



FCC RF Test Report

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : XT1921-2
FCC ID : IHDT56XC4
STANDARD : 47 CFR Part 2, 22(H), 24(E), 27
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)

This is a variant report. The product was received on Dec. 20, 2017 and completely tested on Jan. 30, 2018. We, SPORTON INTERNATIONAL Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures 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 INC., the test report shall not be reproduced except in full.

Reviewed by: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager



SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.



TABLE OF CONTENTS

REVISION HISTORY..... 3

SUMMARY OF TEST RESULT 4

1 GENERAL DESCRIPTION 5

 1.1 Applicant 5

 1.2 Manufacturer 5

 1.3 Product Feature of Equipment Under Test..... 5

 1.4 Product Specification of Equipment Under Test..... 6

 1.5 Modification of EUT 6

 1.6 Emission Designator 7

 1.7 Testing Location 9

 1.8 Applicable Standards..... 9

2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST 10

 2.1 Test Mode 10

 2.2 Connection Diagram of Test System 12

 2.3 Support Unit used in test configuration and system 12

 2.4 Measurement Results Explanation Example 12

 2.5 Frequency List of Low/Middle/High Channels 13

3 CONDUCTED TEST ITEMS 16

 3.1 Measuring Instruments 16

 3.2 Test Setup 16

 3.3 Test Result of Conducted Test 16

 3.4 Conducted Output Power and EIRP 17

 3.5 Peak-to-Average Ratio 18

 3.6 Occupied Bandwidth 19

 3.7 Conducted Band Edge 20

 3.8 Conducted Spurious Emission 22

 3.9 Frequency Stability 23

4 RADIATED TEST ITEMS 24

 4.1 Measuring Instruments 24

 4.2 Test Setup 24

 4.3 Test Result of Radiated Test 24

 4.4 Radiated Spurious Emission 25

5 LIST OF MEASURING EQUIPMENT 26

6 UNCERTAINTY OF EVALUATION 27

APPENDIX A. TEST RESULTS OF CONDUCTED TEST

APPENDIX B. TEST RESULTS OF ERP/EIRP AND RADIATED TEST

APPENDIX C. ORIGINAL REPORT



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§22.913(a)(2)	Equivalent Isotropic Radiated Power (Band 5)	EIRP < 11.5 Watt		
	§27.50(c)(10)	Equivalent Isotropic Radiated Power (Band 12) (Band 17)	EIRP < 5 Watt		
	§24.232(c)	Equivalent Isotropic Radiated Power (Band 2)	EIRP < 2Watt		
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4) (Band 66)	EIRP < 1Watt		
3.5	§24.232(d)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §22.917(a) §24.238(a) §27.53(h)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 66)	< 43+10log ₁₀ (P[Watts])	PASS	-
3.8	§2.1051 §22.917(a) §24.238(a) §27.53(h)	Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 66)	< 43+10log ₁₀ (P[Watts])	PASS	-
3.9	§2.1055 §22.355	Frequency Stability Temperature & Voltage	< 2.5 ppm for RSS-132	PASS	-
	§2.1055 §24.235 §27.54		Within Authorized Band		
4.4	§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 66)	< 43+10log ₁₀ (P[Watts])	PASS	Under limit 39.09 dB at 3700.000 MHz
<p>Note: This is a variant report which can be referred Product Equality Declaration. All the test cases were performed on original report which can be referred to Sporton Report Number FG7D2018C. Based on the original report, the test cases were verified.</p>					



1 General Description

1.1 Applicant

Motorola Mobility LLC
222 W. Merchandise Mart Plaza, Chicago IL 60654, USA

1.2 Manufacturer

Motorola Mobility LLC
222 W. Merchandise Mart Plaza, Chicago IL 60654, USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT1921-2
FCC ID	IHDT56XC4
IMEI Code	351840090009840 (for Radiation) 351840090015086 (for Conducted)
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE/FM/GNSS WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 Bluetooth BR/EDR/LE
HW Version	DVT1B
EUT Stage	Identical Prototype

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

Accessory List	
AC Adapter 1	Brand Name : Motorola
	Model Name : C-P56
AC Adapter 2	Brand Name : Motorola
	Model Name : C-P56
Battery	Brand Name : Motorola
	Model Name : GK40
USB Cable	Brand Name : Saibao
	Model Name : SWT-A083A



1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
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 12 : 699.7 MHz ~ 715.3 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz LTE Band 66 : 1710.7 MHz ~ 1754.3 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 12 : 729.7 MHz ~ 745.3 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz LTE Band 66 : 2110.7 MHz ~ 2154.3 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 12 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 17 : 5MHz / 10MHz LTE Band 66 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	LTE Band 2 : 23.10 dBm LTE Band 4 : 23.32 dBm LTE Band 5 : 23.13 dBm LTE Band 12 : 23.01 dBm LTE Band 17 : 23.21 dBm LTE Band 66 : 23.34 dBm
Antenna Type	PIFA Antenna and Coupling type (LDS) Antenna
Antenna Gain	LTE Band 2 : 1.82 dBi LTE Band 4 : 1.58 dBi LTE Band 5 : -0.71 dBi LTE Band 12 : -3.95 dBi LTE Band 17 : -2.16 dBi LTE Band 66 : 1.58 dBi
Type of Modulation	QPSK / 16QAM

1.5 Modification of EUT

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



1.6 Emission Designator

LTE Band 2		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	1850.7 ~ 1909.3	1M10G7D	-	0.3069	1M10W7D	-	0.2594
3	1851.5 ~ 1908.5	2M72G7D	-	0.3097	2M73W7D	-	0.2655
5	1852.5 ~ 1907.5	4M52G7D	-	0.3083	4M50W7D	-	0.2773
10	1855.0 ~ 1905.0	9M03G7D	0.0079	0.3069	9M03W7D	-	0.2748
15	1857.5 ~ 1902.5	13M4G7D	-	0.3069	13M6W7D	-	0.2716
20	1860.0 ~ 1900.0	18M3G7D	-	0.3105	18M4W7D	-	0.2655
LTE Band 4		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	1710.7 ~ 1754.3	1M10G7D	-	0.2911	1M09W7D	-	0.2541
3	1711.5 ~ 1753.5	2M73G7D	-	0.2938	2M72W7D	-	0.2460
5	1712.5 ~ 1752.5	4M48G7D	-	0.2897	4M50W7D	-	0.2523
10	1715.0 ~ 1750.0	9M09G7D	0.0043	0.3090	9M03W7D	-	0.2661
15	1717.5 ~ 1747.5	13M5G7D	-	0.2773	13M5W7D	-	0.2404
20	1720.0 ~ 1745.0	18M5G7D	-	0.2838	18M3W7D	-	0.2371
LTE Band 5		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)
1.4	824.7 ~ 848.3	1M09G7D	-	0.0982	1M10W7D	-	0.0836
3	825.5 ~ 847.5	2M74G7D	-	0.0975	2M72W7D	-	0.0857
5	826.5 ~ 846.5	4M49G7D	-	0.0979	4M50W7D	-	0.0838
10	829.0 ~ 844.0	9M11G7D	0.0038	0.1064	9M03W7D	-	0.0889
LTE Band 12		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)
1.4	699.7 ~ 715.3	-	-	0.0468	-	-	0.0401
3	700.5 ~ 714.5	-	-	0.0457	-	-	0.0397
5	701.5 ~ 713.5	-	-	0.0467	-	-	0.0399
10	704.0 ~ 711.0	-	-	0.0491	-	-	0.0407



LTE Band 17		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)
5	706.5 ~ 713.5	-	-	0.0706	-	-	0.0604
10	709.0 ~ 711.0	-	-	0.0776	-	-	0.0614
LTE Band 66		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	1710.7 ~ 1779.3	1M10G7D	-	0.2767	1M10G7D	-	0.2410
3	1711.5 ~ 1778.5	2M73G7D	-	0.2773	2M73G7D	-	0.2393
5	1712.5 ~ 1777.5	4M49G7D	-	0.2858	4M50W7D	-	0.2449
10	1715 ~ 1775	9M03G7D	0.0048	0.3097	9M05W7D	-	0.2570
15	1717.5 ~ 1772.5	13M4G7D	-	0.2884	13M5W7D	-	0.2460
20	1720.0 ~ 1770.0	18M5G7D	-	0.3105	18M5W7D	-	0.2443



1.7 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1190 and TW0007 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	Sporton Site No. TH05-HY

Note: The test site complies with ANSI C63.4 2014 requirement.

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd. Guishan Dist, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sporton Site No. 03CH12-HY

Note: The test site complies with ANSI C63.4 2014 requirement.

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
- ♦ ANSI / TIA-603-E
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v02r02
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

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 ICES-003, 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 v02r02 with maximum output power.

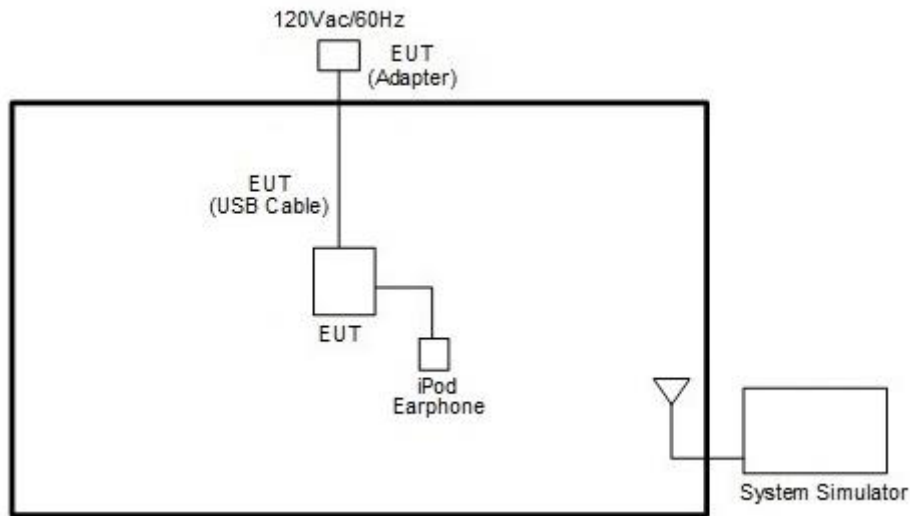
Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

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
	12	v	v	v	v	-	-	v	v	v	v	v	v	v	v
	17	-	-	v	v	-	-	v	v	v	v	v	v	v	v
	66	v	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	v
	4						v	v	v	v		v	v	v	v
	5				v	-	-	v	v	v		v	v	v	v
	66						v	v	v	v		v	v	v	v
26dB and 99% Bandwidth	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
	66	v	v	v	v	v	v	v	v			v	v	v	v
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
	66	v	v	v	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 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
	66	v	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	
	66				v			v				v		v	
E.R.P./ E.I.R.P.	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
	12	v	v	v	v	-	-	v	v	v			v	v	v
	17	-	-	v	v	-	-	v	v	v			v	v	v
	66	v	v	v	v	v	v	v	v	v			v	v	v
Radiated Spurious Emission	2	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
	12	v	v	v	v	-	-	v		v			v	v	v
	17	-	-	v	v	-	-	v		v			v	v	v
	66	v	v	v	v	v	v	v		v			v	v	v
Note	<p>1. The mark "v " means that this configuration is chosen for testing</p> <p>2. The mark "- " means that this bandwidth is not supported.</p> <p>3. 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.</p>														

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.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A

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 4.2 dB and 10dB attenuator.

Example :

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\ &= 4.2 + 10 = 14.2 \text{ (dB)} \end{aligned}$$



2.5 Frequency List of Low/Middle/High Channels

LTE Band 2 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	18700	18900	19100
	Frequency	1860	1880	1900
15	Channel	18675	18900	19125
	Frequency	1857.5	1880	1902.5
10	Channel	18650	18900	19150
	Frequency	1855	1880	1905
5	Channel	18625	18900	19175
	Frequency	1852.5	1880	1907.5
3	Channel	18615	18900	19185
	Frequency	1851.5	1880	1908.5
1.4	Channel	18607	18900	19193
	Frequency	1850.7	1880	1909.3

LTE Band 4 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	20050	20175	20300
	Frequency	1720	1732.5	1745
15	Channel	20025	20175	20325
	Frequency	1717.5	1732.5	1747.5
10	Channel	20000	20175	20350
	Frequency	1715	1732.5	1750
5	Channel	19975	20175	20375
	Frequency	1712.5	1732.5	1752.5
3	Channel	19965	20175	20385
	Frequency	1711.5	1732.5	1753.5
1.4	Channel	19957	20175	20393
	Frequency	1710.7	1732.5	1754.3



LTE Band 5 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	20450	20525	20600
	Frequency	829	836.5	844
5	Channel	20425	20525	20625
	Frequency	826.5	836.5	846.5
3	Channel	20415	20525	20635
	Frequency	825.5	836.5	847.5
1.4	Channel	20407	20525	20643
	Frequency	824.7	836.5	848.3

LTE Band 12 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	23060	23095	23130
	Frequency	704	707.5	711
5	Channel	23035	23095	23155
	Frequency	701.5	707.5	713.5
3	Channel	23025	23095	23165
	Frequency	700.5	707.5	714.5
1.4	Channel	23017	23095	23173
	Frequency	699.7	707.5	715.3

LTE Band 17 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	23780	23790	23800
	Frequency	709	710	711
5	Channel	23755	23790	23825
	Frequency	706.5	710	713.5



LTE Band 66 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	132072	132322	132572
	Frequency	1720	1745	1770
15	Channel	132047	132322	132597
	Frequency	1717.5	1745	1772.5
10	Channel	132022	132322	132622
	Frequency	1715	1745	1775
5	Channel	131997	132322	132647
	Frequency	1712.5	1745	1777.5
3	Channel	131987	132322	132657
	Frequency	1711.5	1745	1778.5
1.4	Channel	131979	132322	132665
	Frequency	1710.7	1745	1779.3

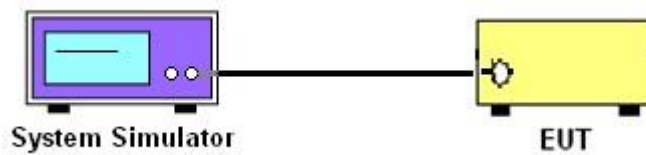
3 Conducted Test Items

3.1 Measuring Instruments

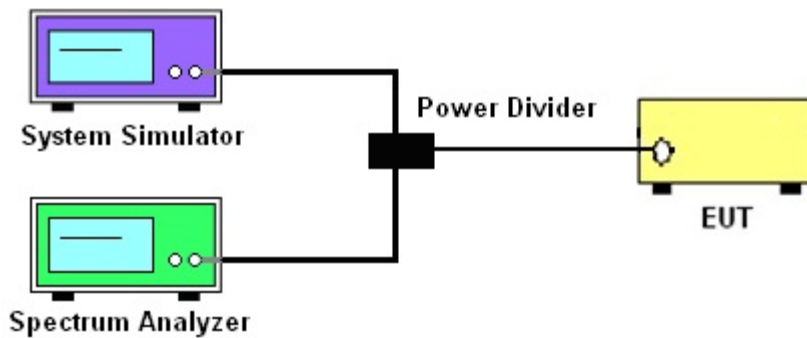
See list of measuring instruments of this test report.

3.2 Test Setup

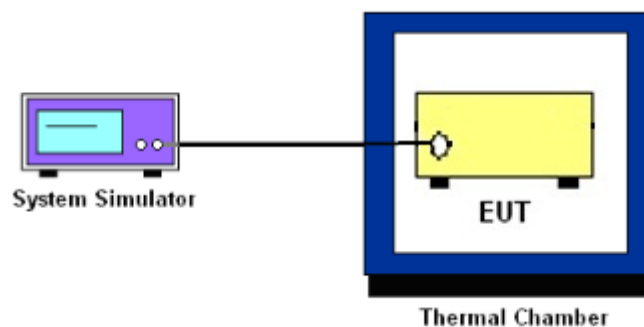
3.2.1 Conducted Output Power



3.2.2 Peak-to-Average Ratio, Occupied Bandwidth ,Conducted Band-Edge and Conducted Spurious Emission



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.



3.4 Conducted Output Power and EIRP

3.4.1 Description of the Conducted Output Power Measurement and EIRP 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.

The EIRP of mobile transmitters must not exceed 11 Watts for LTE Band 5.

The EIRP of mobile transmitters must not exceed 5 Watts for LTE Band 12 and Band 17.

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2.

The EIRP of mobile transmitters must not exceed 1 Watts for LTE Band 4 and Band 66.

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$, $ERP = EIRP - 2.15$, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

3.4.2 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.



3.5 Peak-to-Average Ratio

3.5.1 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.

3.5.2 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.



3.6 Occupied Bandwidth

3.6.1 Description of Occupied 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.

3.6.2 Test Procedures

The testing follows ANSI C63.26 Section 5.4

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
3. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
4. Set the detection mode to peak, and the trace mode to max hold.
5. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace.
(this is the reference value)
6. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
7. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “-X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
8. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.



3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

RSS – 132

For operations in the 824 – 849 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

RSS – 133

For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 1MHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

RSS – 139

For operations in the 1710 – 1755 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

RSS-199 4.5(b)

For mobile subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least: i) $40 + 10 \log_{10} p$ from the channel edges to 5 MHz away, ii) $43 + 10 \log_{10} p$ between 5 MHz and X MHz from the channel edges, and iii) $55 + 10 \log_{10} p$ at X MHz and beyond from the channel edges. iv) in addition, the attenuation shall be not be less than $43 + 10 \log_{10} p$ on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log_{10} p$ at or below 2490.5 MHz. where p in (a) and (b) is the transmitter power measured in watts and X is 6 MHz or the equipment occupied bandwidth, whichever is greater.



3.7.2 Test Procedures

The testing follows ANSI C63.26 Section 5.7.

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The band edges of low and high channels for the highest RF powers were measured.
3. Set RBW \geq 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
4. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
5. Set spectrum analyzer with RMS detector.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
7. Checked that all the results comply with the emission limit line.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)



3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

3.8.2 Test Procedures

The testing follows ANSI C63.26 Section 5.7.

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The middle channel for the highest RF power within the transmitting frequency was measured.
4. The conducted spurious emission for the whole frequency range was taken.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
6. Set spectrum analyzer with RMS detector.
7. Taking the record of maximum spurious emission.
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
9. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)



3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency.

3.9.2 Test Procedures for Temperature Variation

The testing follows ANSI C63.26 Section 5.6.

1. The EUT was set up in the thermal chamber and connected with the system simulator.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.9.3 Test Procedures for Voltage Variation

The testing follows ANSI C63.26 Section 5.6.

1. The EUT was placed in a temperature chamber at $20\pm 5^{\circ}\text{C}$ and connected with the system simulator.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

3.9.4 Test Procedures for Frequency Stability

1. The testing follows the Section 6.11 of RSS-GEN.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The EUT was operated at the lowest and highest channel.
4. For RSS-132, 133, 139 the frequency range shall be within the frequency range.
5. For RSS-130, 199, the frequency at these points shall be recorded as f_L and f_H respectively. The frequency stability by showing that f_L minus the frequency offset and f_H plus the frequency offset shall be within the frequency range that the equipment is designed to operate.

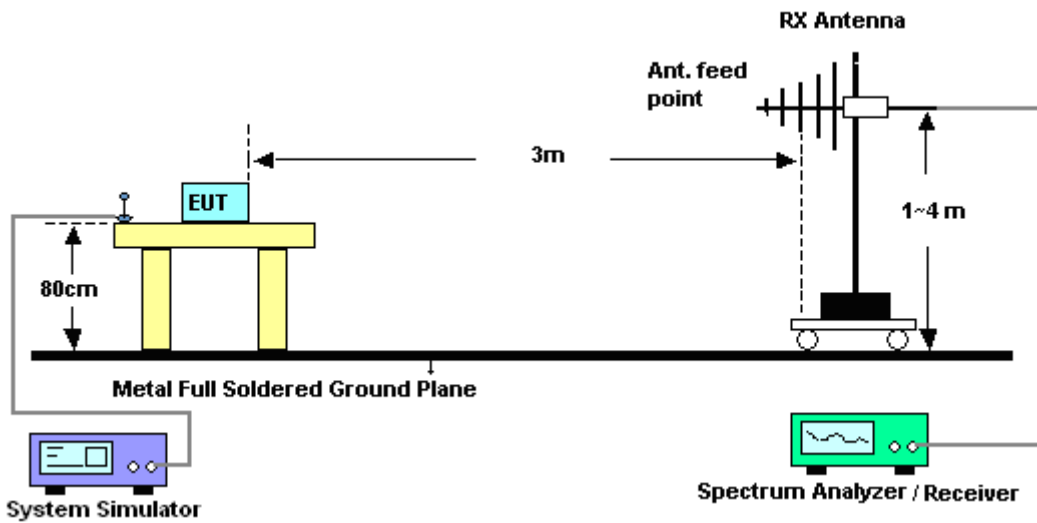
4 Radiated Test Items

4.1 Measuring Instruments

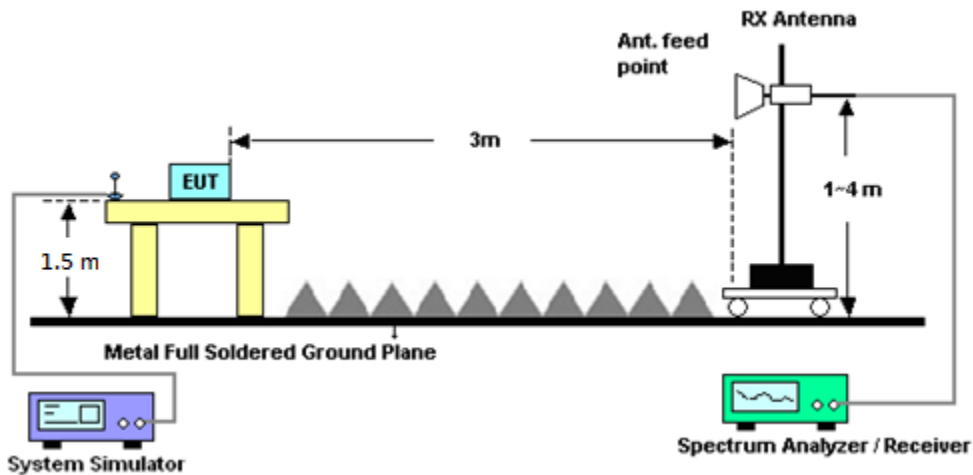
See list of measuring instruments of this test report.

4.2 Test Setup

4.2.1 For radiated test from 30MHz to 1GHz



4.2.2 For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.



4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

For LTE Band 12,17

For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.4.2 Test Procedures

The testing follows ANSI C63.26 Section 5.8 Measurement of spurious emissions using substitution method.

1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)



5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
LTE Base Station	Anritsu	MT8820C	620143282 1	GSM/GPRS /WCDMA/LTE	Oct. 13, 2017	Jan. 25, 2018~ Jan. 30, 2018	Oct. 12, 2018	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101397	10Hz~40GHz	Nov. 07, 2017	Jan. 25, 2018~ Jan. 30, 2018	Nov. 06, 2018	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV30	100895	9kHz~30GHz	Apr. 25, 2017	Jan. 25, 2018~ Jan. 30, 2018	Apr. 24, 2018	Conducted (TH05-HY)
Temperature Chamber	ESPEC	SH-641	92013720	-30°C~70°C	Aug. 28, 2017	Jan. 25, 2018~ Jan. 30, 2018	Aug. 27, 2018	Conducted (TH05-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL890001	1V~20V 0.5A~5A	Oct. 06, 2017	Jan. 25, 2018~ Jan. 30, 2018	Oct. 05, 2018	Conducted (TH05-HY)
Coupler	Warison	1-18GHz 20dB 25WSMA Directional Coupler	#B	1G~18GHz	Feb. 20, 2017	Jan. 25, 2018~ Jan. 30, 2018	Feb. 19, 2018	Conducted (TH05-HY)
Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 18, 2017	Jan. 15, 2017~ Jan. 16, 2018	Jul. 17, 2018	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	35413&02	30MHz~1GHz	Dec. 18, 2017	Jan. 15, 2017~ Jan. 16, 2018	Dec. 17, 2018	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-132 8	1GHz ~ 18GHz	Oct. 20, 2017	Jan. 15, 2017~ Jan. 16, 2018	Oct. 19, 2018	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 23, 2017	Jan. 15, 2017~ Jan. 16, 2018	Mar. 22, 2018	Radiation (03CH12-HY)
Preamplifier	Agilent	8449B	3008A023 75	1GHz~26.5GHz	Dec. 19, 2017	Jan. 15, 2017~ Jan. 16, 2018	Dec. 18, 2018	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Jan. 15, 2017~ Jan. 16, 2018	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jan. 15, 2017~ Jan. 16, 2018	N/A	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170 576	18GHz ~ 40GHz	Apr. 27, 2017	Jan. 15, 2017~ Jan. 16, 2018	Apr. 26, 2018	Radiation (03CH12-HY)
Spectrum Analyzer	Agilent	N9030A	MY523502 76	3Hz~44GHz	Mar. 23, 2017	Jan. 15, 2017~ Jan. 16, 2018	Mar. 22, 2018	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1212	1GHz ~ 18GHz	Mar. 17, 2017	Jan. 15, 2017~ Jan. 16, 2018	Mar. 16, 2018	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170 584	18GHz- 40GHz	Nov. 27, 2017	Jan. 15, 2017~ Jan. 16, 2018	Nov. 26, 2018	Radiation (03CH12-HY)
Signal Generator	Rohde & Schwarz	SMF100A	101107	100kHz~40GHz	May 22, 2017	Jan. 15, 2017~ Jan. 16, 2018	May 21, 2018	Radiation (03CH12-HY)



6 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.36
---	------

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.70
---	------

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.98
---	------



Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	22.64	22.76	22.82
20	1	49		22.92	23.10	22.95
20	1	99		22.59	22.68	22.61
20	50	0		22.01	22.15	22.03
20	50	24		21.93	22.13	21.97
20	50	50		21.78	21.89	21.80
20	100	0		21.83	21.98	21.97
20	1	0	16-QAM	22.18	22.30	22.42
20	1	49		22.07	22.32	22.29
20	1	99		21.87	21.96	21.84
20	50	0		20.81	21.09	21.03
20	50	24		20.92	21.12	20.94
20	50	50		20.71	20.87	20.75
20	100	0		20.82	20.96	20.96
15	1	0	QPSK	22.77	22.94	22.93
15	1	37		22.76	23.05	22.57
15	1	74		22.91	23.01	22.93
15	36	0		21.82	22.11	21.98
15	36	20		21.93	22.11	21.95
15	36	39		21.82	21.99	21.96
15	75	0		21.92	22.05	21.91
15	1	0	16-QAM	22.29	22.52	22.32
15	1	37		22.17	22.27	22.06
15	1	74		22.22	22.37	22.16
15	36	0		20.80	21.08	20.96
15	36	20		20.93	21.10	20.91
15	36	39		20.80	20.97	20.91
15	75	0		20.85	21.03	20.91



LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.72	22.98	22.92
10	1	25		22.85	23.05	23.02
10	1	49		22.98	23.02	22.95
10	25	0		21.84	22.16	21.96
10	25	12		21.83	22.13	21.96
10	25	25		21.90	22.15	21.92
10	50	0		21.83	22.16	21.96
10	1	0	16-QAM	22.23	22.57	22.46
10	1	25		22.15	22.44	22.24
10	1	49		22.21	22.40	22.25
10	25	0		20.90	21.18	20.94
10	25	12		20.83	21.13	20.94
10	25	25		20.90	21.15	20.90
10	50	0		20.81	21.12	20.89
5	1	0	QPSK	22.59	22.93	22.72
5	1	12		22.76	23.07	22.86
5	1	24		22.84	23.04	22.87
5	12	0		21.91	22.19	22.04
5	12	7		21.89	22.17	21.97
5	12	13		21.85	22.08	21.92
5	25	0		21.94	22.20	21.97
5	1	0	16-QAM	22.28	22.61	22.35
5	1	12		22.12	22.38	22.20
5	1	24		22.11	22.44	22.27
5	12	0		20.96	21.23	21.07
5	12	7		20.88	21.20	20.96
5	12	13		20.85	21.10	20.95
5	25	0		20.86	21.16	20.95



LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.85	22.81	22.60
3	1	8		22.81	23.09	22.86
3	1	14		22.75	23.02	22.80
3	8	0		21.86	22.12	21.89
3	8	4		21.81	22.10	21.91
3	8	7		21.78	22.05	21.85
3	15	0		21.83	22.08	21.87
3	1	0	16-QAM	22.09	22.42	22.23
3	1	8		22.08	22.42	22.15
3	1	14		22.00	22.28	22.14
3	8	0		20.89	21.20	20.92
3	8	4		20.87	21.16	20.97
3	8	7		20.84	21.13	20.93
3	15	0		20.80	21.14	20.88
1.4	1	0	QPSK	22.70	22.73	22.49
1.4	1	3		22.76	23.04	22.85
1.4	1	5		22.69	23.05	22.75
1.4	3	0		22.72	23.00	22.75
1.4	3	1		22.75	23.05	22.77
1.4	3	3		22.71	22.99	22.73
1.4	6	0		21.71	22.00	21.79
1.4	1	0	16-QAM	21.98	22.28	22.08
1.4	1	3		22.04	22.32	22.10
1.4	1	5		21.99	22.29	22.10
1.4	3	0		21.74	22.06	21.83
1.4	3	1		21.78	22.11	21.88
1.4	3	3		21.71	22.05	21.86
1.4	6	0		20.76	21.07	20.88



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	22.26	22.37	22.40
20	1	49		22.90	22.95	22.86
20	1	99		22.51	22.69	22.80
20	50	0		21.71	21.79	21.91
20	50	24		21.67	21.83	21.96
20	50	50		21.62	21.70	21.92
20	100	0		21.68	21.72	21.87
20	1	0	16-QAM	21.74	21.66	21.82
20	1	49		21.76	21.97	22.17
20	1	99		21.65	21.89	22.00
20	50	0		20.71	20.80	20.93
20	50	24		20.72	20.81	20.97
20	50	50		20.63	20.72	20.98
20	100	0		20.68	20.74	20.90
15	1	0	QPSK	22.47	22.49	22.78
15	1	37		22.27	22.50	22.85
15	1	74		22.50	22.61	22.80
15	36	0		21.81	21.85	21.94
15	36	20		21.79	21.88	22.04
15	36	39		21.72	21.73	21.91
15	75	0		21.68	21.81	22.02
15	1	0	16-QAM	21.94	21.88	22.17
15	1	37		21.80	21.91	22.23
15	1	74		21.67	21.94	22.07
15	36	0		20.81	20.85	20.96
15	36	20		20.68	20.82	21.06
15	36	39		20.71	20.73	20.92
15	75	0		20.70	20.79	20.96



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.66	23.17	23.00
10	1	25		22.81	22.94	23.17
10	1	49		23.13	23.27	23.32
10	25	0		21.69	21.90	22.06
10	25	12		21.80	21.91	22.14
10	25	25		21.88	22.05	22.24
10	50	0		21.86	21.92	22.20
10	1	0	16-QAM	22.22	22.25	22.49
10	1	25		21.92	21.95	22.31
10	1	49		22.29	22.50	22.67
10	25	0		20.83	20.89	21.11
10	25	12		20.80	20.86	21.15
10	25	25		20.90	21.02	21.15
10	50	0		20.91	20.98	21.22
5	1	0	QPSK	22.56	22.53	22.93
5	1	12		22.61	22.77	23.02
5	1	24		22.70	22.92	23.04
5	12	0		21.79	21.93	22.12
5	12	7		21.70	21.88	22.09
5	12	13		21.79	21.91	22.07
5	25	0		21.74	21.87	22.08
5	1	0	16-QAM	22.05	22.02	22.44
5	1	12		21.83	21.96	22.26
5	1	24		22.00	22.18	22.34
5	12	0		20.76	20.90	21.16
5	12	7		20.73	20.93	21.12
5	12	13		20.77	20.87	21.10
5	25	0		20.65	20.88	21.10



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.35	22.44	22.75
3	1	8		22.60	22.79	23.10
3	1	14		22.57	22.75	22.96
3	8	0		21.69	21.82	22.03
3	8	4		21.68	21.81	22.04
3	8	7		21.64	21.81	22.02
3	15	0		21.63	21.80	22.02
3	1	0	16-QAM	21.93	22.21	22.29
3	1	8		21.92	21.99	22.33
3	1	14		21.82	22.32	22.29
3	8	0		20.71	20.86	21.10
3	8	4		20.72	20.87	21.10
3	8	7		20.66	20.85	21.07
3	15	0		20.63	20.83	21.04
1.4	1	0	QPSK	22.31	22.60	22.68
1.4	1	3		22.65	22.76	23.02
1.4	1	5		22.56	22.73	22.95
1.4	3	0		22.61	22.74	22.95
1.4	3	1		22.67	22.70	23.01
1.4	3	3		22.64	22.77	23.06
1.4	6	0		21.65	21.74	22.01
1.4	1	0	16-QAM	21.86	21.90	22.47
1.4	1	3		21.86	22.31	22.44
1.4	1	5		21.80	21.92	22.42
1.4	3	0		21.64	21.75	22.05
1.4	3	1		21.70	21.77	22.04
1.4	3	3		21.63	21.75	22.02
1.4	6	0		20.71	20.82	21.11



LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.48	22.66	22.60
10	1	25		22.63	22.78	22.76
10	1	49		23.13	23.10	23.06
10	25	0		21.71	21.72	21.95
10	25	12		21.66	21.84	21.81
10	25	25		21.84	21.89	21.88
10	50	0		21.71	21.83	21.93
10	1	0	16-QAM	22.01	22.06	22.21
10	1	25		21.85	22.10	21.96
10	1	49		22.16	22.35	22.27
10	25	0		20.71	20.75	20.94
10	25	12		20.67	20.84	20.84
10	25	25		20.78	20.90	20.88
10	50	0		20.71	20.86	20.95
5	1	0	QPSK	22.24	22.42	22.39
5	1	12		22.74	22.74	22.71
5	1	24		22.70	22.77	22.67
5	12	0		21.66	21.75	21.81
5	12	7		21.66	21.80	21.74
5	12	13		21.59	21.76	21.77
5	25	0		21.69	21.77	21.75
5	1	0	16-QAM	21.93	22.08	22.03
5	1	12		21.81	22.09	21.93
5	1	24		22.07	22.06	22.01
5	12	0		20.67	20.77	20.81
5	12	7		20.68	20.80	20.75
5	12	13		20.61	20.76	20.76
5	25	0		20.69	20.78	20.75



LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.16	22.31	22.31
3	1	8		22.62	22.75	22.72
3	1	14		22.59	22.62	22.60
3	8	0		21.60	21.67	21.68
3	8	4		21.59	21.76	21.79
3	8	7		21.60	21.71	21.74
3	15	0		21.62	21.76	21.74
3	1	0	16-QAM	21.82	22.01	21.97
3	1	8		22.19	22.05	22.05
3	1	14		21.93	21.92	22.02
3	8	0		20.68	20.71	20.74
3	8	4		20.70	20.82	20.80
3	8	7		20.64	20.77	20.77
3	15	0		20.58	20.78	20.78
1.4	1	0	QPSK	22.19	22.22	22.33
1.4	1	3		22.64	22.76	22.77
1.4	1	5		22.56	22.76	22.66
1.4	3	0		22.64	22.61	22.69
1.4	3	1		22.59	22.78	22.72
1.4	3	3		22.62	22.72	22.68
1.4	6	0		21.64	21.76	21.72
1.4	1	0	16-QAM	21.86	22.06	22.08
1.4	1	3		21.85	22.06	22.05
1.4	1	5		21.86	21.96	21.96
1.4	3	0		21.61	21.71	21.72
1.4	3	1		21.70	21.83	21.78
1.4	3	3		21.62	21.78	21.74
1.4	6	0		20.70	20.81	20.77



LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.75	22.76	22.66
10	1	25		22.71	22.80	22.70
10	1	49		22.76	22.83	23.01
10	25	0		21.73	21.65	21.77
10	25	12		21.71	21.74	21.72
10	25	25		21.69	21.77	21.86
10	50	0		21.83	21.70	21.73
10	1	0	16-QAM	21.98	22.20	22.08
10	1	25		21.83	21.94	21.83
10	1	49		22.03	22.09	22.07
10	25	0		20.86	20.68	20.75
10	25	12		20.68	20.76	20.72
10	25	25		20.69	20.75	20.78
10	50	0		20.80	20.71	20.76
5	1	0	QPSK	22.31	22.36	22.23
5	1	12		22.63	22.65	22.68
5	1	24		22.76	22.72	22.79
5	12	0		21.58	21.68	21.66
5	12	7		21.72	21.77	21.73
5	12	13		21.67	21.75	21.73
5	25	0		21.75	21.76	21.74
5	1	0	16-QAM	21.97	22.11	22.01
5	1	12		21.88	22.01	21.88
5	1	24		21.96	21.86	22.05
5	12	0		20.66	20.69	20.76
5	12	7		20.78	20.78	20.74
5	12	13		20.68	20.78	20.73
5	25	0		20.73	20.70	20.70



LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.21	22.24	22.19
3	1	8		22.64	22.70	22.67
3	1	14		22.56	22.65	22.62
3	8	0		21.62	21.68	21.64
3	8	4		21.64	21.74	21.71
3	8	7		21.63	21.64	21.64
3	15	0		21.59	21.71	21.69
3	1	0	16-QAM	21.71	21.86	21.85
3	1	8		22.09	21.88	22.02
3	1	14		21.82	22.09	21.98
3	8	0		20.69	20.73	20.69
3	8	4		20.70	20.79	20.72
3	8	7		20.67	20.69	20.68
3	15	0		20.66	20.73	20.69
1.4	1	0	QPSK	22.33	22.25	22.24
1.4	1	3		22.61	22.75	22.80
1.4	1	5		22.53	22.68	22.69
1.4	3	0		22.66	22.65	22.58
1.4	3	1		22.68	22.72	22.55
1.4	3	3		22.67	22.70	22.66
1.4	6	0		21.62	21.69	21.64
1.4	1	0	16-QAM	21.87	21.97	22.03
1.4	1	3		22.02	22.06	21.91
1.4	1	5		21.95	21.95	22.13
1.4	3	0		21.57	21.66	21.64
1.4	3	1		21.70	21.71	21.63
1.4	3	3		21.64	21.64	21.72
1.4	6	0		20.75	20.83	20.67



LTE Band 17 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.48	22.60	22.51
10	1	25		22.72	22.69	22.67
10	1	49		22.83	22.99	23.21
10	25	0		21.72	21.75	21.64
10	25	12		21.75	21.71	21.64
10	25	25		21.75	21.79	21.86
10	50	0		21.72	21.72	21.74
10	1	0	16-QAM	22.00	22.09	22.08
10	1	25		21.86	21.85	21.90
10	1	49		22.16	22.19	22.14
10	25	0		20.73	20.74	20.66
10	25	12		20.76	20.64	20.62
10	25	25		20.72	20.77	20.80
10	50	0		20.79	20.71	20.78
5	1	0	QPSK	22.23	22.23	22.26
5	1	12		22.62	22.54	22.59
5	1	24		22.57	22.69	22.80
5	12	0		21.64	21.59	21.73
5	12	7		21.63	21.62	21.71
5	12	13		21.70	21.69	21.84
5	25	0		21.70	21.63	21.83
5	1	0	16-QAM	21.97	21.96	21.92
5	1	12		21.84	21.80	21.91
5	1	24		21.86	22.04	22.12
5	12	0		20.64	20.62	20.75
5	12	7		20.70	20.68	20.73
5	12	13		20.72	20.69	20.72
5	25	0		20.67	20.64	20.76



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	22.39	22.67	22.75
20	1	49		22.53	22.96	22.83
20	1	99		23.24	23.14	23.34
20	50	0		21.62	21.82	21.89
20	50	24		21.73	21.94	21.89
20	50	50		21.78	21.90	21.85
20	100	0		21.69	21.85	21.94
20	1	0	16-QAM	21.83	21.89	21.99
20	1	49		21.78	22.12	22.00
20	1	99		22.04	22.30	22.29
20	50	0		20.70	20.82	20.90
20	50	24		20.70	20.90	20.89
20	50	50		20.82	20.91	20.84
20	100	0		20.67	20.82	20.95
15	1	0	QPSK	22.77	22.86	22.95
15	1	37		22.58	22.61	22.74
15	1	74		22.57	22.89	23.02
15	36	0		21.76	21.93	21.96
15	36	20		21.71	21.87	21.90
15	36	39		21.74	21.71	21.87
15	75	0		21.71	21.89	21.92
15	1	0	16-QAM	22.12	22.23	22.33
15	1	37		21.76	21.97	22.08
15	1	74		21.83	22.15	22.14
15	36	0		20.76	20.84	20.97
15	36	20		20.72	20.86	20.91
15	36	39		20.70	20.71	20.83
15	75	0		20.72	20.86	20.88



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.07	22.11	22.26
10	1	25		22.59	22.79	22.86
10	1	49		23.09	23.23	23.33
10	25	0		21.63	21.75	21.85
10	25	12		21.71	21.89	21.90
10	25	25		21.87	21.93	21.99
10	50	0		21.68	21.90	21.93
10	1	0	16-QAM	21.34	21.53	21.62
10	1	25		21.82	22.07	22.16
10	1	49		22.19	22.52	22.36
10	25	0		20.70	20.75	20.93
10	25	12		20.69	20.86	20.88
10	25	25		20.82	20.90	21.00
10	50	0		20.72	20.87	20.91
5	1	0	QPSK	22.51	22.80	22.97
5	1	12		22.53	22.84	22.98
5	1	24		22.57	22.81	22.81
5	12	0		21.65	21.91	21.95
5	12	7		21.56	21.89	21.89
5	12	13		21.65	21.81	21.83
5	25	0		21.61	21.87	21.88
5	1	0	16-QAM	22.00	22.17	22.31
5	1	12		21.79	22.03	22.09
5	1	24		21.90	22.09	22.03
5	12	0		20.69	20.95	21.04
5	12	7		20.63	20.87	20.92
5	12	13		20.67	20.79	20.89
5	25	0		20.62	20.85	20.90



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.37	22.59	22.72
3	1	8		22.49	22.79	22.85
3	1	14		22.59	22.73	22.81
3	8	0		21.61	21.85	21.83
3	8	4		21.60	21.84	21.84
3	8	7		21.54	21.79	21.80
3	15	0		21.54	21.83	21.87
3	1	0	16-QAM	21.91	22.11	22.21
3	1	8		21.86	22.08	22.06
3	1	14		21.92	22.09	22.04
3	8	0		20.63	20.88	20.94
3	8	4		20.63	20.85	20.90
3	8	7		20.55	20.80	20.86
3	15	0		20.63	20.80	20.87
1.4	1	0	QPSK	22.33	22.56	22.56
1.4	1	3		22.64	22.84	22.76
1.4	1	5		22.49	22.73	22.67
1.4	3	0		22.60	22.84	22.77
1.4	3	1		22.58	22.81	22.82
1.4	3	3		22.56	22.79	22.73
1.4	6	0		21.56	21.78	21.73
1.4	1	0	16-QAM	21.78	22.03	22.24
1.4	1	3		22.08	22.21	22.20
1.4	1	5		21.75	22.00	22.01
1.4	3	0		21.64	21.80	21.80
1.4	3	1		21.63	21.86	21.81
1.4	3	3		21.57	21.76	21.79
1.4	6	0		20.60	20.83	20.83



LTE Band 2

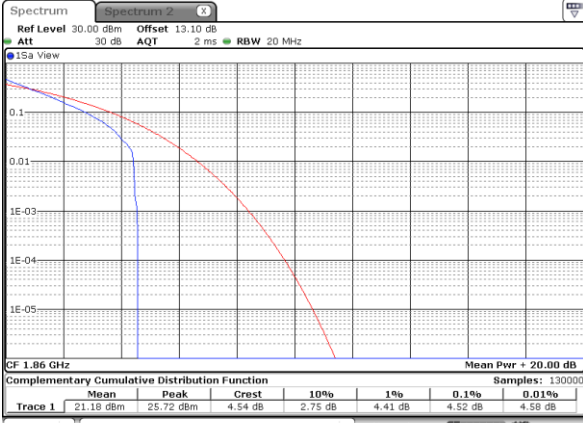
Peak-to-Average Ratio

Mode	LTE Band 2 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.52	4.81	5.28	5.86	PASS
Middle CH	4.49	5.1	5.22	6.09	
Highest CH	4.55	5.07	5.25	6.06	



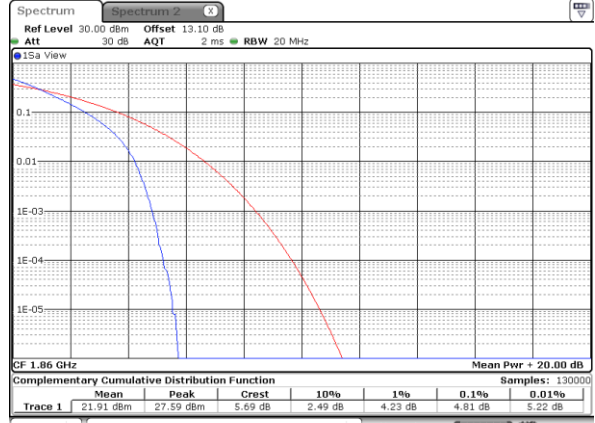
LTE Band 2 / 20MHz / QPSK

Lowest Channel / 1RB



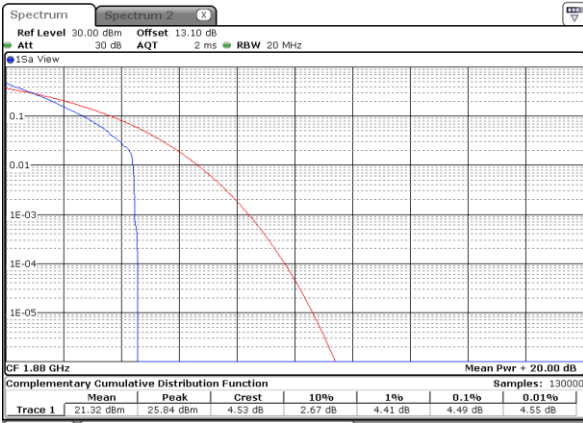
Date: 24.JAN.2018 01:59:03

Lowest Channel / Full RB



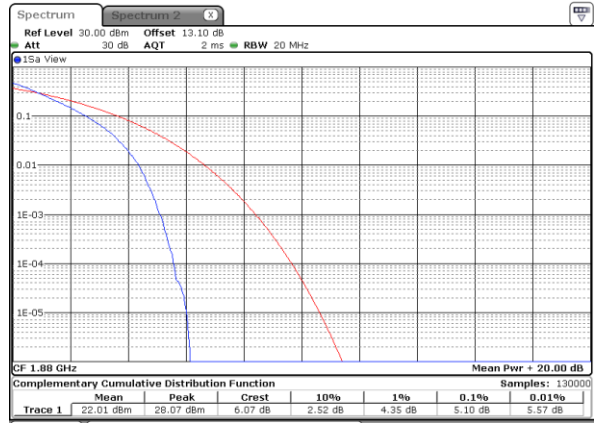
Date: 24.JAN.2018 01:59:19

Middle Channel / 1RB



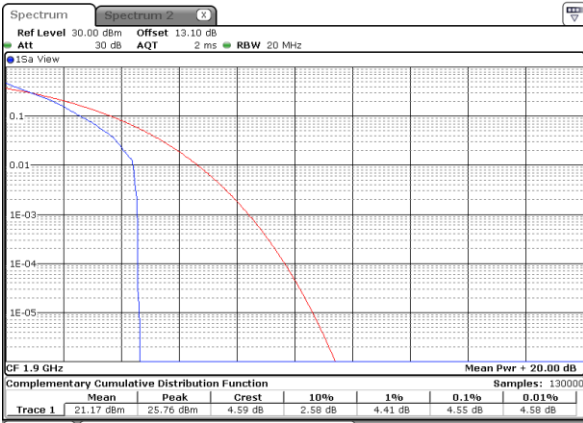
Date: 24.JAN.2018 01:59:29

Middle Channel / Full RB



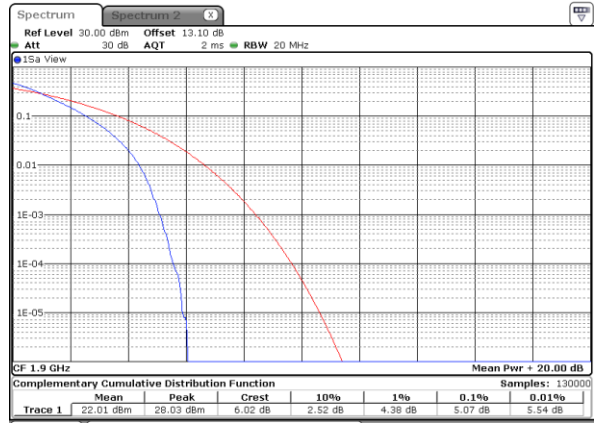
Date: 24.JAN.2018 01:59:40

Highest Channel / 1RB



Date: 24.JAN.2018 01:59:52

Highest Channel / Full RB

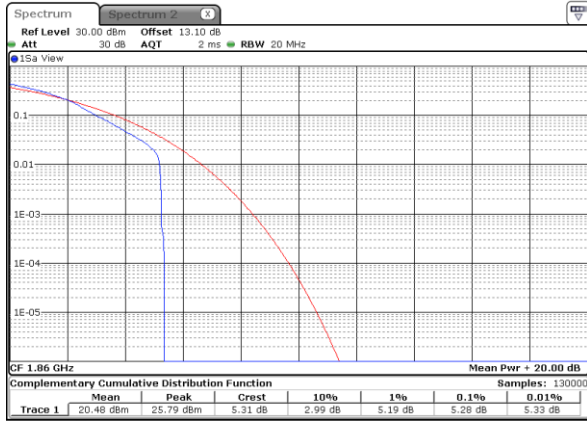


Date: 24.JAN.2018 02:00:04



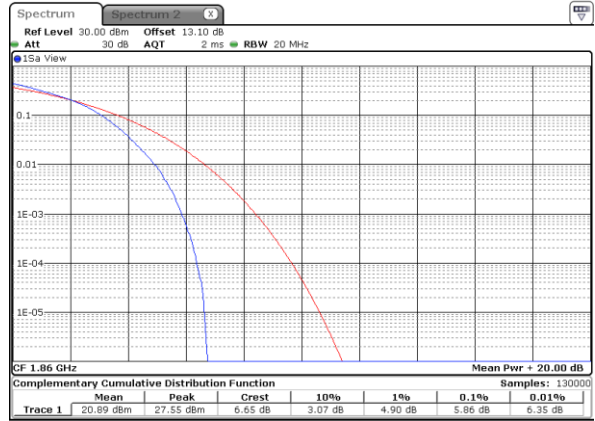
LTE Band 2 / 20MHz / 16QAM

Lowest Channel / 1RB



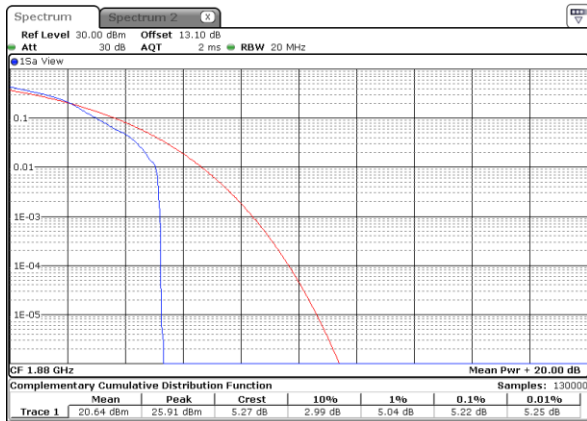
Date: 24.JAN.2018 01:56:29

Lowest Channel / Full RB



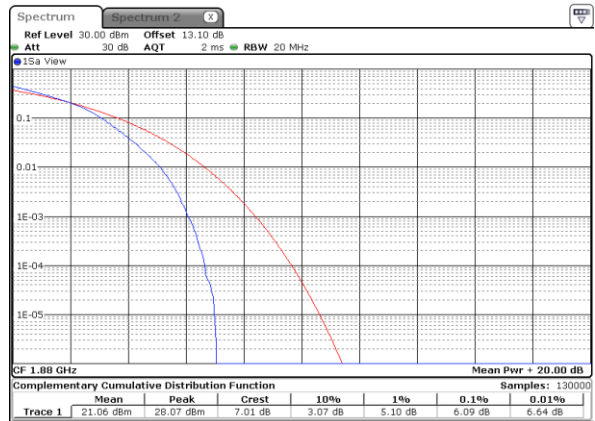
Date: 24.JAN.2018 01:56:57

Middle Channel / 1RB



Date: 24.JAN.2018 01:57:21

Middle Channel / Full RB



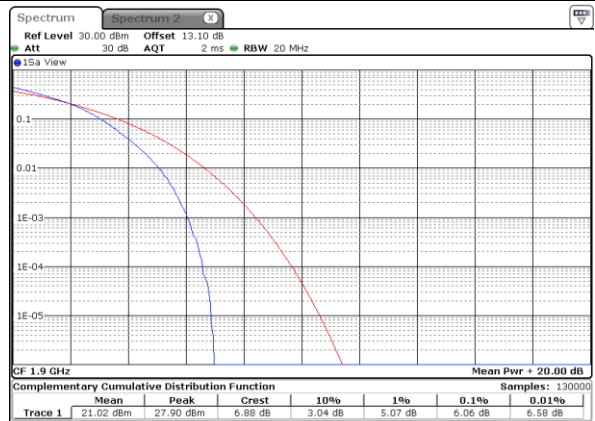
Date: 24.JAN.2018 01:58:18

Highest Channel / 1RB



Date: 24.JAN.2018 01:58:44

Highest Channel / Full RB



Date: 24.JAN.2018 02:02:10



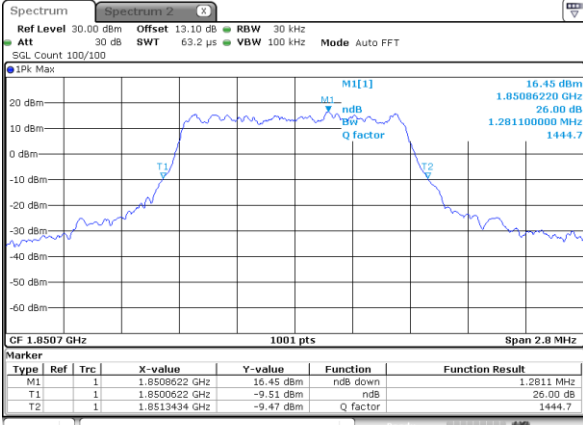
26dB Bandwidth

Mode	LTE Band 2 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW												
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.28	1.26	3.02	3.04	4.98	4.90	9.81	9.85	14.51	14.39	20.14	20.10
Middle CH	1.29	1.32	3.02	3.00	4.91	4.96	9.87	9.73	14.15	14.24	20.14	20.26
Highest CH	1.31	1.28	2.98	2.99	4.83	4.93	9.95	9.93	14.45	14.48	20.22	20.10



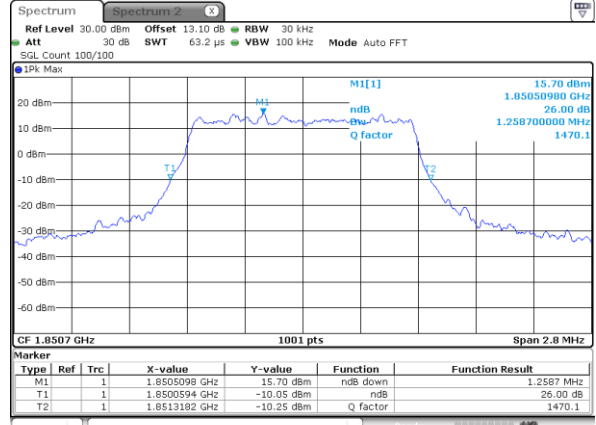
LTE Band 2

Lowest Channel / 1.4MHz / QPSK



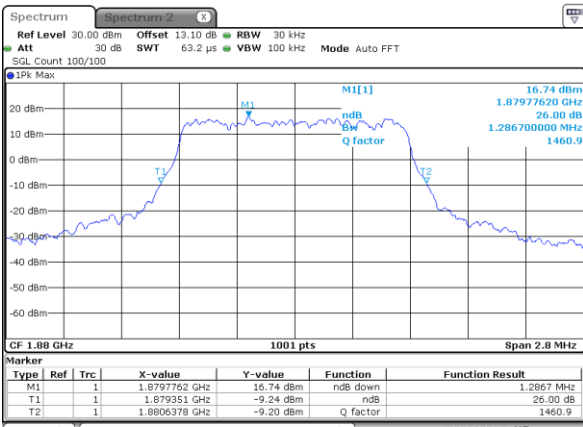
Date: 24_JAN.2018 01:39:39

Lowest Channel / 1.4MHz / 16QAM



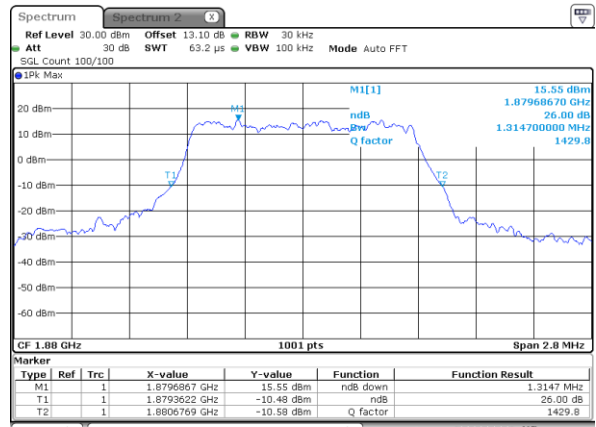
Date: 24_JAN.2018 01:39:50

Middle Channel / 1.4MHz / QPSK



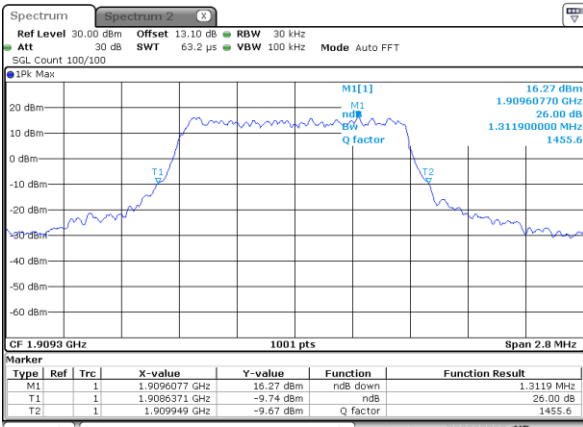
Date: 24_JAN.2018 01:46:52

Middle Channel / 1.4MHz / 16QAM



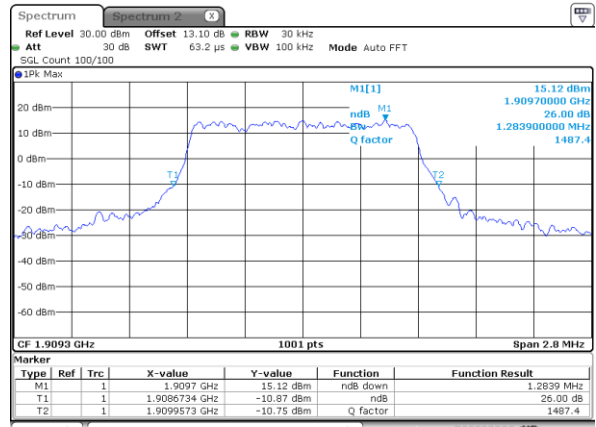
Date: 24_JAN.2018 01:47:04

Highest Channel / 1.4MHz / QPSK



Date: 24_JAN.2018 01:49:31

Highest Channel / 1.4MHz / 16QAM

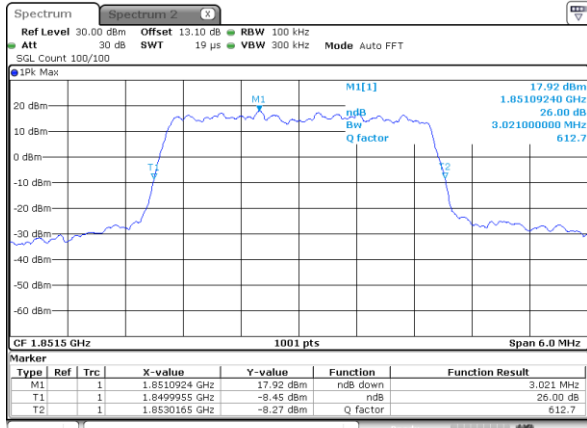


Date: 24_JAN.2018 01:49:42



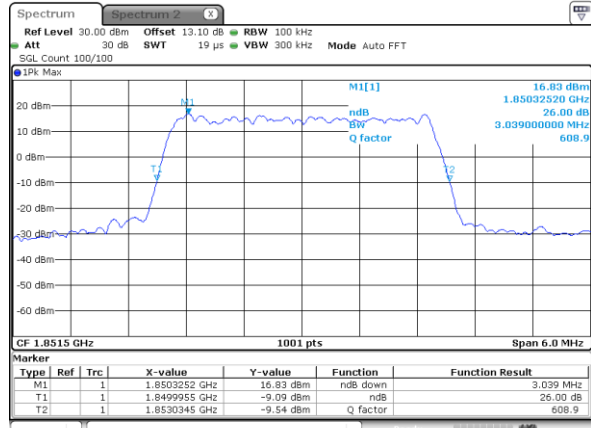
LTE Band 2

Lowest Channel / 3MHz / QPSK



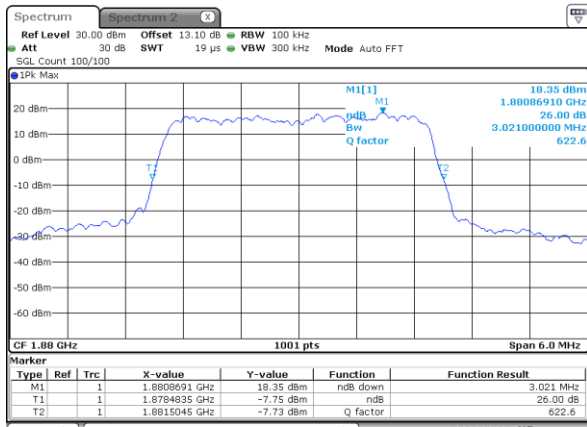
Date: 24.JAN.2018 00:11:10

Lowest Channel / 3MHz / 16QAM



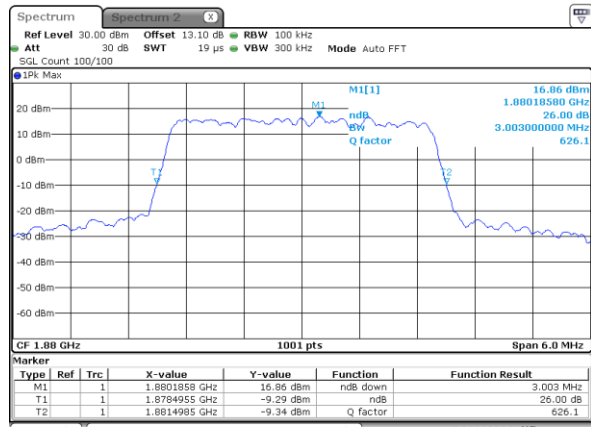
Date: 24.JAN.2018 00:11:121

Middle Channel / 3MHz / QPSK



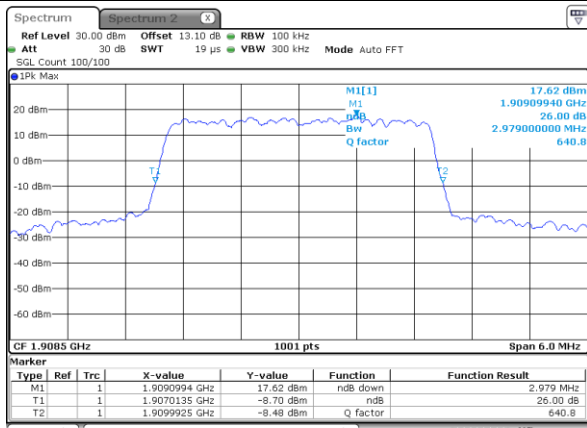
Date: 24.JAN.2018 00:18:25

Middle Channel / 3MHz / 16QAM



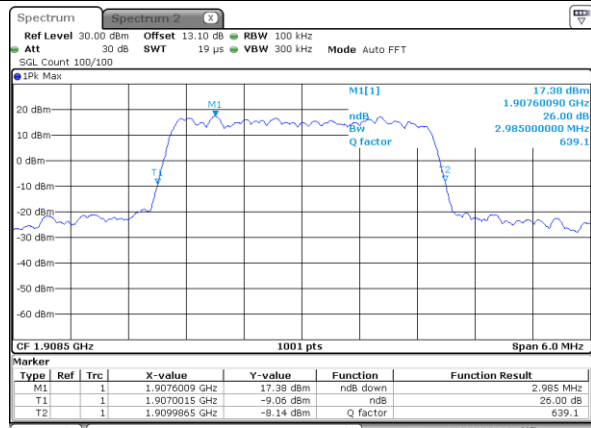
Date: 24.JAN.2018 00:18:136

Highest Channel / 3MHz / QPSK



Date: 24.JAN.2018 00:21:03

Highest Channel / 3MHz / 16QAM

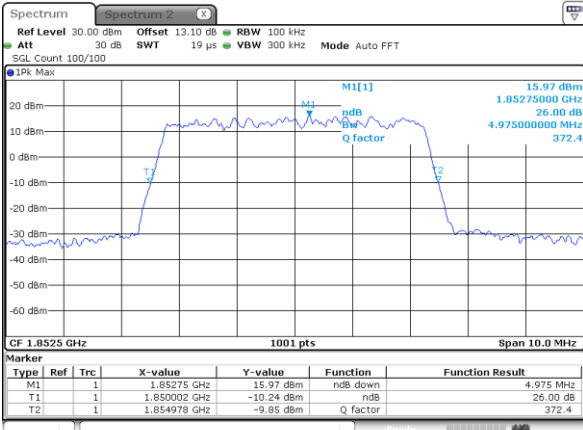


Date: 24.JAN.2018 00:21:114



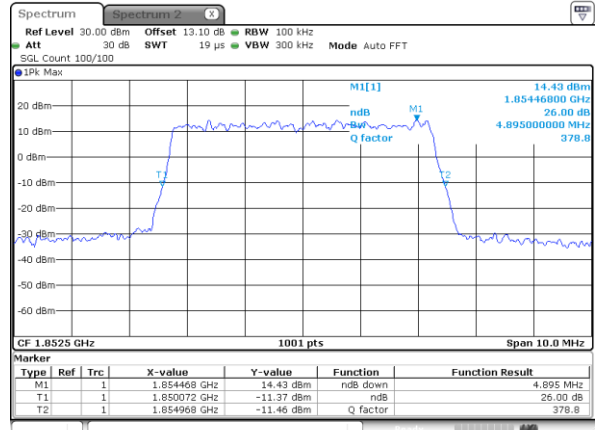
LTE Band 2

Lowest Channel / 5MHz / QPSK



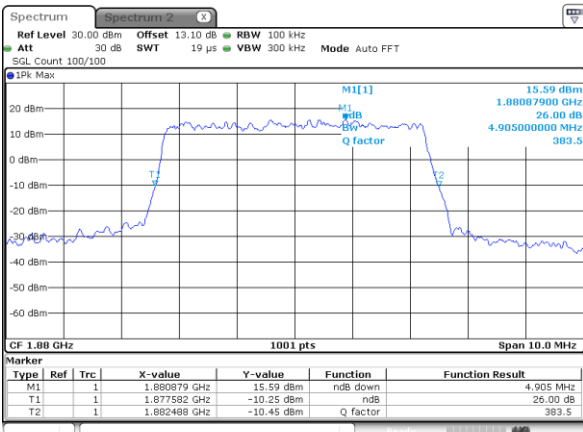
Date: 24_JAN.2018 00:28:10

Lowest Channel / 5MHz / 16QAM



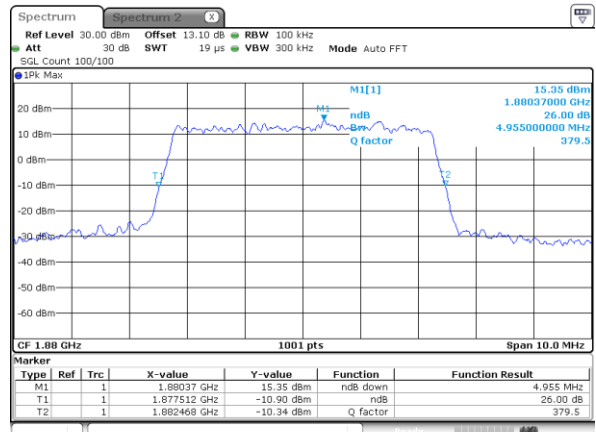
Date: 24_JAN.2018 00:28:29

Middle Channel / 5MHz / QPSK



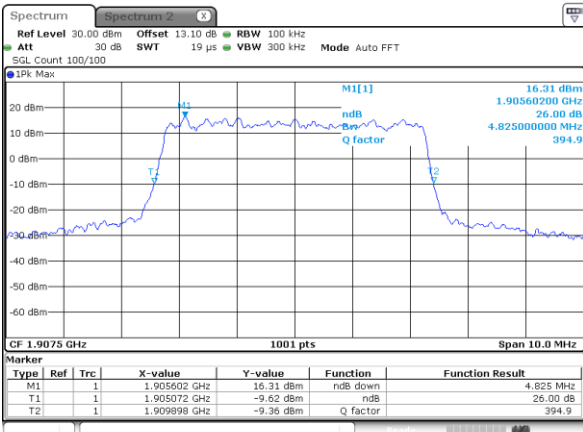
Date: 24_JAN.2018 00:35:33

Middle Channel / 5MHz / 16QAM



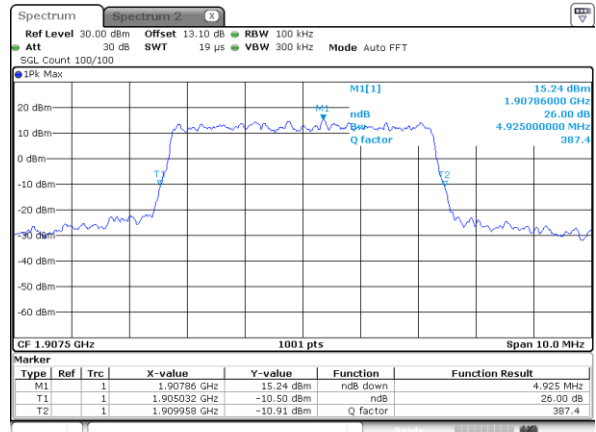
Date: 24_JAN.2018 00:35:44

Highest Channel / 5MHz / QPSK



Date: 24_JAN.2018 00:38:11

Highest Channel / 5MHz / 16QAM

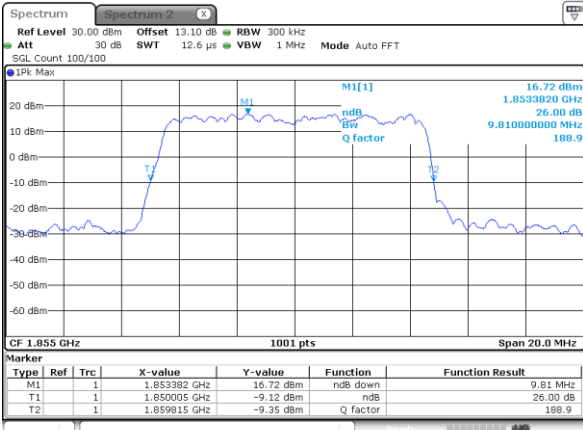


Date: 24_JAN.2018 00:38:23



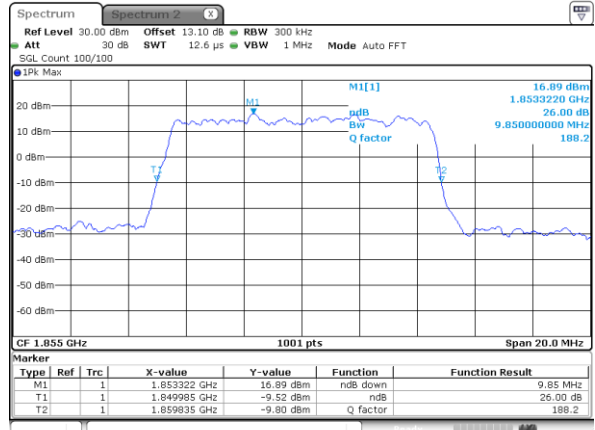
LTE Band 2

Lowest Channel / 10MHz / QPSK



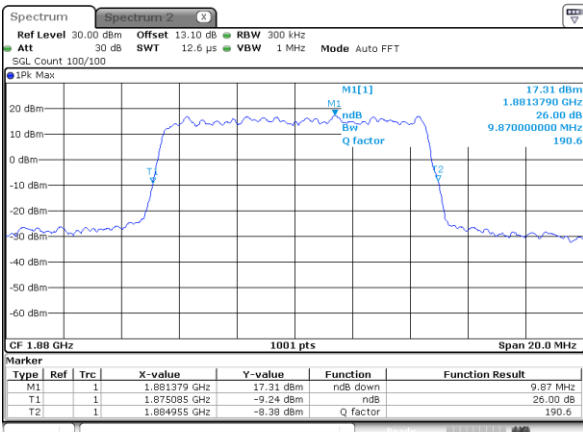
Date: 24_JAN.2018 00:45:26

Lowest Channel / 10MHz / 16QAM



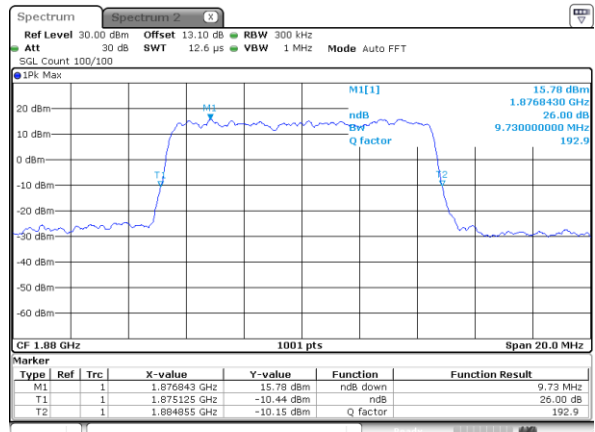
Date: 24_JAN.2018 00:45:37

Middle Channel / 10MHz / QPSK



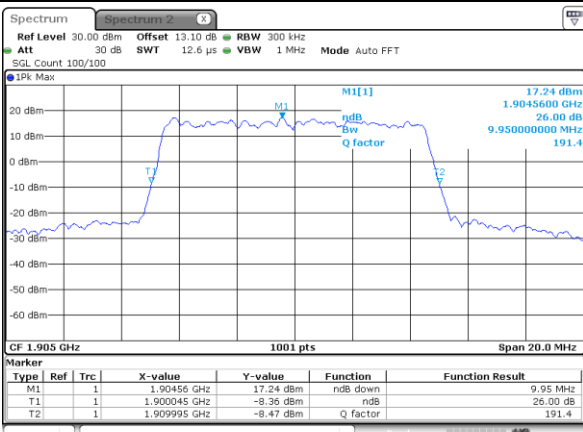
Date: 24_JAN.2018 00:52:40

Middle Channel / 10MHz / 16QAM



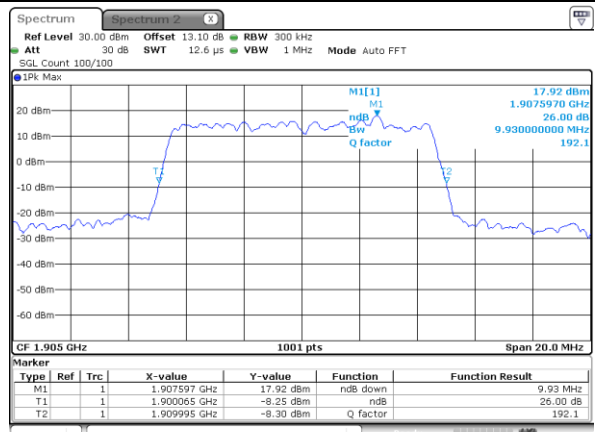
Date: 24_JAN.2018 00:52:52

Highest Channel / 10MHz / QPSK



Date: 24_JAN.2018 00:55:19

Highest Channel / 10MHz / 16QAM

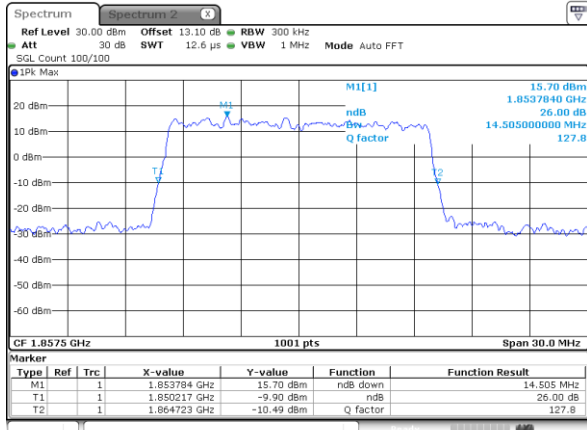


Date: 24_JAN.2018 00:55:30



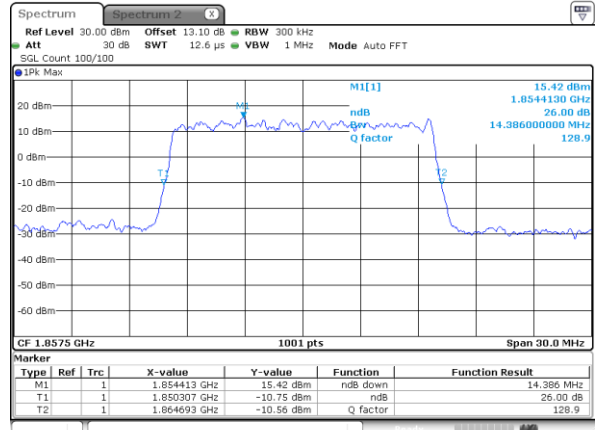
LTE Band 2

Lowest Channel / 15MHz / QPSK



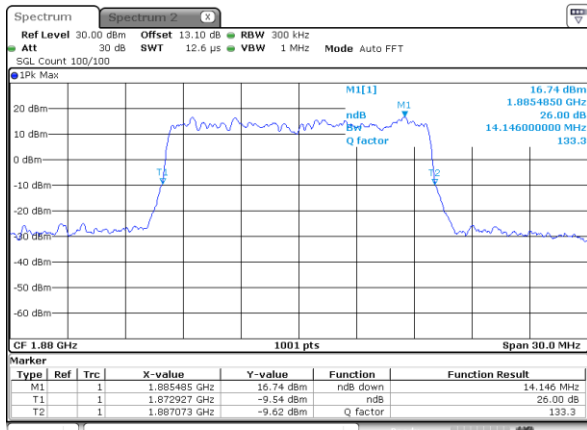
Date: 24_JAN.2018 01:02:134

Lowest Channel / 15MHz / 16QAM



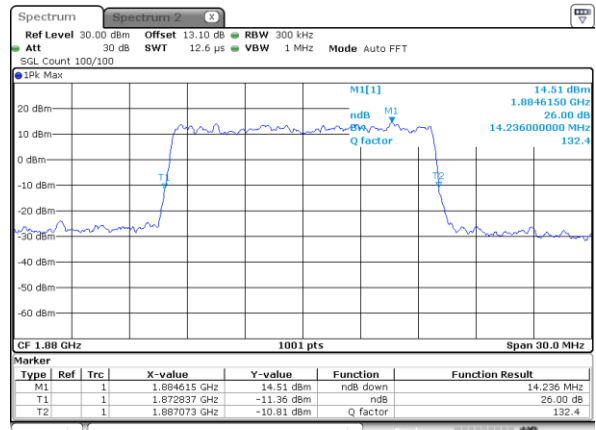
Date: 24_JAN.2018 01:02:145

Middle Channel / 15MHz / QPSK



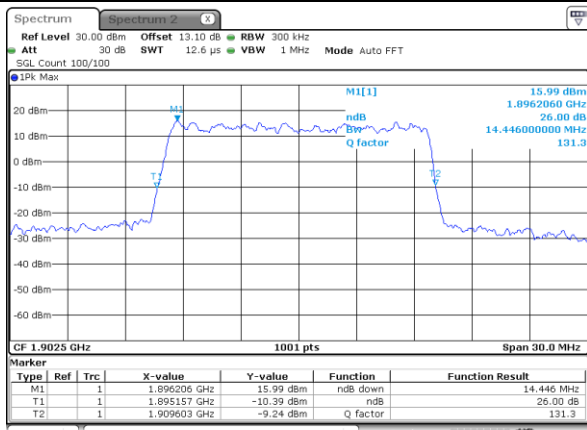
Date: 24_JAN.2018 01:09:47

Middle Channel / 15MHz / 16QAM



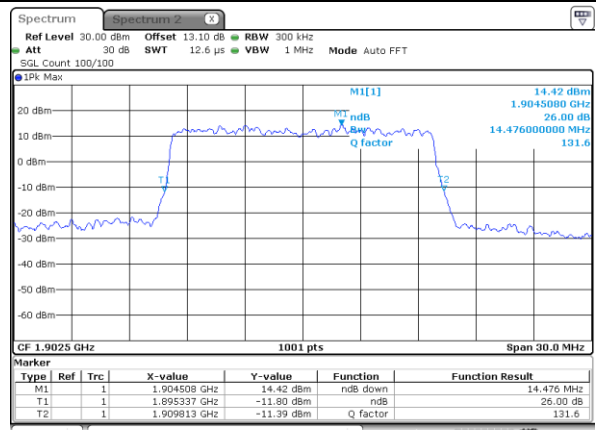
Date: 24_JAN.2018 01:09:158

Highest Channel / 15MHz / QPSK



Date: 24_JAN.2018 01:12:25

Highest Channel / 15MHz / 16QAM

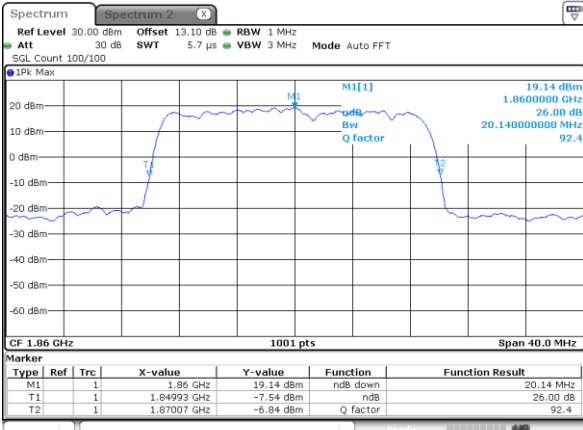


Date: 24_JAN.2018 01:12:136



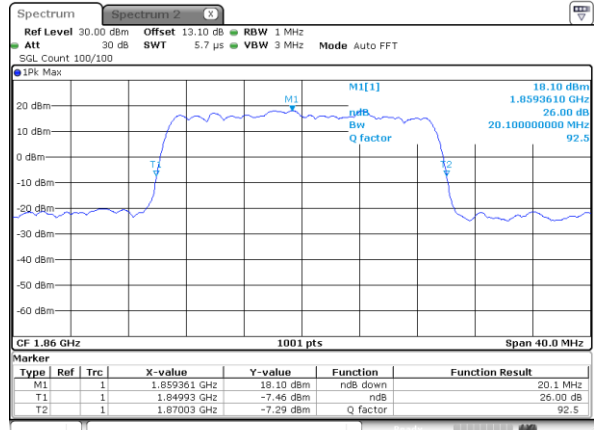
LTE Band 2

Lowest Channel / 20MHz / QPSK



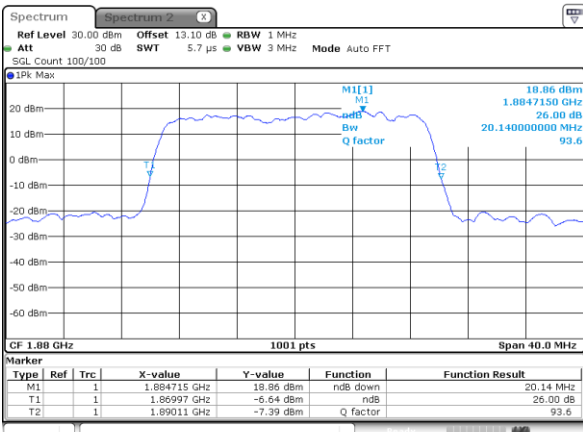
Date: 24_JAN_2018 01:19:40

Lowest Channel / 20MHz / 16QAM



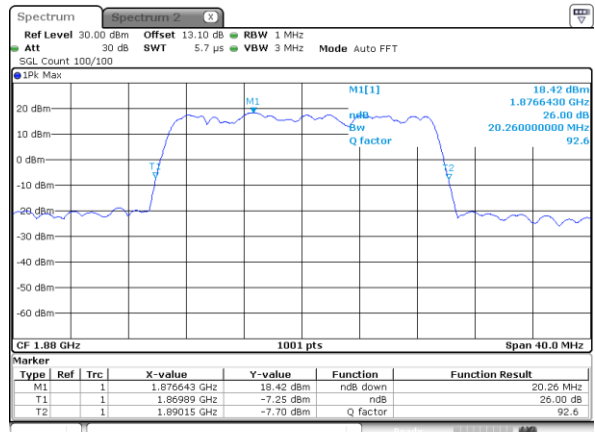
Date: 24_JAN_2018 01:19:51

Middle Channel / 20MHz / QPSK



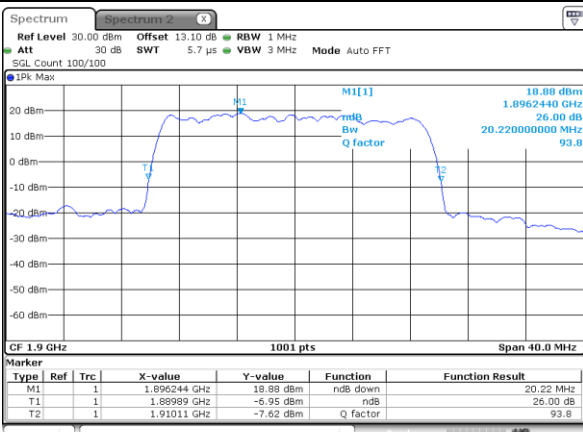
Date: 24_JAN_2018 01:26:53

Middle Channel / 20MHz / 16QAM



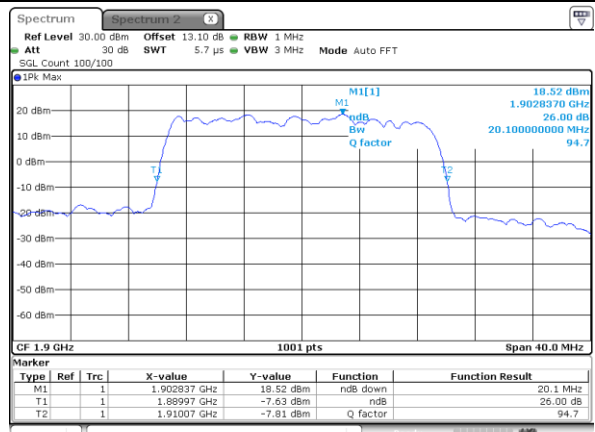
Date: 24_JAN_2018 01:27:04

Highest Channel / 20MHz / QPSK



Date: 24_JAN_2018 01:30:17

Highest Channel / 20MHz / 16QAM



Date: 24_JAN_2018 01:30:28



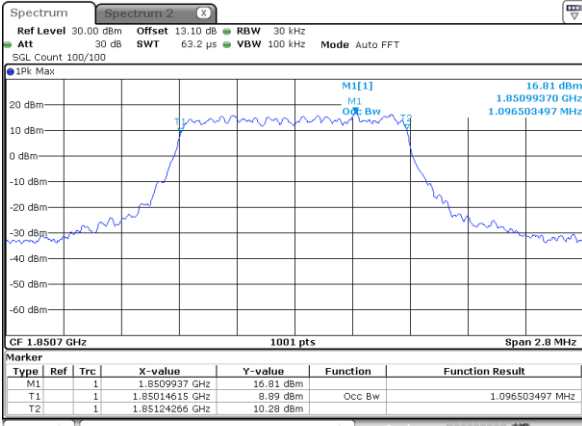
Occupied Bandwidth

Mode	LTE Band 2 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.10	1.10	2.72	2.71	4.52	4.49	9.01	9.03	13.40	13.43	18.34	18.38
Middle CH	1.09	1.10	2.70	2.72	4.49	4.50	9.03	9.01	13.43	13.46	18.34	18.26
Highest CH	1.10	1.09	2.72	2.73	4.51	4.48	9.03	9.01	13.43	13.55	18.34	18.38

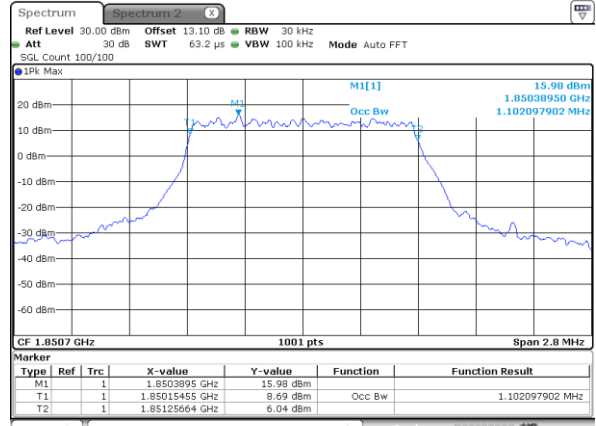


LTE Band 2

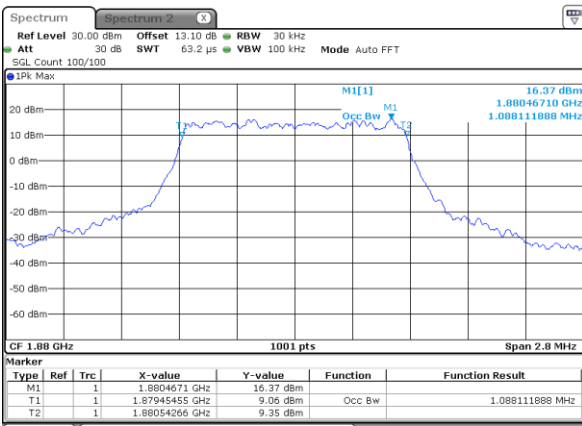
Lowest Channel / 1.4MHz / QPSK



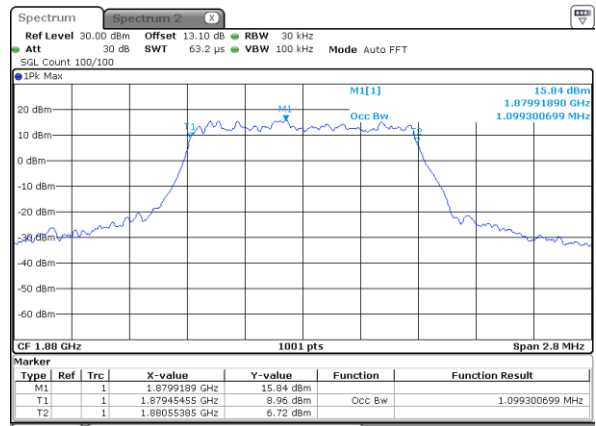
Lowest Channel / 1.4MHz / 16QAM



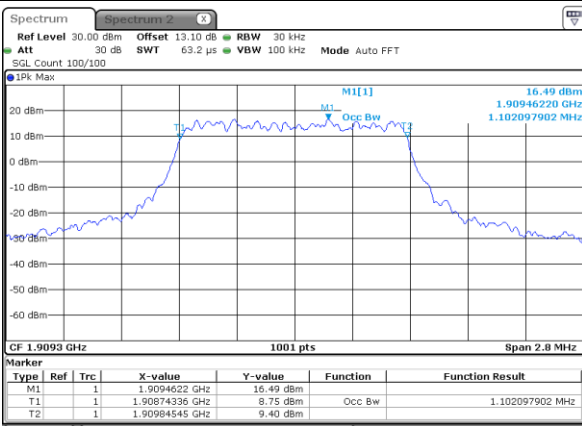
Middle Channel / 1.4MHz / QPSK



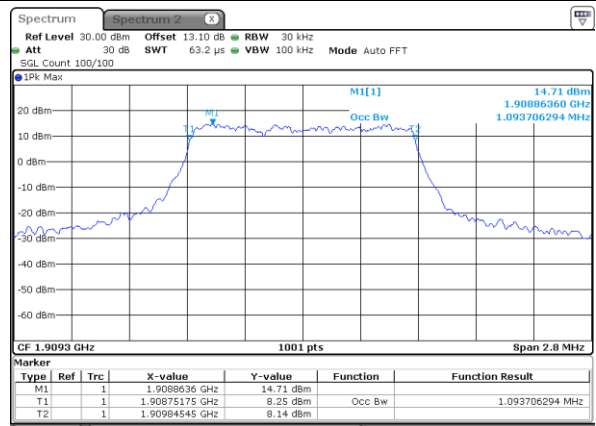
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



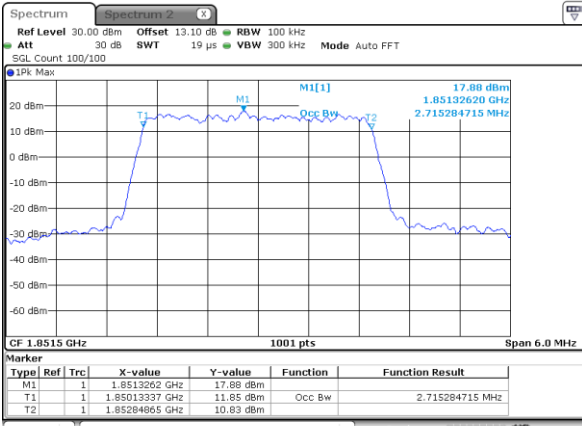
Highest Channel / 1.4MHz / 16QAM





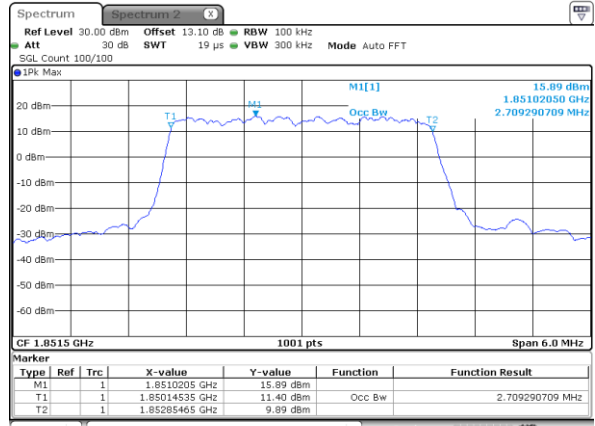
LTE Band 2

Lowest Channel / 3MHz / QPSK



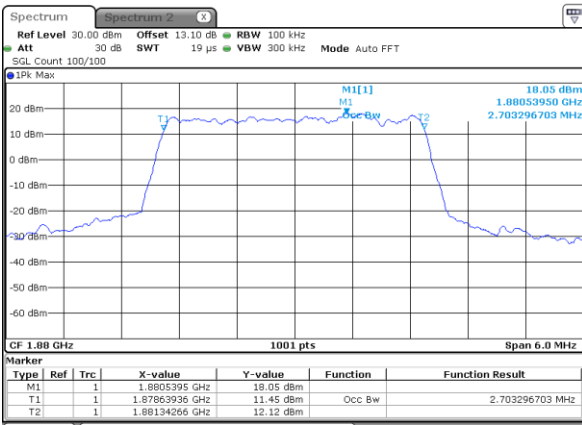
Date: 24_JAN.2018 00:10:47

Lowest Channel / 3MHz / 16QAM



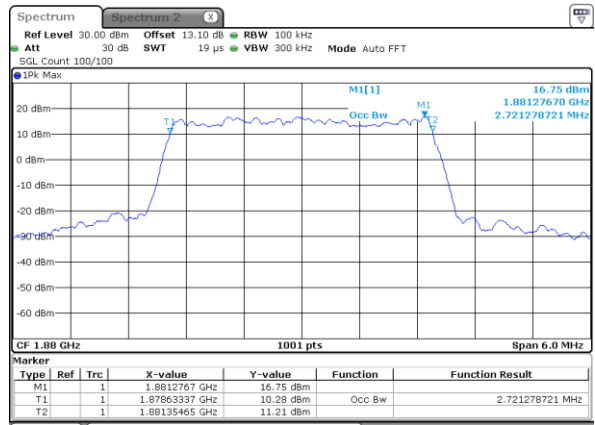
Date: 24_JAN.2018 00:10:58

Middle Channel / 3MHz / QPSK



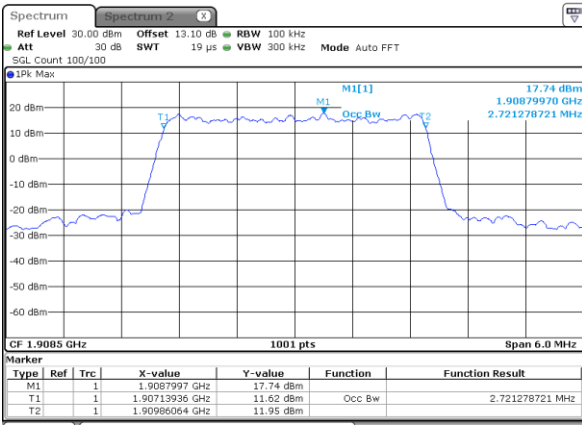
Date: 24_JAN.2018 00:18:02

Middle Channel / 3MHz / 16QAM



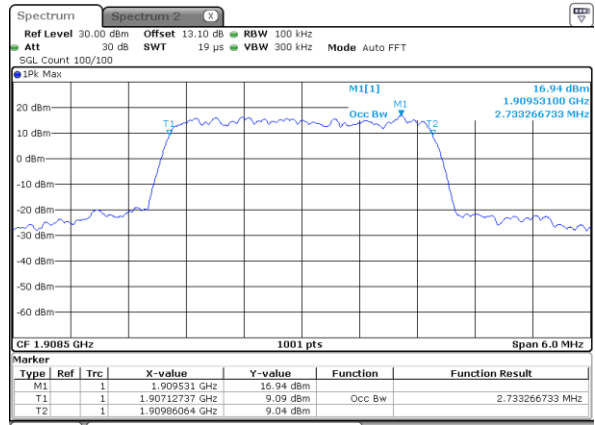
Date: 24_JAN.2018 00:18:13

Highest Channel / 3MHz / QPSK



Date: 24_JAN.2018 00:20:40

Highest Channel / 3MHz / 16QAM

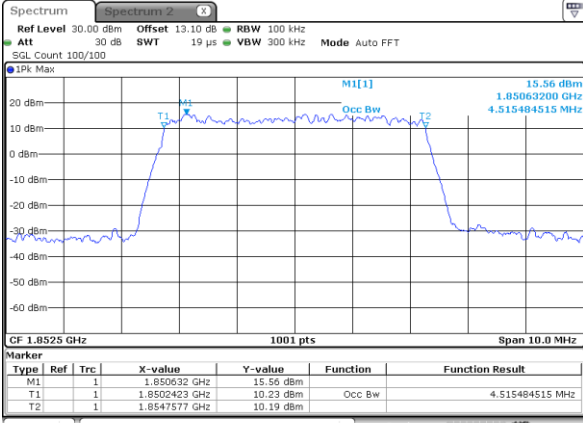


Date: 24_JAN.2018 00:20:52



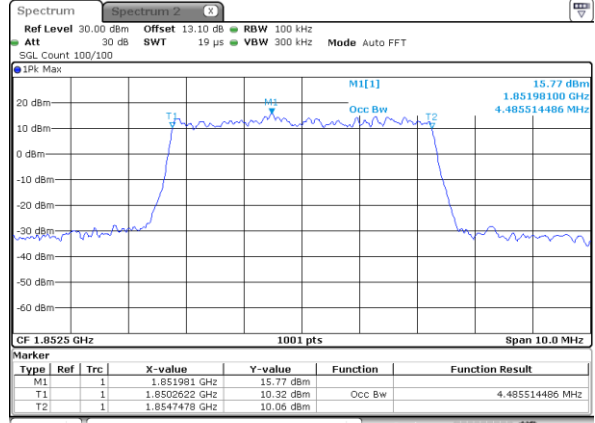
LTE Band 2

Lowest Channel / 5MHz / QPSK



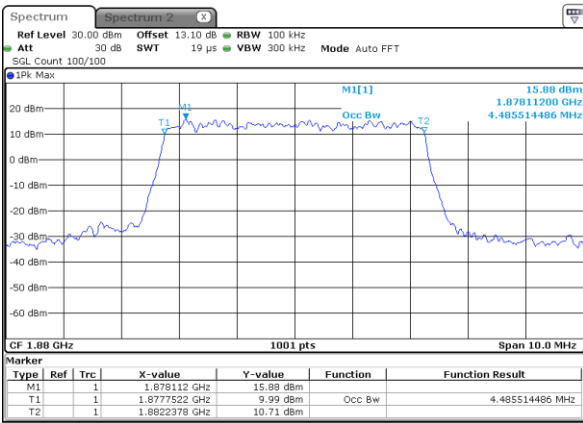
Date: 24_JAN.2018 00:27:55

Lowest Channel / 5MHz / 16QAM



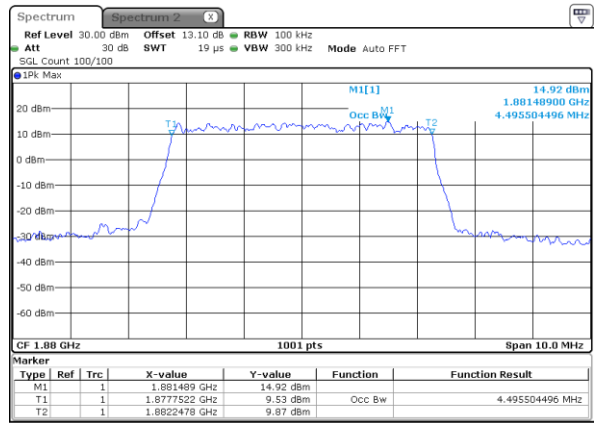
Date: 24_JAN.2018 00:28:07

Middle Channel / 5MHz / QPSK



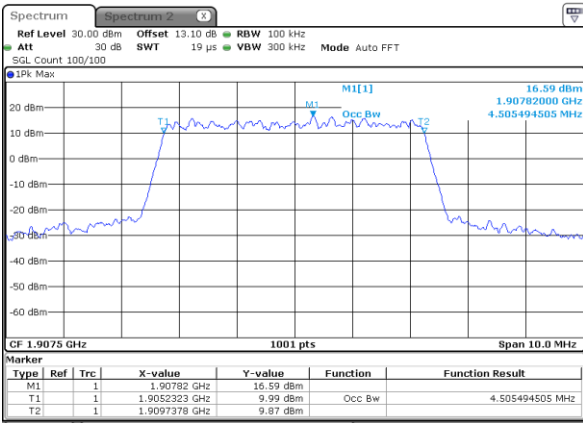
Date: 24_JAN.2018 00:35:10

Middle Channel / 5MHz / 16QAM



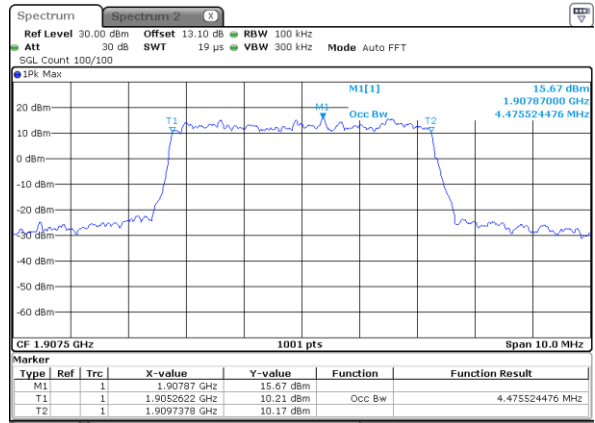
Date: 24_JAN.2018 00:35:21

Highest Channel / 5MHz / QPSK



Date: 24_JAN.2018 00:37:49

Highest Channel / 5MHz / 16QAM

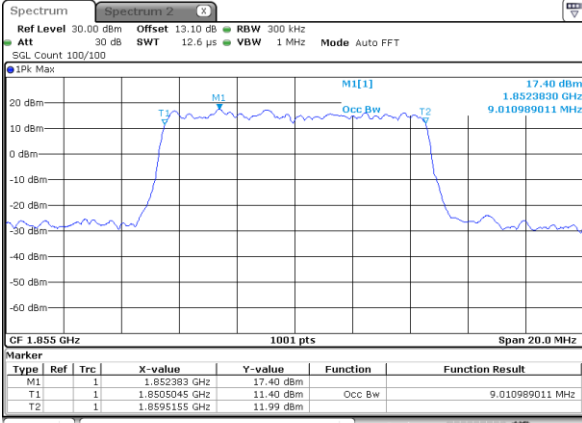


Date: 24_JAN.2018 00:38:00



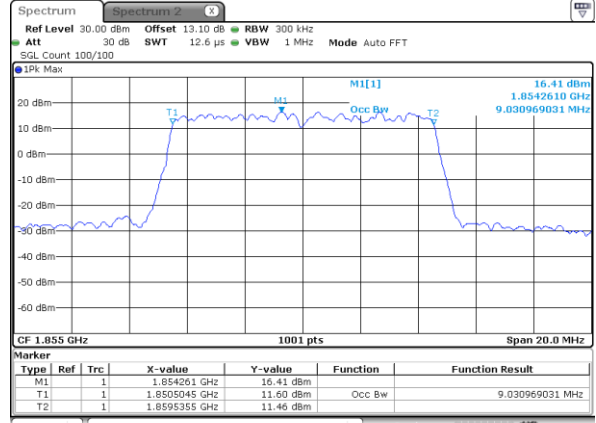
LTE Band 2

Lowest Channel / 10MHz / QPSK



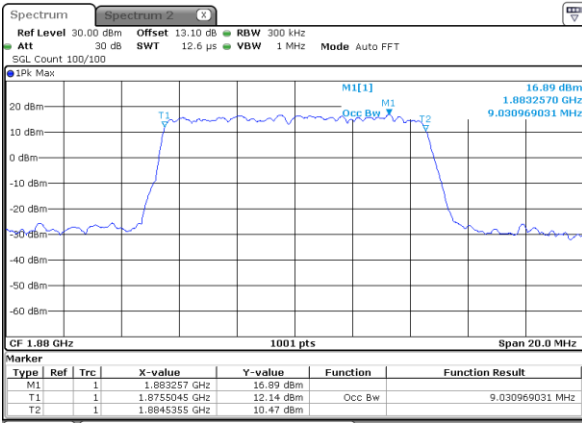
Date: 24_JAN.2018 00:45:03

Lowest Channel / 10MHz / 16QAM



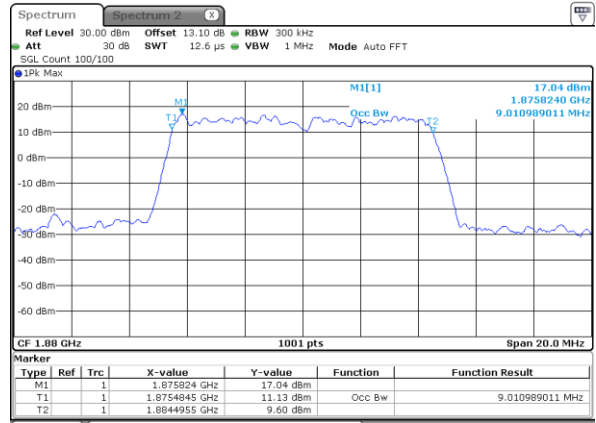
Date: 24_JAN.2018 00:45:15

Middle Channel / 10MHz / QPSK



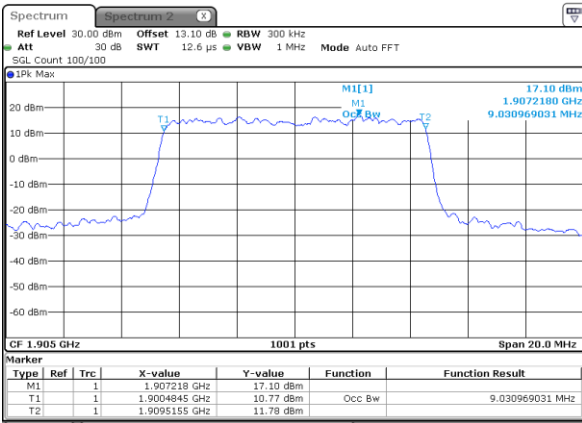
Date: 24_JAN.2018 00:52:17

Middle Channel / 10MHz / 16QAM



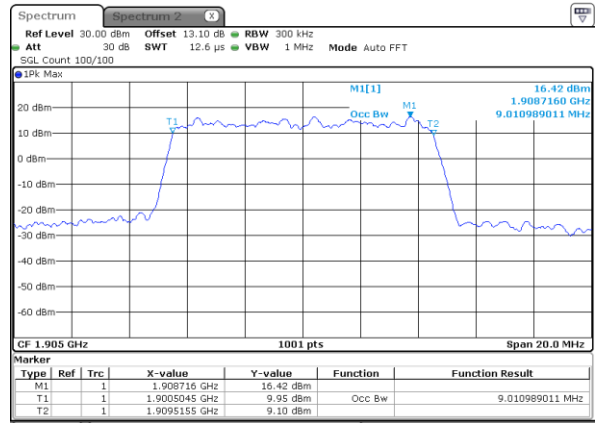
Date: 24_JAN.2018 00:52:29

Highest Channel / 10MHz / QPSK



Date: 24_JAN.2018 00:54:56

Highest Channel / 10MHz / 16QAM

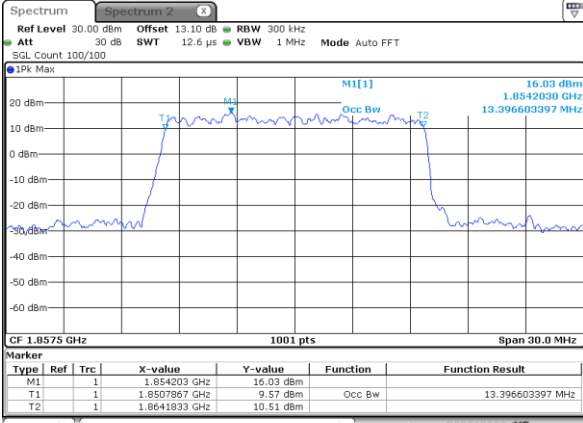


Date: 24_JAN.2018 00:55:08



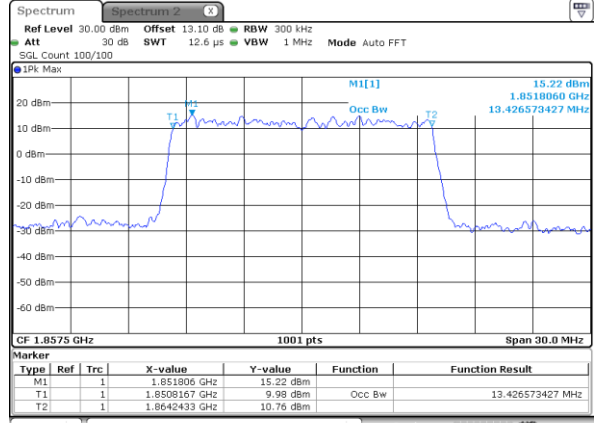
LTE Band 2

Lowest Channel / 15MHz / QPSK



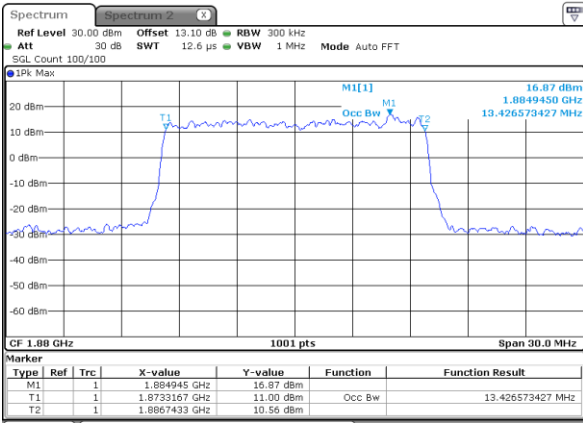
Date: 24_JAN.2018 01:02:11

Lowest Channel / 15MHz / 16QAM



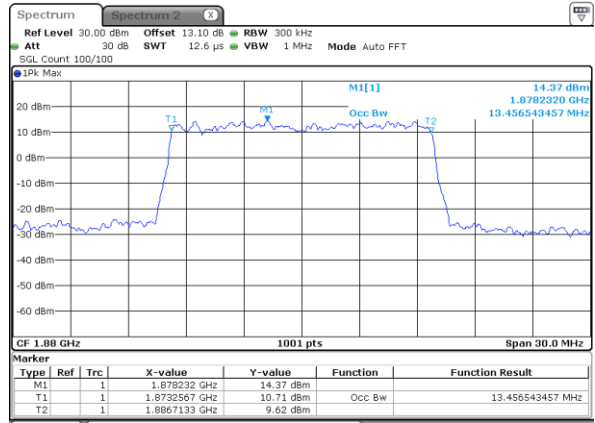
Date: 24_JAN.2018 01:02:22

Middle Channel / 15MHz / QPSK



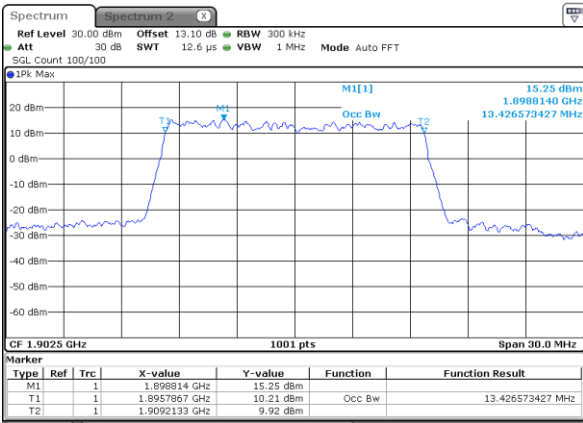
Date: 24_JAN.2018 01:09:24

Middle Channel / 15MHz / 16QAM



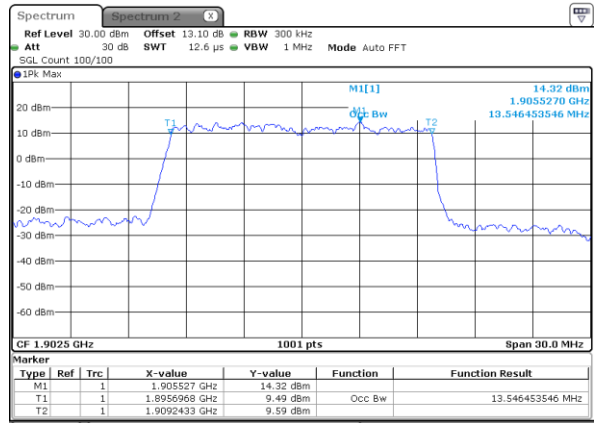
Date: 24_JAN.2018 01:09:36

Highest Channel / 15MHz / QPSK



Date: 24_JAN.2018 01:12:03

Highest Channel / 15MHz / 16QAM

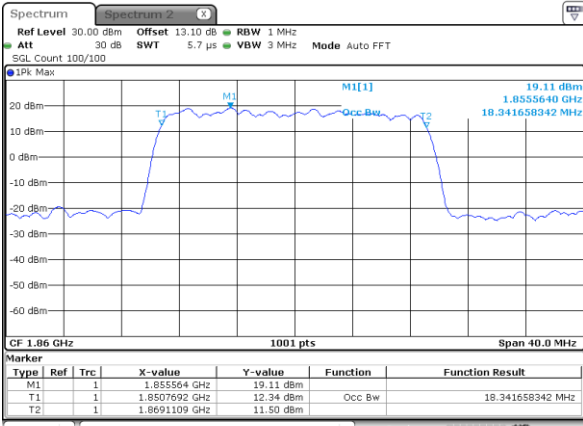


Date: 24_JAN.2018 01:12:14



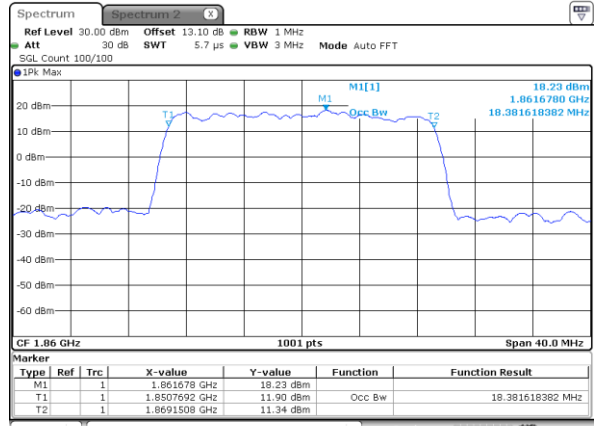
LTE Band 2

Lowest Channel / 20MHz / QPSK



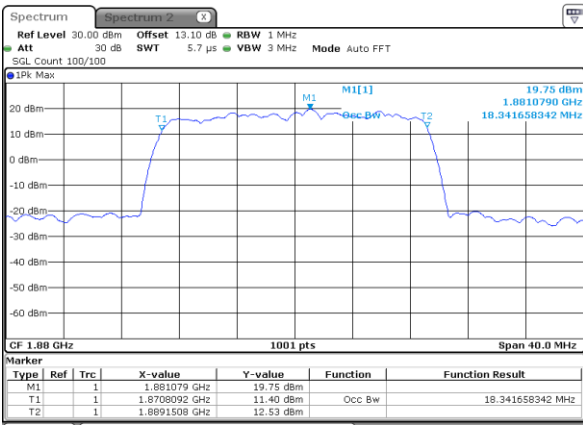
Date: 24_JAN_2018 01:19:17

Lowest Channel / 20MHz / 16QAM



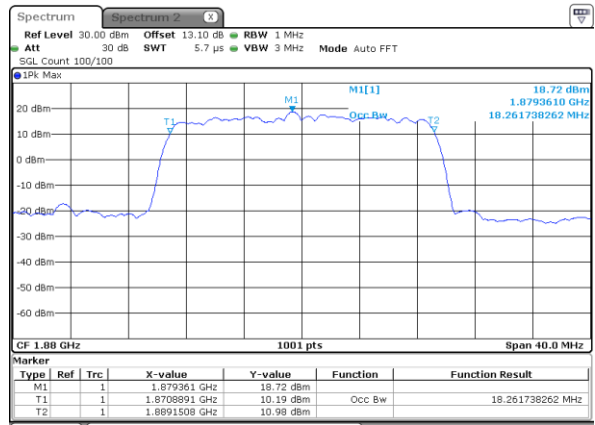
Date: 24_JAN_2018 01:19:28

Middle Channel / 20MHz / QPSK



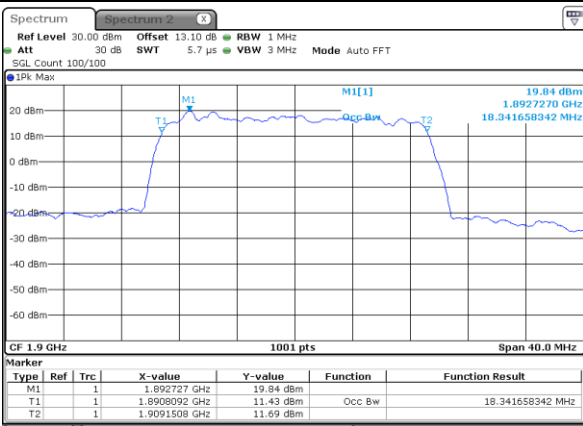
Date: 24_JAN_2018 01:26:30

Middle Channel / 20MHz / 16QAM



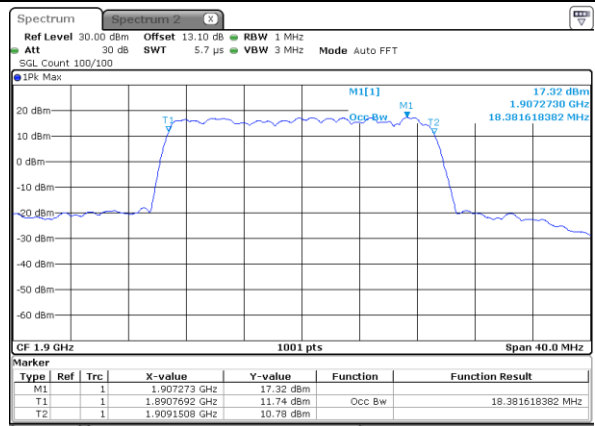
Date: 24_JAN_2018 01:26:41

Highest Channel / 20MHz / QPSK



Date: 24_JAN_2018 01:29:08

Highest Channel / 20MHz / 16QAM



Date: 24_JAN_2018 01:29:20

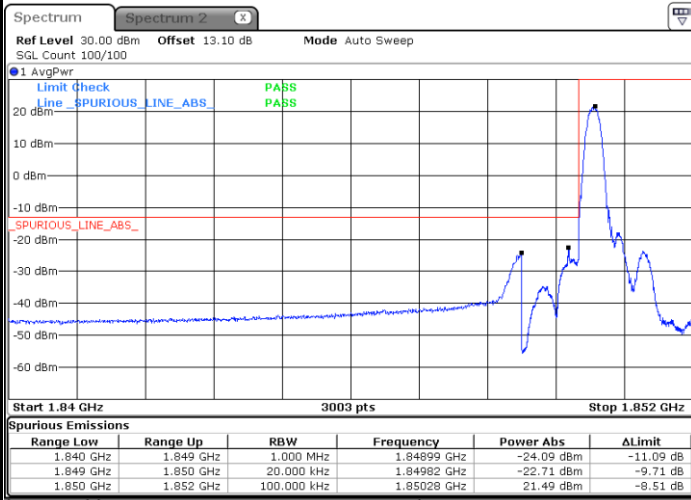


Conducted Band Edge



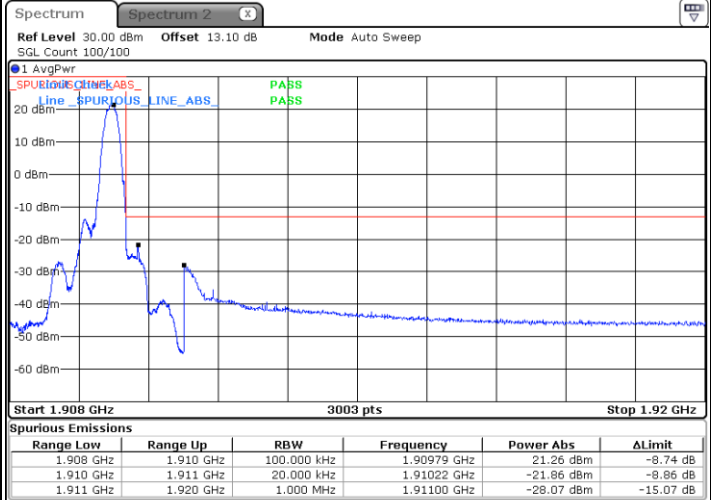
LTE Band 2 / 1.4MHz / QPSK

Lowest Band Edge / 1RB



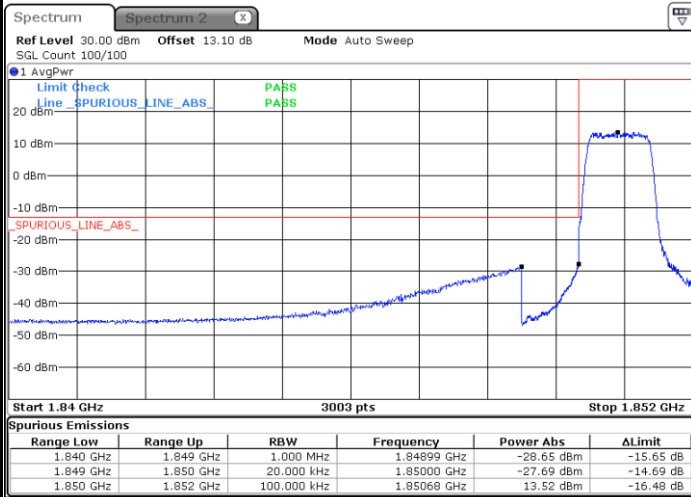
Date: 24.JAN.2018 01:41:00

Highest Band Edge / 1RB



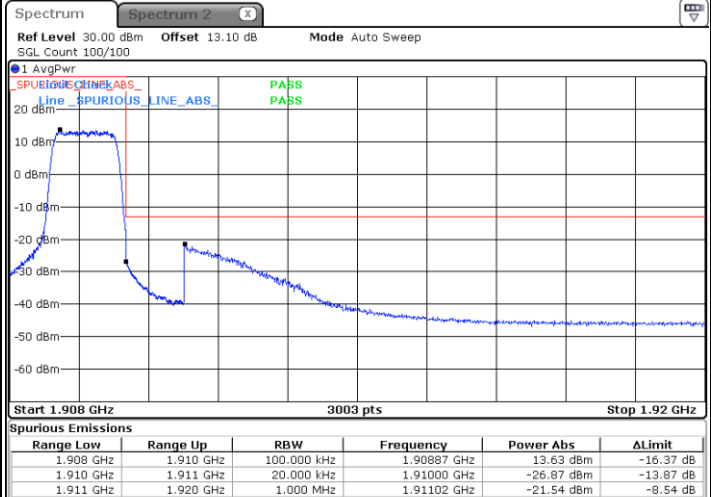
Date: 24.JAN.2018 01:50:51

Lowest Band Edge / Full RB



Date: 24.JAN.2018 01:43:17

Highest Band Edge / Full RB

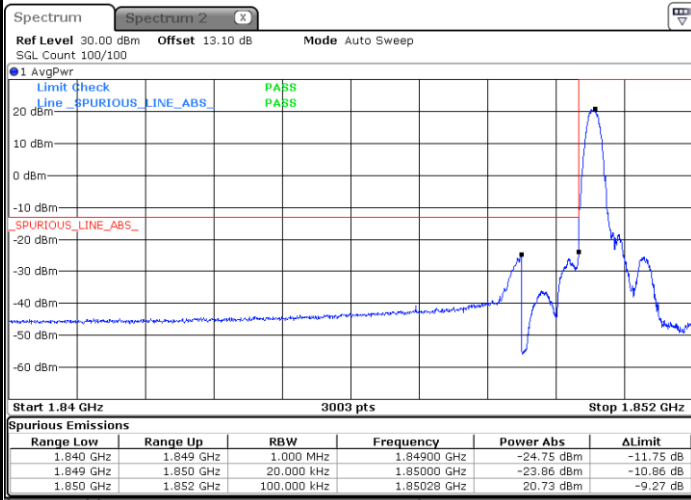


Date: 24.JAN.2018 01:53:09



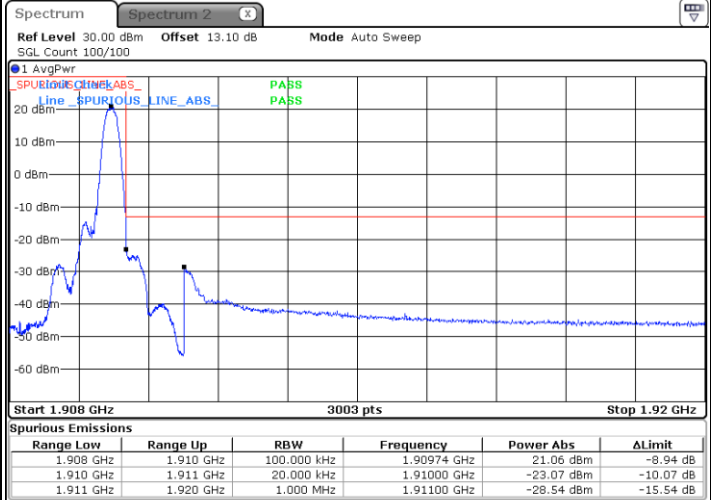
LTE Band 2 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



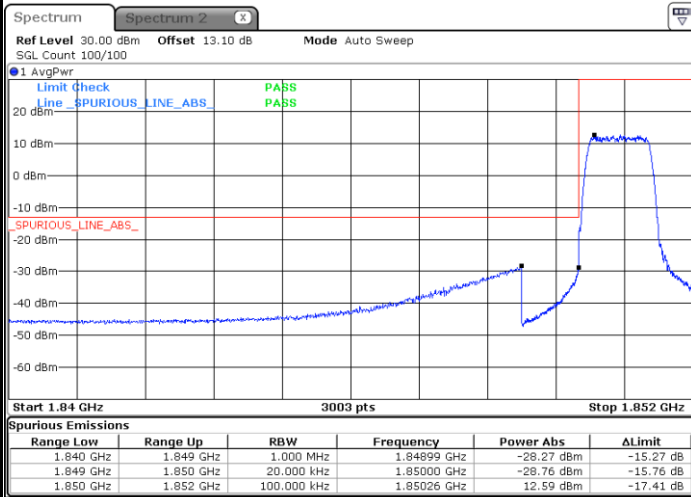
Date: 24.JAN.2018 01:42:09

Highest Band Edge / 1 RB



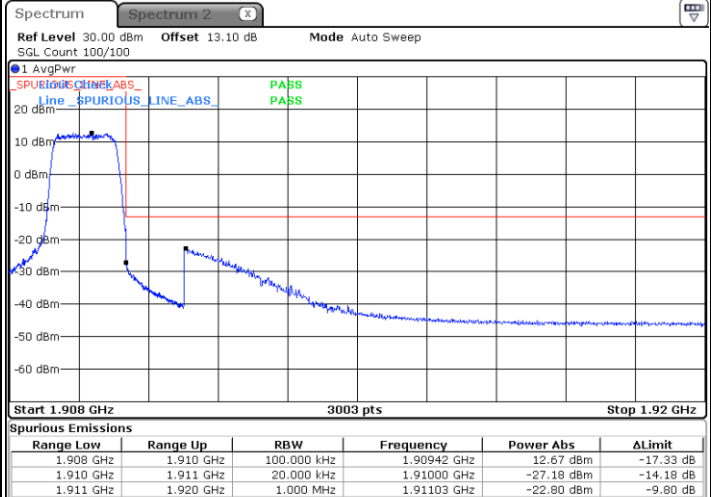
Date: 24.JAN.2018 01:52:00

Lowest Band Edge / Full RB



Date: 24.JAN.2018 01:44:26

Highest Band Edge / Full RB

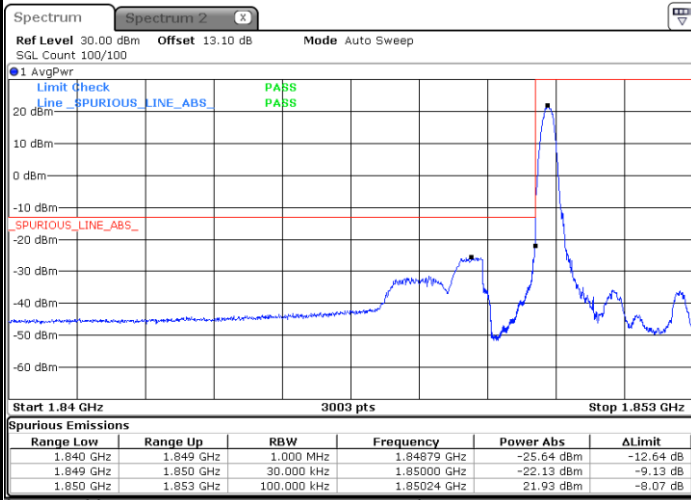


Date: 24.JAN.2018 01:54:18



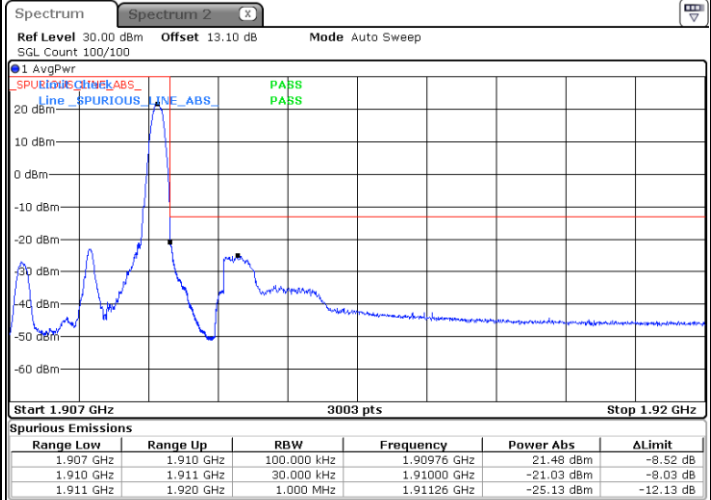
LTE Band 2 / 3MHz / QPSK

Lowest Band Edge / 1RB



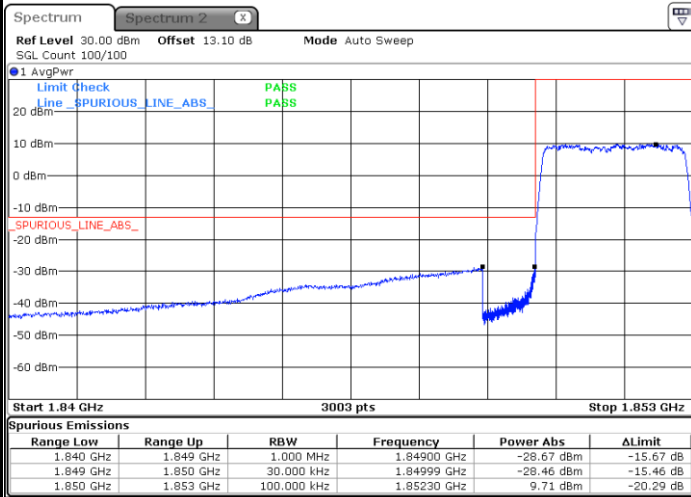
Date: 24.JAN.2018 00:12:30

Highest Band Edge / 1 RB



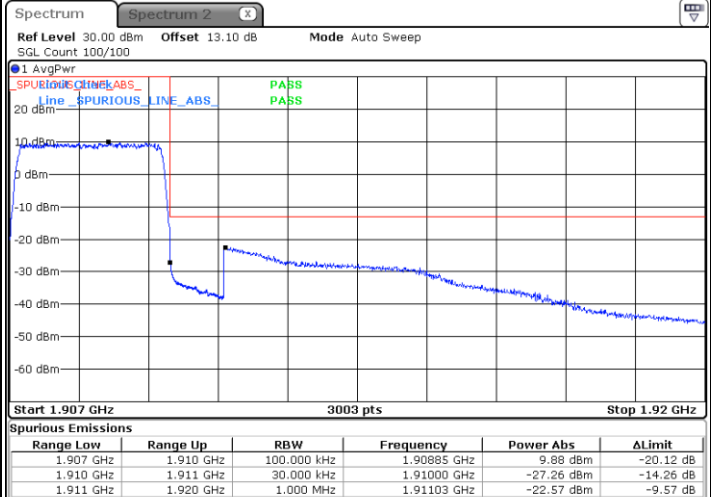
Date: 24.JAN.2018 00:22:24

Lowest Band Edge / Full RB



Date: 24.JAN.2018 00:14:48

Highest Band Edge / Full RB

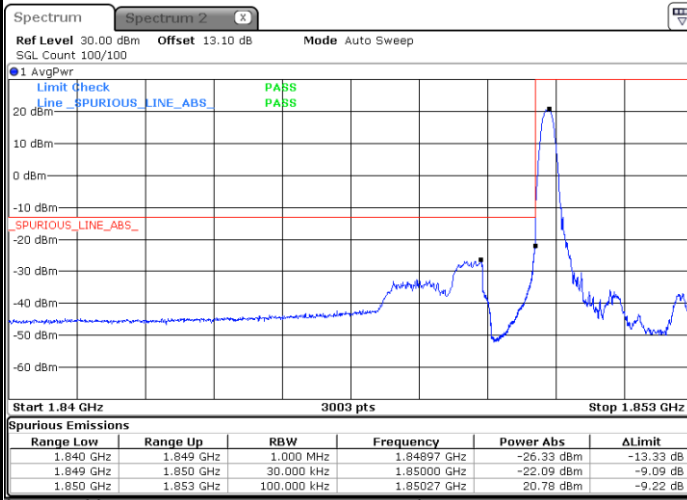


Date: 24.JAN.2018 00:24:41



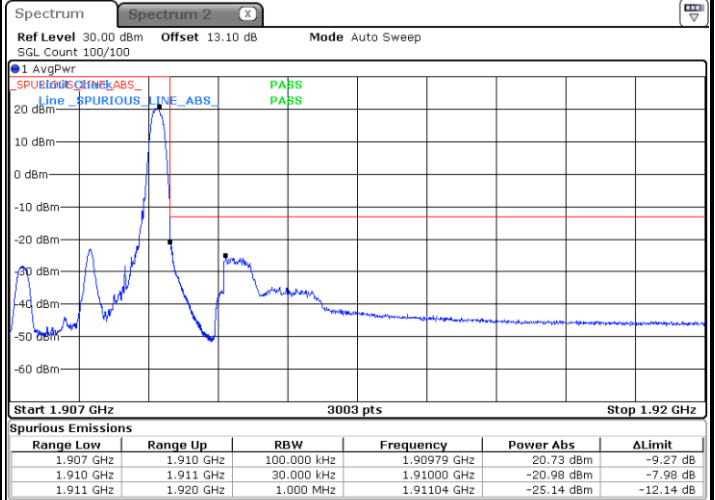
LTE Band 2 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



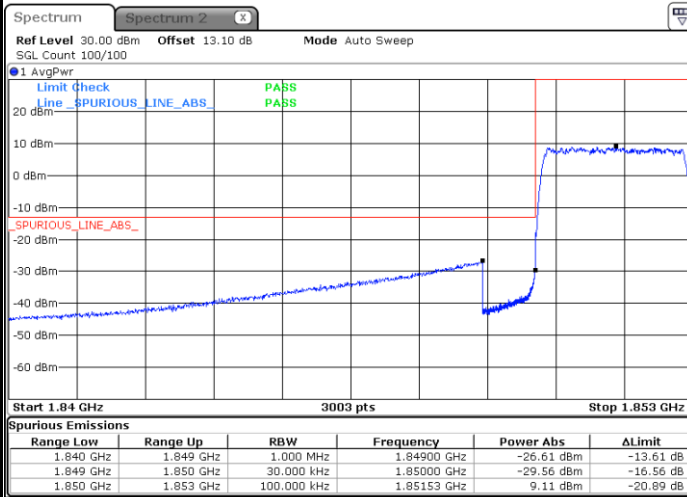
Date: 24.JAN.2018 00:13:39

Highest Band Edge / 1 RB



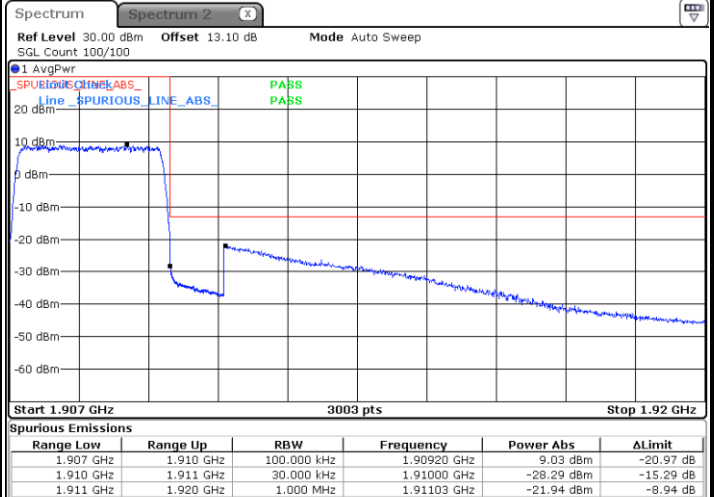
Date: 24.JAN.2018 00:23:32

Lowest Band Edge / Full RB



Date: 24.JAN.2018 00:15:57

Highest Band Edge / Full RB

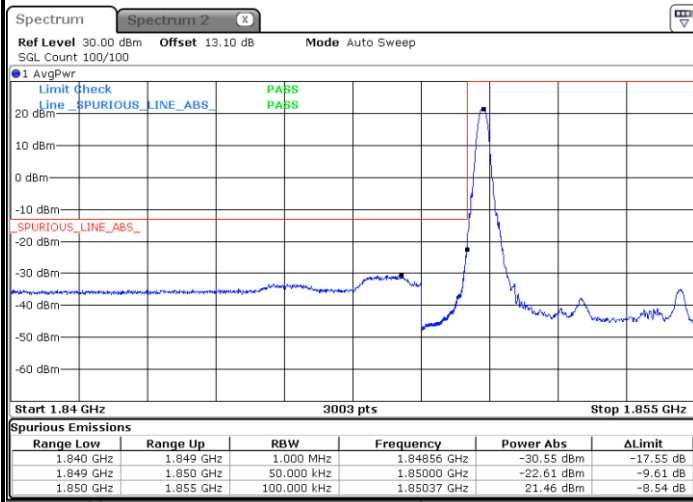


Date: 24.JAN.2018 00:25:50



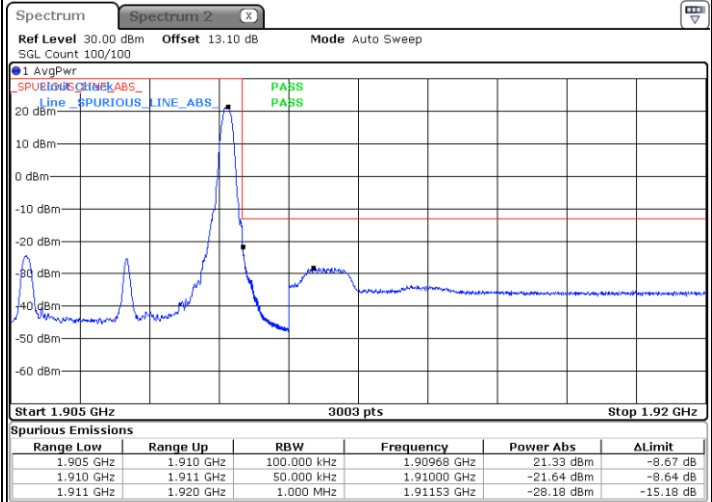
LTE Band 2 / 5MHz / QPSK

Lowest Band Edge / 1 RB



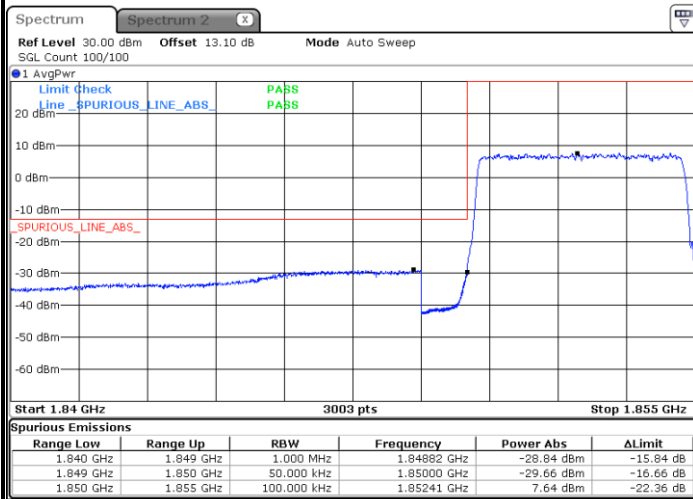
Date: 24.JAN.2018 00:29:39

Highest Band Edge / 1 RB



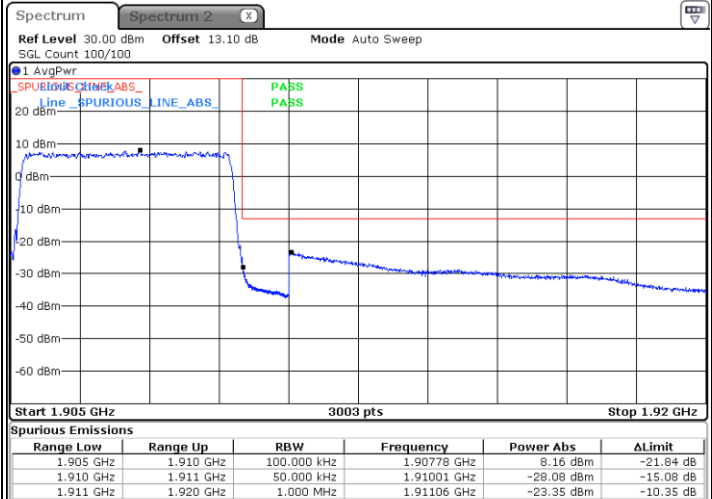
Date: 24.JAN.2018 00:31:32

Lowest Band Edge / Full RB



Date: 24.JAN.2018 00:31:57

Highest Band Edge / Full RB



Date: 24.JAN.2018 00:41:50