPSK	1	0	1880	24.27	0.2673	H
2	20	QPSK	1	0	1900	24.21	0.2637	H
2	20	QPSK	1	0	1860	24.55	0.2853	V
2	20	QPSK	1	0	1880	24.78	0.3003	V
2	20	QPSK	1	0	1900	24.91	0.3098	V
2	20	16QAM	1	0	1860	23.11	0.2044	H
2	20	16QAM	1	99	1880	23.50	0.2241	H
2	20	16QAM	1	49	1900	23.19	0.2083	H
2	20	16QAM	1	0	1860	23.14	0.2062	V
2	20	16QAM	1	99	1880	23.59	0.2287	V
2	20	16QAM	1	49	1900	23.56	0.2267	V



LTE Band 4 Radiated Power EIRP								
LTE Band	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	EIRP (W)	H/V
			RB Size	RB Offset				
4	1.4	QPSK	1	2	1710.7	22.67	0.1851	H
4	1.4	QPSK	1	2	1732.5	22.70	0.1863	H
4	1.4	QPSK	1	5	1754.3	22.94	0.1966	H
4	1.4	QPSK	1	2	1710.7	22.59	0.1815	V
4	1.4	QPSK	1	2	1732.5	22.65	0.1841	V
4	1.4	QPSK	1	5	1754.3	22.81	0.1910	V
4	1.4	16QAM	1	0	1710.7	21.71	0.1483	H
4	1.4	16QAM	1	0	1732.5	21.64	0.1459	H
4	1.4	16QAM	1	2	1754.3	22.76	0.1889	H
4	1.4	16QAM	1	0	1710.7	21.69	0.1477	V
4	1.4	16QAM	1	0	1732.5	21.66	0.1467	V
4	1.4	16QAM	1	2	1754.3	22.74	0.1878	V
4	20	QPSK	1	49	1720	22.68	0.1854	H
4	20	QPSK	1	49	1732.5	22.77	0.1894	H
4	20	QPSK	1	49	1745	22.51	0.1783	H
4	20	QPSK	1	49	1720	22.67	0.1848	V
4	20	QPSK	1	49	1732.5	22.75	0.1885	V
4	20	QPSK	1	49	1745	22.68	0.1852	V
4	20	16QAM	1	99	1720	21.78	0.1507	H
4	20	16QAM	1	0	1732.5	21.14	0.1299	H
4	20	16QAM	1	0	1745	21.41	0.1383	H
4	20	16QAM	1	99	1720	21.74	0.1491	V
4	20	16QAM	1	0	1732.5	21.00	0.1259	V
4	20	16QAM	1	0	1745	21.39	0.1376	V



LTE Band 5 Radiated Power ERP								
LTE Band	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	ERP (W)	H/V
			RB Size	RB Offset				
5	1.4	QPSK	1	5	824.7	17.98	0.0627	H
5	1.4	QPSK	1	2	836.5	17.27	0.0533	H
5	1.4	QPSK	1	5	848.3	17.24	0.0530	H
5	1.4	QPSK	1	5	824.7	10.59	0.0114	V
5	1.4	QPSK	1	2	836.5	10.15	0.0103	V
5	1.4	QPSK	1	5	848.3	11.49	0.0141	V
5	1.4	16QAM	1	5	824.7	17.88	0.0614	H
5	1.4	16QAM	1	2	836.5	16.13	0.0410	H
5	1.4	16QAM	1	0	848.3	16.75	0.0473	H
5	1.4	16QAM	1	5	824.7	10.24	0.0106	V
5	1.4	16QAM	1	2	836.5	9.14	0.0082	V
5	1.4	16QAM	1	0	848.3	10.06	0.0101	V
5	10	QPSK	1	24	829	17.70	0.0589	H
5	10	QPSK	1	24	836.5	17.13	0.0516	H
5	10	QPSK	1	24	844	17.13	0.0517	H
5	10	QPSK	1	24	829	10.49	0.0112	V
5	10	QPSK	1	24	836.5	10.15	0.0103	V
5	10	QPSK	1	24	844	10.71	0.0118	V
5	10	16QAM	1	24	829	16.52	0.0449	H
5	10	16QAM	1	49	836.5	16.13	0.0410	H
5	10	16QAM	1	24	844	16.13	0.0410	H
5	10	16QAM	1	24	829	8.77	0.0075	V
5	10	16QAM	1	49	836.5	9.04	0.0080	V
5	10	16QAM	1	24	844	9.14	0.0082	V



LTE Band 7 Radiated Power EIRP								
LTE Band	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	EIRP (W)	H/V
			RB Size	RB Offset				
7	5	QPSK	1	0	2502.5	21.79	0.1512	H
7	5	QPSK	1	0	2535	21.90	0.1550	H
7	5	QPSK	1	0	2567.5	18.76	0.0751	H
7	5	QPSK	1	0	2502.5	22.25	0.1680	V
7	5	QPSK	1	0	2535	22.03	0.1595	V
7	5	QPSK	1	0	2567.5	18.95	0.0785	V
7	5	16QAM	1	12	2502.5	20.81	0.1204	H
7	5	16QAM	1	24	2535	20.60	0.1147	H
7	5	16QAM	1	0	2567.5	17.98	0.0627	H
7	5	16QAM	1	12	2502.5	21.25	0.1333	V
7	5	16QAM	1	24	2535	20.70	0.1175	V
7	5	16QAM	1	0	2567.5	18.18	0.0658	V
7	20	QPSK	1	49	2510	22.02	0.1591	H
7	20	QPSK	1	49	2535	21.85	0.1531	H
7	20	QPSK	1	49	2560	20.53	0.1130	H
7	20	QPSK	1	49	2510	22.34	0.1716	V
7	20	QPSK	1	49	2535	21.87	0.1537	V
7	20	QPSK	1	49	2560	20.67	0.1166	V
7	20	16QAM	1	49	2510	20.66	0.1165	H
7	20	16QAM	1	49	2535	20.56	0.1138	H
7	20	16QAM	1	0	2560	19.60	0.0912	H
7	20	16QAM	1	49	2510	20.97	0.1249	V
7	20	16QAM	1	49	2535	20.62	0.1153	V
7	20	16QAM	1	0	2560	19.79	0.0952	V



LTE Band 12 Radiated Power ERP								
LTE Band	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	ERP (W)	H/V
			RB Size	RB Offset				
12	1.4	QPSK	1	0	699.7	17.98	0.0628	H
12	1.4	QPSK	1	5	707.5	18.60	0.0724	H
12	1.4	QPSK	1	5	715.3	19.08	0.0809	H
12	1.4	QPSK	1	0	699.7	7.27	0.0053	V
12	1.4	QPSK	1	5	707.5	8.28	0.0067	V
12	1.4	QPSK	1	5	715.3	8.99	0.0079	V
12	1.4	16QAM	1	0	699.7	17.21	0.0526	H
12	1.4	16QAM	1	5	707.5	17.84	0.0609	H
12	1.4	16QAM	1	5	715.3	18.24	0.0667	H
12	1.4	16QAM	1	0	699.7	5.71	0.0037	V
12	1.4	16QAM	1	5	707.5	6.73	0.0047	V
12	1.4	16QAM	1	5	715.3	7.32	0.0054	V
12	10	QPSK	1	49	704	17.50	0.0562	H
12	10	QPSK	1	49	707.5	18.95	0.0785	H
12	10	QPSK	1	49	711	19.23	0.0837	H
12	10	QPSK	1	49	704	7.61	0.0058	V
12	10	QPSK	1	49	707.5	8.71	0.0074	V
12	10	QPSK	1	49	711	9.13	0.0082	V
12	10	16QAM	1	49	704	17.80	0.0603	H
12	10	16QAM	1	49	707.5	18.05	0.0638	H
12	10	16QAM	1	24	711	17.78	0.0599	H
12	10	16QAM	1	49	704	6.76	0.0047	V
12	10	16QAM	1	49	707.5	7.22	0.0053	V
12	10	16QAM	1	24	711	6.90	0.0049	V



LTE Band 17 Radiated Power ERP								
LTE Band	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	ERP (W)	H/V
			RB Size	RB Offset				
17	5	QPSK	1	24	706.5	18.58	0.0721	H
17	5	QPSK	1	24	710	18.87	0.0771	H
17	5	QPSK	1	12	713.5	18.94	0.0783	H
17	5	QPSK	1	24	706.5	8.35	0.0068	V
17	5	QPSK	1	24	710	8.54	0.0071	V
17	5	QPSK	1	12	713.5	8.83	0.0076	V
17	5	16QAM	1	24	706.5	16.73	0.0471	H
17	5	16QAM	1	24	710	16.87	0.0486	H
17	5	16QAM	1	12	713.5	16.94	0.0495	H
17	5	16QAM	1	24	706.5	5.43	0.0035	V
17	5	16QAM	1	24	710	5.56	0.0036	V
17	5	16QAM	1	12	713.5	5.62	0.0037	V
17	10	QPSK	1	49	709	19.24	0.0840	H
17	10	QPSK	1	49	710	18.79	0.0757	H
17	10	QPSK	1	49	711	19.30	0.0850	H
17	10	QPSK	1	49	709	9.53	0.0090	V
17	10	QPSK	1	49	710	9.35	0.0086	V
17	10	QPSK	1	49	711	9.41	0.0087	V
17	10	16QAM	1	24	709	16.45	0.0442	H
17	10	16QAM	1	49	710	17.03	0.0505	H
17	10	16QAM	1	24	711	16.71	0.0469	H
17	10	16QAM	1	24	709	5.04	0.0032	V
17	10	16QAM	1	49	710	5.92	0.0039	V
17	10	16QAM	1	24	711	5.42	0.0035	V



LTE Band 25 Radiated Power EIRP								
LTE Band	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	EIRP (W)	H/V
			RB Size	RB Offset				
25	1.4	QPSK	1	5	1850.7	24.37	0.2738	H
25	1.4	QPSK	1	0	1882.5	24.86	0.3062	H
25	1.4	QPSK	1	2	1914.3	24.31	0.2699	H
25	1.4	QPSK	1	5	1850.7	24.71	0.2961	V
25	1.4	QPSK	1	0	1882.5	25.47	0.3524	V
25	1.4	QPSK	1	2	1914.3	24.73	0.2973	V
25	1.4	16QAM	1	5	1850.7	23.34	0.2157	H
25	1.4	16QAM	1	2	1882.5	23.42	0.2199	H
25	1.4	16QAM	1	2	1914.3	23.12	0.2053	H
25	1.4	16QAM	1	5	1850.7	23.68	0.2331	V
25	1.4	16QAM	1	2	1882.5	23.82	0.2412	V
25	1.4	16QAM	1	2	1914.3	23.52	0.2249	V
25	20	QPSK	1	99	1860	24.63	0.2906	H
25	20	QPSK	1	99	1882.5	24.71	0.2956	H
25	20	QPSK	1	99	1905	24.49	0.2815	H
25	20	QPSK	1	99	1860	25.10	0.3233	V
25	20	QPSK	1	99	1882.5	25.34	0.3423	V
25	20	QPSK	1	99	1905	25.18	0.3300	V
25	20	16QAM	1	49	1860	22.90	0.1948	H
25	20	16QAM	1	0	1882.5	23.22	0.2100	H
25	20	16QAM	1	99	1905	22.86	0.1931	H
25	20	16QAM	1	49	1860	23.25	0.2111	V
25	20	16QAM	1	0	1882.5	23.64	0.2310	V
25	20	16QAM	1	99	1905	23.29	0.2132	V



LTE Band 26 Radiated Power ERP								
LTE Band	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	ERP (W)	H/V
			RB Size	RB Offset				
26	1.4	QPSK	1	2	824.7	19.26	0.0844	H
26	1.4	QPSK	1	0	836.5	18.78	0.0755	H
26	1.4	QPSK	1	2	848.3	17.55	0.0569	H
26	1.4	QPSK	1	2	824.7	11.86	0.0153	V
26	1.4	QPSK	1	0	836.5	11.25	0.0133	V
26	1.4	QPSK	1	2	848.3	11.18	0.0131	V
26	1.4	16QAM	1	0	824.7	17.27	0.0533	H
26	1.4	16QAM	1	2	836.5	16.74	0.0472	H
26	1.4	16QAM	1	0	848.3	16.34	0.0430	H
26	1.4	16QAM	1	0	824.7	9.97	0.0099	V
26	1.4	16QAM	1	2	836.5	9.44	0.0088	V
26	1.4	16QAM	1	0	848.3	10.07	0.0102	V
26	15	QPSK	1	74	831.5	17.65	0.0582	H
26	15	QPSK	1	37	836.5	17.86	0.0610	H
26	15	QPSK	1	74	841.5	17.49	0.0561	H
26	15	QPSK	1	74	831.5	10.24	0.0106	V
26	15	QPSK	1	37	836.5	10.53	0.0113	V
26	15	QPSK	1	74	841.5	11.10	0.0129	V
26	15	16QAM	1	74	831.5	16.66	0.0464	H
26	15	16QAM	1	37	836.5	16.58	0.0455	H
26	15	16QAM	1	74	841.5	16.15	0.0412	H
26	15	16QAM	1	74	831.5	9.18	0.0083	V
26	15	16QAM	1	37	836.5	9.38	0.0087	V
26	15	16QAM	1	74	841.5	9.96	0.0099	V

3.4 99% Occupied Bandwidth and 26dB Bandwidth Measurement

3.4.1 Description of 99% Occupied Bandwidth and 26dB Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

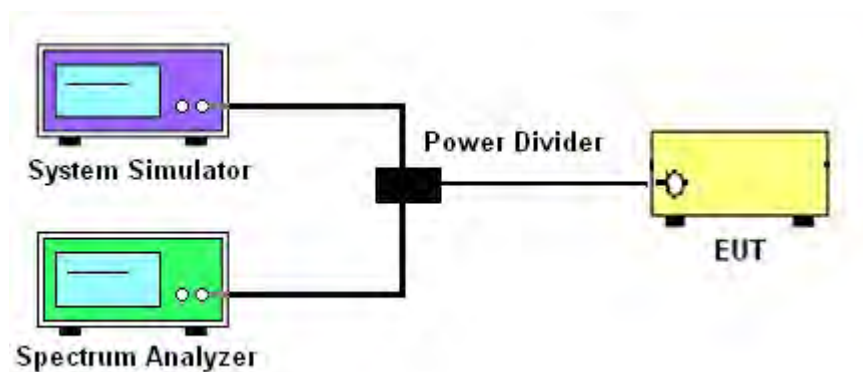
3.4.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The 26dB and 99% occupied bandwidth (BW) of the middle channel for the highest RF power with full RB sizes were measured.

3.4.4 Test Setup



3.4.5 Test Result of 99% Occupied Bandwidth and 26dB Bandwidth

Modes	LTE Band 2			
BW / Mod.	1.4MHz / QPSK	1.4MHz / 16QAM	3MHz / QPSK	3MHz / 16QAM
99% OBW (MHz)	1.097	1.097	2.721	2.727
26dB BW (MHz)	1.295	1.290	3.051	3.045
BW / Mod.	5MHz / QPSK	5MHz / 16QAM	10MHz / QPSK	10MHz / 16QAM
99% OBW (MHz)	4.486	4.486	9.071	8.971
26dB BW (MHz)	5.025	5.025	10.030	10.030
BW / Mod.	15MHz / QPSK	15MHz / 16QAM	20MHz / QPSK	20MHz / 16QAM
99% OBW (MHz)	13.427	13.397	18.222	18.222
26dB BW (MHz)	14.655	14.715	20.260	20.220

Modes	LTE Band 4			
BW / Mod.	1.4MHz / QPSK	1.4MHz / 16QAM	3MHz / QPSK	3MHz / 16QAM
99% OBW (MHz)	1.097	1.097	2.739	2.721
26dB BW (MHz)	1.298	1.287	3.075	3.051
BW / Mod.	5MHz / QPSK	5MHz / 16QAM	10MHz / QPSK	10MHz / 16QAM
99% OBW (MHz)	4.486	4.496	9.051	8.991
26dB BW (MHz)	5.035	5.005	10.030	10.010
BW / Mod.	15MHz / QPSK	15MHz / 16QAM	20MHz / QPSK	20MHz / 16QAM
99% OBW (MHz)	13.427	13.397	18.302	18.302
26dB BW (MHz)	14.655	14.835	20.460	20.380

Modes	LTE Band 5			
BW / Mod.	1.4MHz / QPSK	1.4MHz / 16QAM	3MHz / QPSK	3MHz / 16QAM
99% OBW (MHz)	1.094	1.094	2.721	2.721
26dB BW (MHz)	1.292	1.290	3.039	3.051
BW / Mod.	5MHz / QPSK	5MHz / 16QAM	10MHz / QPSK	10MHz / 16QAM
99% OBW (MHz)	4.486	4.486	9.091	9.011
26dB BW (MHz)	5.015	5.005	10.010	9.990

Modes	LTE Band 7			
BW / Mod.	5MHz / QPSK	5MHz / 16QAM	10MHz / QPSK	10MHz / 16QAM
99% OBW (MHz)	4.496	4.496	9.051	9.011
26dB BW (MHz)	5.035	5.025	10.090	10.010
BW / Mod.	15MHz / QPSK	15MHz / 16QAM	20MHz / QPSK	20MHz / 16QAM
99% OBW (MHz)	13.427	13.427	18.302	18.302
26dB BW (MHz)	14.715	14.835	20.220	20.460

Modes	LTE Band 12			
BW / Mod.	1.4MHz / QPSK	1.4MHz / 16QAM	3MHz / QPSK	3MHz / 16QAM
99% OBW (MHz)	1.099	1.097	2.727	2.727
26dB BW (MHz)	1.306	1.306	3.051	3.069
BW / Mod.	5MHz / QPSK	5MHz / 16QAM	10MHz / QPSK	10MHz / 16QAM
99% OBW (MHz)	4.496	4.496	9.091	9.011
26dB BW (MHz)	5.045	5.035	10.050	10.030

Modes	LTE Band 17			
BW / Mod.	5MHz / QPSK	5MHz / 16QAM	10MHz / QPSK	10MHz / 16QAM
99% OBW (MHz)	4.496	4.486	9.051	8.971
26dB BW (MHz)	5.045	5.035	10.030	10.010

Modes	LTE Band 25			
BW / Mod.	1.4MHz / QPSK	1.4MHz / 16QAM	3MHz / QPSK	3MHz / 16QAM
99% OBW (MHz)	1.097	1.099	2.721	2.721
26dB BW (MHz)	1.295	1.290	3.045	3.045
BW / Mod.	5MHz / QPSK	5MHz / 16QAM	10MHz / QPSK	10MHz / 16QAM
99% OBW (MHz)	4.486	4.496	9.091	9.011
26dB BW (MHz)	5.025	5.015	10.010	9.990
BW / Mod.	15MHz / QPSK	15MHz / 16QAM	20MHz / QPSK	20MHz / 16QAM
99% OBW (MHz)	13.457	13.427	18.262	18.302
26dB BW (MHz)	14.625	14.775	20.340	20.300

Modes	LTE Band 26			
BW / Mod.	1.4MHz / QPSK	1.4MHz / 16QAM	3MHz / QPSK	3MHz / 16QAM
99% OBW (MHz)	1.094	1.099	2.721	2.721
26dB BW (MHz)	1.295	1.290	3.039	3.051
BW / Mod.	5MHz / QPSK	5MHz / 16QAM	10MHz / QPSK	10MHz / 16QAM
99% OBW (MHz)	4.486	4.486	9.111	9.011
26dB BW (MHz)	5.015	5.005	10.010	10.030
BW / Mod.	15MHz / QPSK	15MHz / 16QAM		
99% OBW (MHz)	13.487	13.487		
26dB BW (MHz)	14.715	14.865		

Note:

The maximum RB configurations of the 99% Occupied Bandwidth and 26dB Bandwidth summary as below:

BW1.4MHz RB setting : RB Size 6, RB offset 0

BW3.0MHz RB setting : RB Size 15, RB offset 0

BW5.0MHz RB setting : RB Size 25, RB offset 0

BW10MHz RB setting : RB Size 50, RB offset 0

BW15MHz RB setting : RB Size 75, RB offset 0

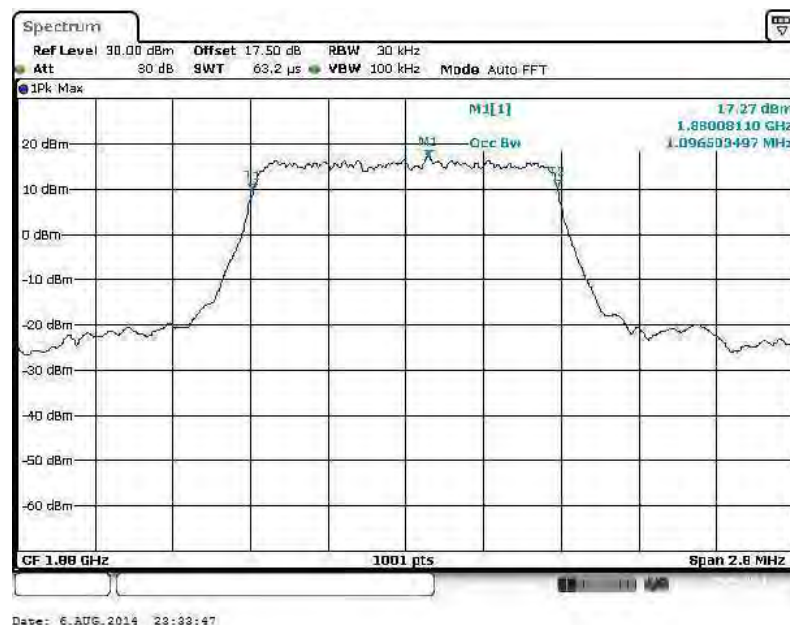
BW20MHz RB setting : RB Size 100, RB offset 0



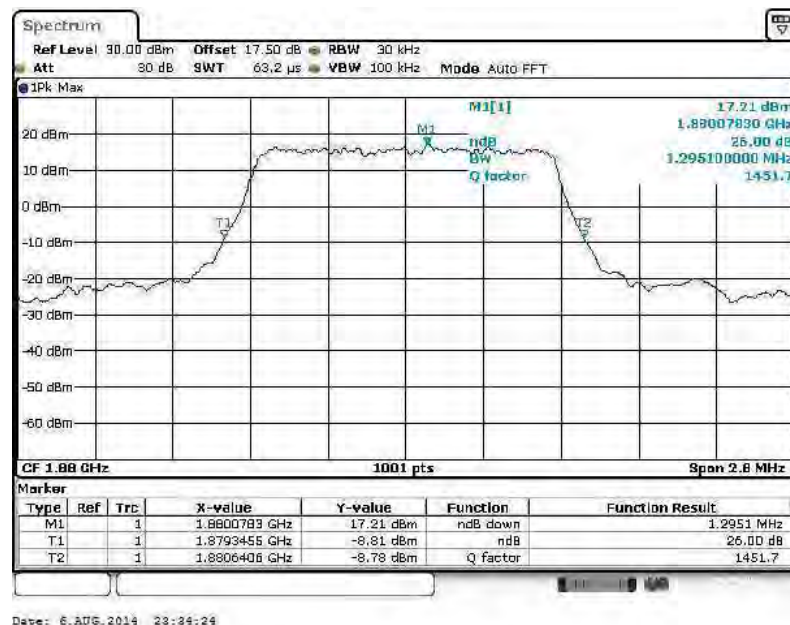
3.4.6 Test Result (Plots) of Occupied Bandwidth

Band :	LTE Band 2	BW / Mod. :	1.4MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 18900



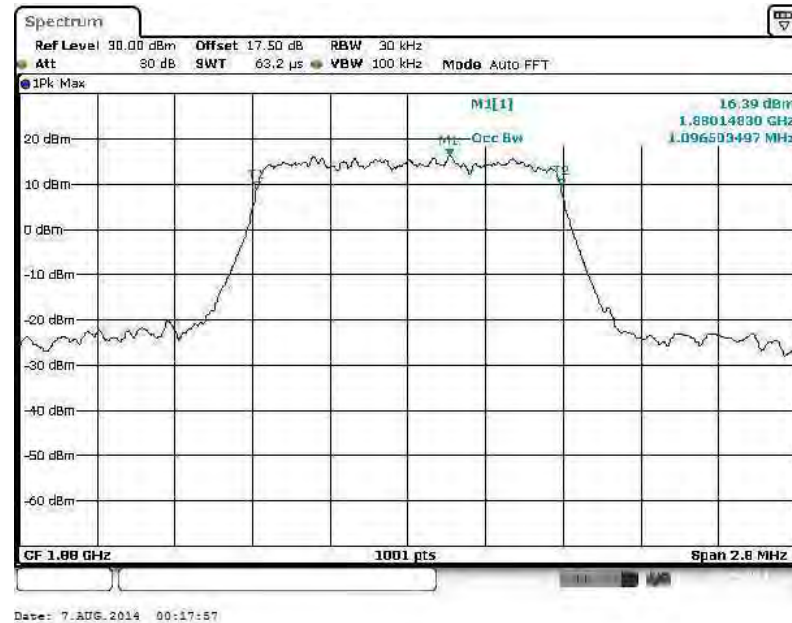
26dB Bandwidth Plot on Channel 18900



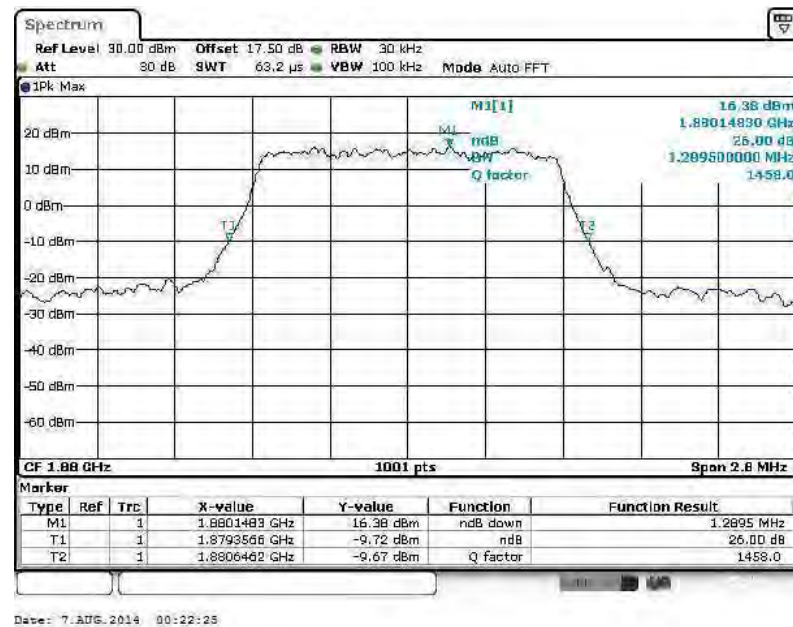


Band :	LTE Band 2	BW / Mod. :	1.4MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 18900



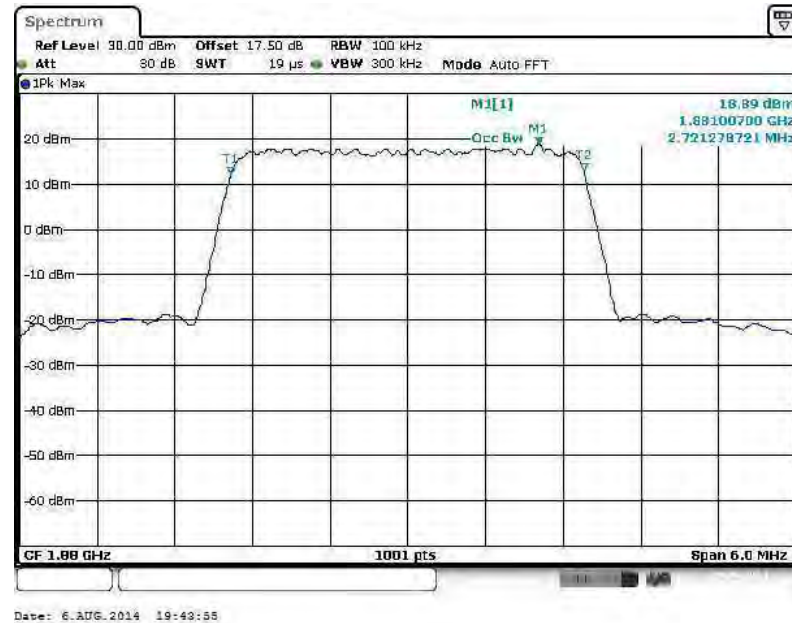
26dB Bandwidth Plot on Channel 18900



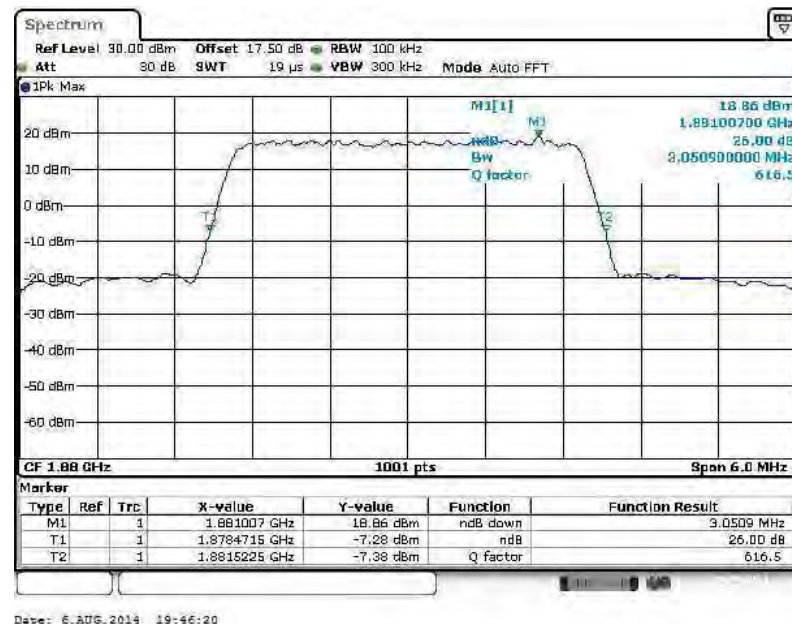


Band :	LTE Band 2	BW / Mod. :	3MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 18900



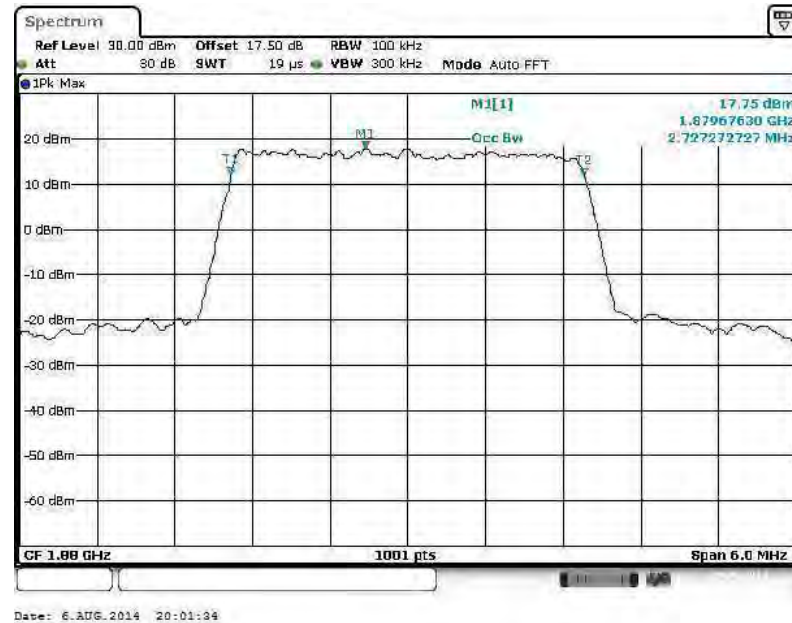
26dB Bandwidth Plot on Channel 18900



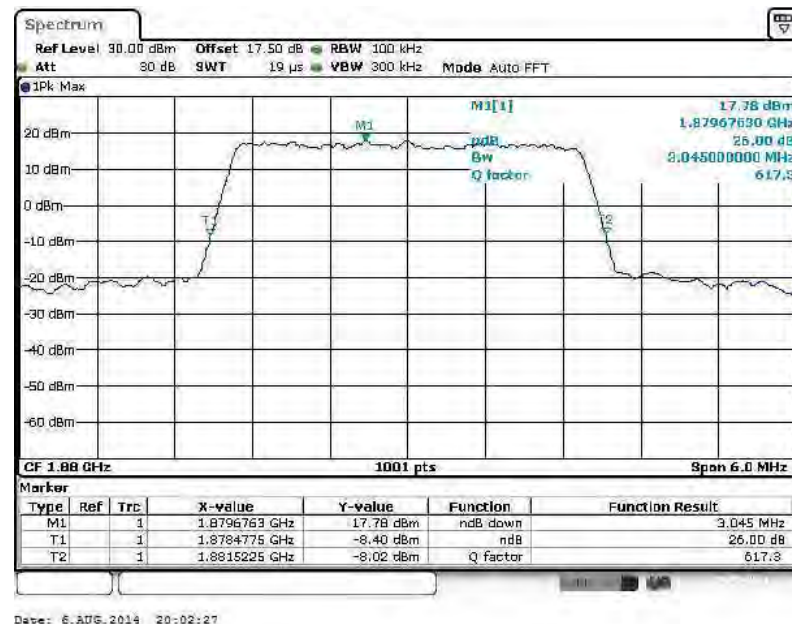


Band :	LTE Band 2	BW / Mod. :	3MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 18900



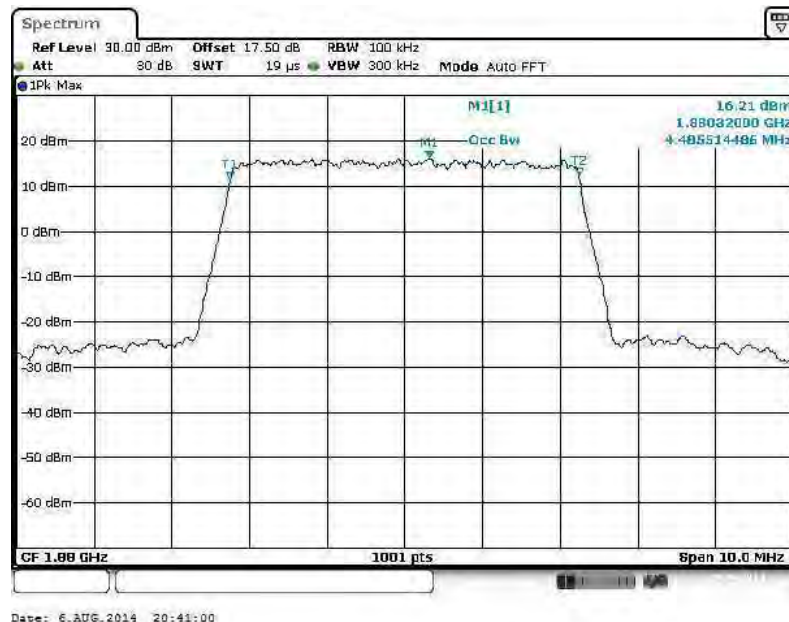
26dB Bandwidth Plot on Channel 18900



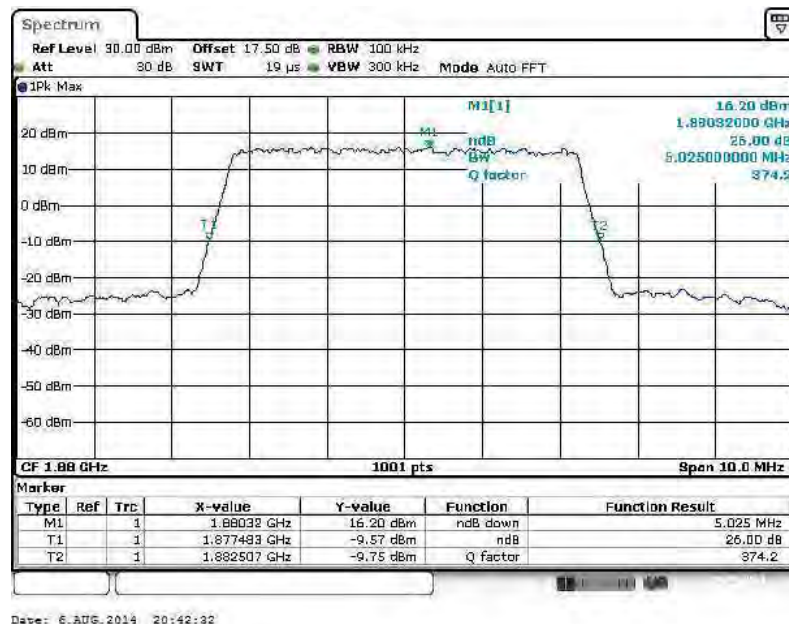


Band :	LTE Band 2	BW / Mod. :	5MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 18900



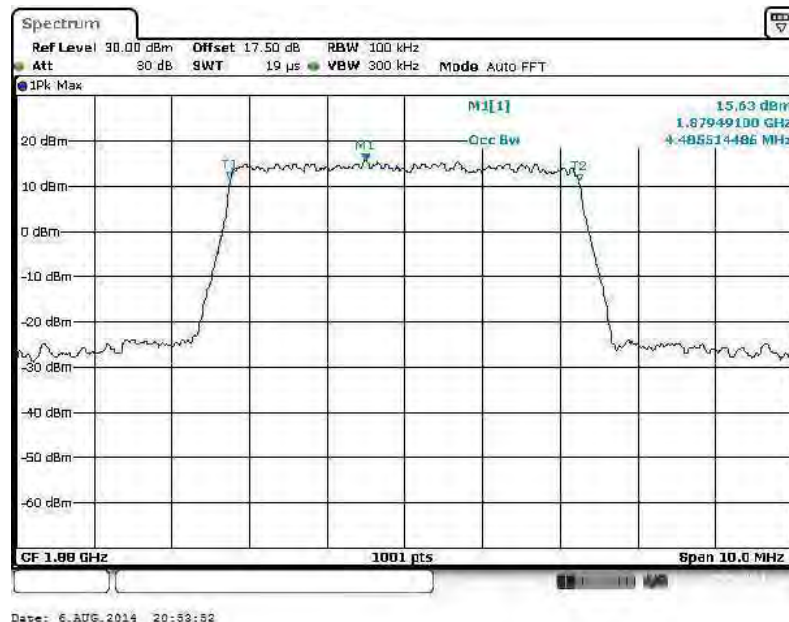
26dB Bandwidth Plot on Channel 18900



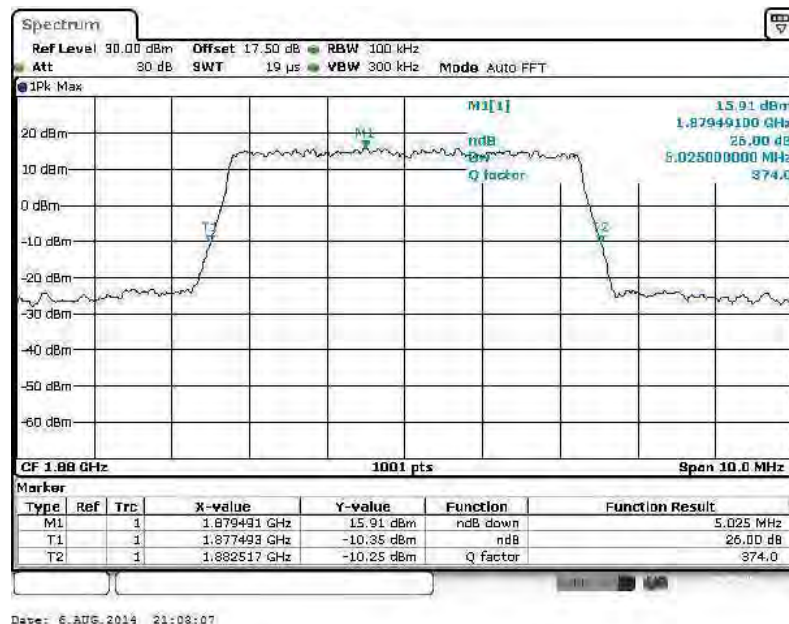


Band :	LTE Band 2	BW / Mod. :	5MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 18900



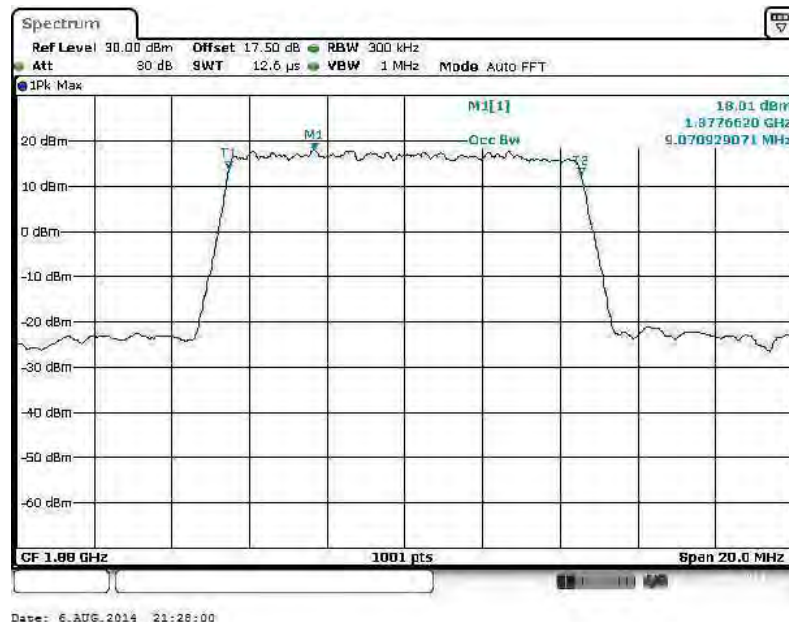
26dB Bandwidth Plot on Channel 18900



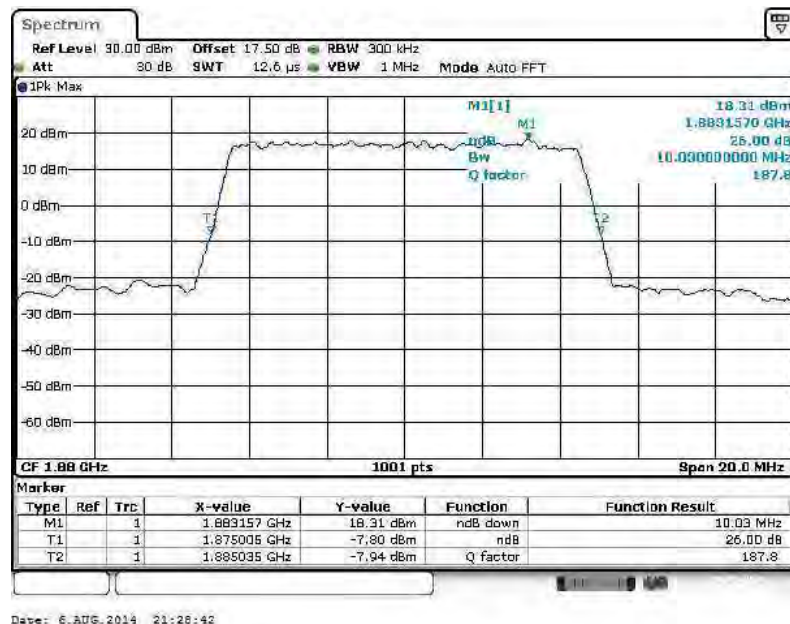


Band :	LTE Band 2	BW / Mod. :	10MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 18900



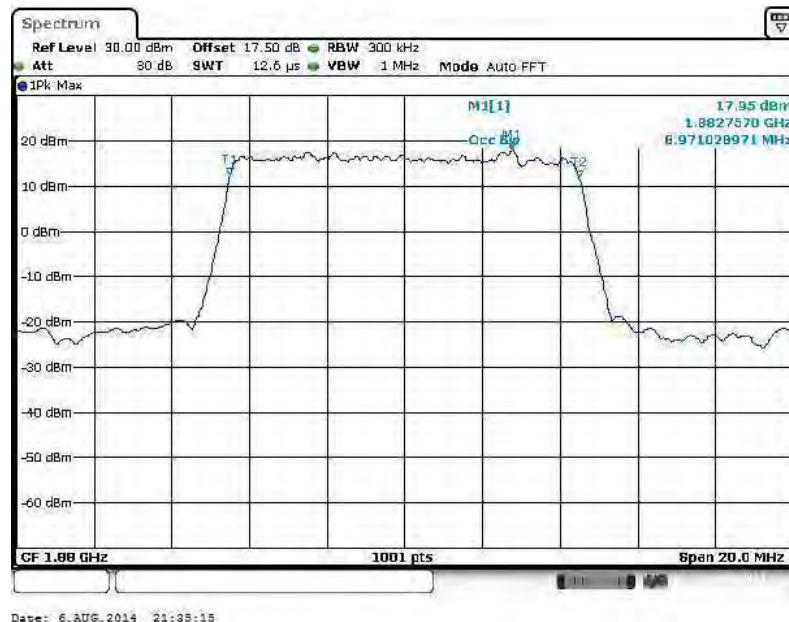
26dB Bandwidth Plot on Channel 18900



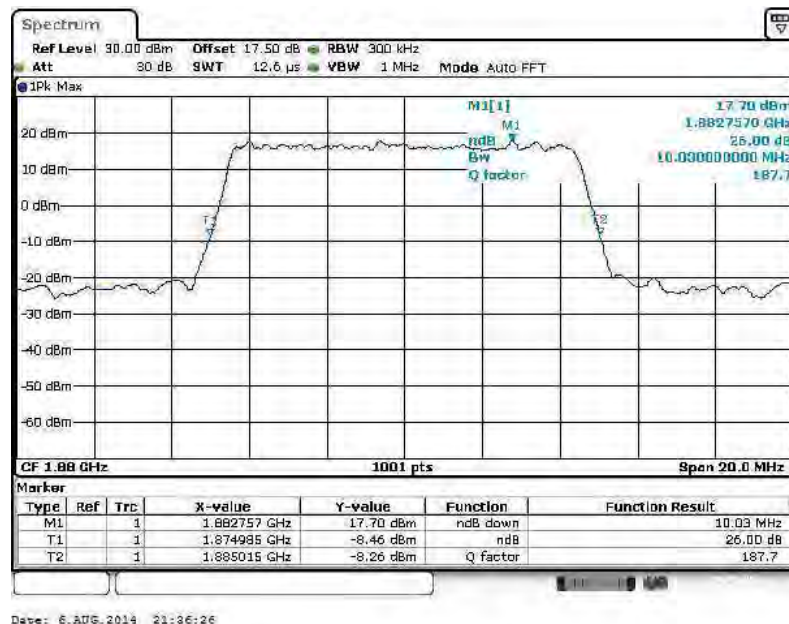


Band :	LTE Band 2	BW / Mod. :	10MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 18900



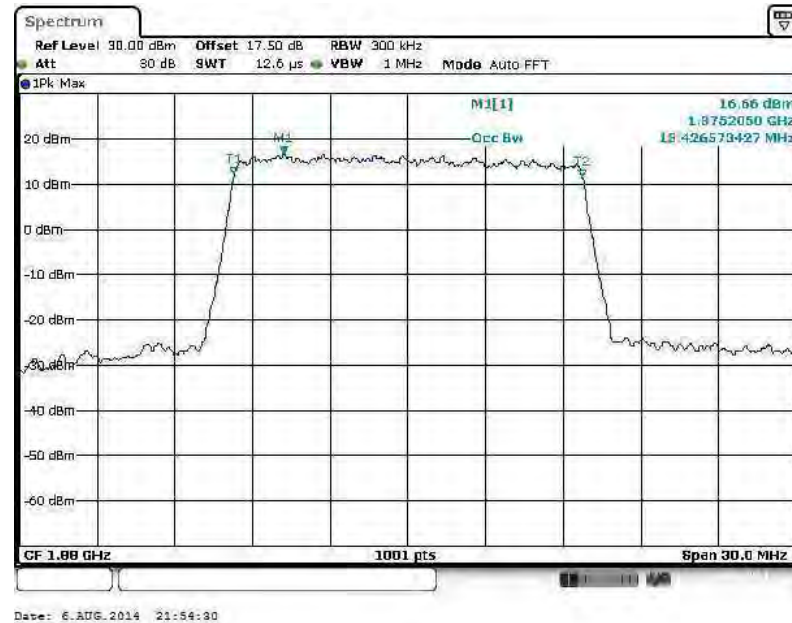
26dB Bandwidth Plot on Channel 18900



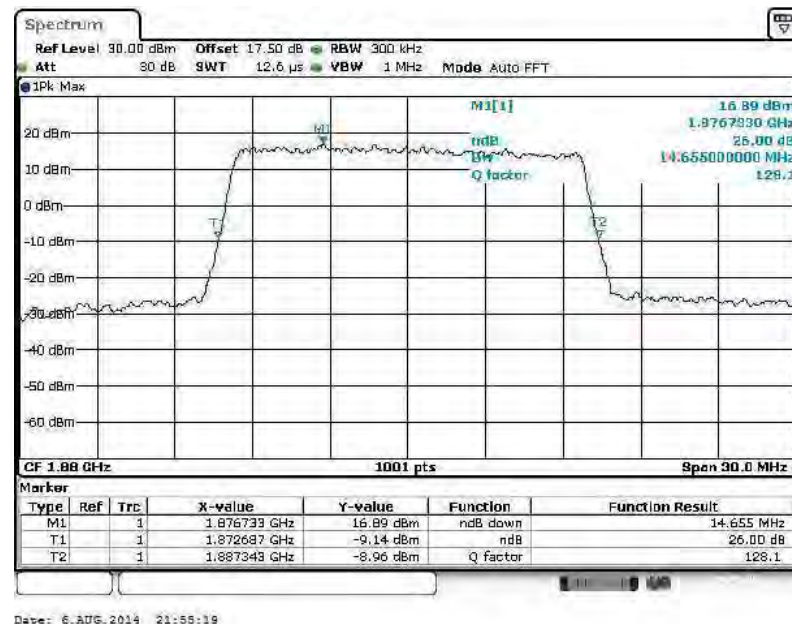


Band :	LTE Band 2	BW / Mod. :	15MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 18900



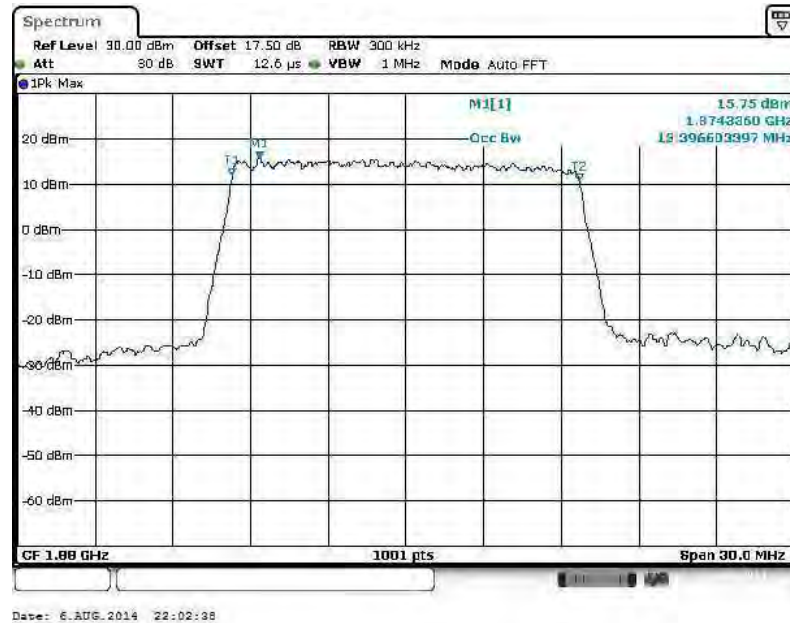
26dB Bandwidth Plot on Channel 18900



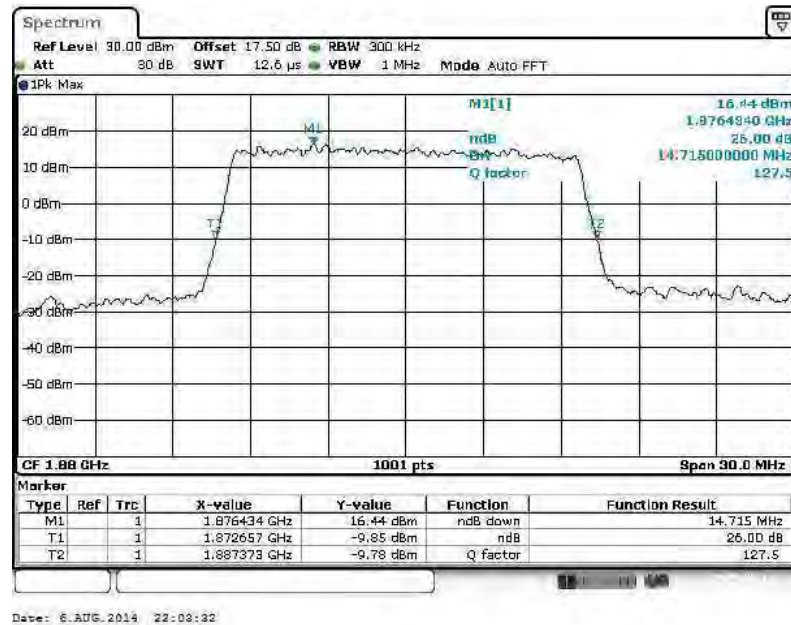


Band :	LTE Band 2	BW / Mod. :	15MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 18900



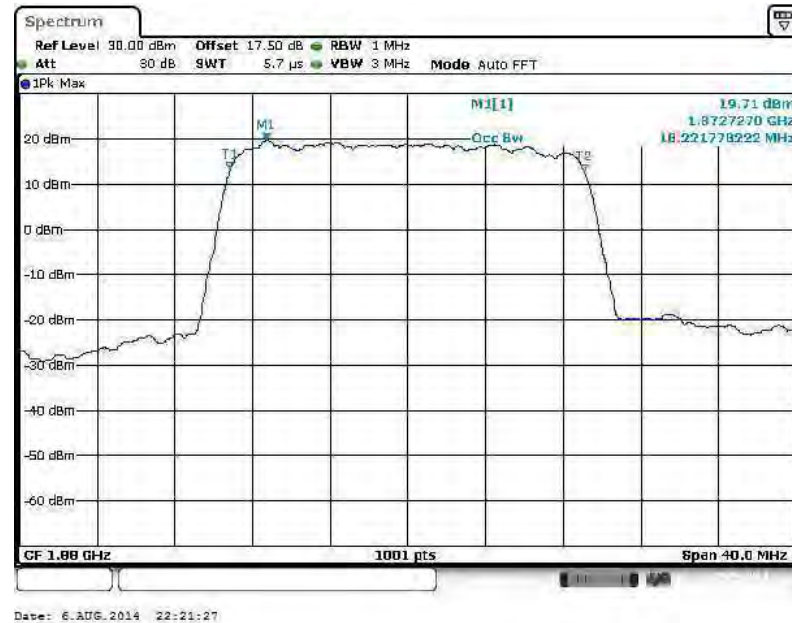
26dB Bandwidth Plot on Channel 18900



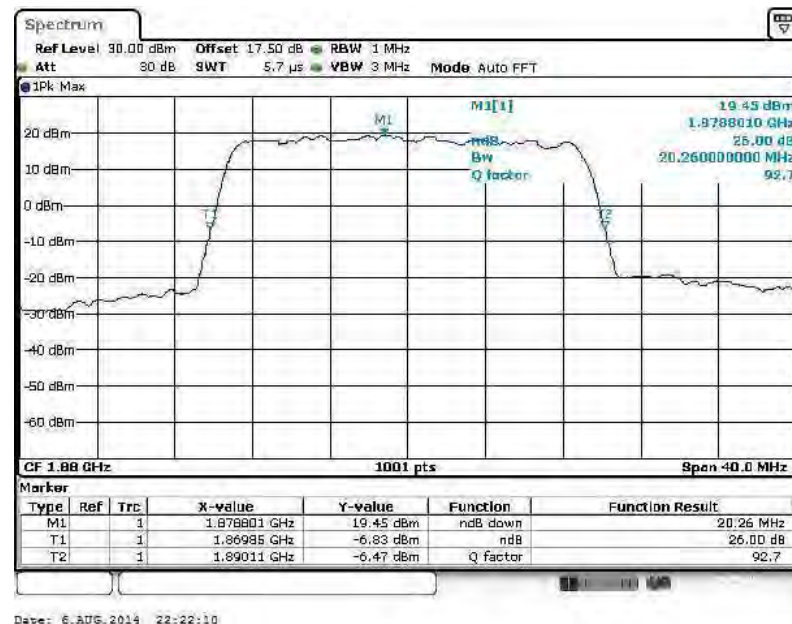


Band :	LTE Band 2	BW / Mod. :	20MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 18900



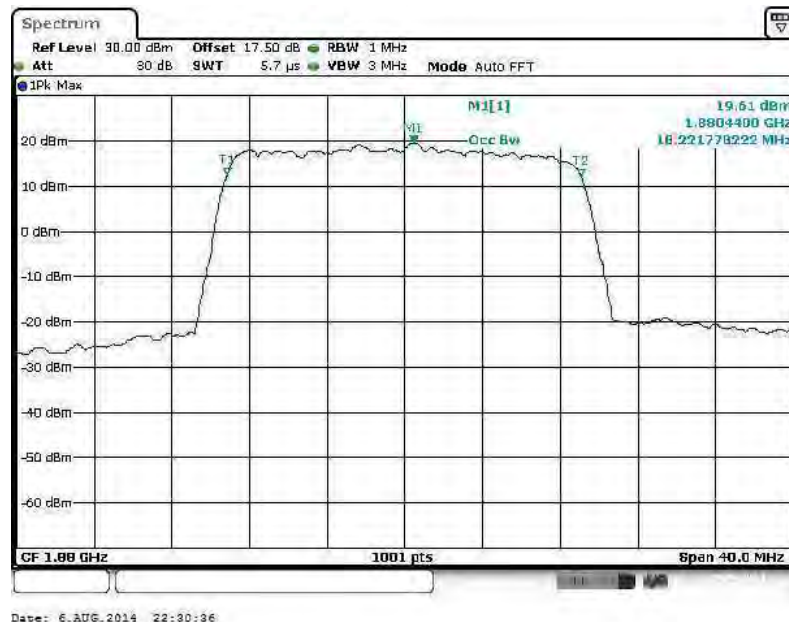
26dB Bandwidth Plot on Channel 18900



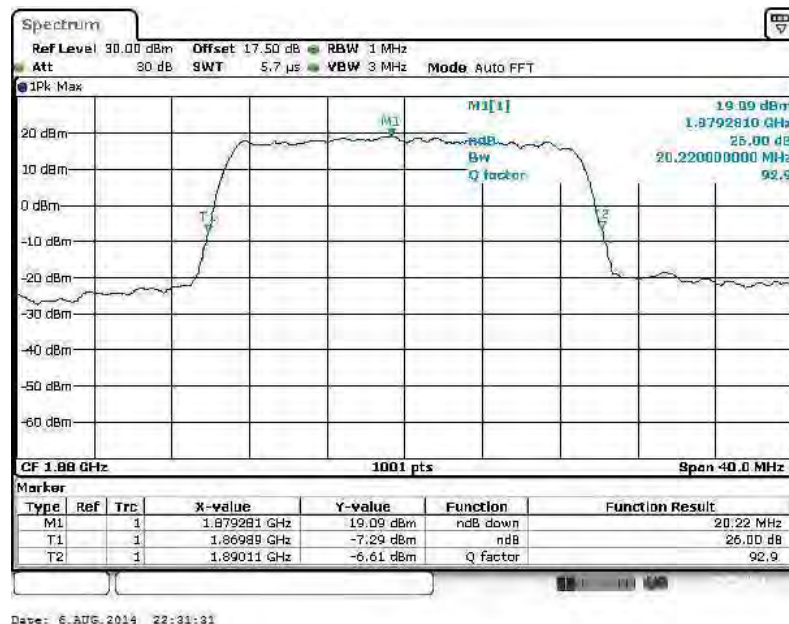


Band :	LTE Band 2	BW / Mod. :	20MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 18900



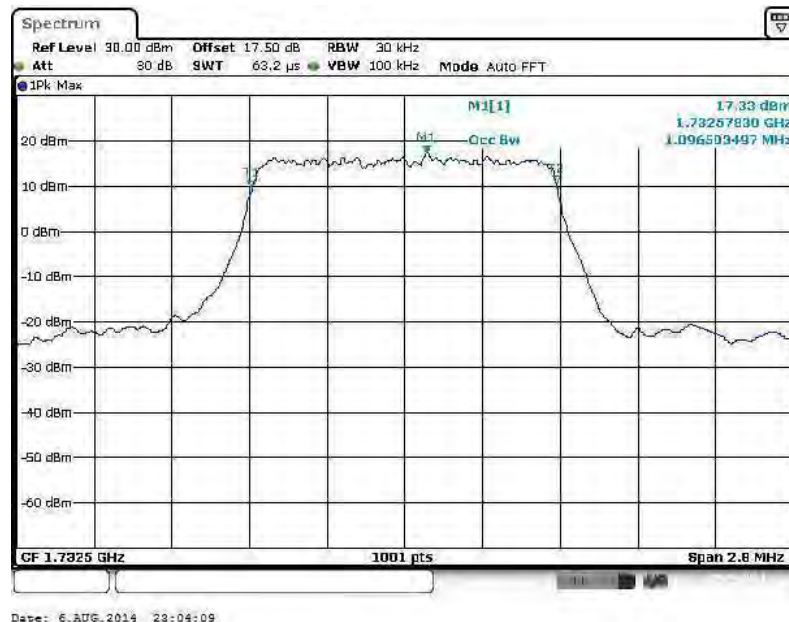
26dB Bandwidth Plot on Channel 18900



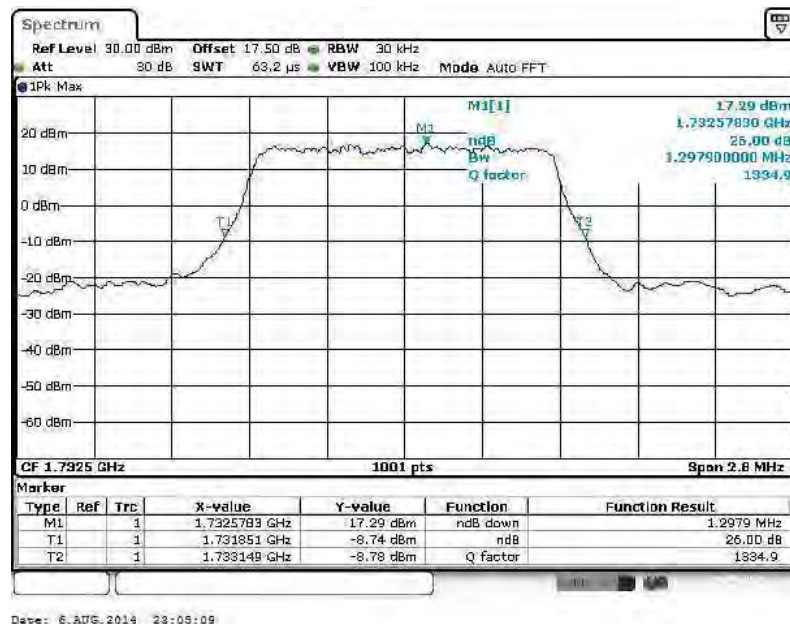


Band :	LTE Band 4	BW / Mod. :	1.4MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 20175



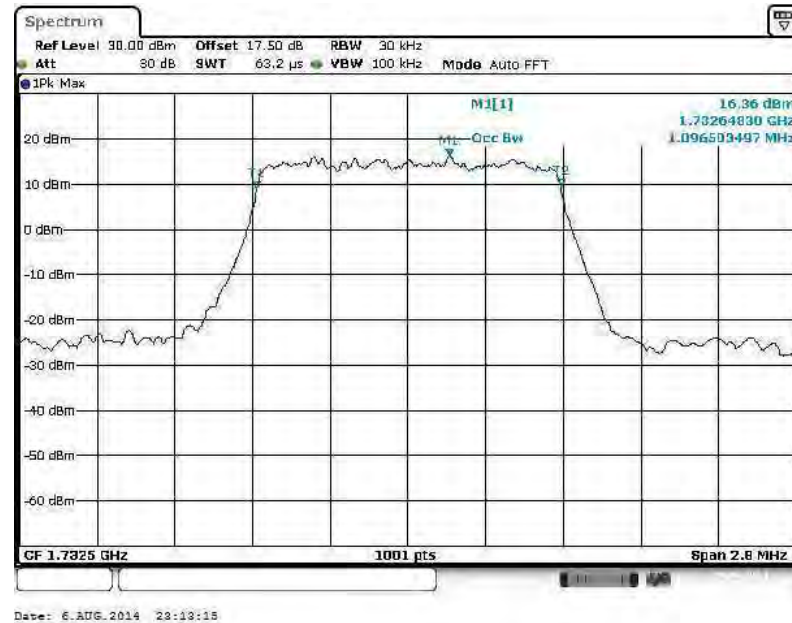
26dB Bandwidth Plot on Channel 20175



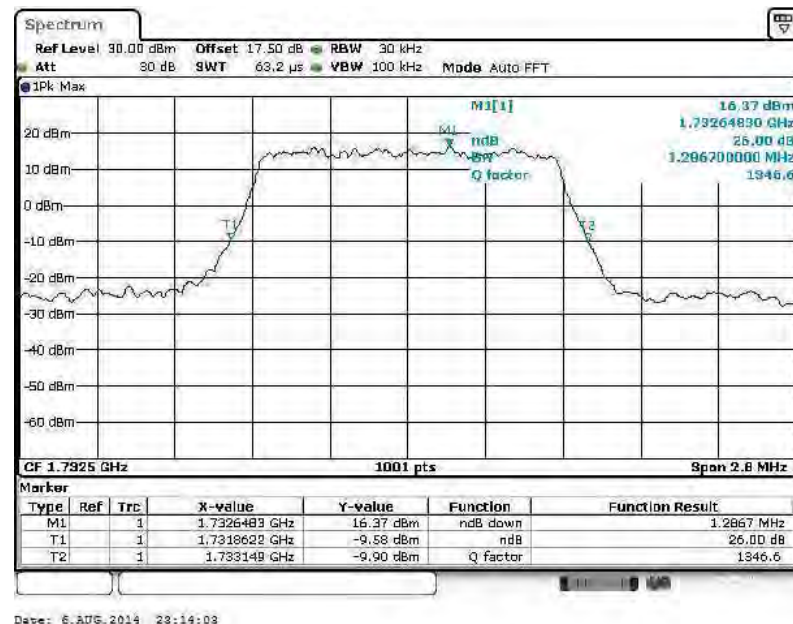


Band :	LTE Band 4	BW / Mod. :	1.4MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 20175



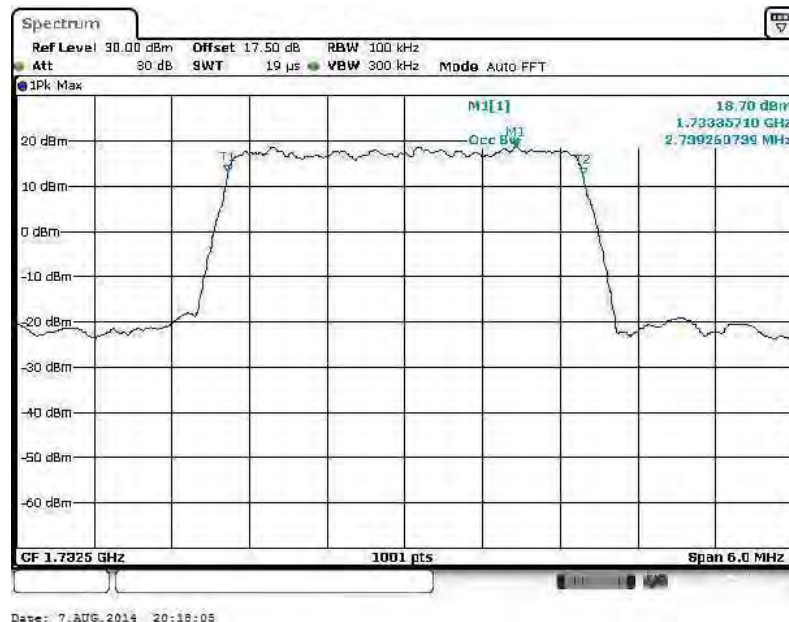
26dB Bandwidth Plot on Channel 20175



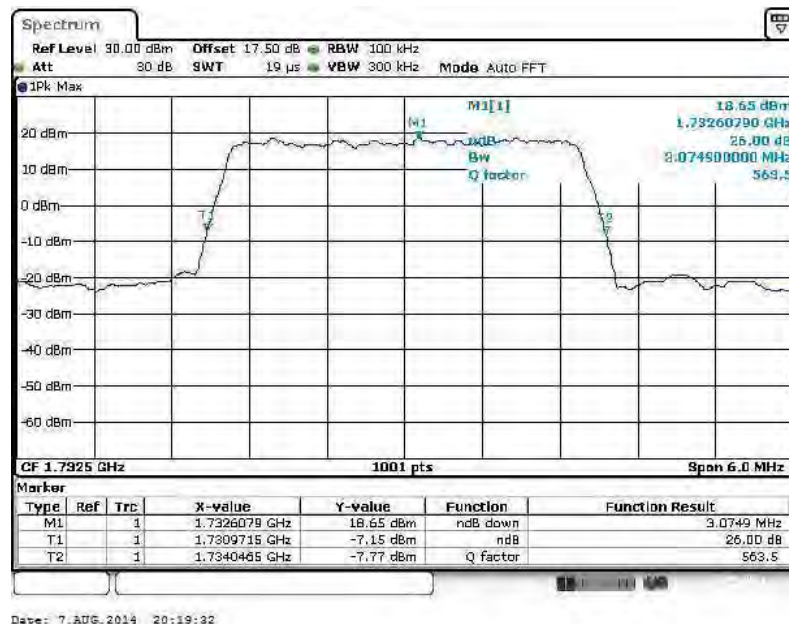


Band :	LTE Band 4	BW / Mod. :	3MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 20175



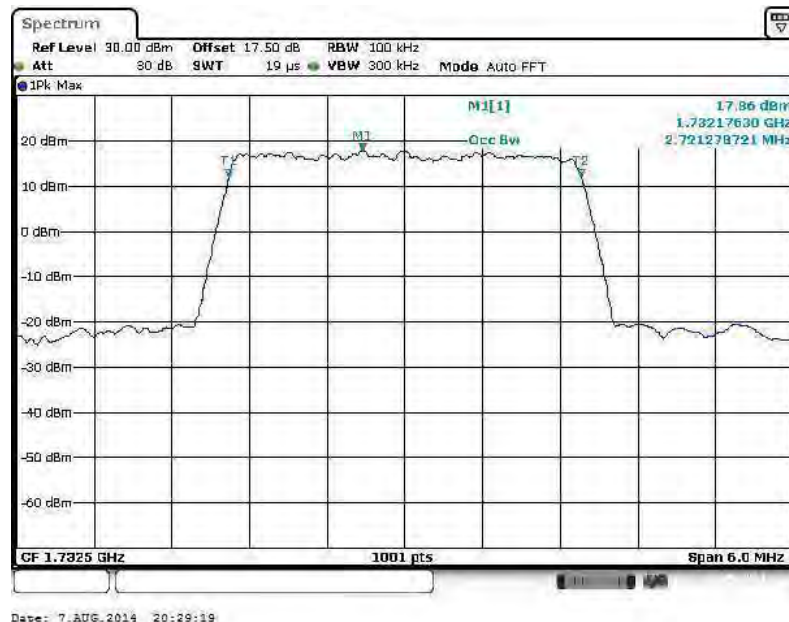
26dB Bandwidth Plot on Channel 20175



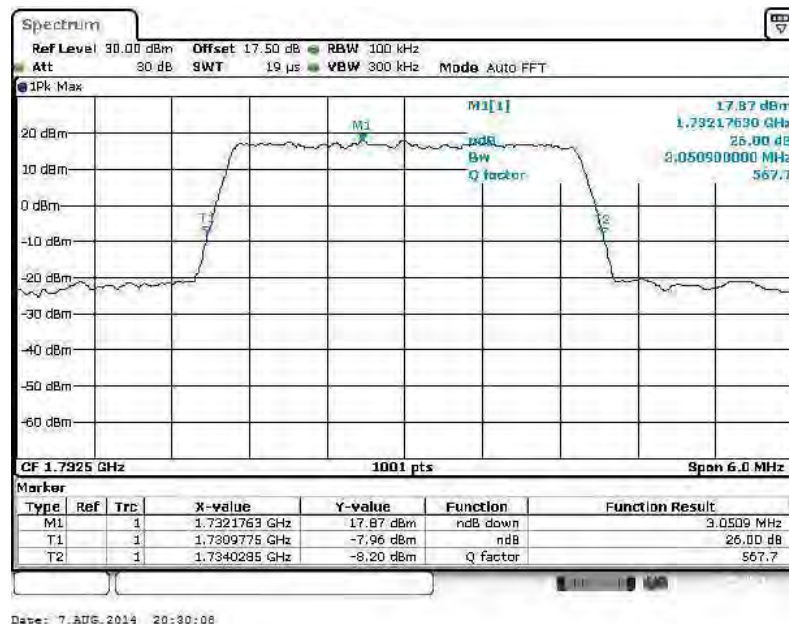


Band :	LTE Band 4	BW / Mod. :	3MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 20175



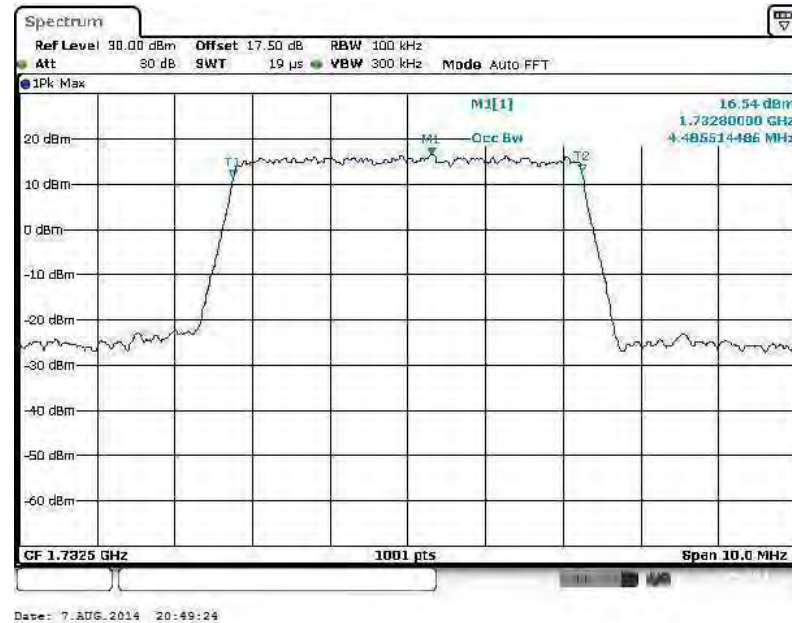
26dB Bandwidth Plot on Channel 20175



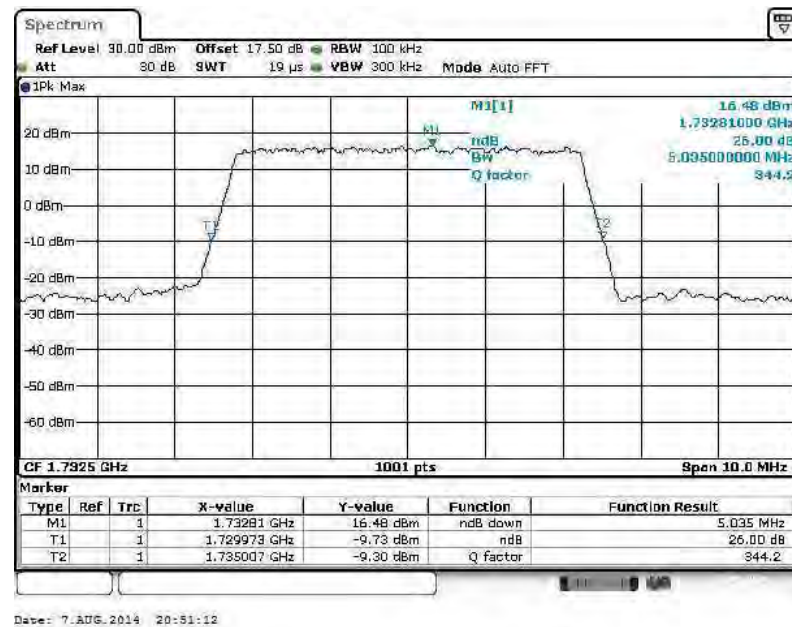


Band :	LTE Band 4	BW / Mod. :	5MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 20175



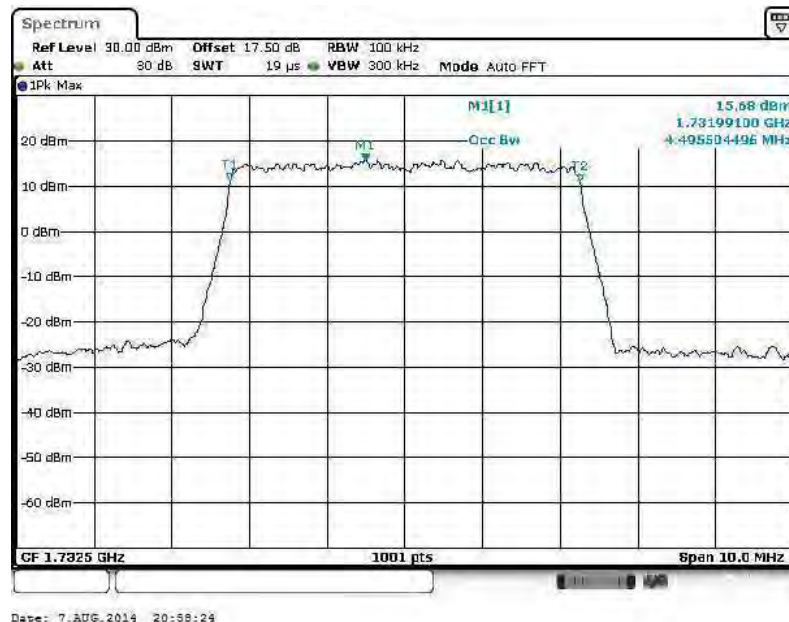
26dB Bandwidth Plot on Channel 20175



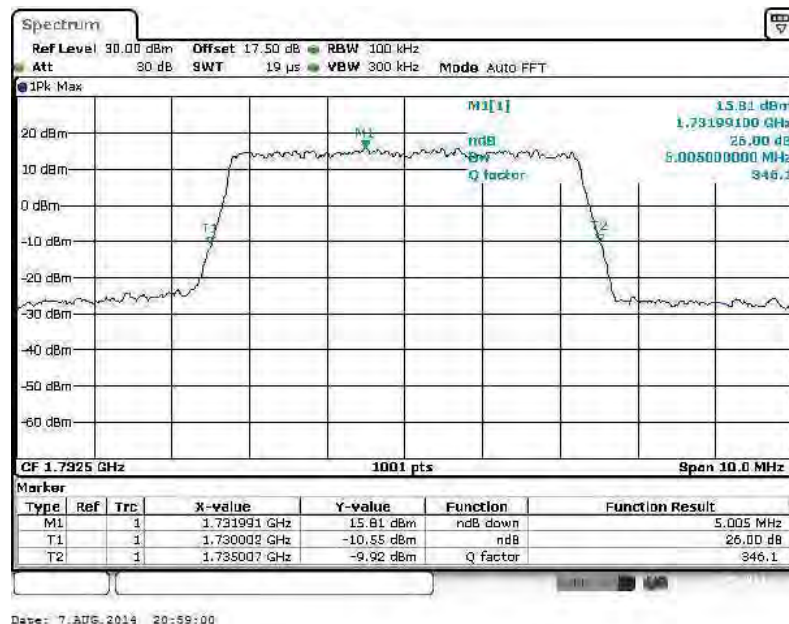


Band :	LTE Band 4	BW / Mod. :	5MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 20175



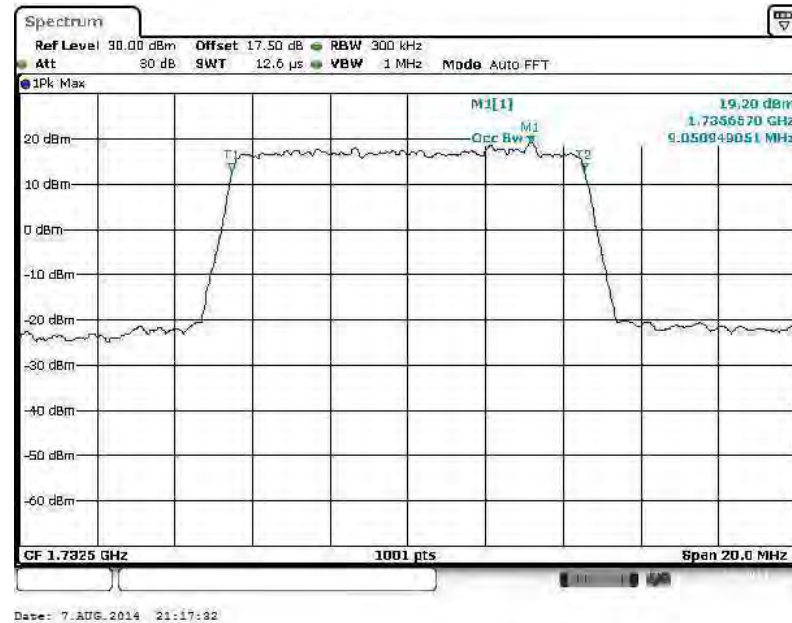
26dB Bandwidth Plot on Channel 20175



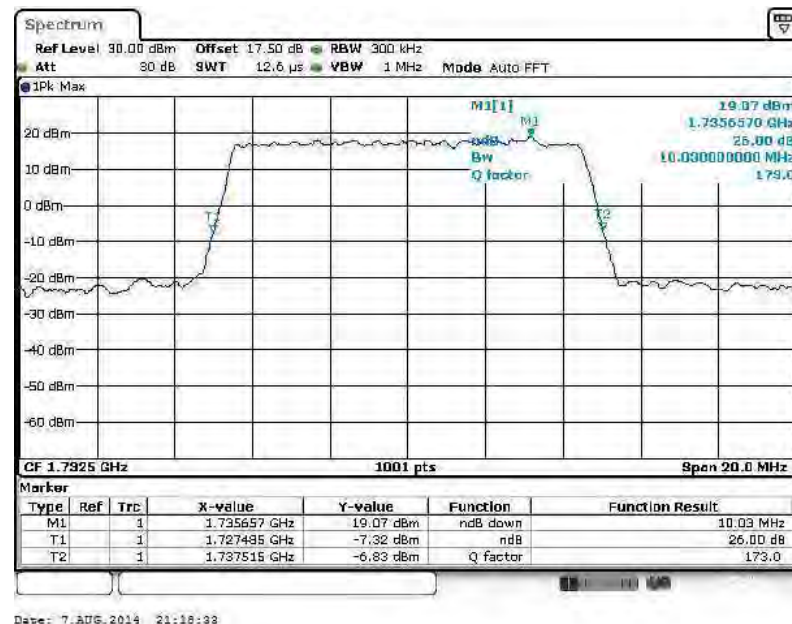


Band :	LTE Band 4	BW / Mod. :	10MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 20175



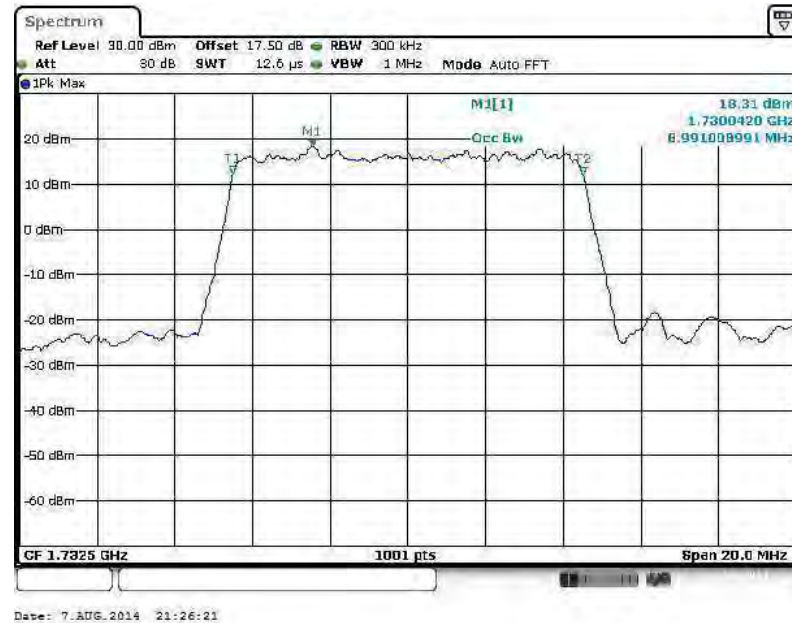
26dB Bandwidth Plot on Channel 20175



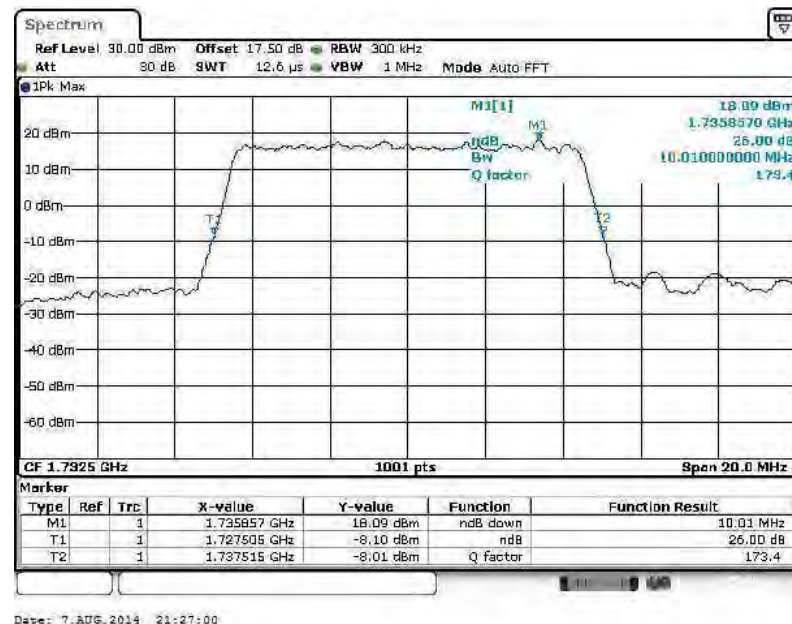


Band :	LTE Band 4	BW / Mod. :	10MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 20175



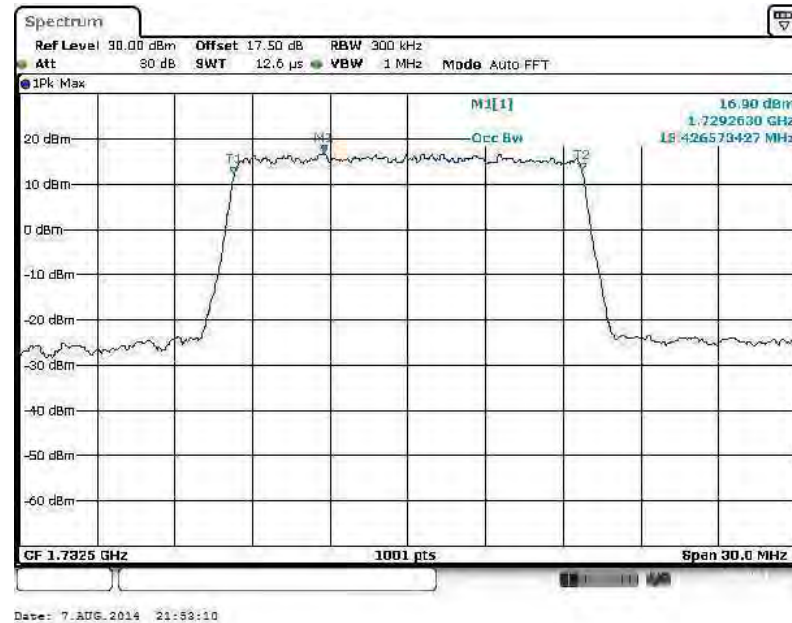
26dB Bandwidth Plot on Channel 20175



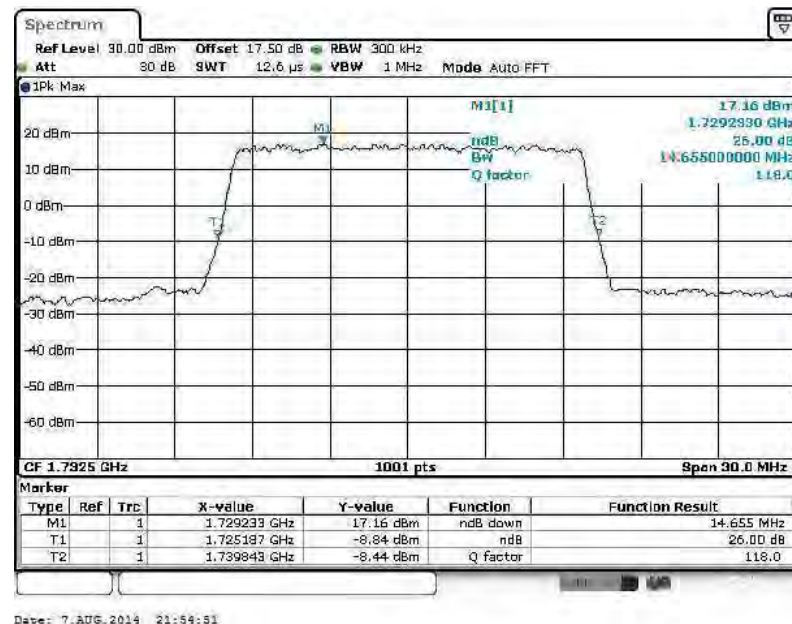


Band :	LTE Band 4	BW / Mod. :	15MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 20175



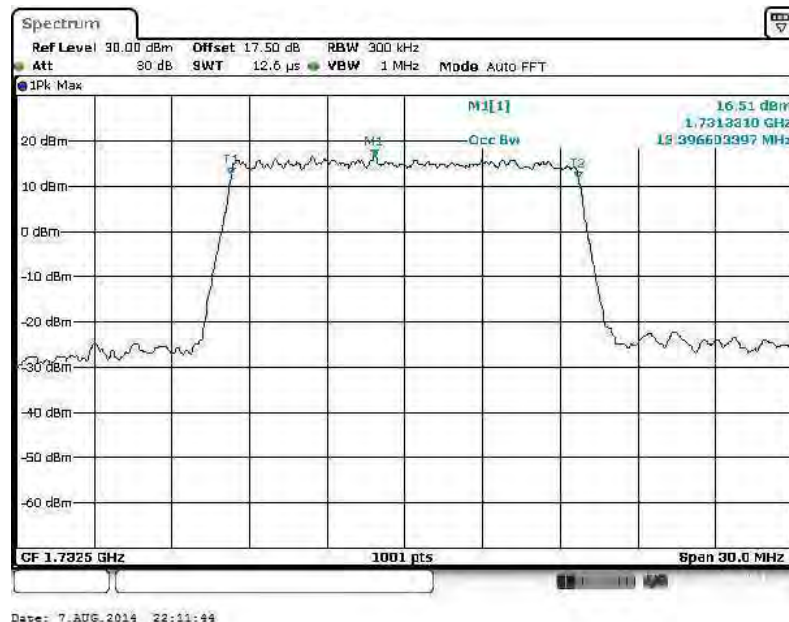
26dB Bandwidth Plot on Channel 20175



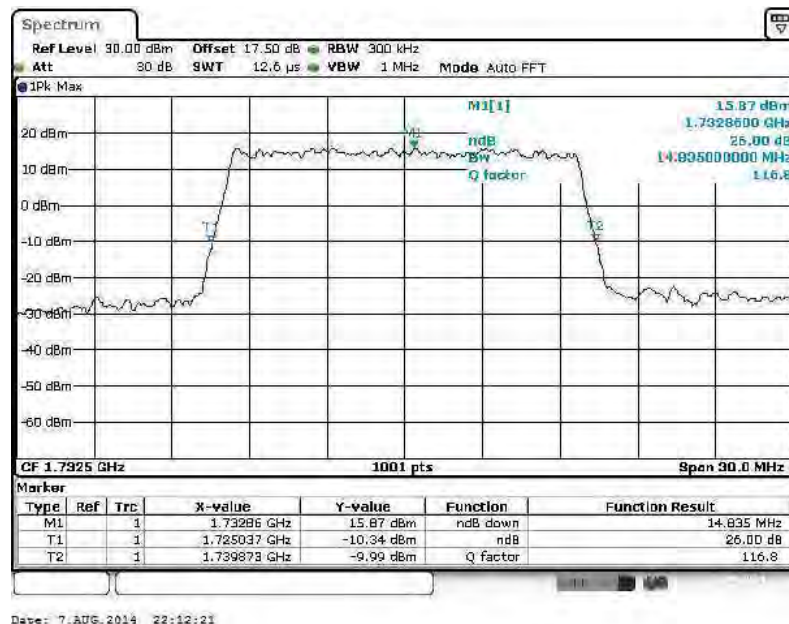


Band :	LTE Band 4	BW / Mod. :	15MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 20175



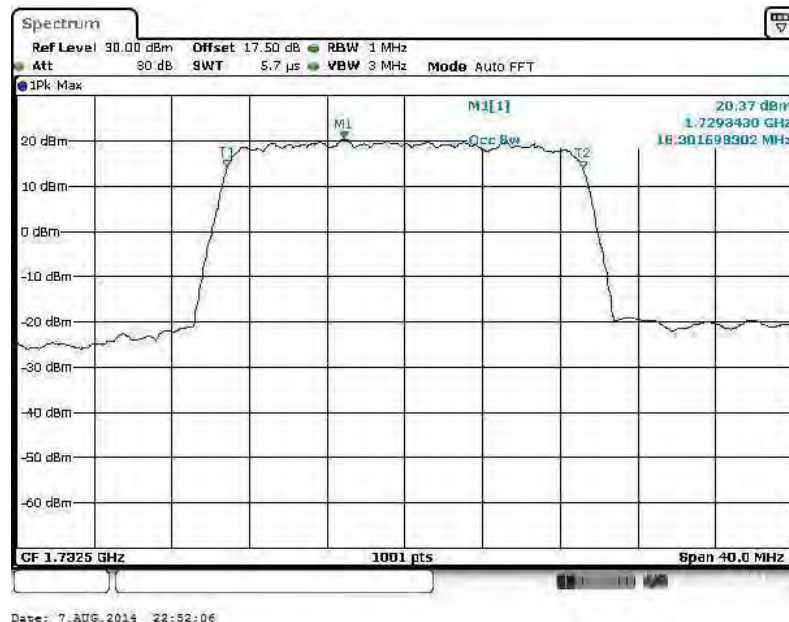
26dB Bandwidth Plot on Channel 20175



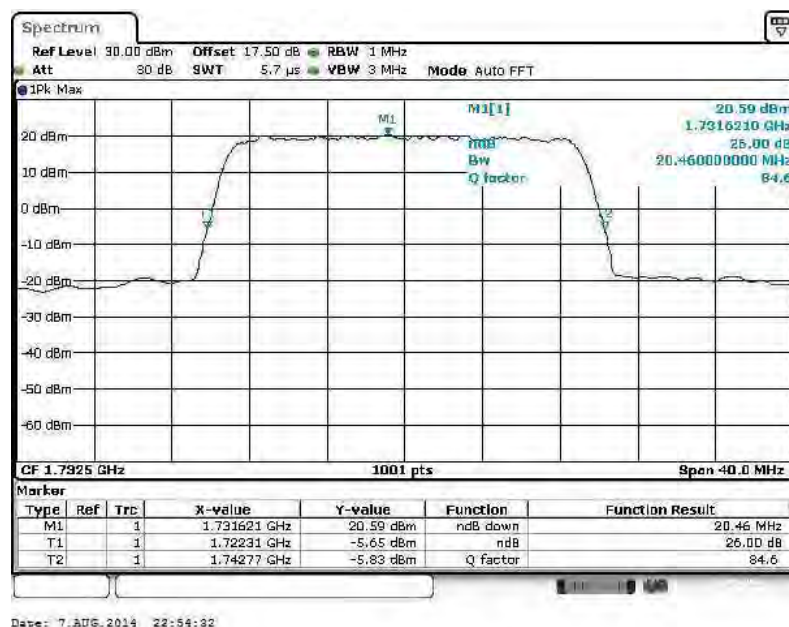


Band :	LTE Band 4	BW / Mod. :	20MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 20175



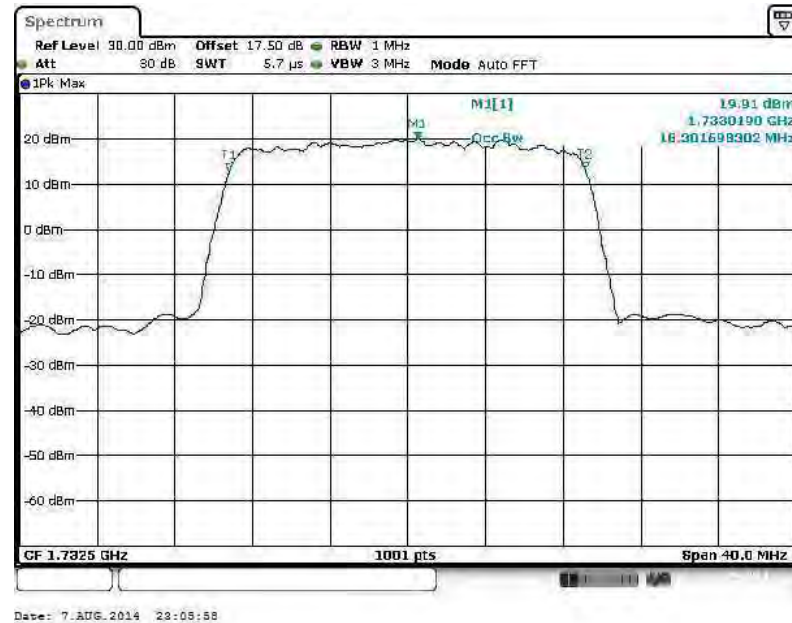
26dB Bandwidth Plot on Channel 20175



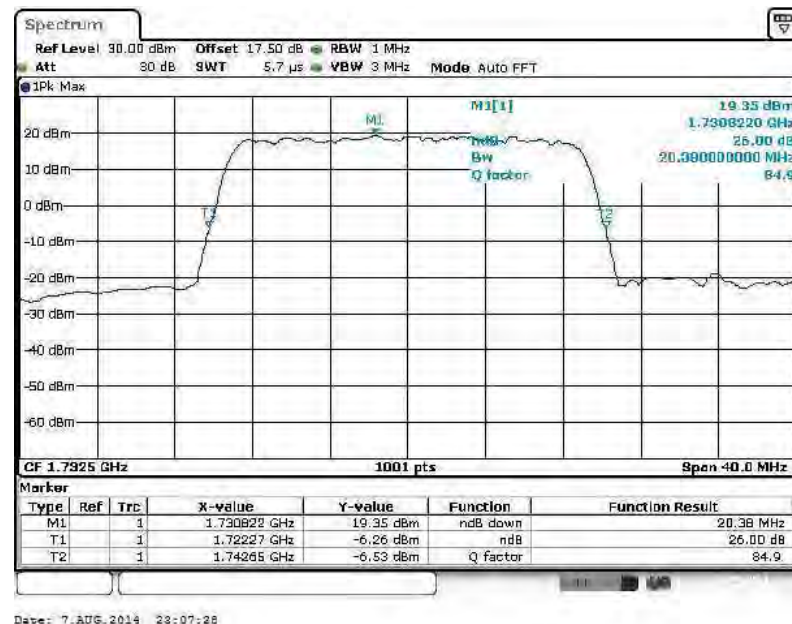


Band :	LTE Band 4	BW / Mod. :	20MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 20175



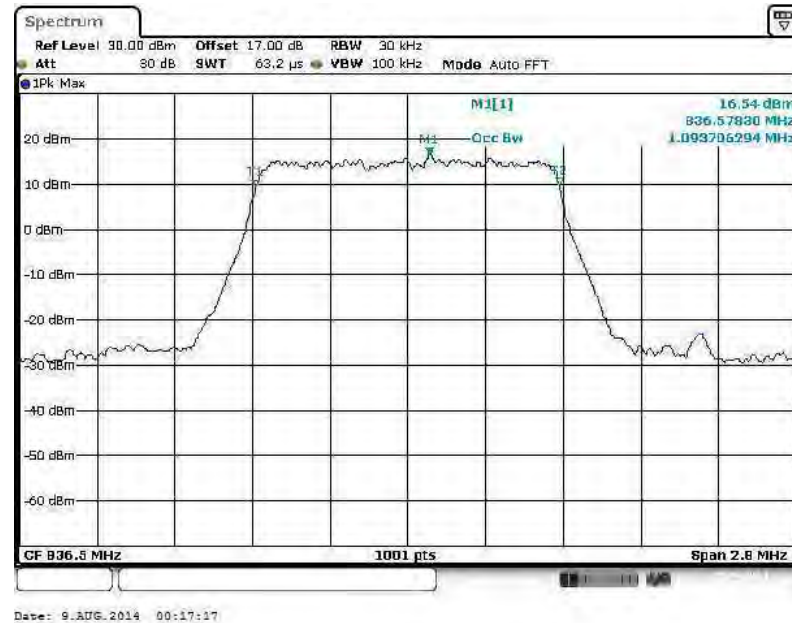
26dB Bandwidth Plot on Channel 20175



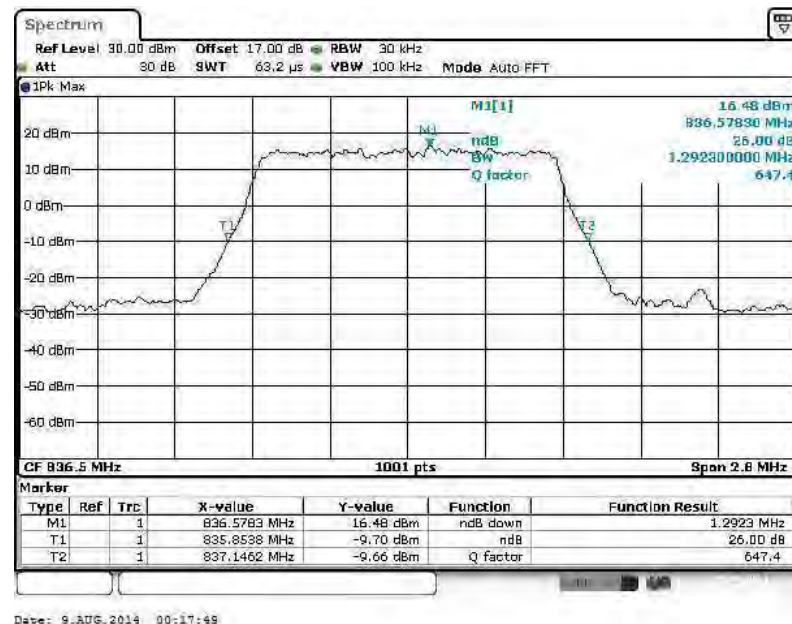


Band :	LTE Band 5	BW / Mod. :	1.4MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 20525



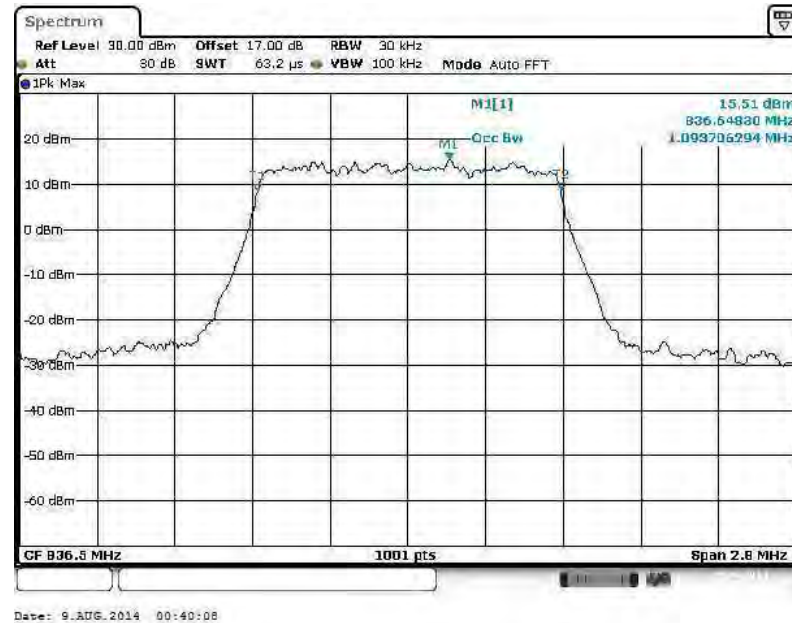
26dB Bandwidth Plot on Channel 20525



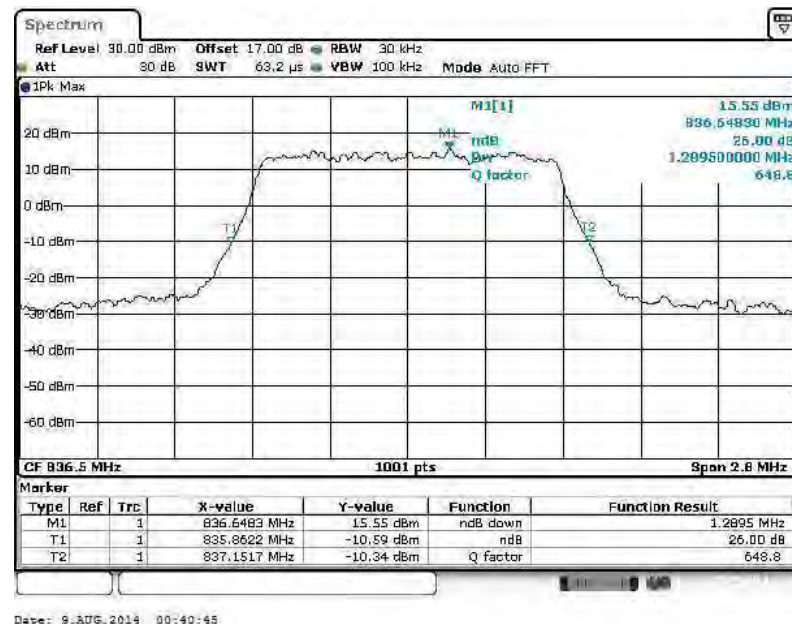


Band :	LTE Band 5	BW / Mod. :	1.4MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 20525



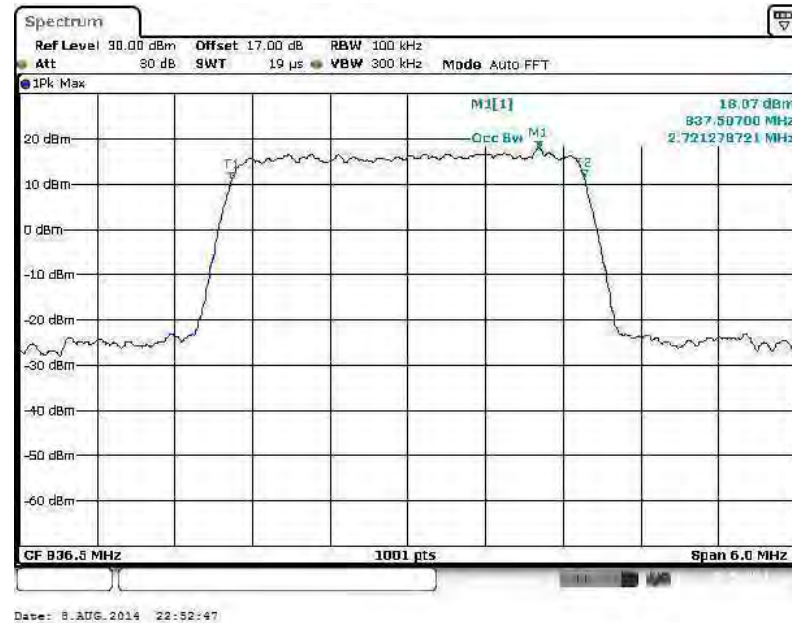
26dB Bandwidth Plot on Channel 20525



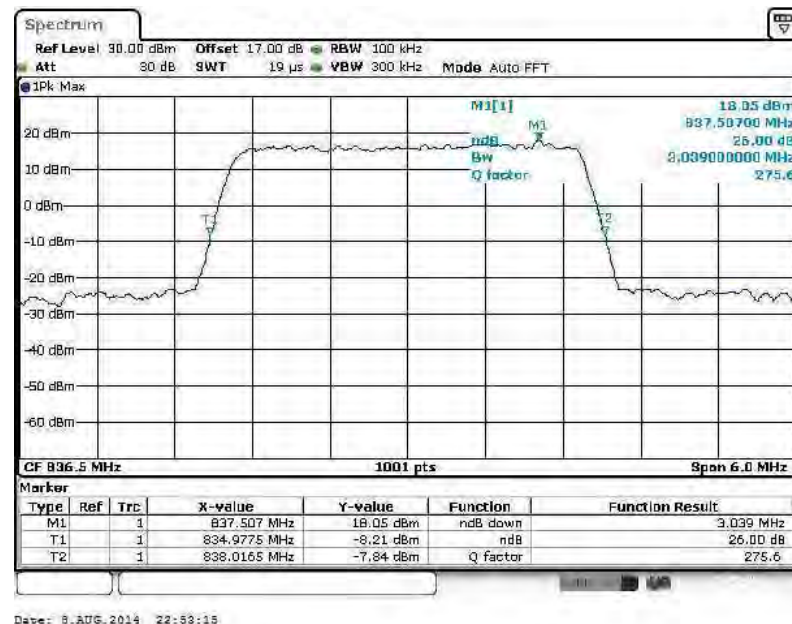


Band :	LTE Band 5	BW / Mod. :	3MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 20525



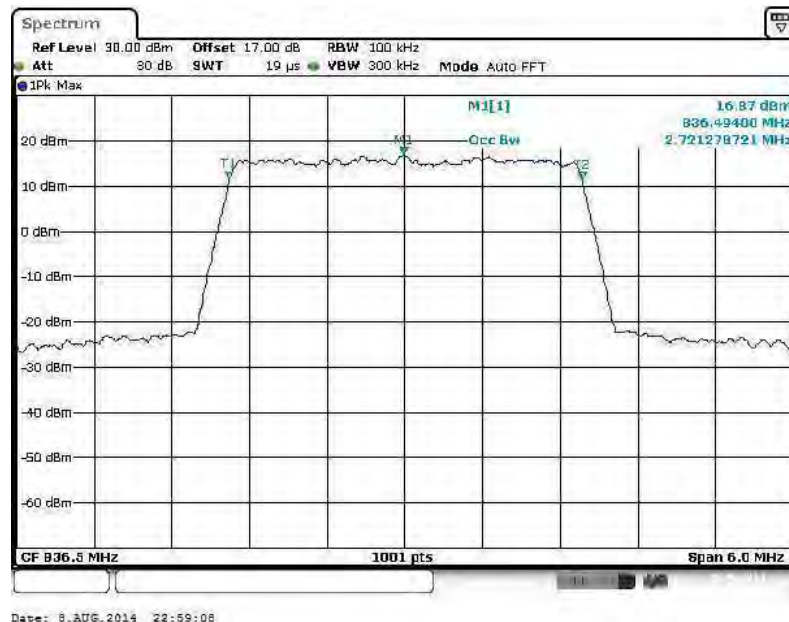
26dB Bandwidth Plot on Channel 20525



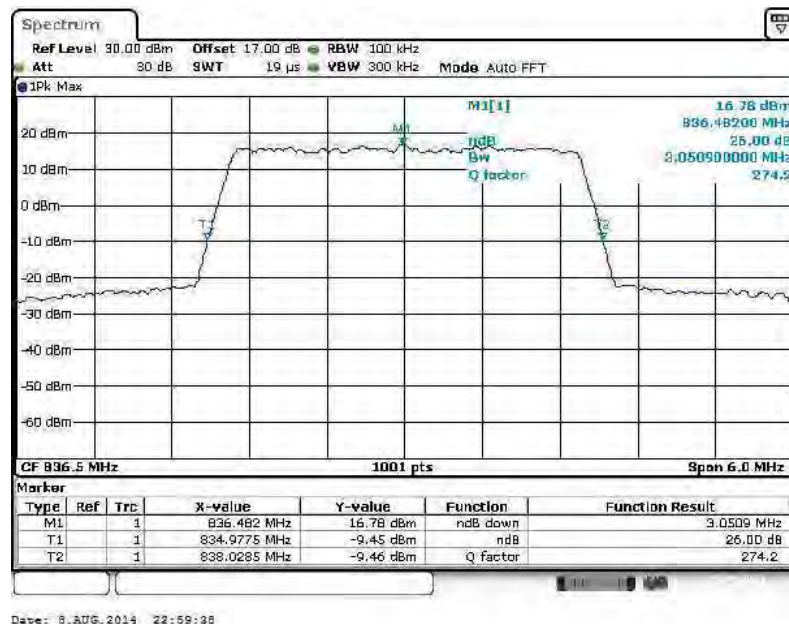


Band :	LTE Band 5	BW / Mod. :	3MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 20525



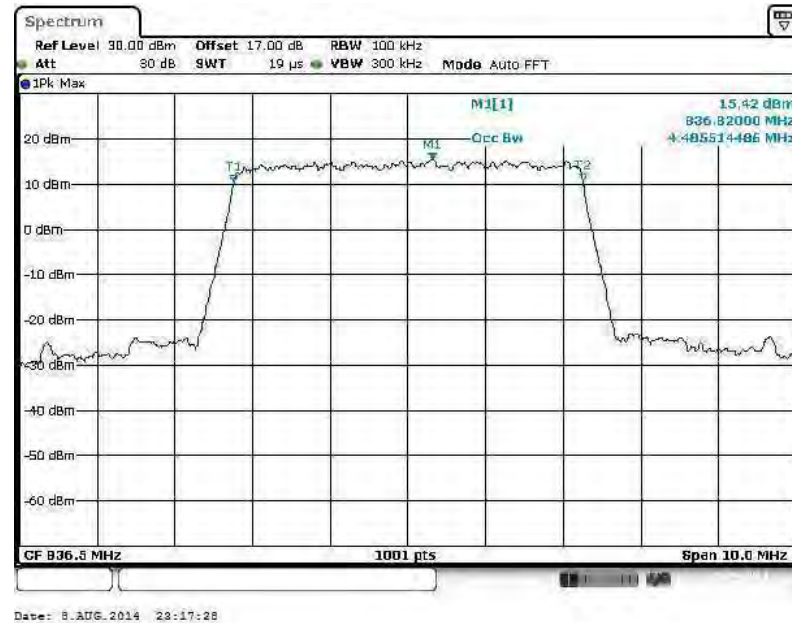
26dB Bandwidth Plot on Channel 20525



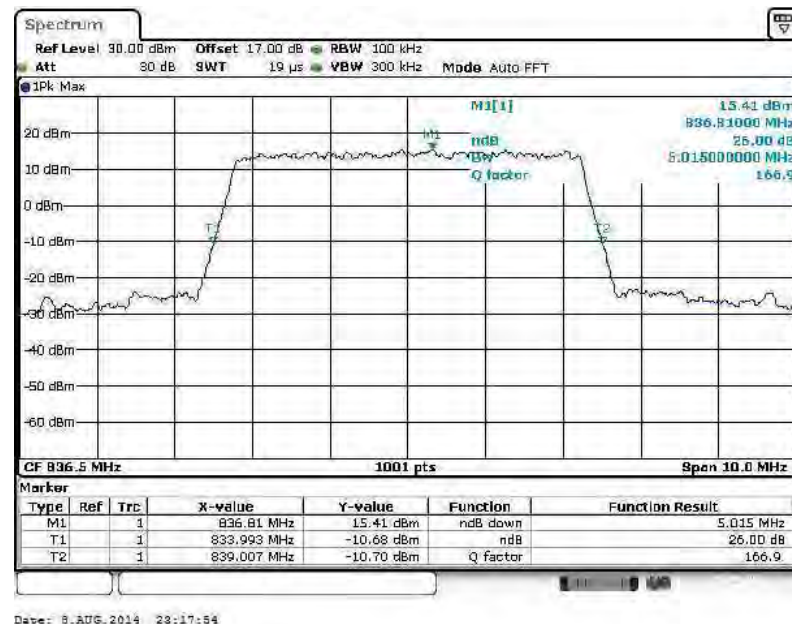


Band :	LTE Band 5	BW / Mod. :	5MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 20525



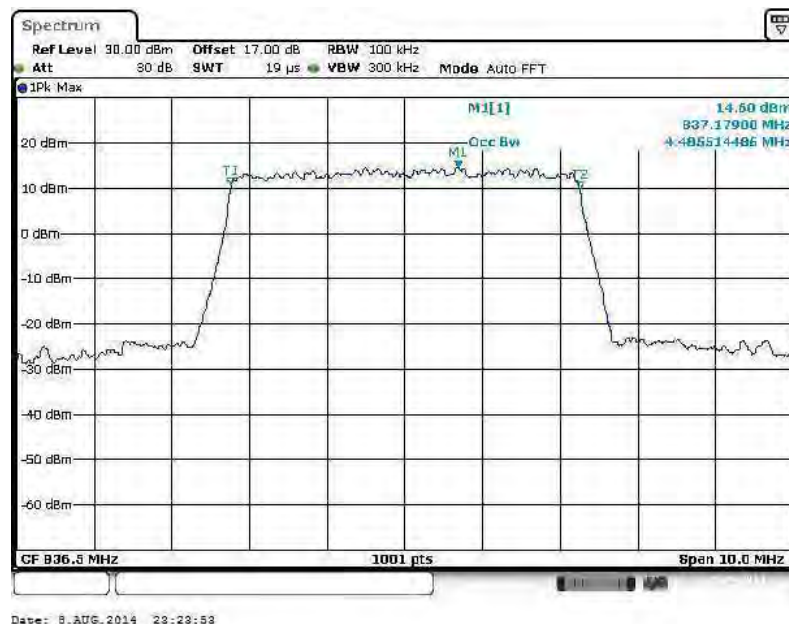
26dB Bandwidth Plot on Channel 20525



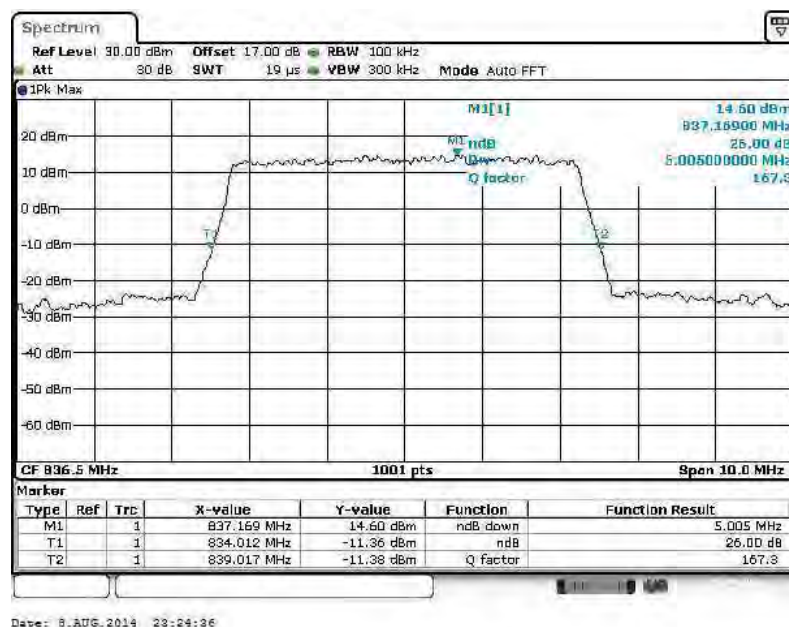


Band :	LTE Band 5	BW / Mod. :	5MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 20525



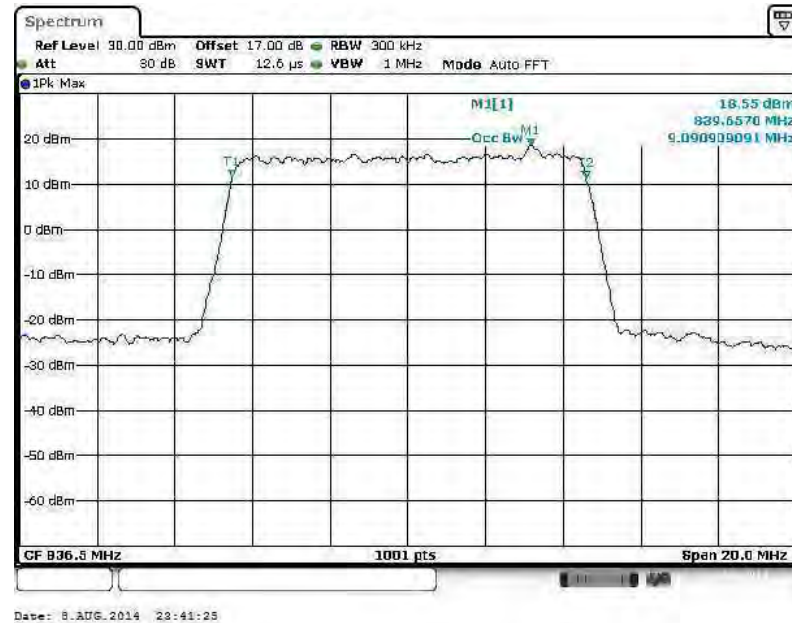
26dB Bandwidth Plot on Channel 20525



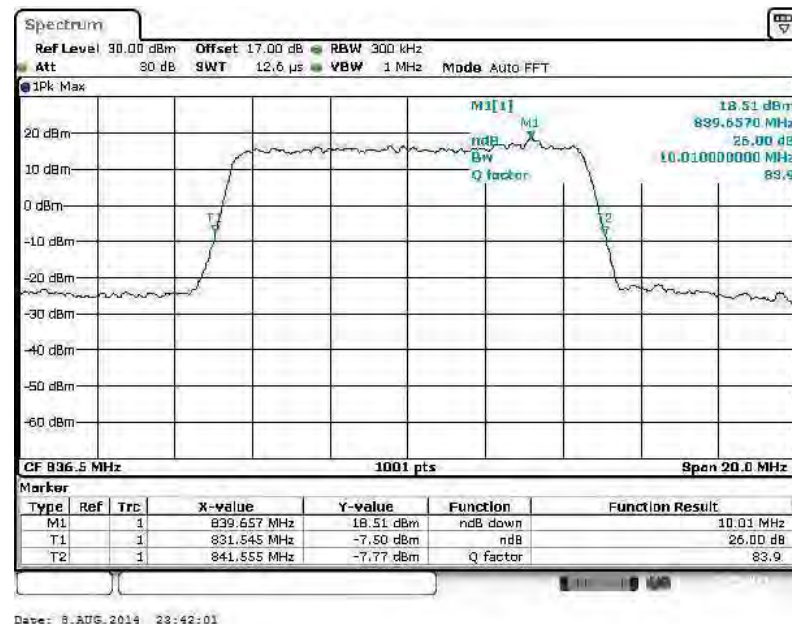


Band :	LTE Band 5	BW / Mod. :	10MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 20525



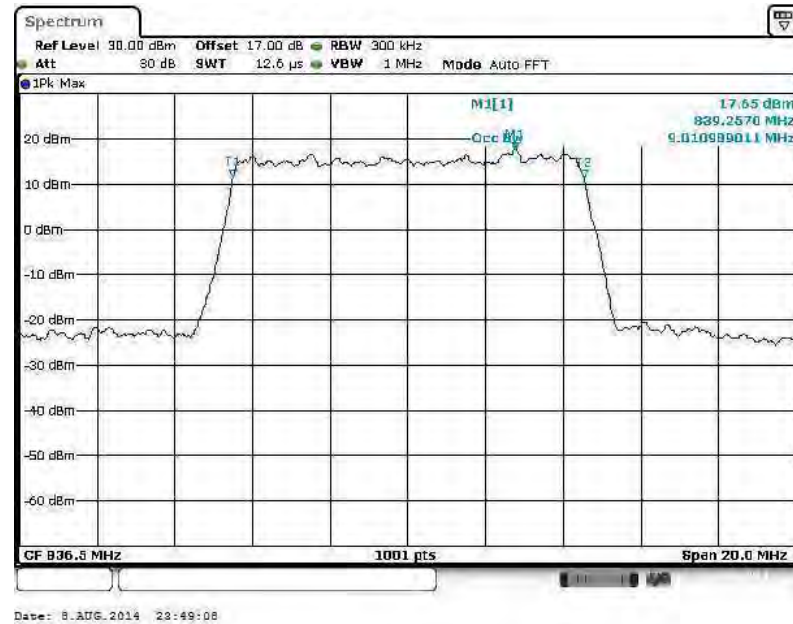
26dB Bandwidth Plot on Channel 20525



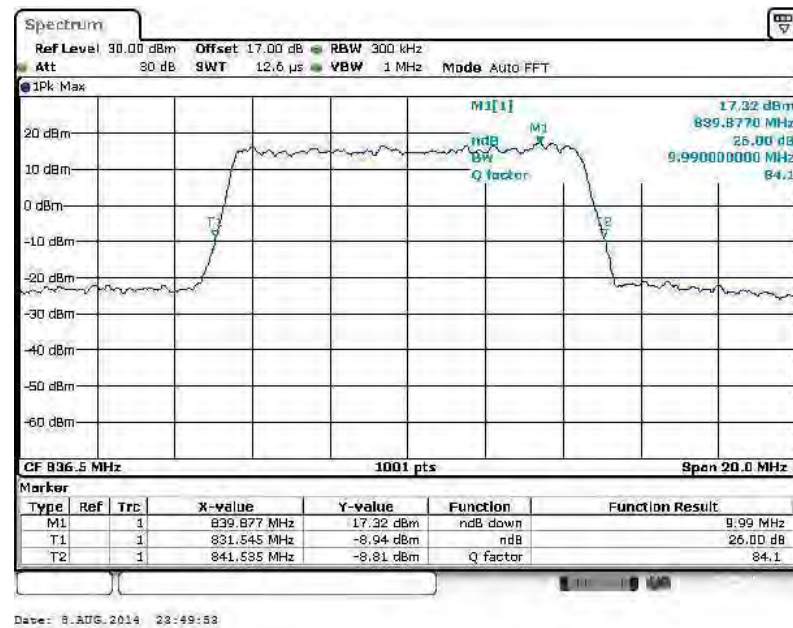


Band :	LTE Band 5	BW / Mod. :	10MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 20525



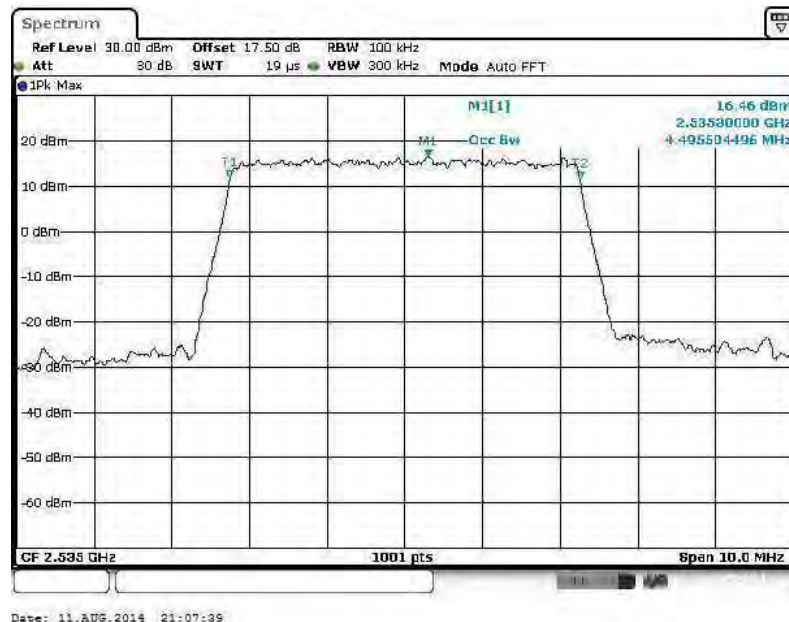
26dB Bandwidth Plot on Channel 20525



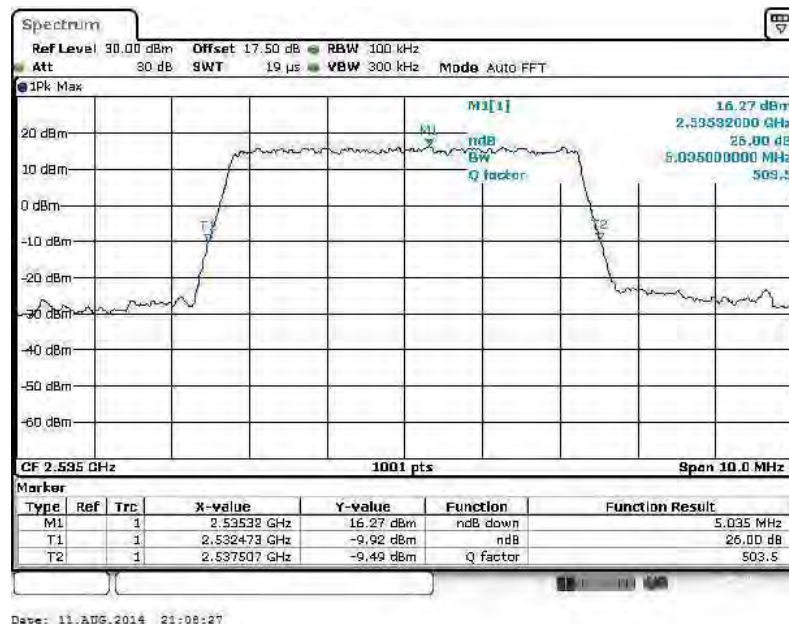


Band :	LTE Band 7	BW / Mod. :	5MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 21100



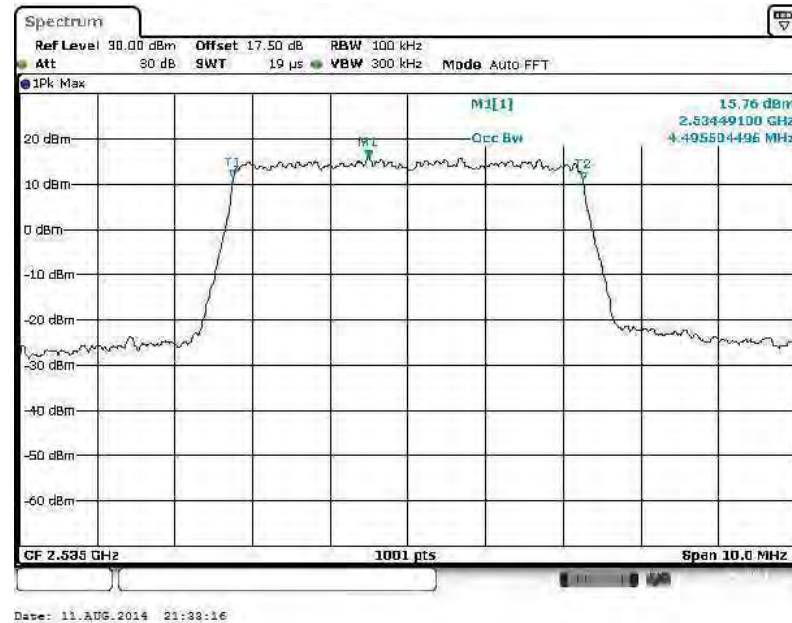
26dB Bandwidth Plot on Channel 21100



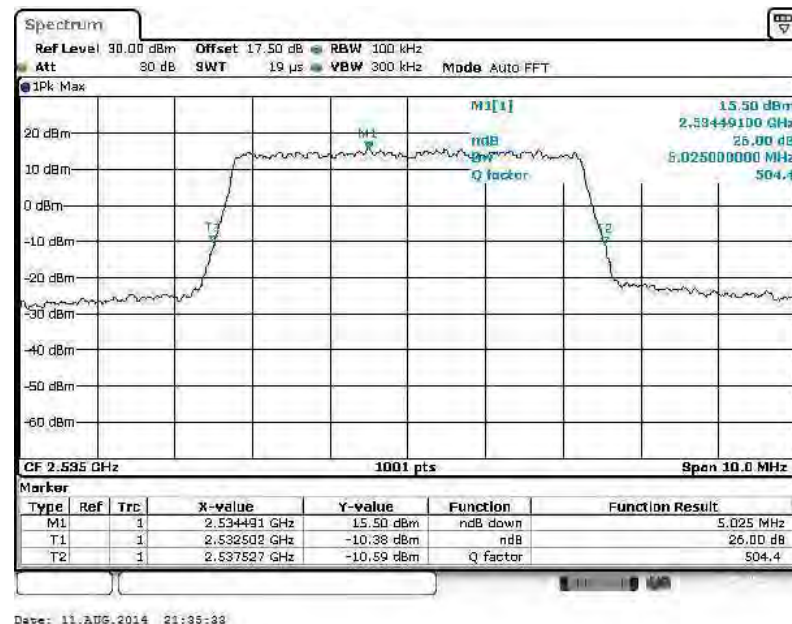


Band :	LTE Band 7	BW / Mod. :	5MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 21100



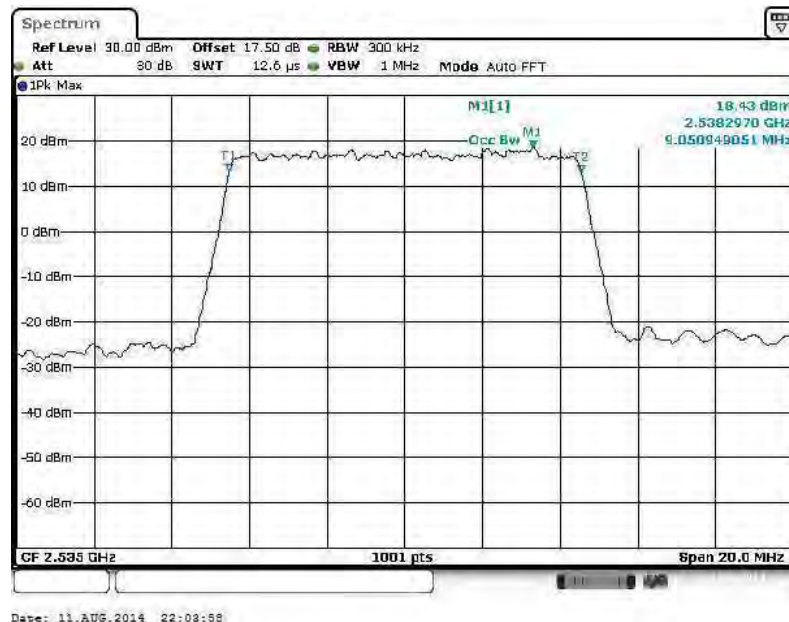
26dB Bandwidth Plot on Channel 21100



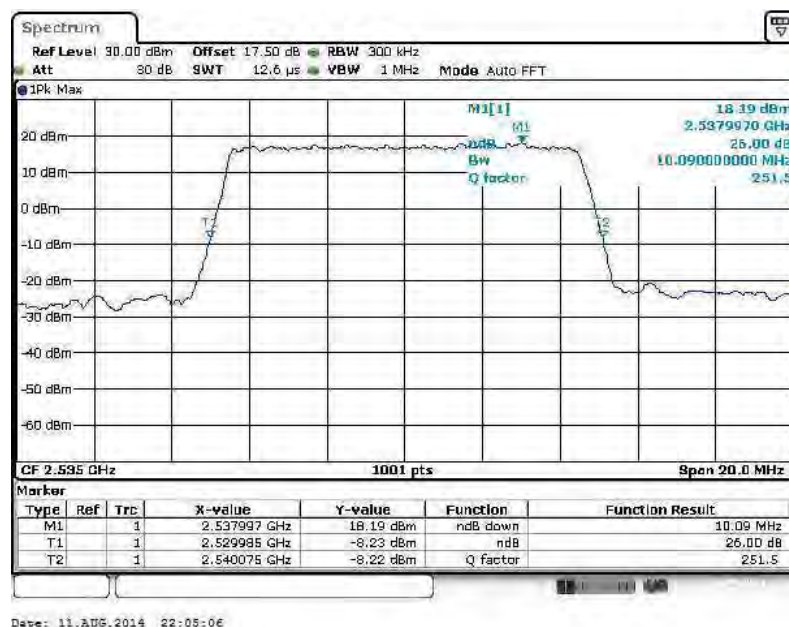


Band :	LTE Band 7	BW / Mod. :	10MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 21100



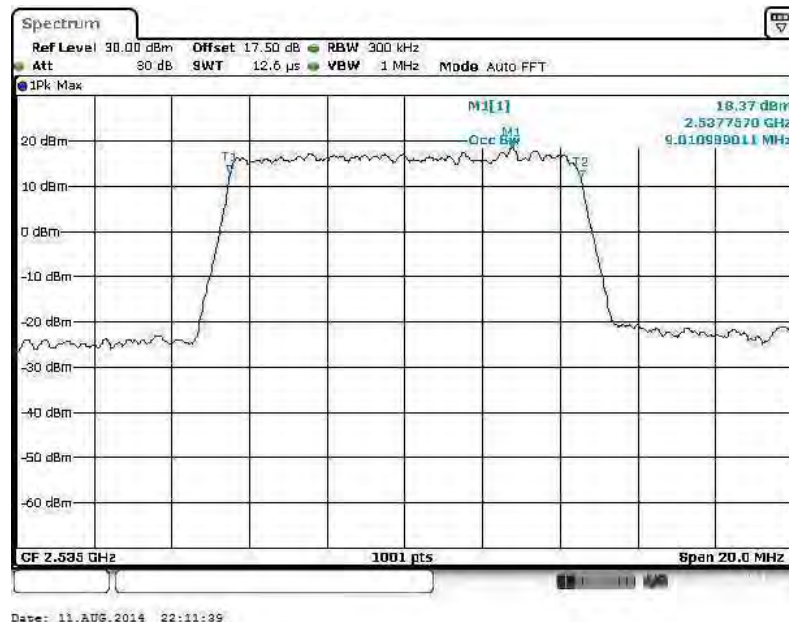
26dB Bandwidth Plot on Channel 21100



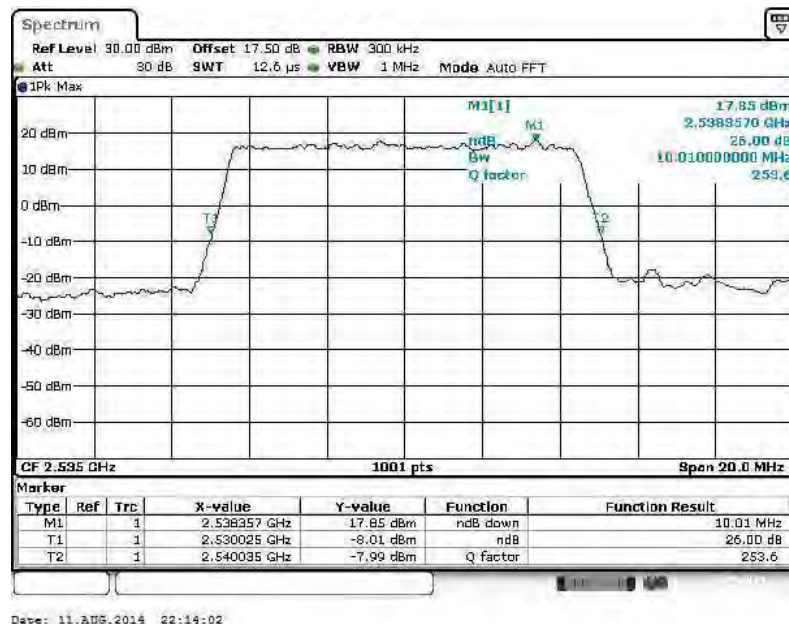


Band :	LTE Band 7	BW / Mod. :	10MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 21100



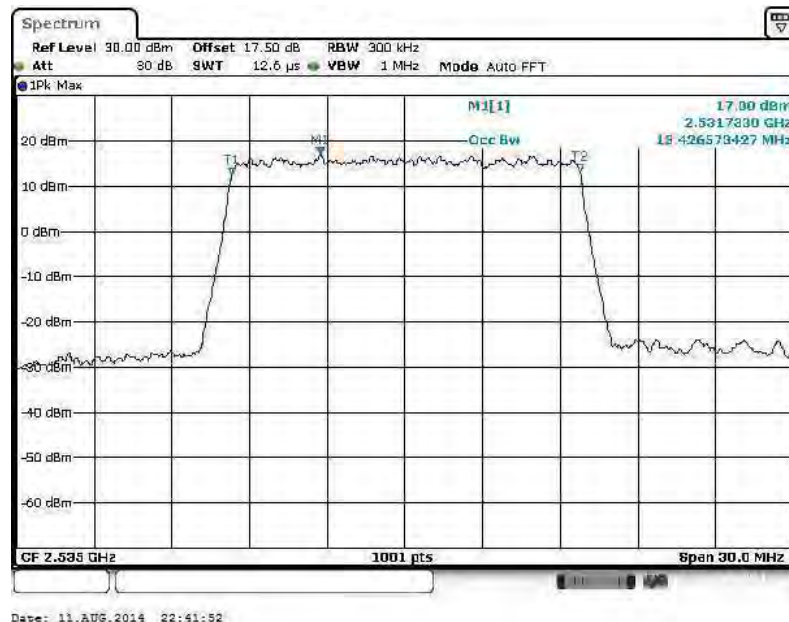
26dB Bandwidth Plot on Channel 21100



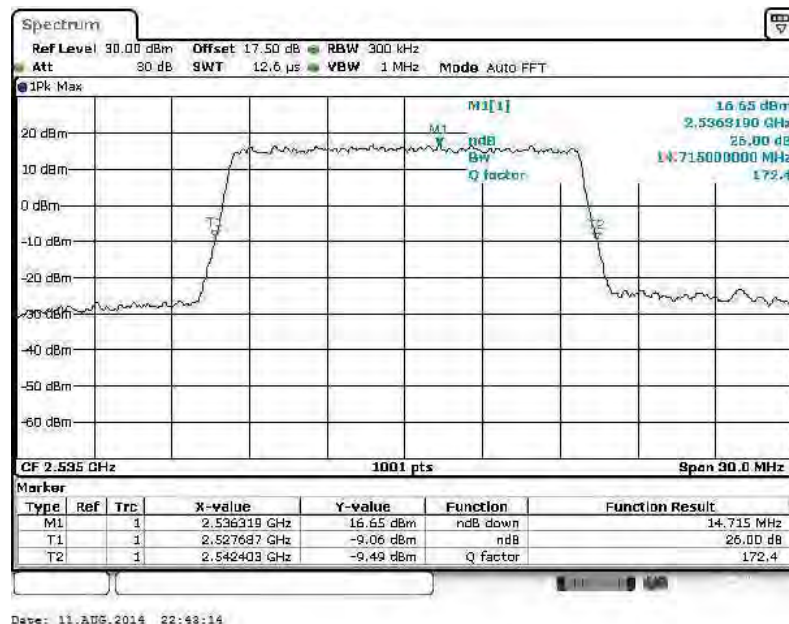


Band :	LTE Band 7	BW / Mod. :	15MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 21100



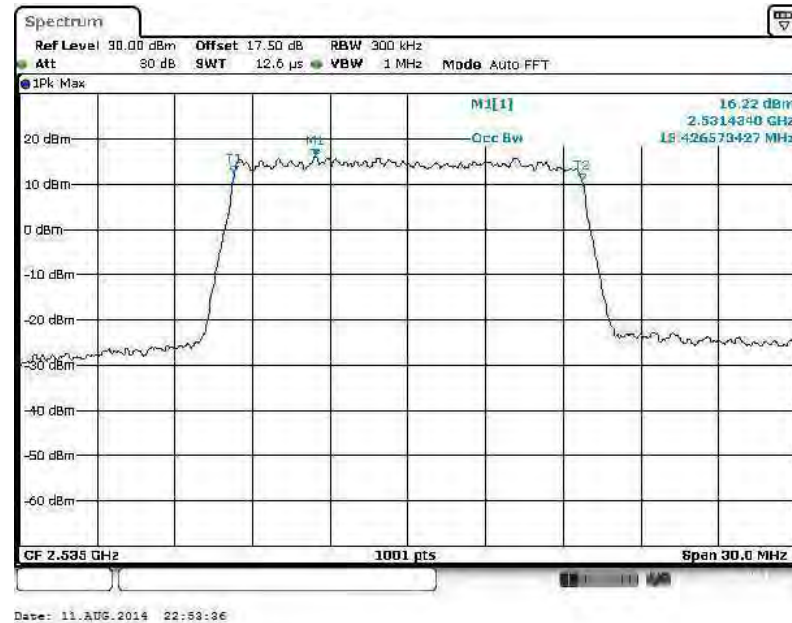
26dB Bandwidth Plot on Channel 21100



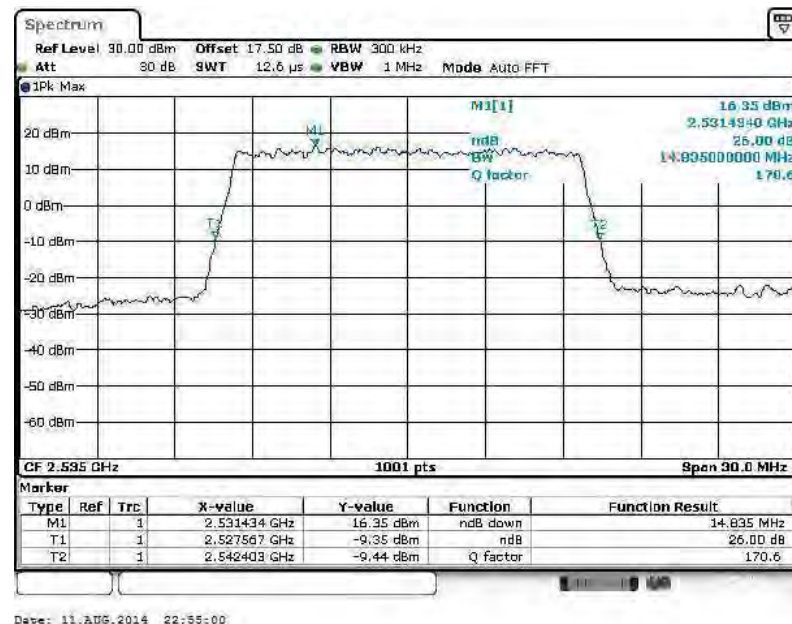


Band :	LTE Band 7	BW / Mod. :	15MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 21100



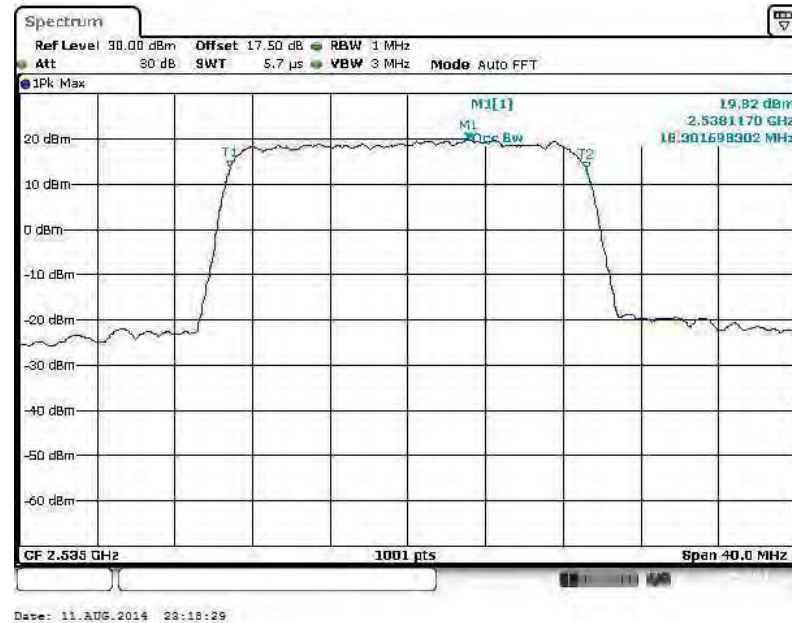
26dB Bandwidth Plot on Channel 21100



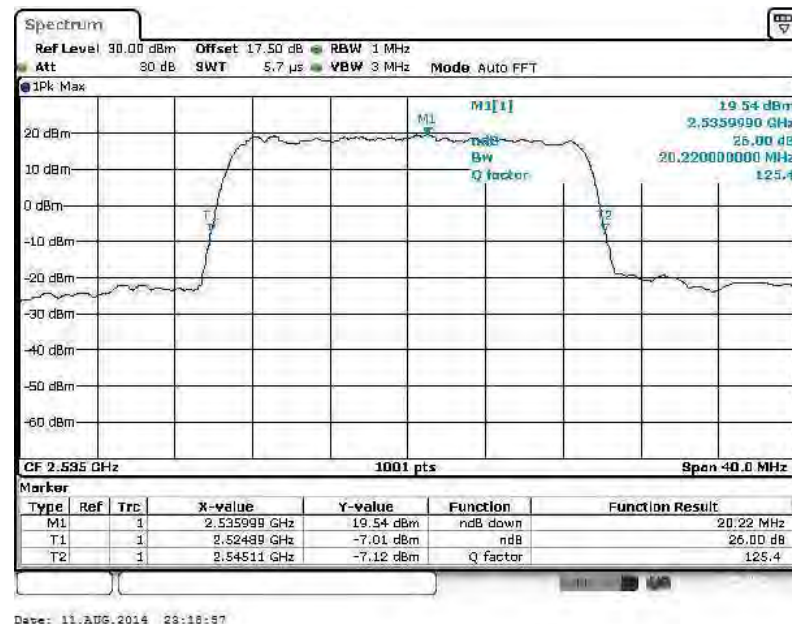


Band :	LTE Band 7	BW / Mod. :	20MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 21100



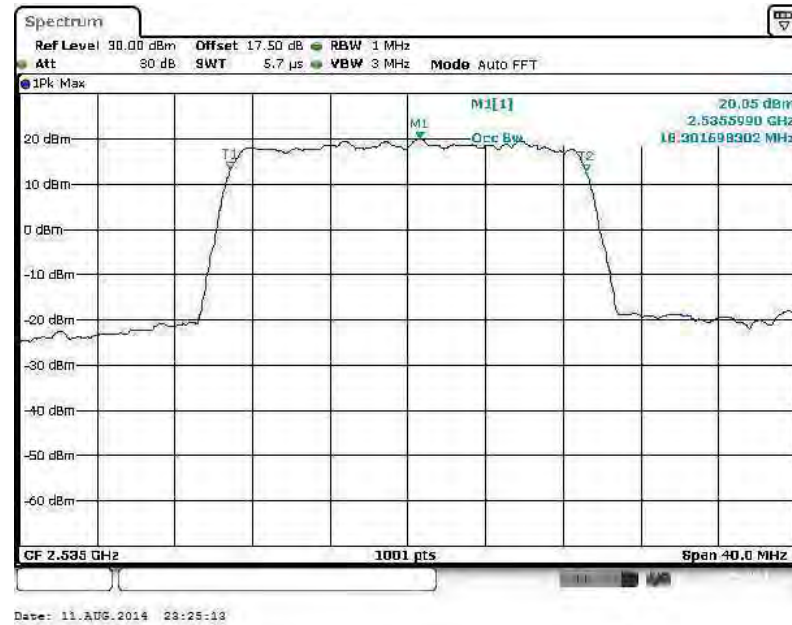
26dB Bandwidth Plot on Channel 21100



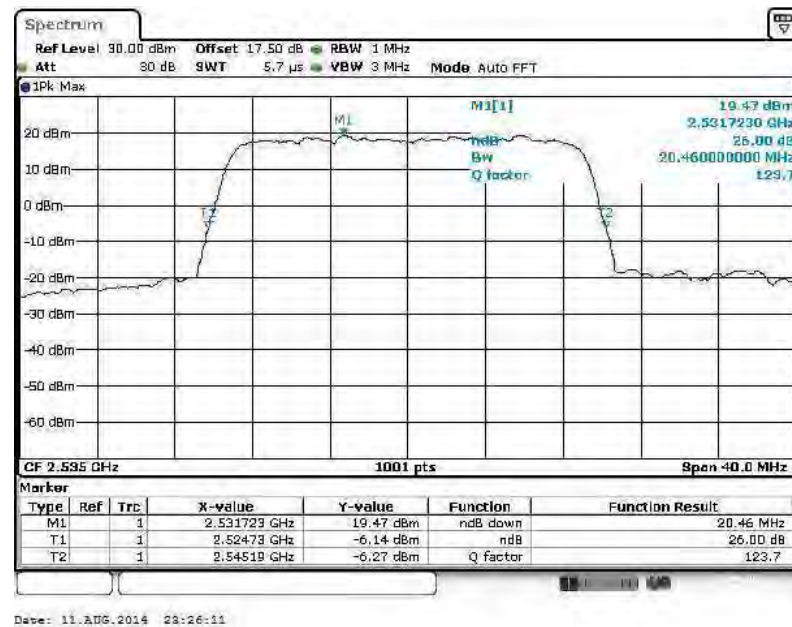


Band :	LTE Band 7	BW / Mod. :	20MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 21100



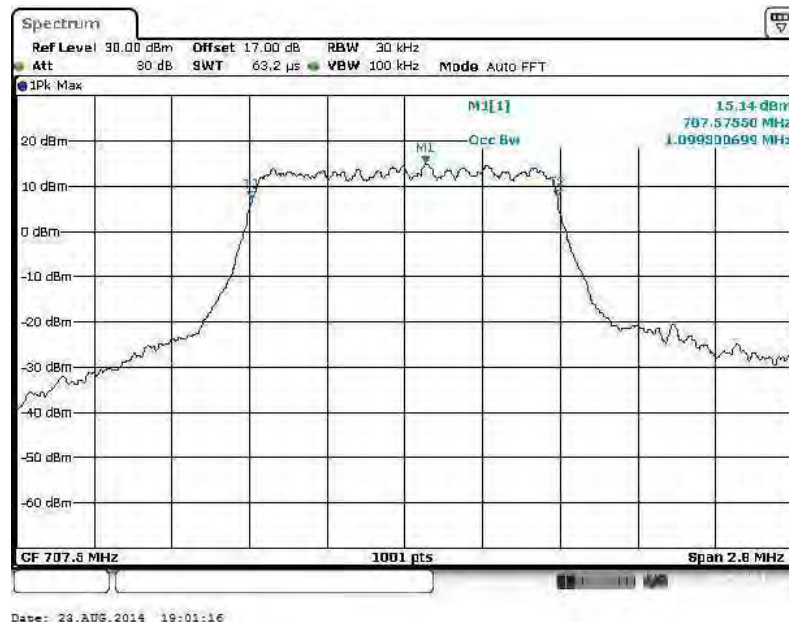
26dB Bandwidth Plot on Channel 21100



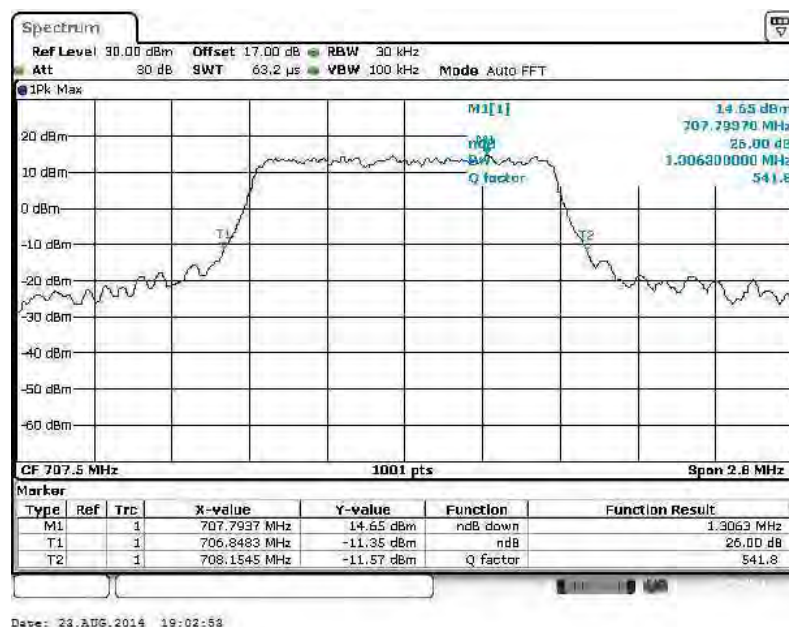


Band :	LTE Band 12	BW / Mod. :	1.4MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 23095



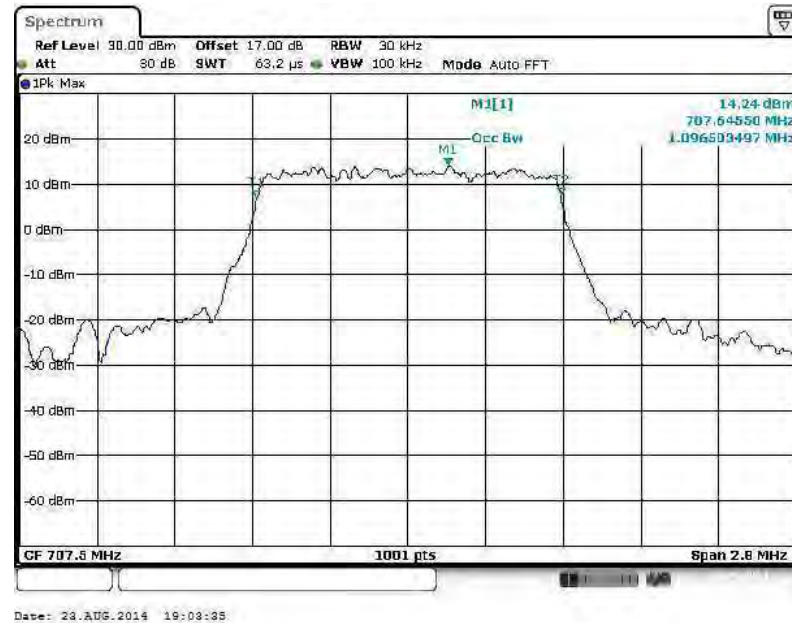
26dB Bandwidth Plot on Channel 23095



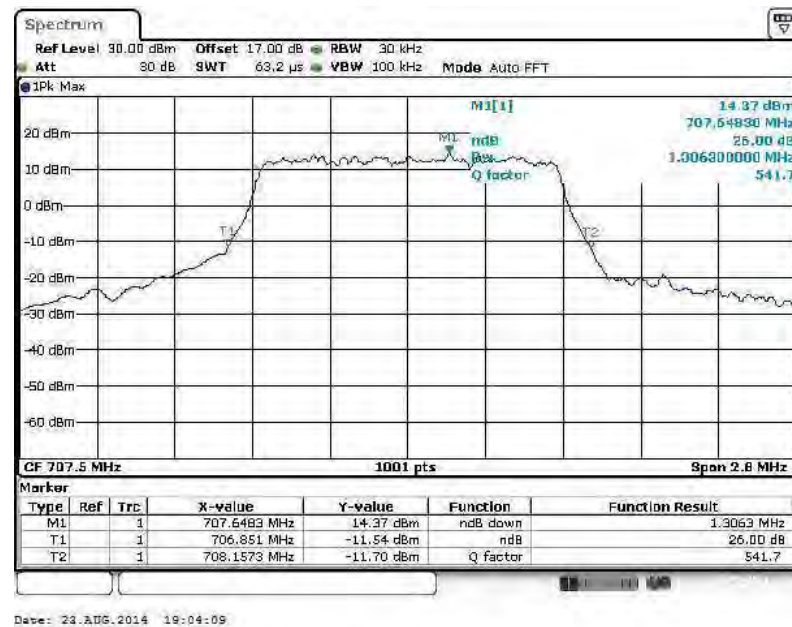


Band :	LTE Band 12	BW / Mod. :	1.4MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 23095



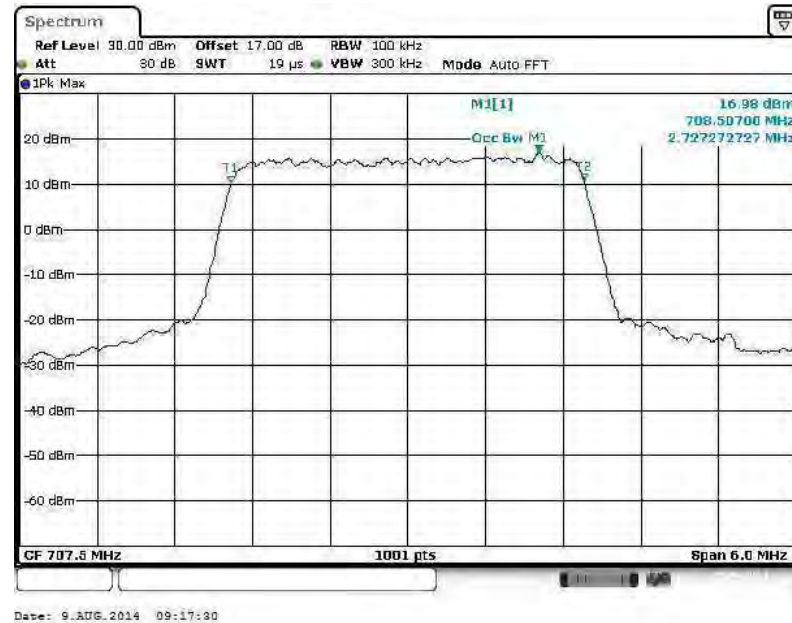
26dB Bandwidth Plot on Channel 23095



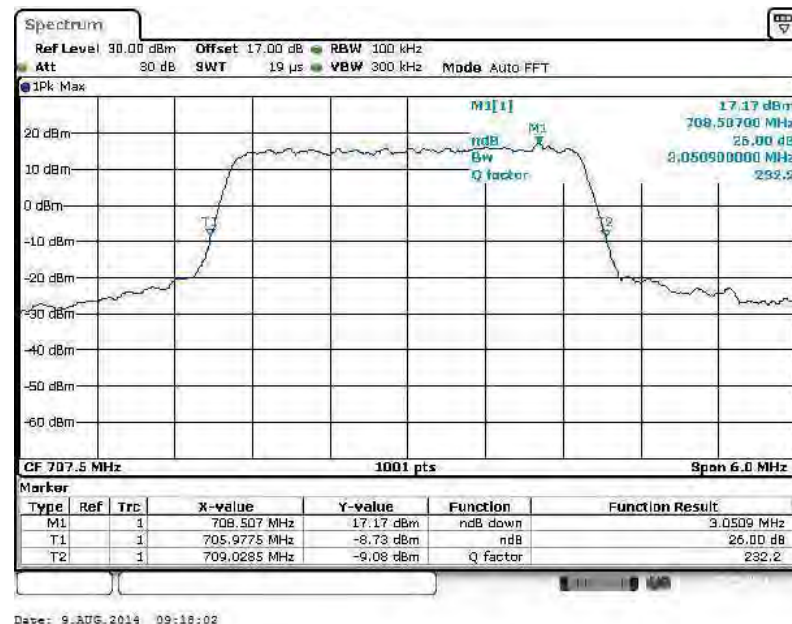


Band :	LTE Band 12	BW / Mod. :	3MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 23095



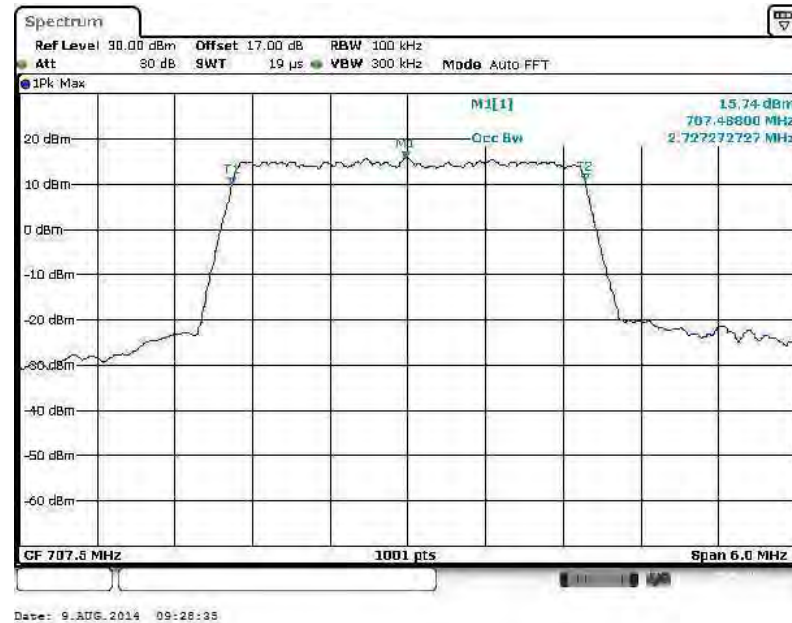
26dB Bandwidth Plot on Channel 23095



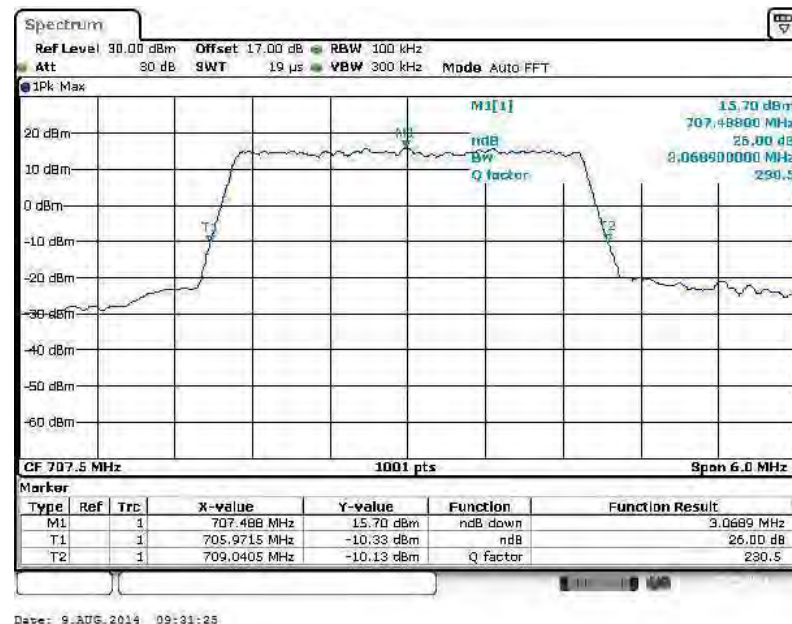


Band :	LTE Band 12	BW / Mod. :	3MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 23095



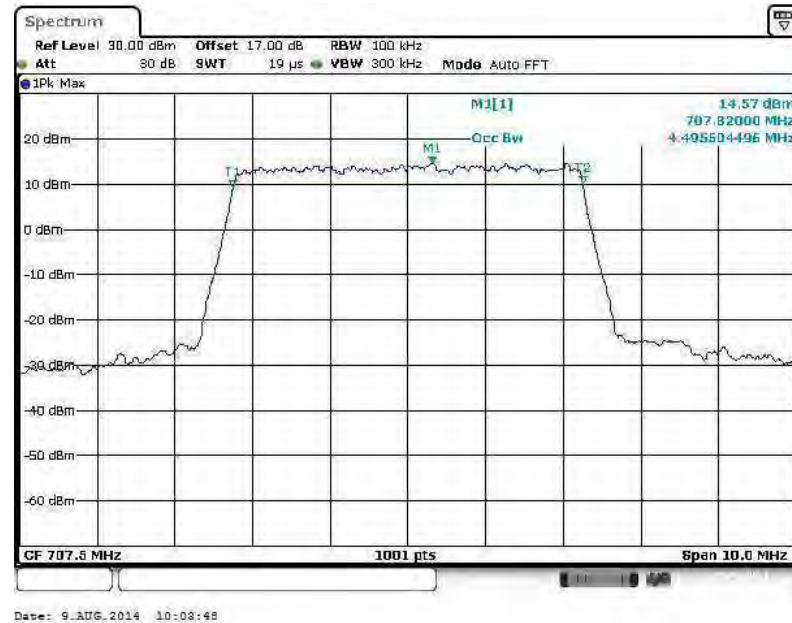
26dB Bandwidth Plot on Channel 23095



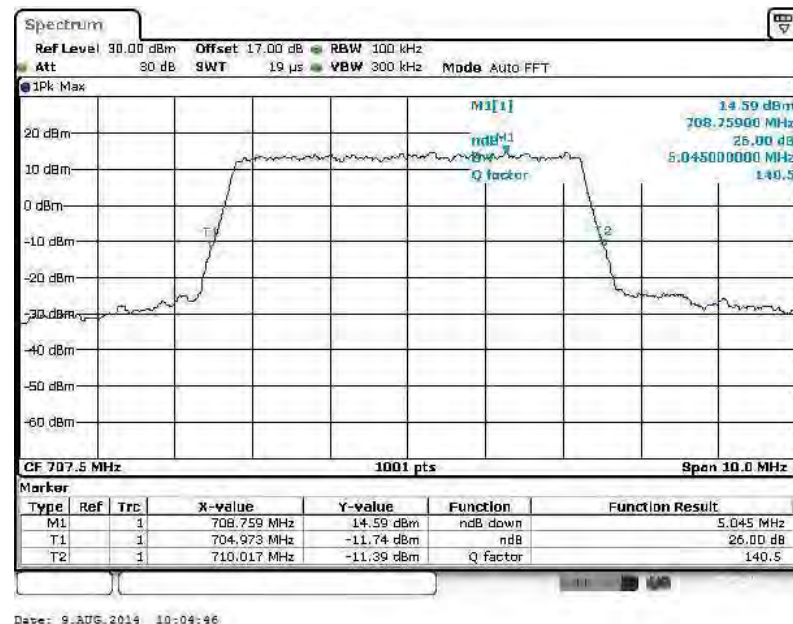


Band :	LTE Band 12	BW / Mod. :	5MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 23095



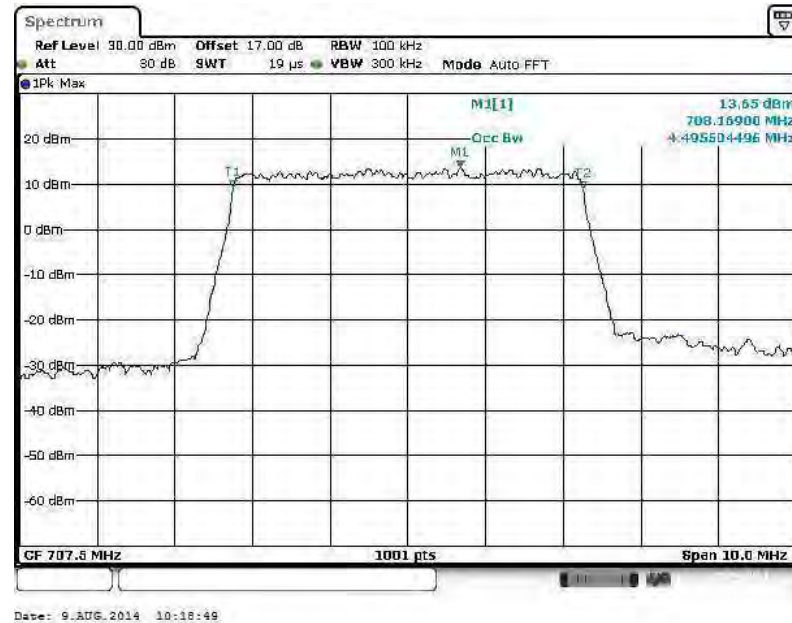
26dB Bandwidth Plot on Channel 23095



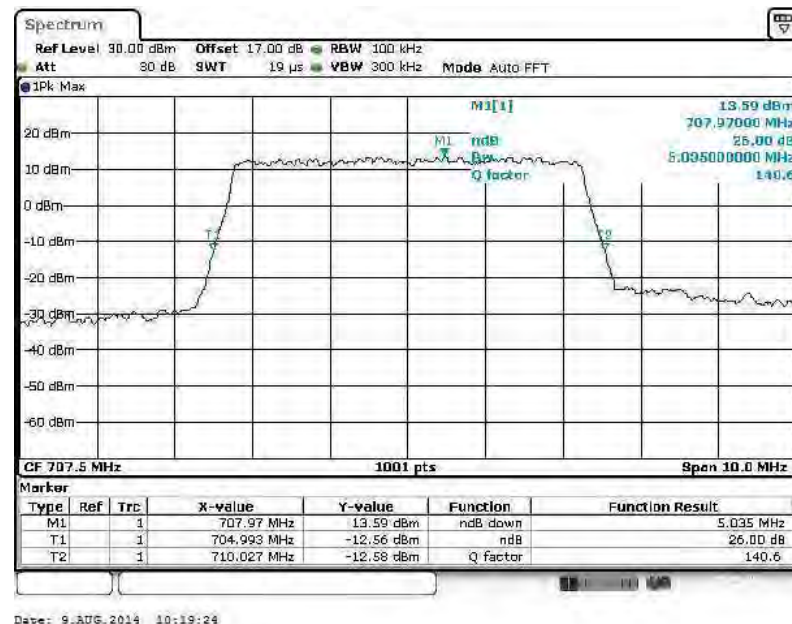


Band :	LTE Band 12	BW / Mod. :	5MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 23095



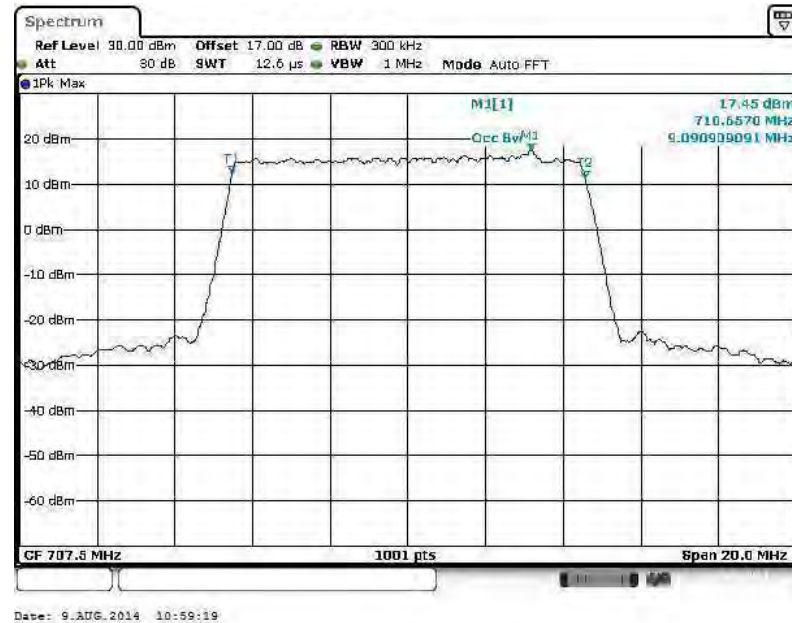
26dB Bandwidth Plot on Channel 23095



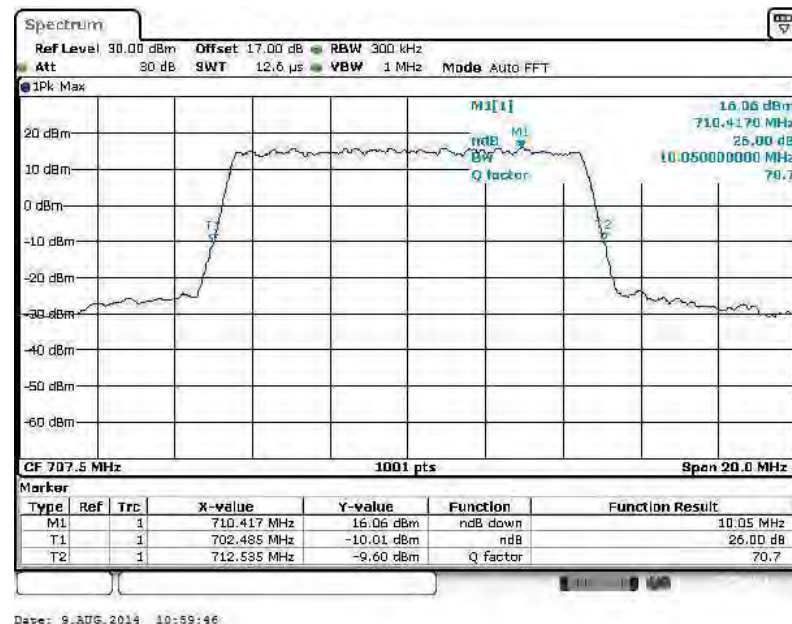


Band :	LTE Band 12	BW / Mod. :	10MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 23095



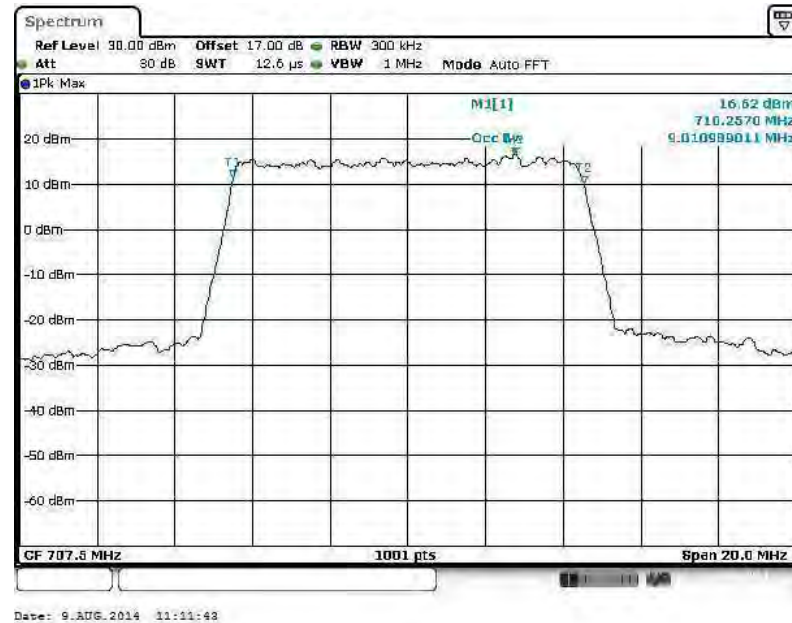
26dB Bandwidth Plot on Channel 23095



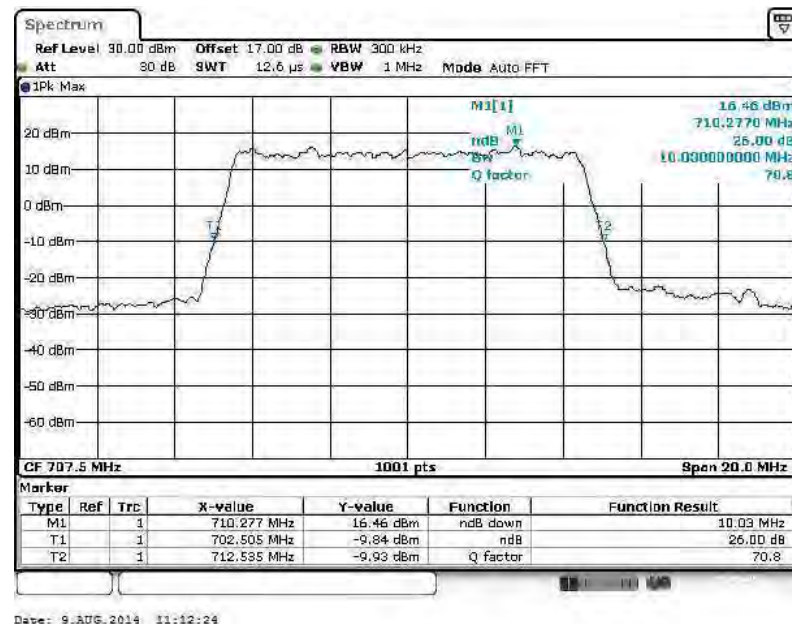


Band :	LTE Band 12	BW / Mod. :	10MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 23095



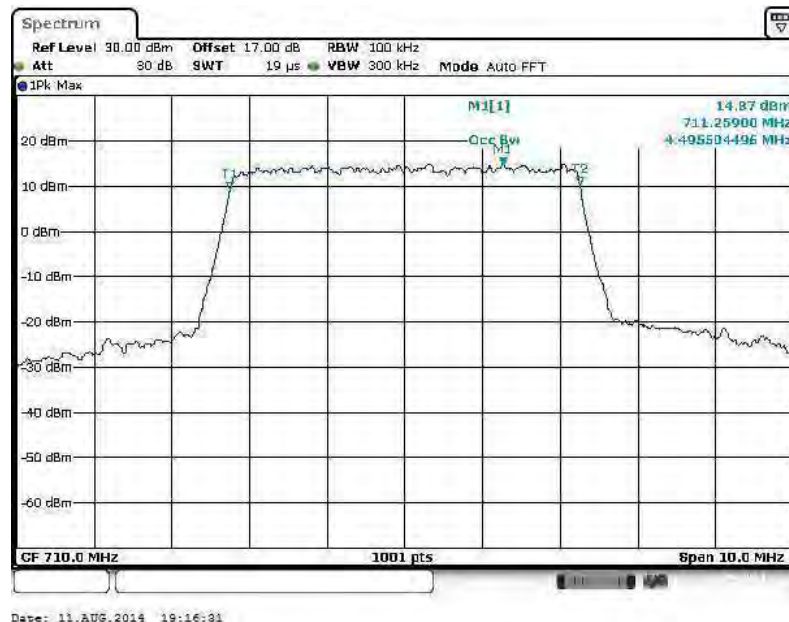
26dB Bandwidth Plot on Channel 23095



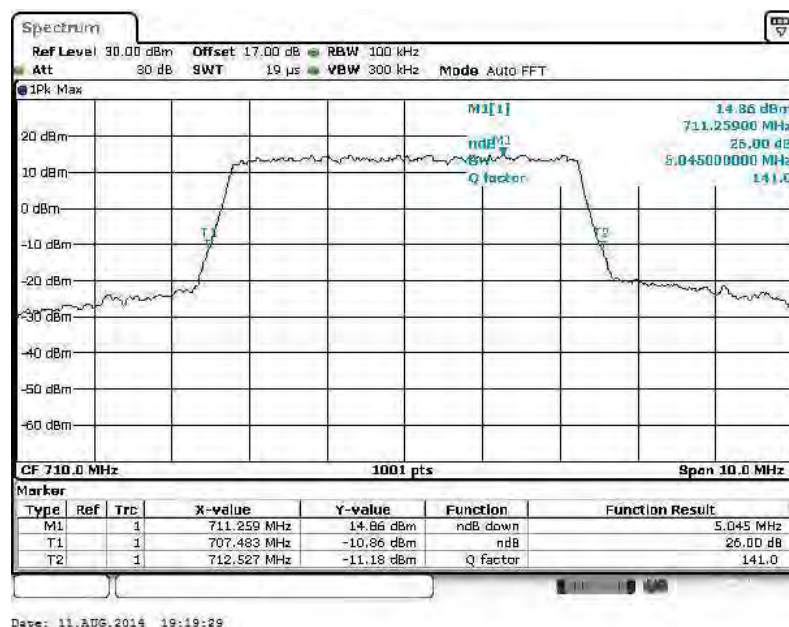


Band :	LTE Band 17	BW / Mod. :	5MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 23790



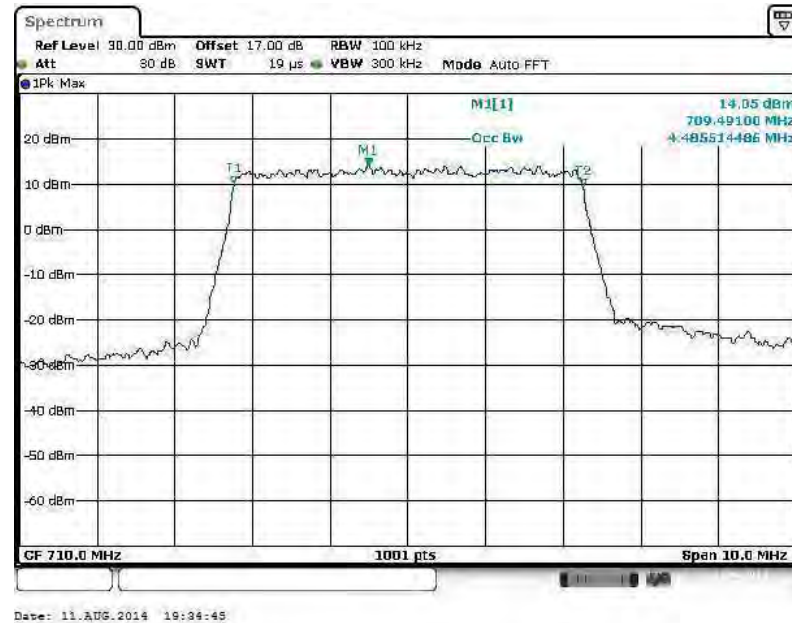
26dB Bandwidth Plot on Channel 23790



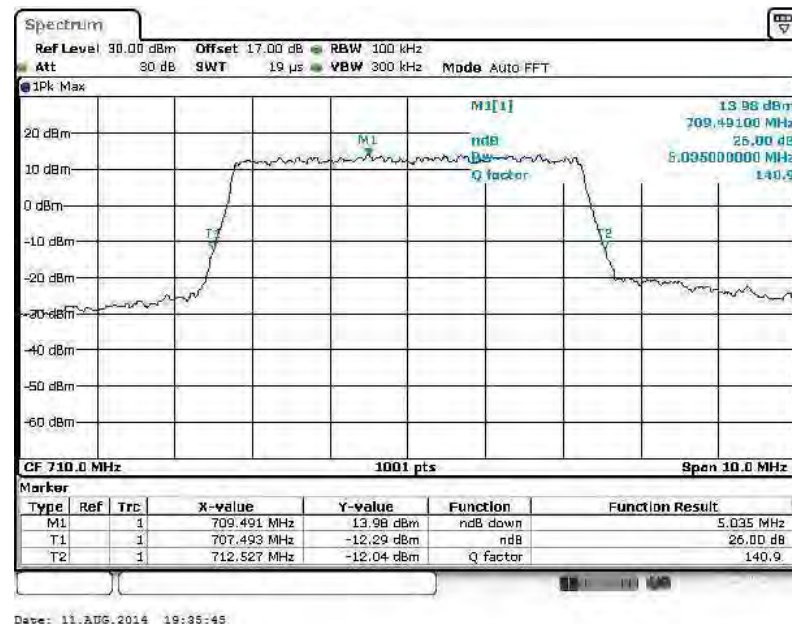


Band :	LTE Band 17	BW / Mod. :	5MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 23790



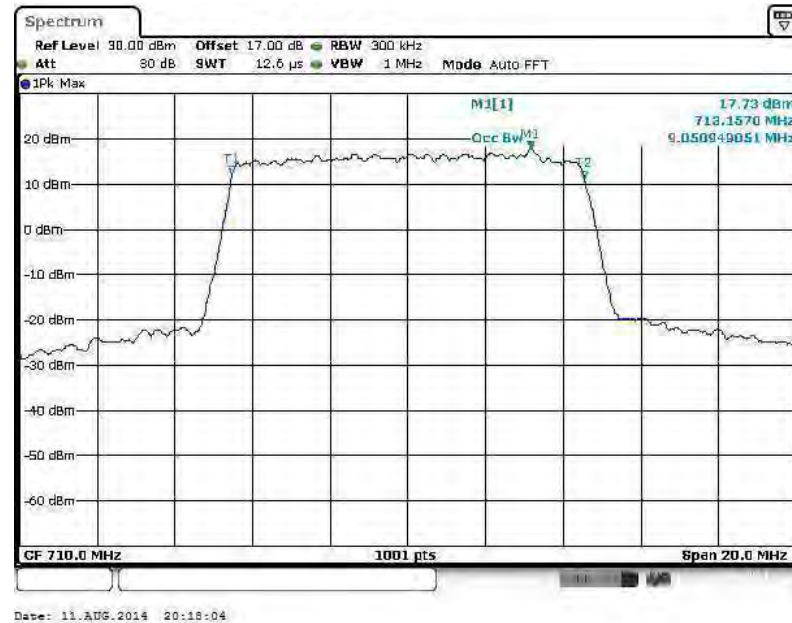
26dB Bandwidth Plot on Channel 23790



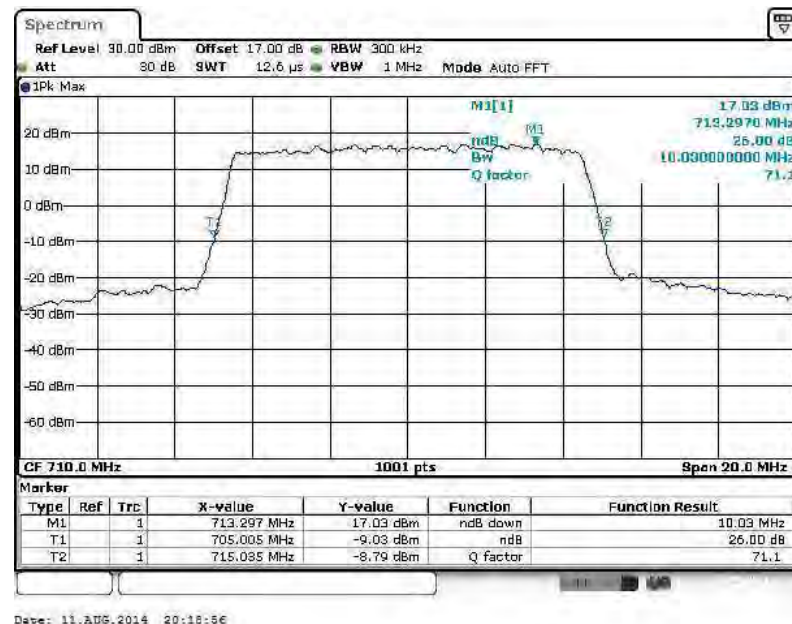


Band :	LTE Band 17	BW / Mod. :	10MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 23790



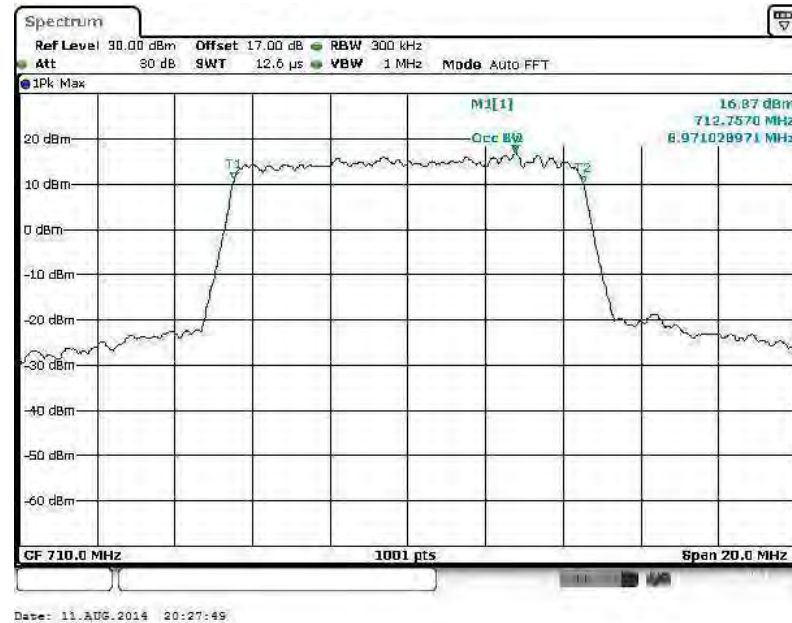
26dB Bandwidth Plot on Channel 23790



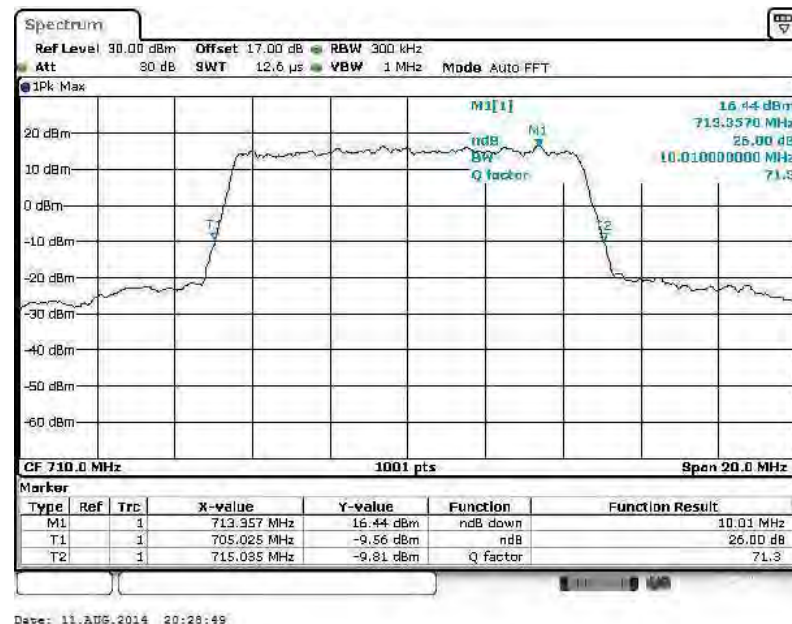


Band :	LTE Band 17	BW / Mod. :	10MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 23790



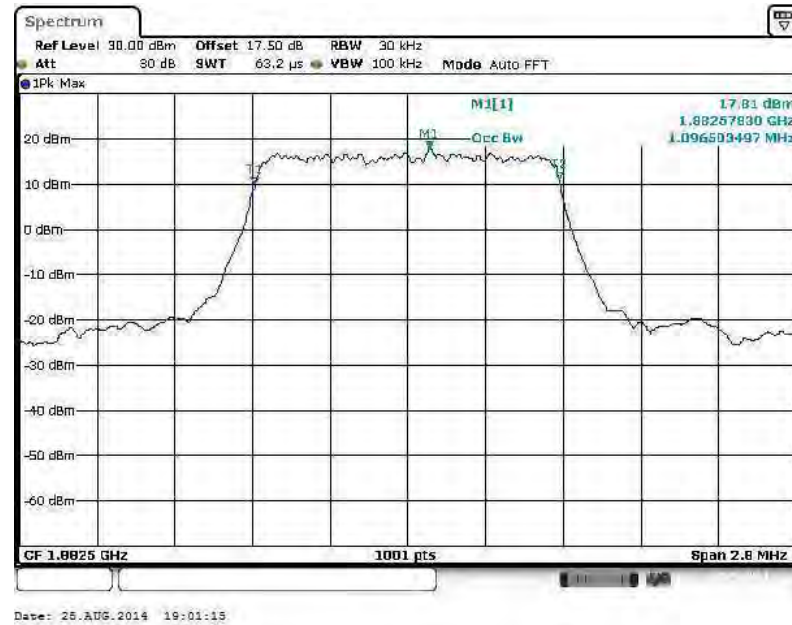
26dB Bandwidth Plot on Channel 23790



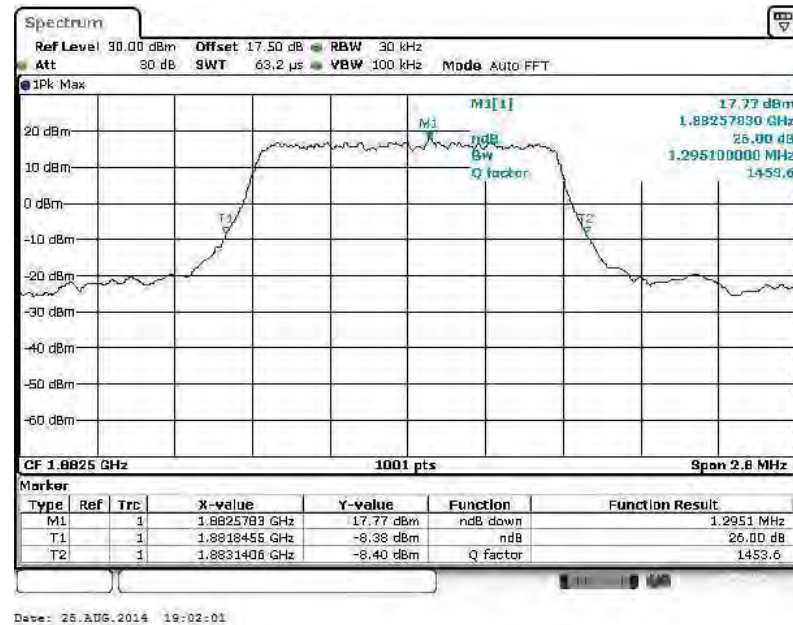


Band :	LTE Band 25	BW / Mod. :	1.4MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 26365



26dB Bandwidth Plot on Channel 26365

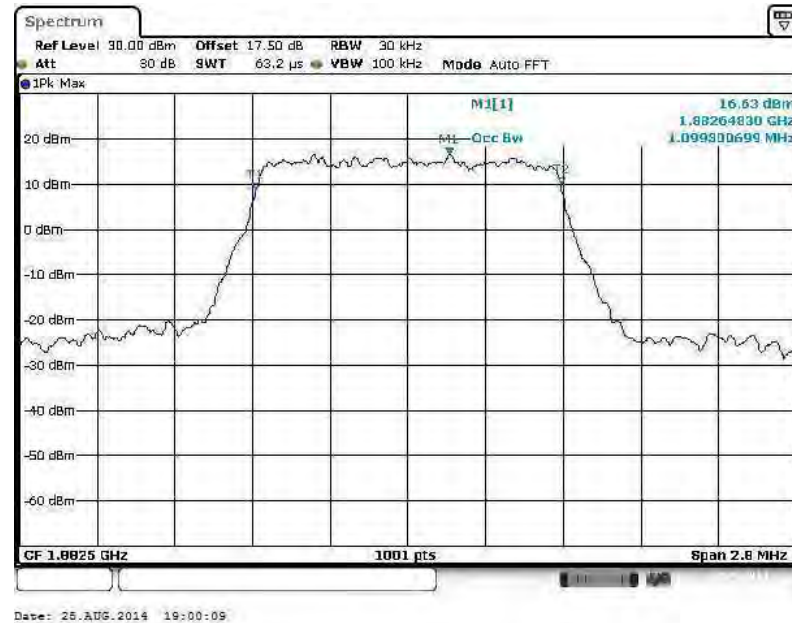




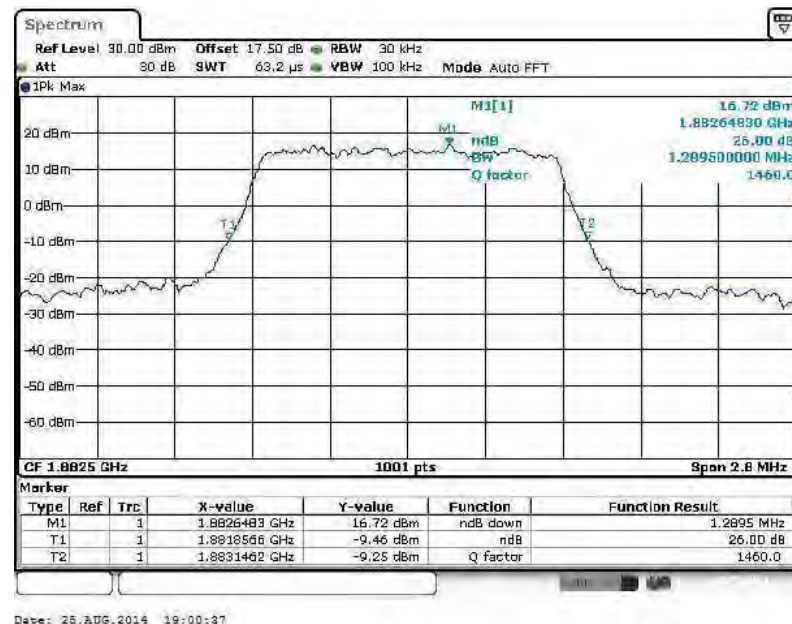
Band : LTE Band 25

BW / Mod. : 1.4MHz / 16QAM

99% Occupied Bandwidth Plot on Channel 26365

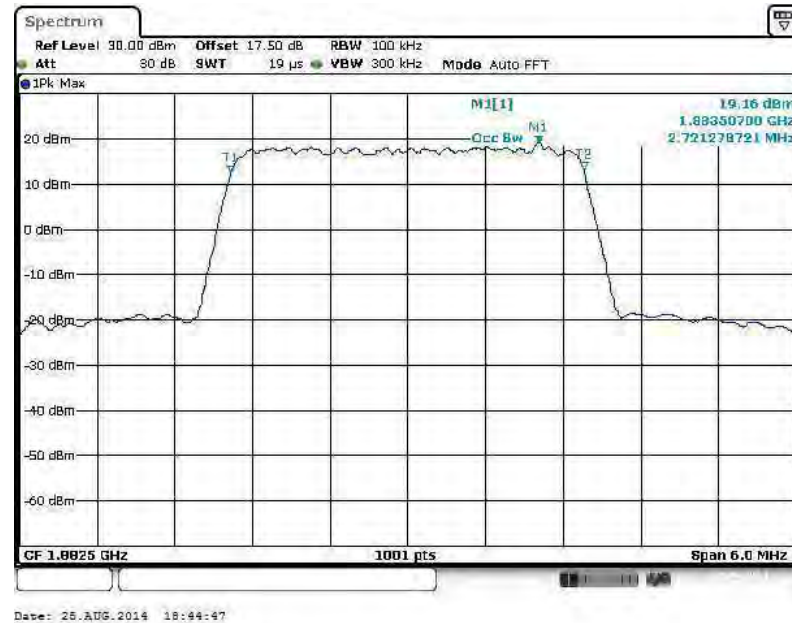
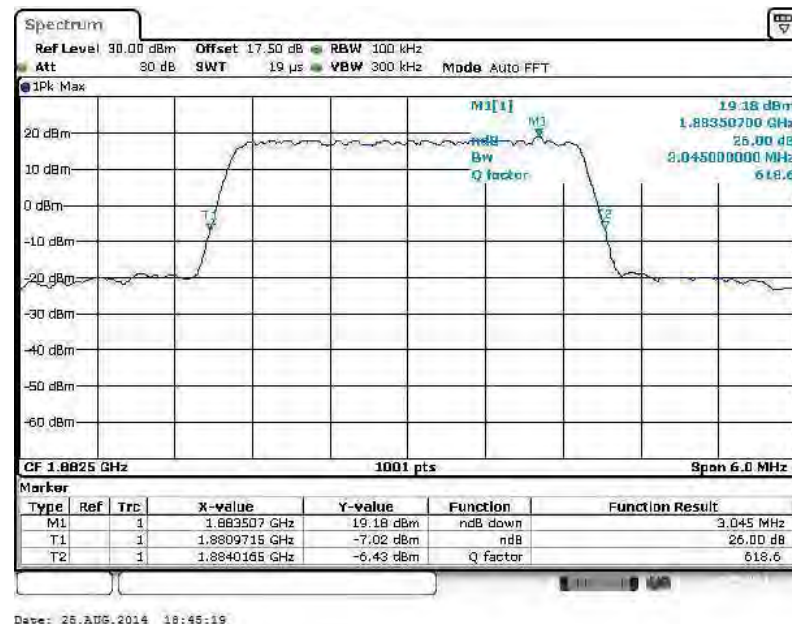


26dB Bandwidth Plot on Channel 26365





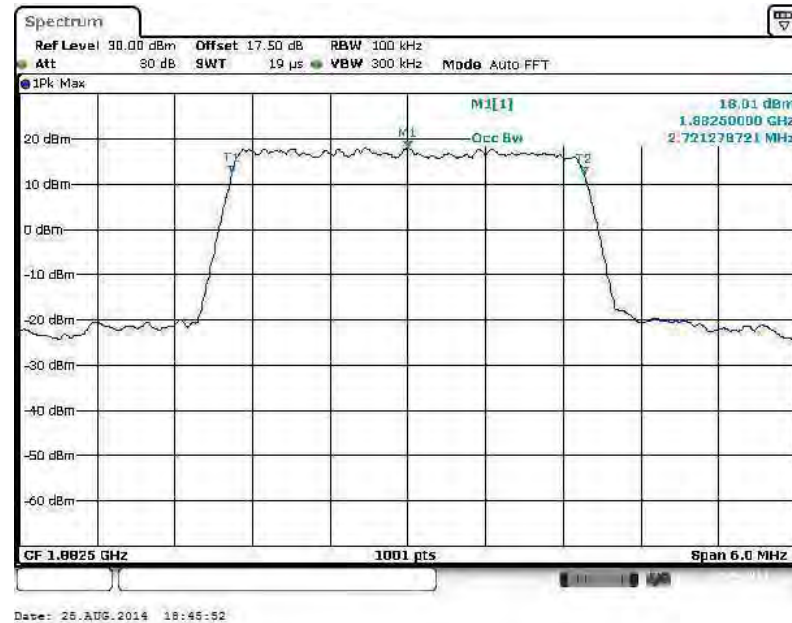
Band :	LTE Band 25	BW / Mod. :	3MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 26365**26dB Bandwidth Plot on Channel 26365**

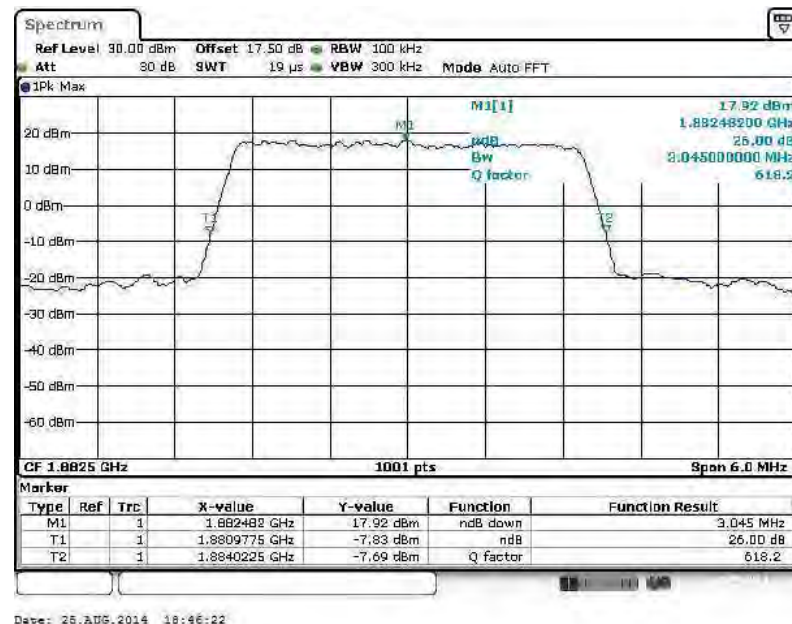


Band :	LTE Band 25	BW / Mod. :	3MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 26365



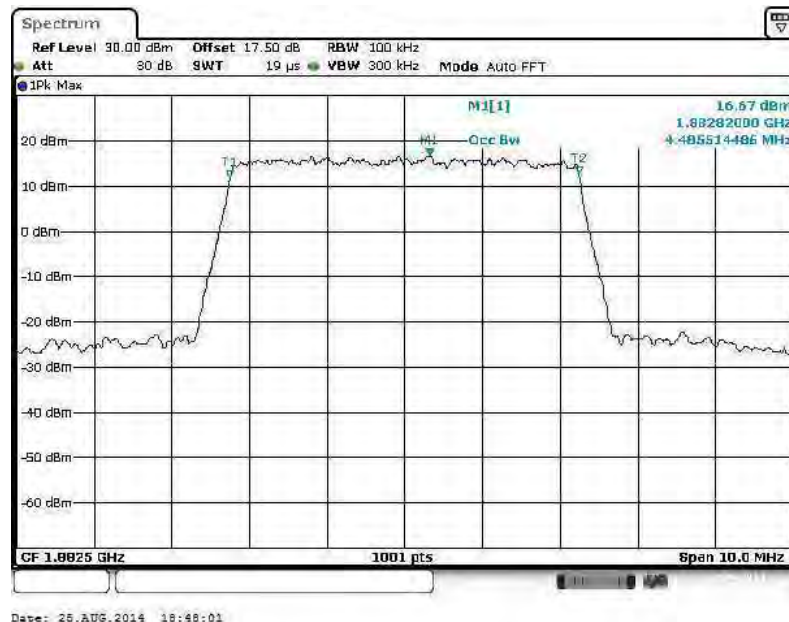
26dB Bandwidth Plot on Channel 26365



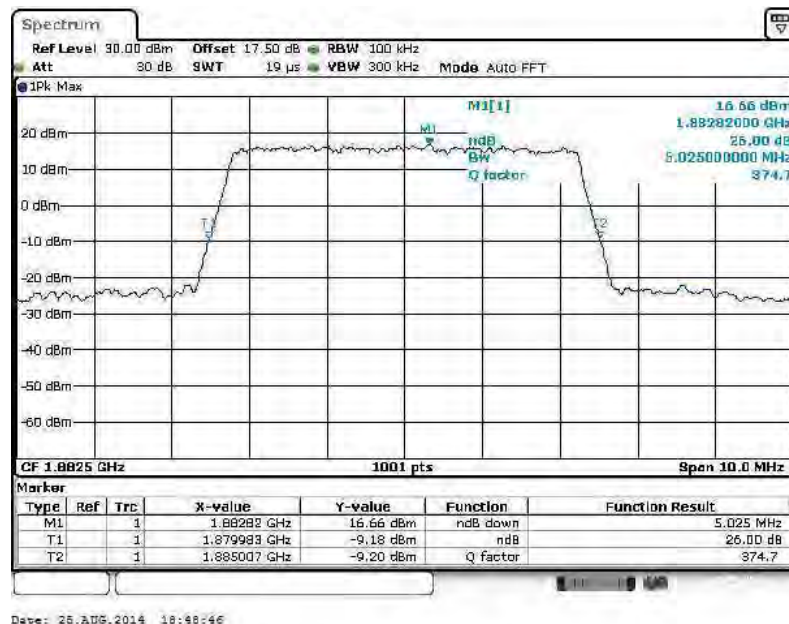


Band :	LTE Band 25	BW / Mod. :	5MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 26365



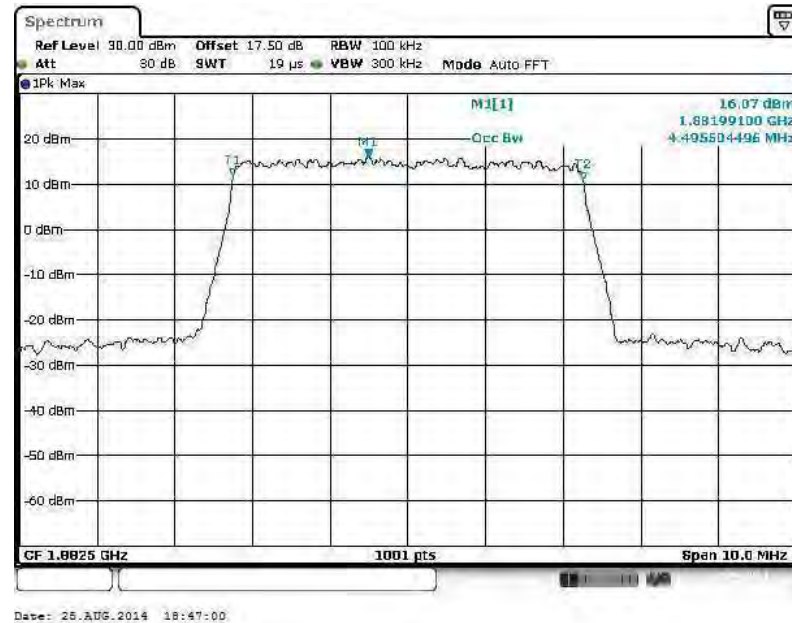
26dB Bandwidth Plot on Channel 26365



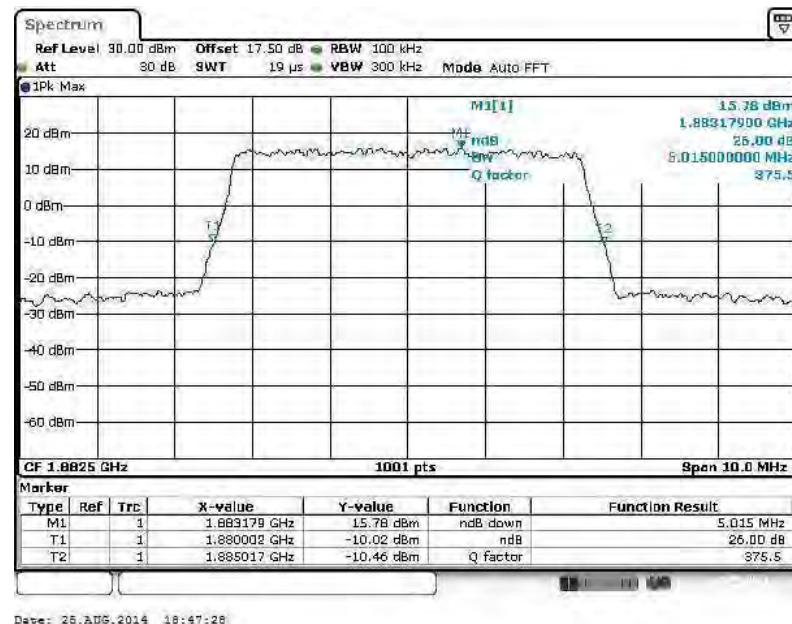


Band :	LTE Band 25	BW / Mod. :	5MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 26365



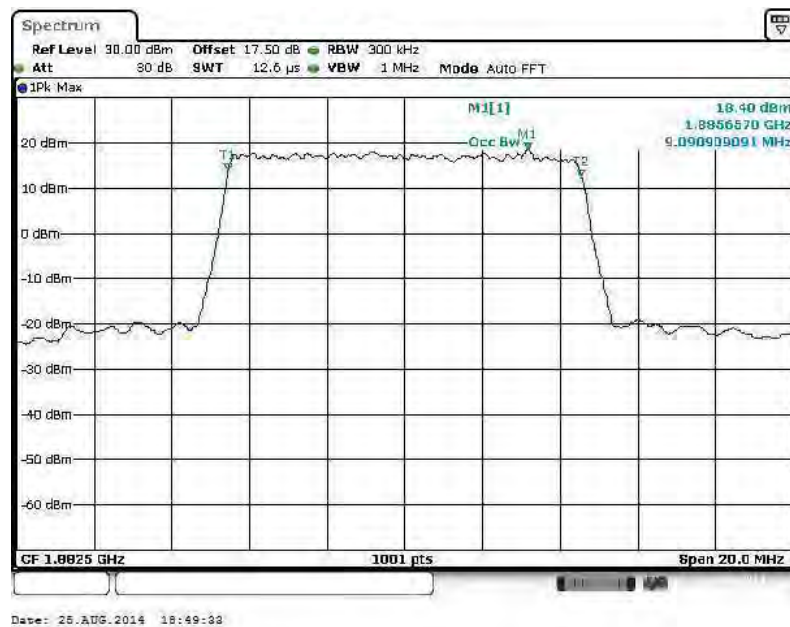
26dB Bandwidth Plot on Channel 26365



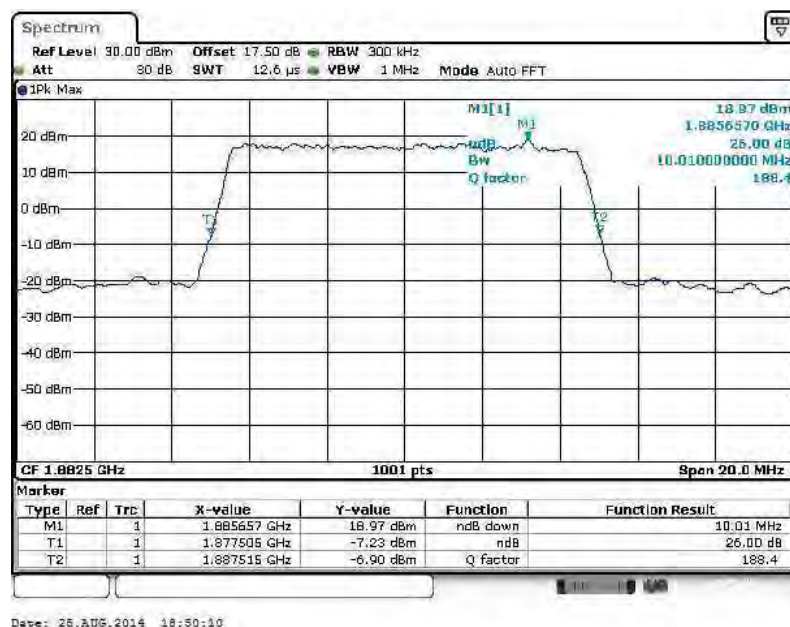


Band :	LTE Band 25	BW / Mod. :	10MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 26365



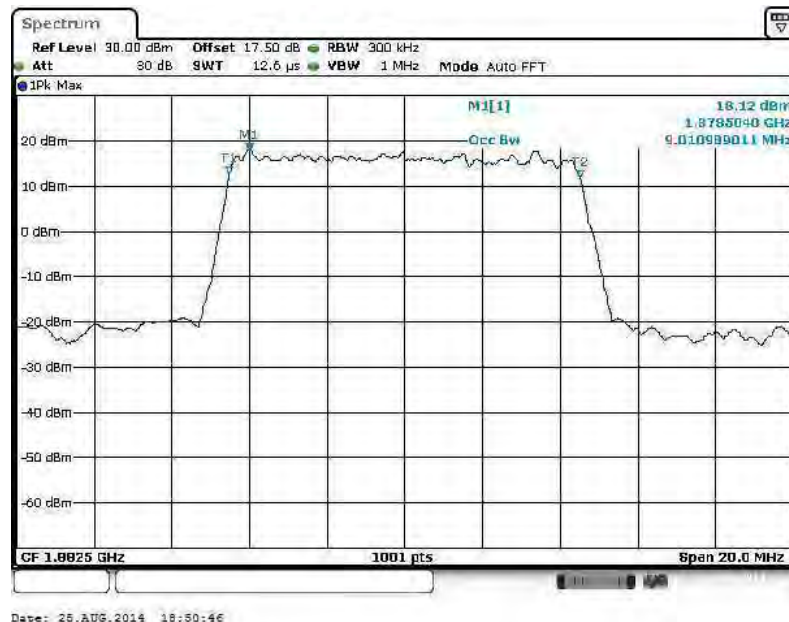
26dB Bandwidth Plot on Channel 26365



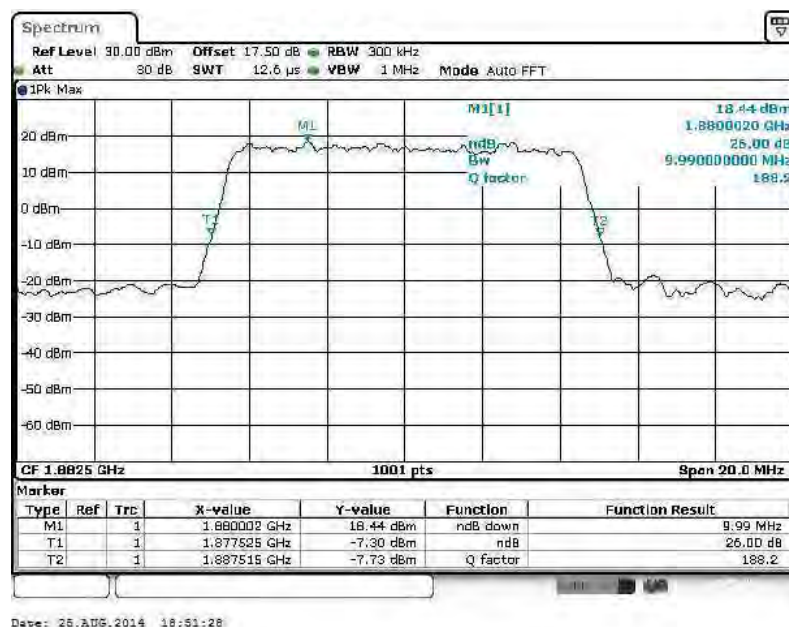


Band :	LTE Band 25	BW / Mod. :	10MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 26365

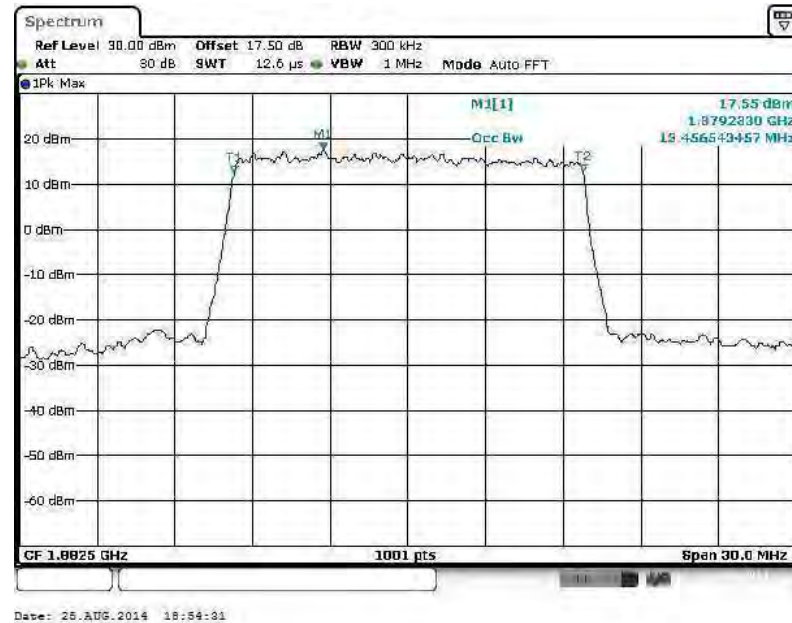
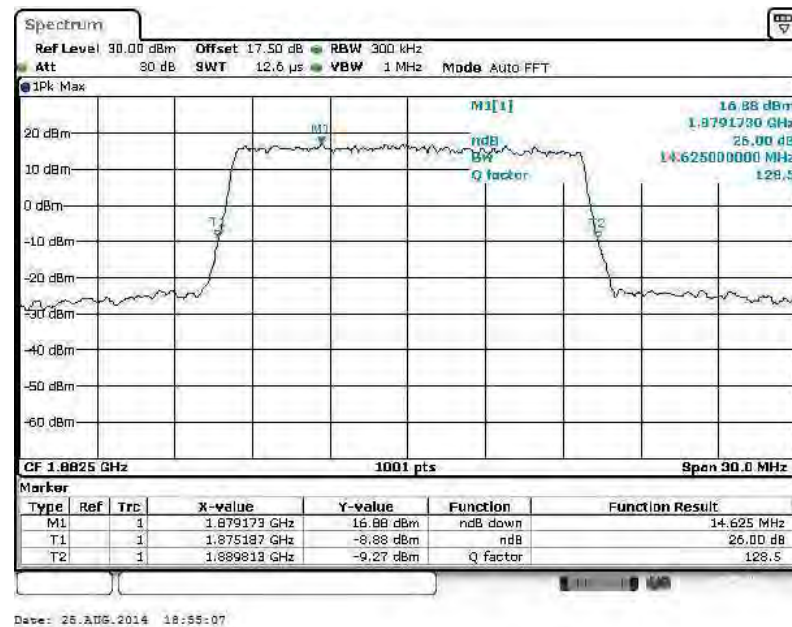


26dB Bandwidth Plot on Channel 26365





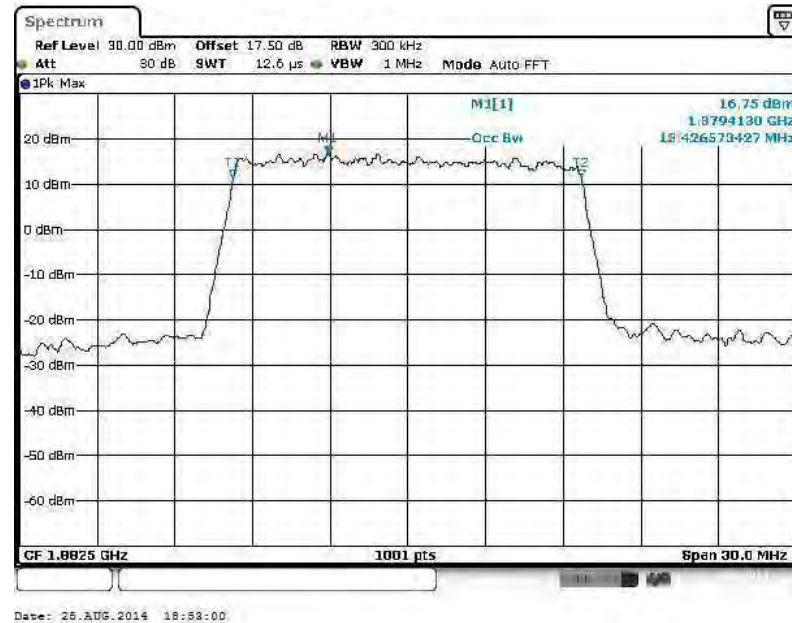
Band :	LTE Band 25	BW / Mod. :	15MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 26365**26dB Bandwidth Plot on Channel 26365**

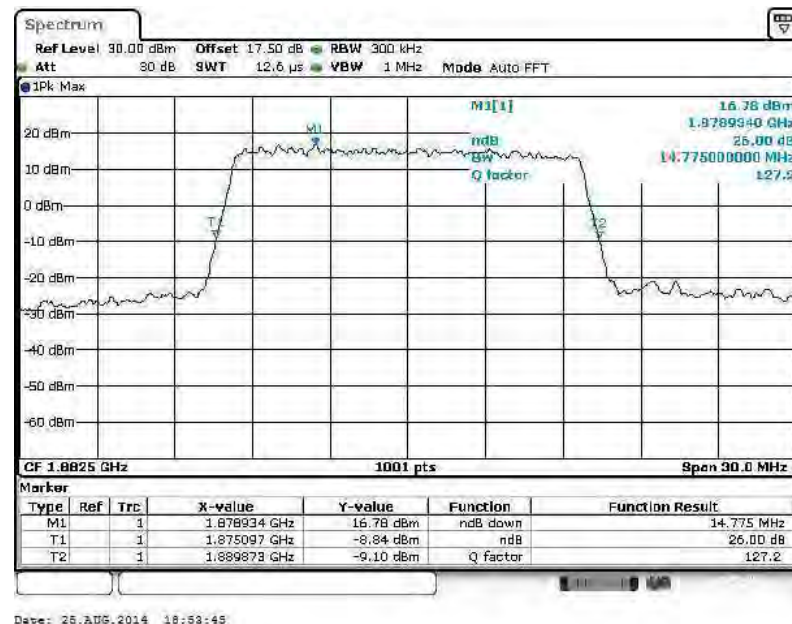


Band :	LTE Band 25	BW / Mod. :	15MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 26365



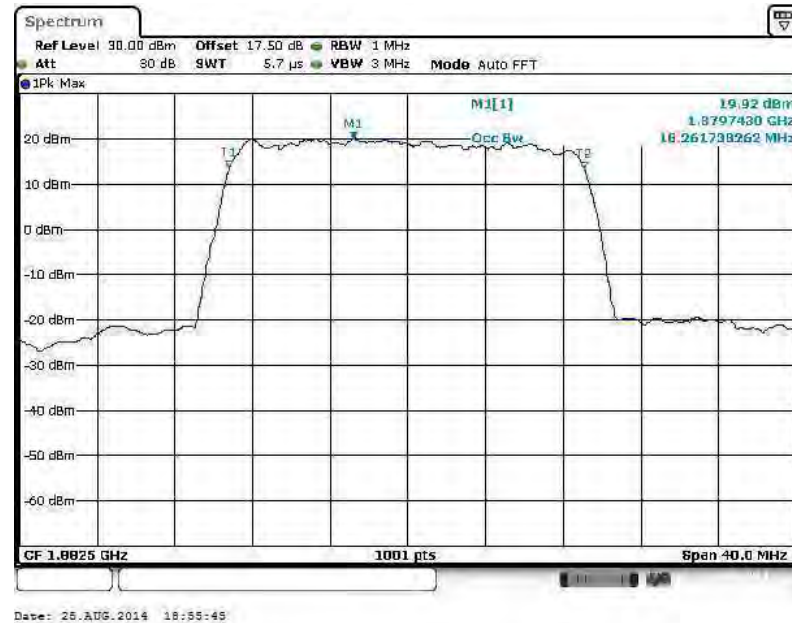
26dB Bandwidth Plot on Channel 26365



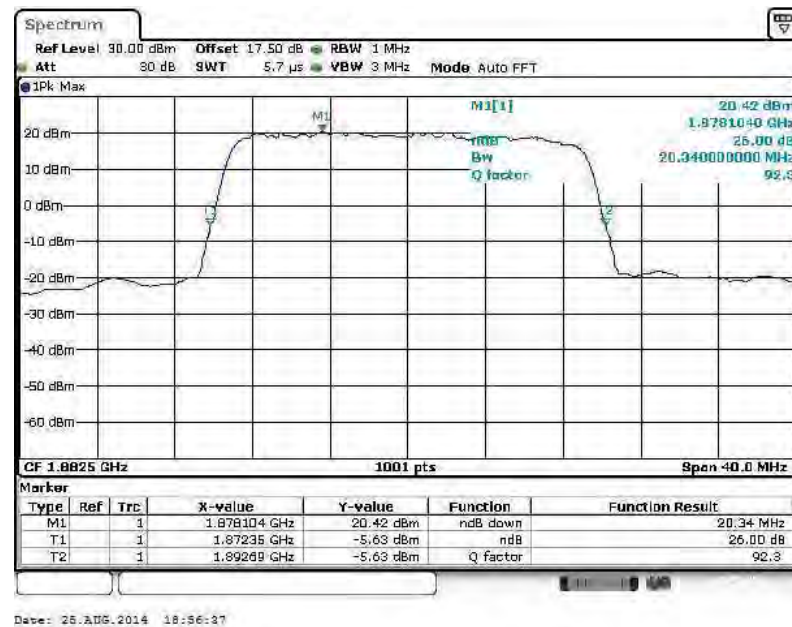


Band :	LTE Band 25	BW / Mod. :	20MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 26365



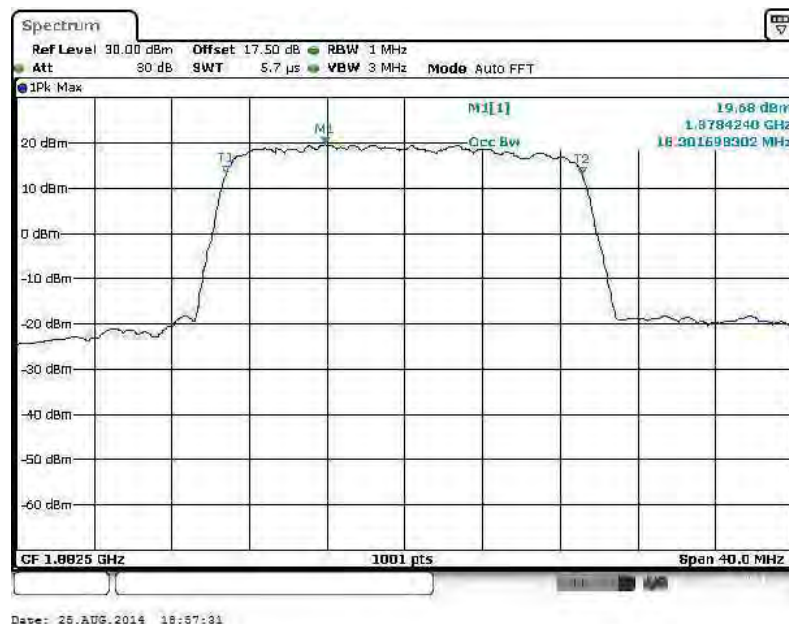
26dB Bandwidth Plot on Channel 26365



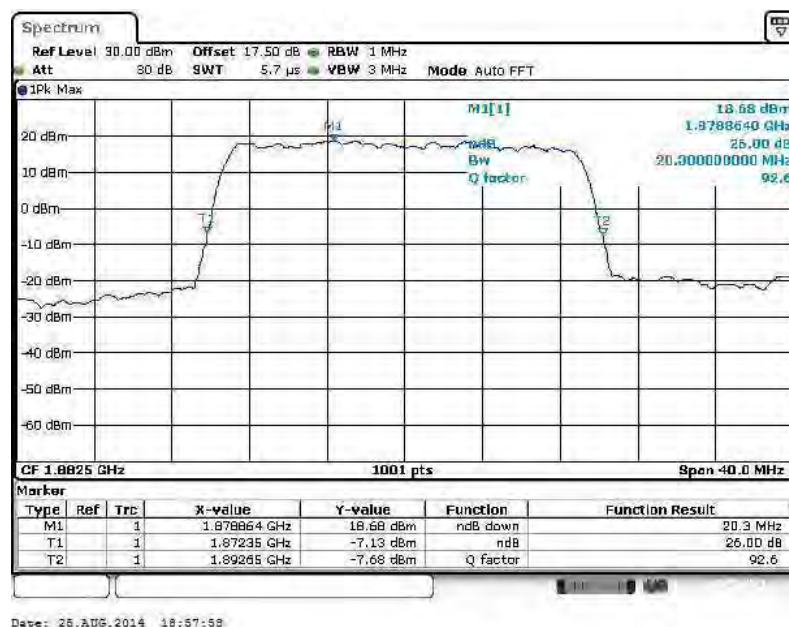


Band :	LTE Band 25	BW / Mod. :	20MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 26365



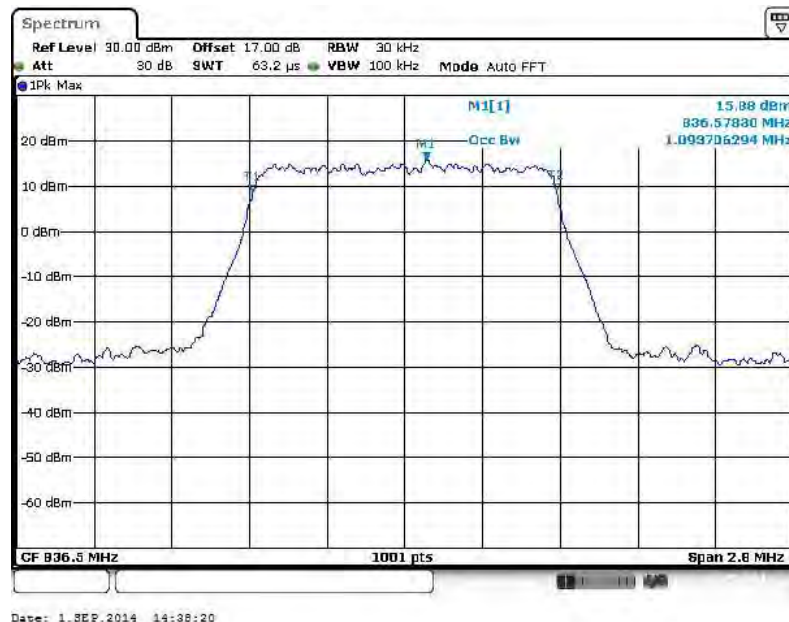
26dB Bandwidth Plot on Channel 26365



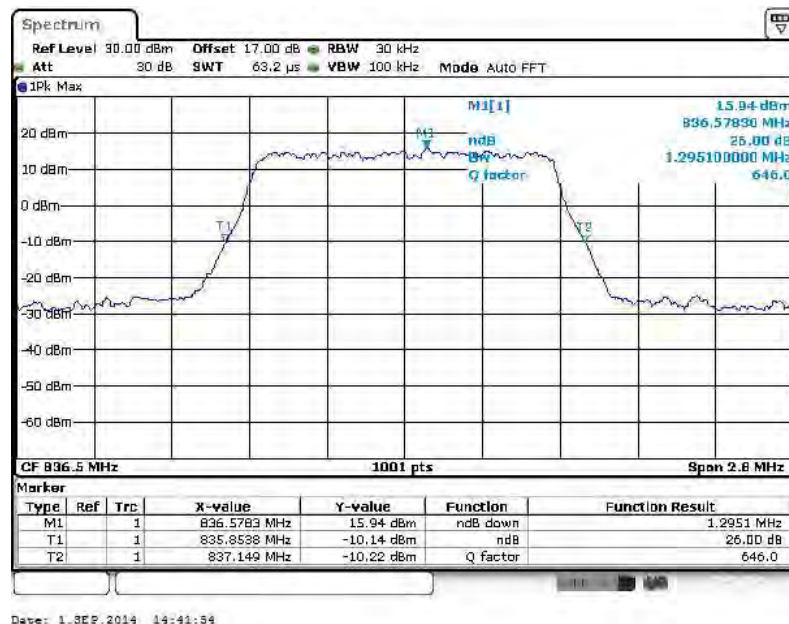


Band :	LTE Band 26	BW / Mod. :	1.4MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 26915



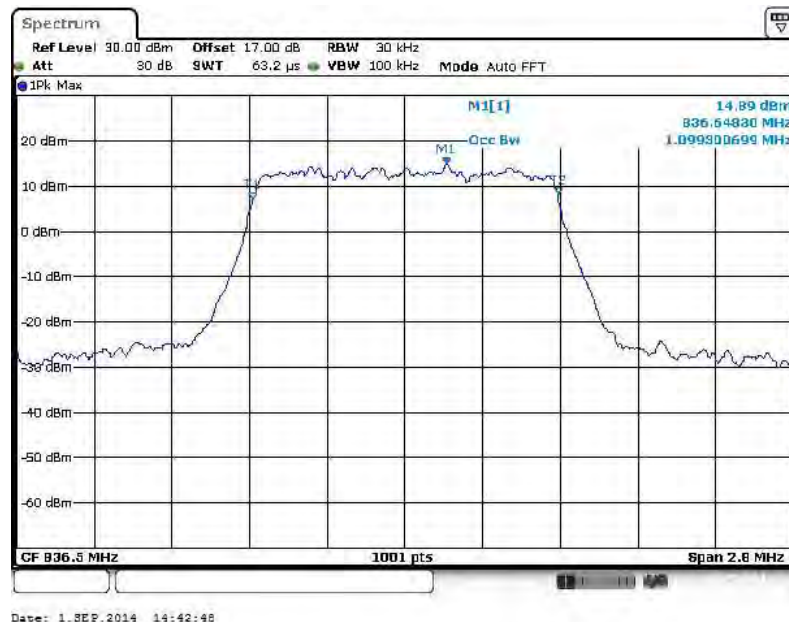
26dB Bandwidth Plot on Channel 26915



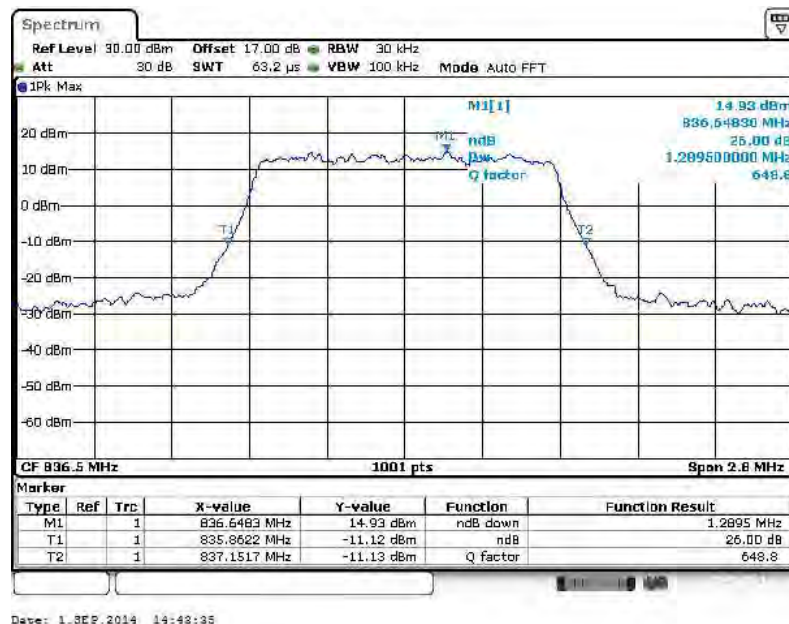


Band :	LTE Band 26	BW / Mod. :	1.4MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 26915



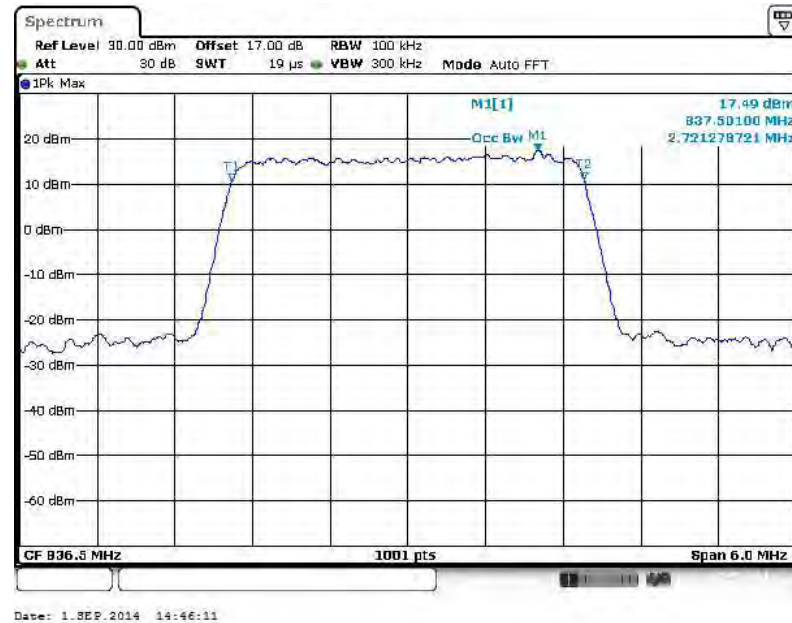
26dB Bandwidth Plot on Channel 26915



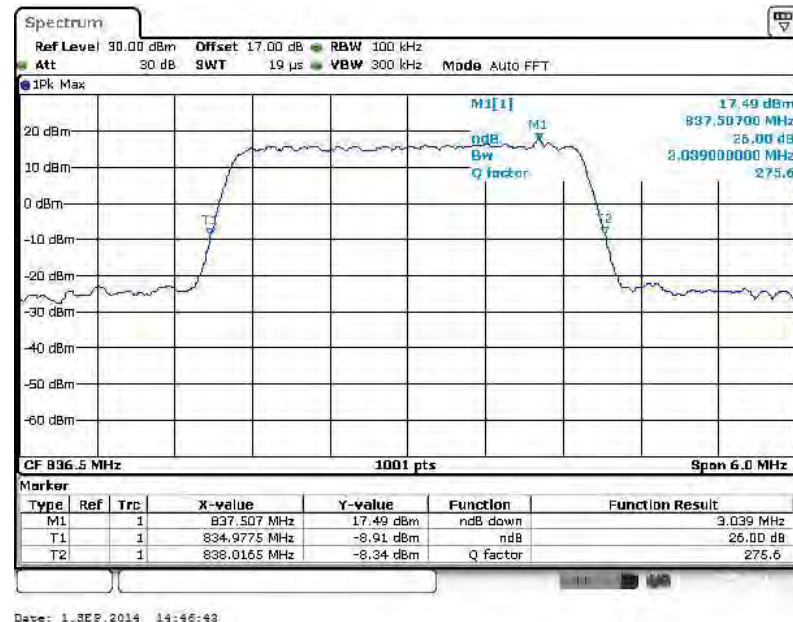


Band :	LTE Band 26	BW / Mod. :	3MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 26915



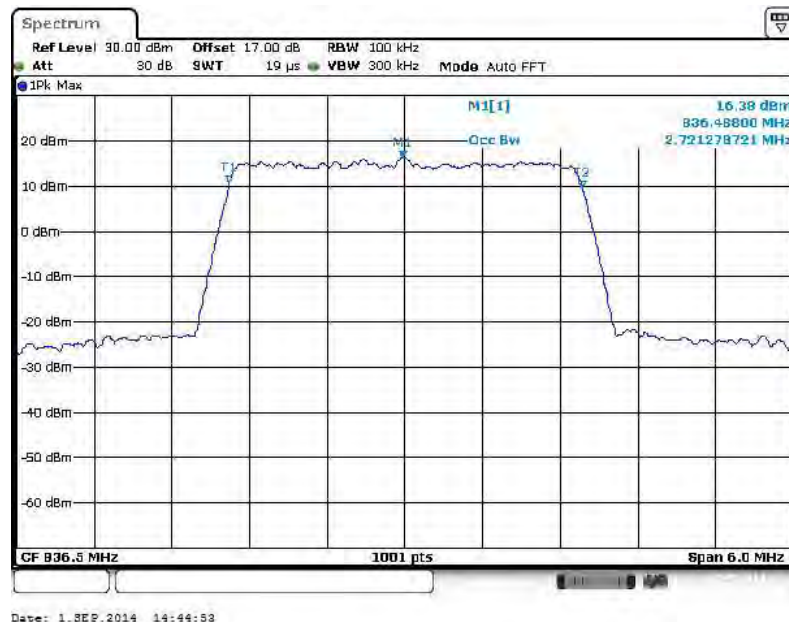
26dB Bandwidth Plot on Channel 26915



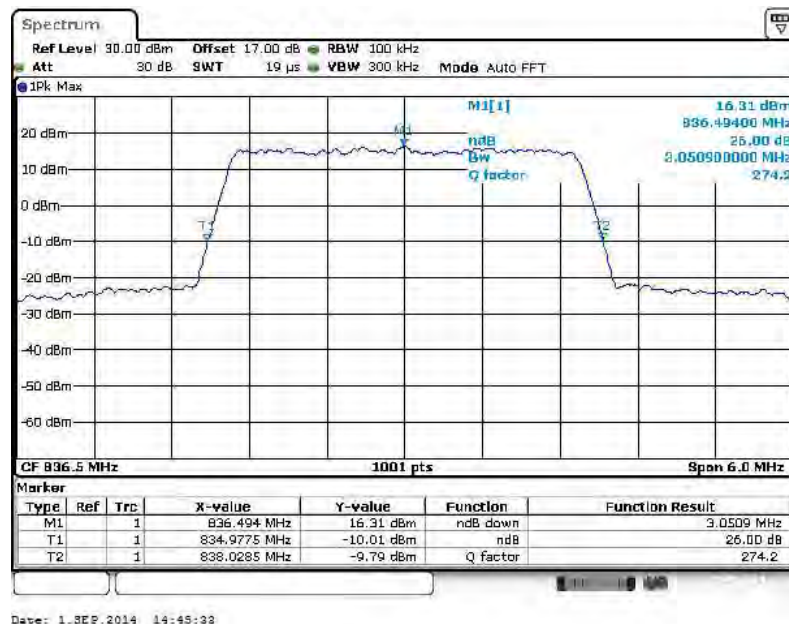


Band :	LTE Band 26	BW / Mod. :	3MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 26915



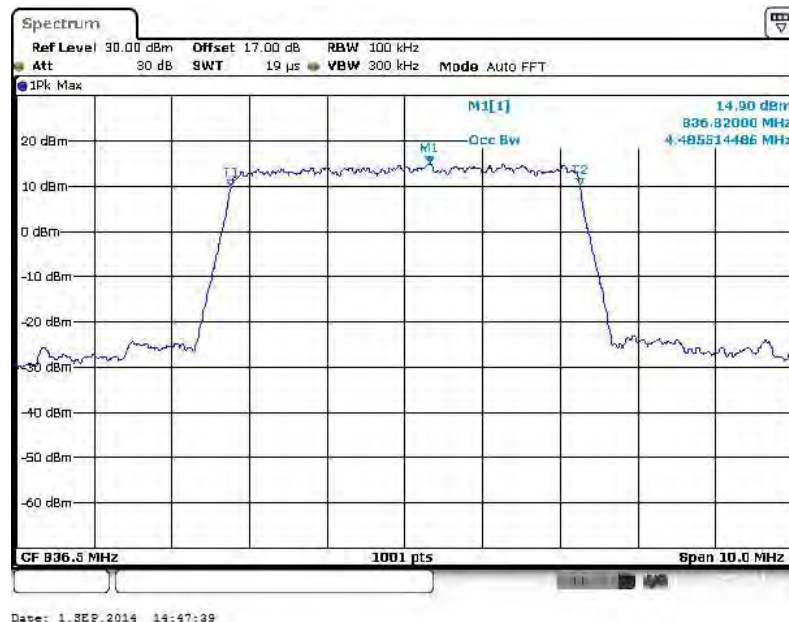
26dB Bandwidth Plot on Channel 26915



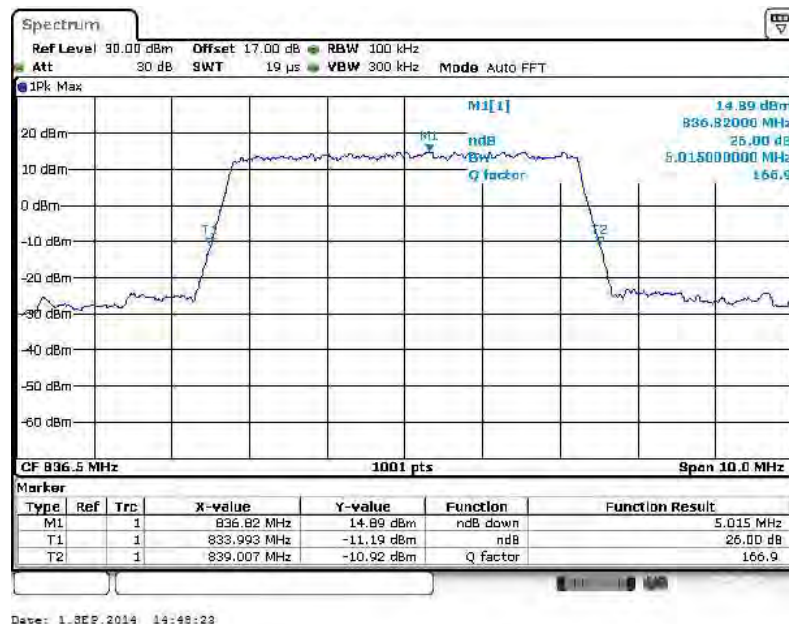


Band :	LTE Band 26	BW / Mod. :	5MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 26915



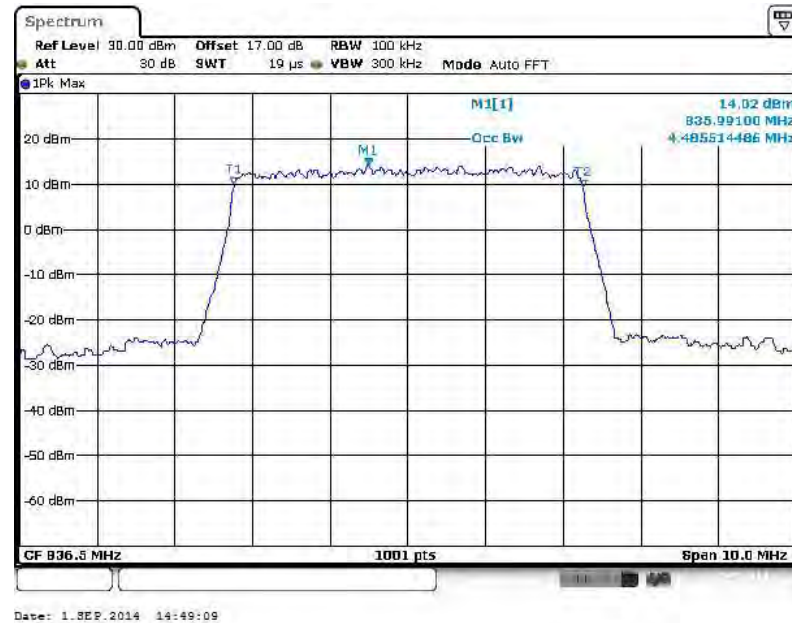
26dB Bandwidth Plot on Channel 26915



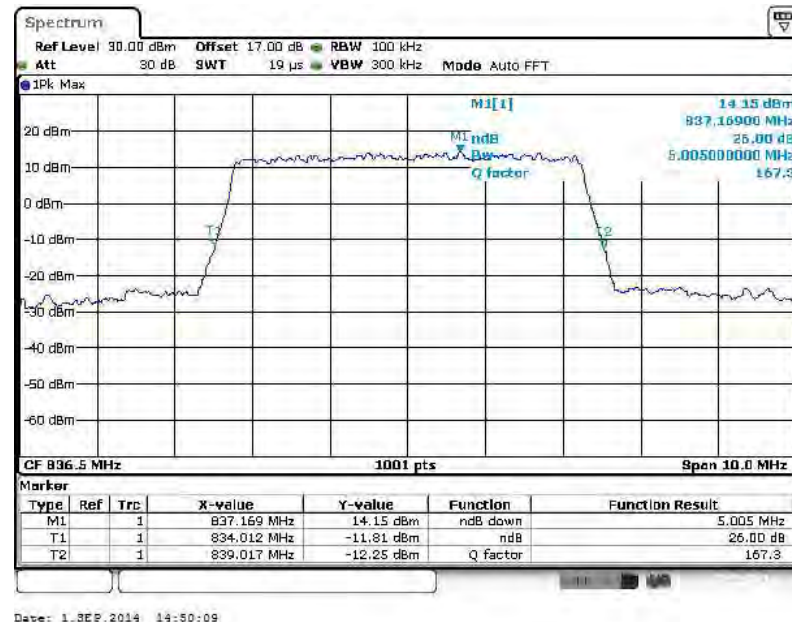


Band :	LTE Band 26	BW / Mod. :	5MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 26915



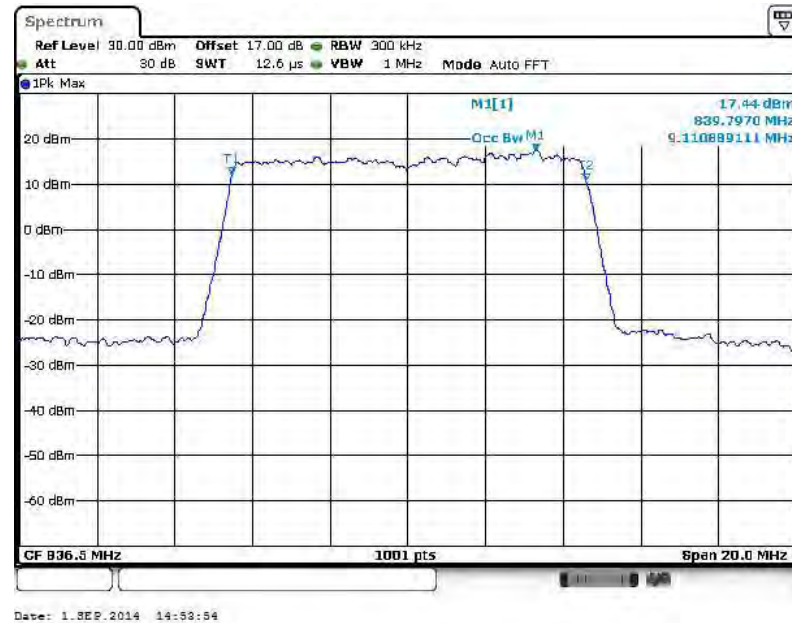
26dB Bandwidth Plot on Channel 26915



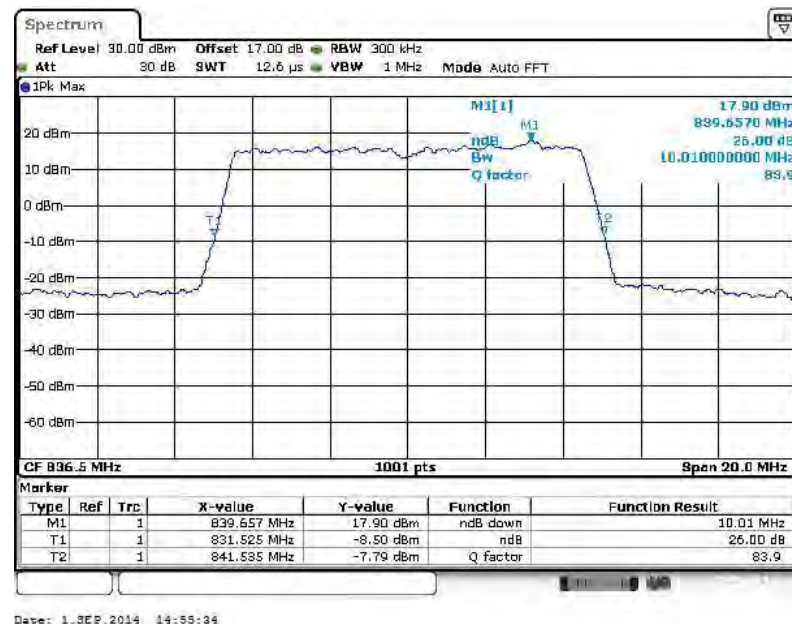


Band :	LTE Band 26	BW / Mod. :	10MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 26915



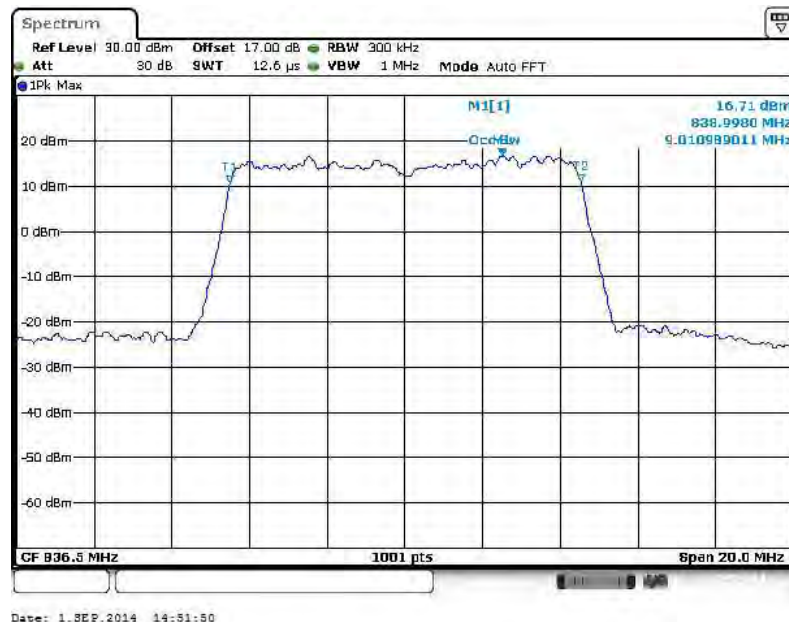
26dB Bandwidth Plot on Channel 26915



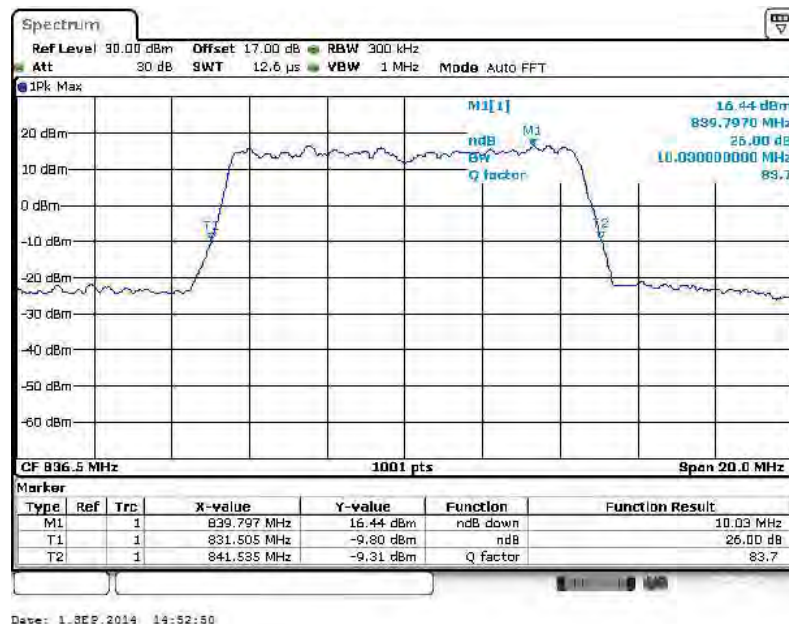


Band :	LTE Band 26	BW / Mod. :	10MHz / 16QAM
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99% Occupied Bandwidth Plot on Channel 26915



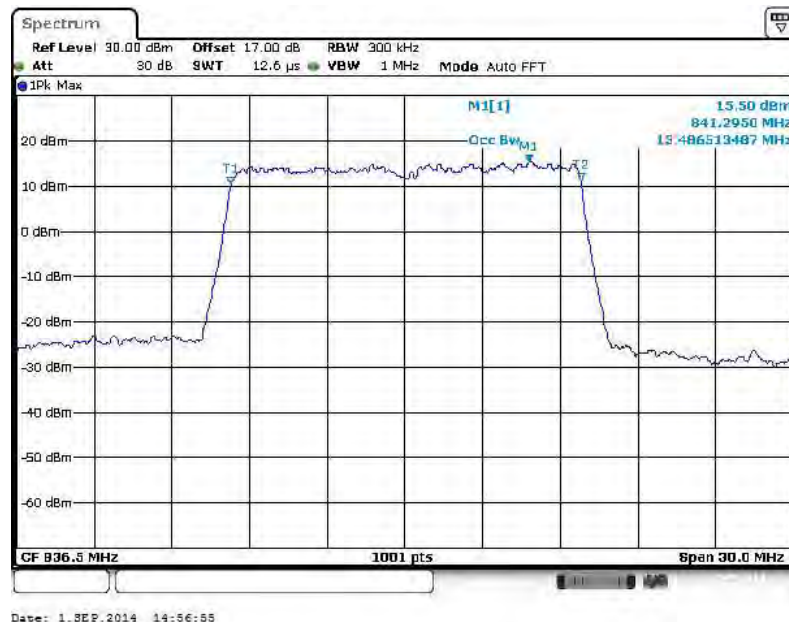
26dB Bandwidth Plot on Channel 26915





Band :	LTE Band 26	BW / Mod. :	15MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 26915



26dB Bandwidth Plot on Channel 26915

