



# FCC RF Test Report

**APPLICANT** : Motorola Mobility LLC  
**EQUIPMENT** : Mobile Cellular Phone  
**BRAND NAME** : Motorola  
**MODEL NAME** : XT2075-2  
**FCC ID** : IHDT56ZC2  
**STANDARD** : 47 CFR Part 2, 22(H), 24(E), 27(L)  
**CLASSIFICATION** : PCS Licensed Transmitter Held to Ear (PCE)

The product was received on May 27, 2020 and completely tested on Jul. 13, 2020. We, Sporton International (Kunshan) Inc., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown 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: Jason Jia / Supervisor

Approved by: James Huang / Manager



**Sporton International (Kunshan) Inc.**

No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300  
People's Republic of China



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 Maximum ERP/EIRP Power, Frequency Tolerance, and Emission Designator ... 7
1.7 Testing Location ... 11
1.8 Test Software ... 11
1.9 Applicable Standards ... 11
1.10 Specification of Accessory ... 12
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST ... 13
2.1 Test Mode ... 13
2.2 Connection Diagram of Test System ... 16
2.3 Support Unit used in test configuration and system ... 16
2.4 Measurement Results Explanation Example ... 16
2.5 Frequency List of Low/Middle/High Channels ... 17
3 CONDUCTED TEST ITEMS ... 21
3.1 Measuring Instruments ... 21
3.2 Test Setup ... 21
3.3 Test Result of Conducted Test ... 21
3.4 Conducted Output Power and ERP/EIRP ... 22
3.5 Peak-to-Average Ratio ... 23
3.6 Occupied Bandwidth ... 24
3.7 Conducted Band Edge ... 25
3.8 Conducted Spurious Emission ... 26
3.9 Frequency Stability ... 27
4 RADIATED TEST ITEMS ... 28
4.1 Measuring Instruments ... 28
4.2 Test Setup ... 28
4.3 Test Result of Radiated Test ... 28
4.4 Radiated Spurious Emission ... 29
5 LIST OF MEASURING EQUIPMENT ... 30
6 UNCERTAINTY OF EVALUATION ... 31
APPENDIX A. TEST RESULTS OF CONDUCTED TEST
APPENDIX B. TEST RESULTS OF RADIATED TEST
APPENDIX C. TEST SETUP PHOTOGRAPHS



### REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG051103-02B	Rev. 01	Initial issue of report	Jul. 17, 2020



## 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)(5)	Effective Radiated Power (Band 5) (Band 26)	ERP < 7 Watt		
	§24.232(c)	Equivalent Isotropic Radiated Power (Band 2) (Band 25)	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 25) (Band 26) (Band 66)	< 43+10log <sub>10</sub> (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 25) (Band 26) (Band 66)	< 43+10log <sub>10</sub> (P[Watts])	PASS	-
3.9	§2.1055 §22.355	Frequency Stability Temperature & Voltage	< 2.5 ppm for Part 22	PASS	-
	§2.1055 §24.235 §27.54		Within Authorized Band		
4.4	§2.1053 §22.917(a) §24.238(a) §27.53(h)	Radiated Spurious Emission (Band 2) (Band 4) (Band 5) (Band 25) (Band 26) (Band 66)	< 43+10log <sub>10</sub> (P[Watts])	PASS	Under limit 34.66 dB at 7584.000 MHz

**Declaration of Conformity:**

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

**Comments and Explanations:**

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.



# 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	XT2075-2
FCC ID	IHDT56ZC2
EUT supports Radios application	GSM/CDMA/WCDMA/LTE/NFC/5G NR WLAN 2.4GHz 802.11b/g/n HT20 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE FM Receiver and GNSS
IMEI Code	Conducted: 353613110012815 Radiation: 353613110012518
HW Version	DVT2
SW Version	QPN30.37
EUT Stage	Identical Prototype

### 1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
<b>Tx Frequency</b>	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 25 : 1850.7MHz ~ 1914.3 MHz LTE Band 26 : 824.7MHz ~ 848.3 MHz LTE Band 66 : 1710.7 MHz ~ 1779.3 MHz
<b>Rx Frequency</b>	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 25 : 1930.7MHz ~ 1994.3 MHz LTE Band 26 : 869.7MHz ~ 893.3MHz LTE Band 66 : 2110.7 MHz~ 2199.3 MHz
<b>Bandwidth</b>	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 25 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 26 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz LTE Band 66 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz
<b>Maximum Output Power to Antenna</b>	LTE Band 2 : 22.90 dBm LTE Band 4 : 22.70 dBm LTE Band 5 : 23.10 dBm LTE Band 25 : 23.45 dBm LTE Band 26 : 23.22 dBm LTE Band 66 : 22.71 dBm LTE Band 5B_CA : 22.91 dBm
<b>Antenna Gain</b>	LTE Band 2 : 1.00 dBi LTE Band 4 : 1.00 dBi LTE Band 5 : -3.00 dBi LTE Band 25 : 1.00 dBi LTE Band 26 : -3.00 dBi LTE Band 66 : 1.00 dBi
<b>Type of Modulation</b>	QPSK / 16QAM / 64QAM

### 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

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	1M09G7D	-	0.2773	1M09W7D	-	0.2218
3	1851.5 ~ 1908.5	2M73G7D	-	0.2761	2M73W7D	-	0.2244
5	1852.5 ~ 1907.5	4M50G7D	-	0.2780	4M50W7D	-	0.2239
10	1855.0 ~ 1905.0	9M07G7D	0.0044	0.2742	9M01W7D	-	0.2244
15	1857.5 ~ 1902.5	13M4G7D	-	0.2780	13M5W7D	-	0.2239
20	1860.0 ~ 1900.0	18M4G7D	-	0.2786	18M5W7D	-	0.2218
LTE Band 2		64QAM					
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)		Maximum EIRP(W)		
1.4	1850.7 ~ 1909.3	1M10W7D	-		0.1845		
3	1851.5 ~ 1908.5	2M73W7D	-		0.1866		
5	1852.5 ~ 1907.5	4M50W7D	-		0.1862		
10	1855.0 ~ 1905.0	9M01W7D	-		0.1910		
15	1857.5 ~ 1902.5	13M5W7D	-		0.1866		
20	1860.0 ~ 1900.0	18M5W7D	-		0.1770		
LTE Band 25		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 ~ 1914.3	1M09G7D	-	0.2773	1M09W7D	-	0.2218
3	1851.5 ~ 1913.5	2M73G7D	-	0.2761	2M73W7D	-	0.2244
5	1852.5 ~ 1912.5	4M50G7D	-	0.2780	4M50W7D	-	0.2239
10	1855.0 ~ 1910.0	9M07G7D	0.0044	0.2742	9M01W7D	-	0.2244
15	1857.5 ~ 1907.5	13M4G7D	-	0.2780	13M5W7D	-	0.2239
20	1860.0 ~ 1905.0	18M4G7D	-	0.2786	18M5W7D	-	0.2218



LTE Band 25		64QAM					
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)		Frequency Tolerance (ppm)		Maximum EIRP(W)	
1.4	1850.7 ~ 1914.3	1M10W7D		-		0.1845	
3	1851.5 ~ 1913.5	2M73W7D		-		0.1866	
5	1852.5 ~ 1912.5	4M50W7D		-		0.1862	
10	1855.0 ~ 1910.0	9M01W7D		-		0.1910	
15	1857.5 ~ 1907.5	13M5W7D		-		0.1866	
20	1860.0 ~ 1905.0	18M5W7D		-		0.1770	
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	1M09G7D	-	0.2244	1M09W7D	-	0.1936
3	1711.5 ~ 1753.5	2M72G7D	-	0.2286	2M73W7D	-	0.1968
5	1712.5 ~ 1752.5	4M49G7D	-	0.2265	4M50W7D	-	0.1950
10	1715.0 ~ 1750.0	9M09G7D	0.0041	0.2244	9M05W7D	-	0.1959
15	1717.5 ~ 1747.5	13M4G7D	-	0.2286	13M5W7D	-	0.1972
20	1720.0 ~ 1745.0	18M4G7D	-	0.2350	18M5W7D	-	0.1982
LTE Band 4		64QAM					
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)		Frequency Tolerance (ppm)		Maximum EIRP(W)	
1.4	1710.7 ~ 1754.3	1M10W7D		-		0.1462	
3	1711.5 ~ 1753.5	2M73W7D		-		0.1600	
5	1712.5 ~ 1752.5	4M50W7D		-		0.1592	
10	1715.0 ~ 1750.0	9M03W7D		-		0.1660	
15	1717.5 ~ 1747.5	13M5W7D		-		0.1614	
20	1720.0 ~ 1745.0	18M5W7D		-		0.1629	
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	-	0.0628	1M09W7D	-	0.0428
3	825.5 ~ 847.5	2M73G7D	-	0.0638	2M72W7D	-	0.0537
5	826.5 ~ 846.5	4M50G7D	-	0.0640	4M50W7D	-	0.0536
10	829.0 ~ 844.0	9M09G7D	0.0046	0.0638	9M05W7D	-	0.0550





LTE Band 5		64QAM					
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)			
1.4	824.7 ~ 848.3	1M09W7D	-	0.0449			
3	825.5 ~ 847.5	2M72W7D	-	0.0448			
5	826.5 ~ 846.5	4M51W7D	-	0.0442			
10	829.0 ~ 844.0	9M05W7D	-	0.0467			
LTE Band 26		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	-	0.0628	1M09W7D	-	0.0428
3	825.5 ~ 847.5	2M73G7D	-	0.0638	2M72W7D	-	0.0537
5	826.5 ~ 846.5	4M50G7D	-	0.0640	4M50W7D	-	0.0536
10	829.0 ~ 844.0	9M09G7D	0.0046	0.0638	9M05W7D	-	0.0550
15	831.5 ~ 841.5	13M6G7D	-	0.0641	13M5W7D	-	0.0542
CH26765	821.5	13M4G7D	-	0.2084	13M4W7D	-	0.1774
LTE Band 26		64QAM					
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)			
1.4	824.7 ~ 848.3	1M09W7D	-	0.0449			
3	825.5 ~ 847.5	2M72W7D	-	0.0448			
5	826.5 ~ 846.5	4M51W7D	-	0.0442			
10	829.0 ~ 844.0	9M05W7D	-	0.0467			
15	831.5 ~ 841.5	13M5W7D	-	0.0444			
CH26765	821.5	13M4W7D	-	0.0400			
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	1M09G7D	-	0.2244	1M09W7D	-	0.1936
3	1711.5 ~ 1778.5	2M72G7D	-	0.2286	2M73W7D	-	0.1968
5	1712.5 ~ 1777.5	4M49G7D	-	0.2265	4M50W7D	-	0.1950
10	1715.0 ~ 1775.0	9M09G7D	0.0041	0.2244	9M05W7D	-	0.1959
15	1717.5 ~ 1772.5	13M4G7D	-	0.2286	13M5W7D	-	0.1972
20	1720.0 ~ 1770.0	18M4G7D	-	0.2350	18M5W7D	-	0.1982



LTE Band 66		64QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	1710.7 ~ 1779.3	1M10W7D	-	0.1462
3	1711.5 ~ 1778.5	2M73W7D	-	0.1600
5	1712.5 ~ 1777.5	4M50W7D	-	0.1592
10	1715.0 ~ 1775.0	9M03W7D	-	0.1660
15	1717.5 ~ 1772.5	13M5W7D	-	0.1614
20	1720.0 ~ 1770.0	18M5W7D	-	0.1629

LTE Band 5B_CA		QPSK			16QAM	
BW (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)
10MHz+10MHz	18M8G7D	-	0.0597	18M7W7D	-	0.0485

LTE Band 5B_CA		64QAM		
BW (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	
10MHz+10MHz	18M8W7D	-	0.0481	

**Note:**

1. LTE Band 26 overlaps the entire frequency range of LTE Band 5. Therefore, the test results provided in this report covers Band 5 and the portion of Band 26 subject to Part 22.
2. LTE Band 66 overlaps the entire frequency range of LTE Band 4. Therefore, the test results provided in this report covers Band 66 as well as Band 4.
3. LTE Band 25 overlaps the entire frequency range of LTE Band 2. Therefore, the test results provided in this report covers Band 25 as well as Band 2.
4. The maximum EIRP for CA band is calculated from max output power of 10M+10M and max antenna gain, only the maximum EIRP of Band 5B\_CA is shown on the report.



### 1.7 Testing Location

Sporton International (Kunshan) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

<b>Test Firm</b>	Sporton International (Kunshan) Inc.		
<b>Test Site Location</b>	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958		
<b>Test Site No.</b>	<b>Sporton Site No.</b>	<b>FCC Designation No.</b>	<b>FCC Test Firm Registration No.</b>
	03CH04-KS TH01-KS	CN1257	314309

### 1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH04-KS	AUDIX	E3	6.2009-8-24a

### 1.9 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)
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- 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 FCC Part 15, Subpart B, recorded in a separate test report.



### 1.10 Specification of Accessory

Specification of Accessory				
AC Adapter 1	Brand Name	Motorola(Chenyang)	Model Name	MC-201
AC Adapter 2	Brand Name	Motorola(Acbel)	Model Name	MC-201
Battery	Brand Name	Motorola(Amperex)	Model Name	LZ50
USB Cable 1	Brand Name	Motorola(Luxshare)	Model Name	SC18C24368
USB Cable 2	Brand Name	Motorola(Saibao)	Model Name	SC18C24367



## 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 v03r01 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	64QAM	1	Half	Full	L	M	H
Max. Output Power	2	v	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	v
	5	v	v	v	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	v
	26	v	v	v	v	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	v
Peak-to-Average Ratio	25						v	v	v	v	v		v	v	v	v
	26				v		-	v	v	v	v		v	v	v	v
	66						v	v	v	v	v		v	v	v	v
26dB and 99% Bandwidth	25	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
	66	v	v	v	v	v	v	v	v	v			v	v	v	v
Conducted Band Edge	25	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
	66	v	v	v	v	v	v	v	v	v	v		v	v		v

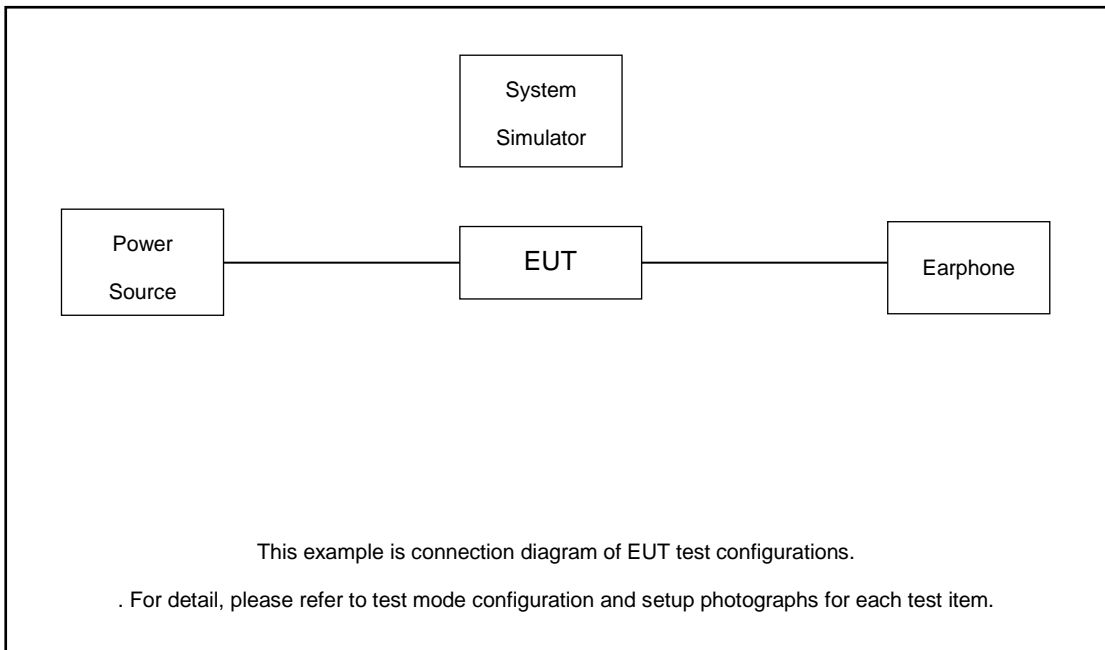


Test Items	Band	Bandwidth (MHz)						Modulation			RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Conducted Spurious Emission	25	v	v	v	v	v	v	v	v	v	v			v	v	v
	26	v	v	v	v	v	-	v	v	v	v			v	v	v
	66	v	v	v	v	v	v	v	v	v	v			v	v	v
Frequency Stability	25				v			v					v		v	
	26				v		-	v					v		v	
	66				v			v					v		v	
E.R.P / E.I.R.P	25	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
	66	v	v	v	v	v	v	v	v	v	v			v	v	v
Radiated Spurious Emission	2	Worst Case											v	v	v	
	4	Worst Case											v	v	v	
	5	Worst Case											v	v	v	
	25	Worst Case											v	v	v	
	26	Worst Case											v	v	v	
	66	Worst Case											v	v	v	
Note	<ol style="list-style-type: none"> <li>The mark "v" means that this configuration is chosen for testing</li> <li>The mark "-" means that this bandwidth is not supported.</li> <li>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.</li> <li>LTE Band 26 overlaps the entire frequency range of LTE Band 5. Therefore, the test results provided in this report covers Band 5 and the portion of Band 26 subject to Part 22</li> <li>LTE Band 66 overlaps the entire frequency range of LTE Band 4. Therefore, the test results provided in this report covers Band 66 as well as Band 4.</li> <li>LTE Band 25 overlaps the entire frequency range of LTE Band 2. Therefore, the test results provided in this report covers Band 25 as well as Band 2.</li> </ol>															



Test Items	Band	Bandwidth (MHz)					Modulation			RB #			Test Channel		
		3+5	5+3	5+10	10+5	10+10	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Max. Output Power	5B_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v
26dB and 99% Bandwidth	5B_CA	v	v	v	v	v	v	v	v			v	v	v	v
Conducted Band Edge	5B_CA	v	v	v	v	v	v	v	v	v		v	v		v
Conducted Spurious Emission	5B_CA	v	v	v	v	v	v	v	v	v			v	v	v
E.I.R.P.	5B_CA	v	v	v	v	v	v	v	v	v			v	v	v
Radiated Spurious Emission	5B_CA	Worst Case											v	v	v
Note	<ol style="list-style-type: none"> <li>The mark "v " means that this configuration is chosen for testing</li> <li>The mark "- " means that this bandwidth is not supported.</li> <li>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.</li> </ol>														

## 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.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8820C	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.

$$\text{Offset} = \text{RF cable loss.}$$

Following shows an offset computation example with cable loss 4.6 dB.

Example :

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)}. \\ &= 4.6 \text{ (dB)} \end{aligned}$$





### 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 25 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	26140	26340	26590
	Frequency	1860	1880	1905
15	Channel	26115	26340	26615
	Frequency	1857.5	1880	1907.5
10	Channel	26090	26340	26640
	Frequency	1855	1880	1910
5	Channel	26065	26340	26665
	Frequency	1852.5	1880	1912.5
3	Channel	26055	26340	26675
	Frequency	1851.5	1880	1913.5
1.4	Channel	26047	26340	26683
	Frequency	1850.7	1880	1914.3



LTE Band 26 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
15	Channel	26865	26915	26965
	Frequency	831.5	836.5	841.5
10	Channel	26840	26915	26990
	Frequency	829	836.5	844
5	Channel	26815	26915	27015
	Frequency	826.5	836.5	846.5
3	Channel	26805	26915	27025
	Frequency	825.5	836.5	847.5
1.4	Channel	26797	26915	27033
	Frequency	824.7	836.5	848.3

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



LTE Band 5B_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
3 + 5	PCC	Channel	20416	20501	20586
		Frequency	825.6	834.1	842.6
	SCC	Channel	20455	20540	20625
		Frequency	829.5	838.0	846.5
5 + 3	PCC	Channel	20425	20510	20595
		Frequency	826.5	835.0	843.5
	SCC	Channel	20464	20549	20634
		Frequency	830.4	838.9	847.4
5 + 10	PCC	Channel	20428	20478	20528
		Frequency	826.8	831.8	836.8
	SCC	Channel	20500	20550	20600
		Frequency	834	839	844
10 + 5	PCC	Channel	20450	20500	20550
		Frequency	829	834	839
	SCC	Channel	20522	20572	20622
		Frequency	836.2	841.2	846.2
10 + 10	PCC	Channel	20450	20476	20501
		Frequency	829	831.6	834.1
	SCC	Channel	20549	20575	20600
		Frequency	838.9	841.5	844

### 3 Conducted Test Items

#### 3.1 Measuring Instruments

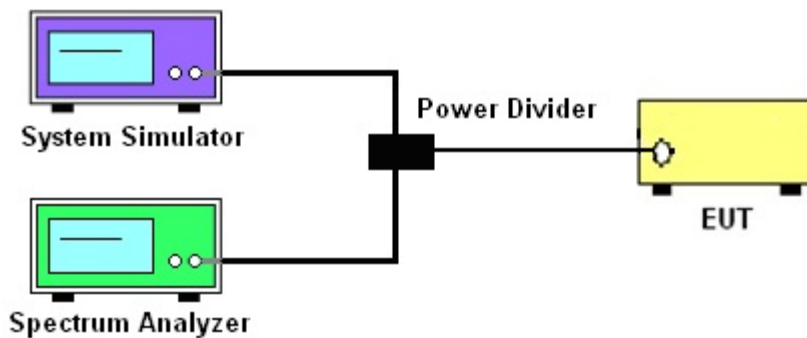
See list of measuring instruments of this test report.

#### 3.2 Test Setup

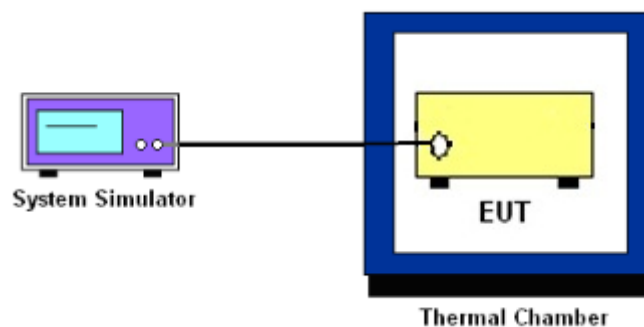
##### 3.2.1 Conducted Output Power



##### 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 ERP/EIRP

#### 3.4.1 Description of the Conducted Output Power Measurement and ERP/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 ERP of mobile transmitters must not exceed 7 Watts for LTE Band 5 and Band 26.

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2 and Band 25

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 testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. 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 testing follows ANSI C63.26 Section 5.2.3.4 (CCDF).
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
5. 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

1. The testing follows ANSI C63.26 Section 5.4
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. 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.
4. 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.
5. Set the detection mode to peak, and the trace mode to max hold.
6. 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)
7. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
8. 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.
9. 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

22.917(a)

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(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.

24.238 (a)

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(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.

27.53 (h)

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(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.

#### 3.7.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW  $\geq$  1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.

Example:

$$\begin{aligned} &\text{The limit line is derived from } 43 + 10\log(P)\text{dB below the transmitter power P(Watts)} \\ &= P(W) - [43 + 10\log(P)] \text{ (dB)} \\ &= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)} = -13\text{dBm}. \end{aligned}$$



### 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 10<sup>th</sup> harmonic.

#### 3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. 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.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. The limit line is derived from  $43 + 10\log(P)$ dB below the transmitter power P(Watts)  
= P(W)- [43 + 10log(P)] (dB)  
= [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)  
= -13dBm.



## 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

1. The testing follows ANSI C63.26 section 5.6.4
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. With power OFF, the temperature was decreased to  $-30^{\circ}\text{C}$  and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
4. With power OFF, the temperature was raised in  $10^{\circ}\text{C}$  step up to  $50^{\circ}\text{C}$ . 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

1. The testing follows ANSI C63.26 section 5.6.5
2. The EUT was placed in a temperature chamber at  $20\pm 5^{\circ}\text{C}$  and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value for other than hand carried battery equipment.
4. For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.
5. The variation in frequency was measured for the worst case.

## 4 Radiated Test Items

### 4.1 Measuring Instruments

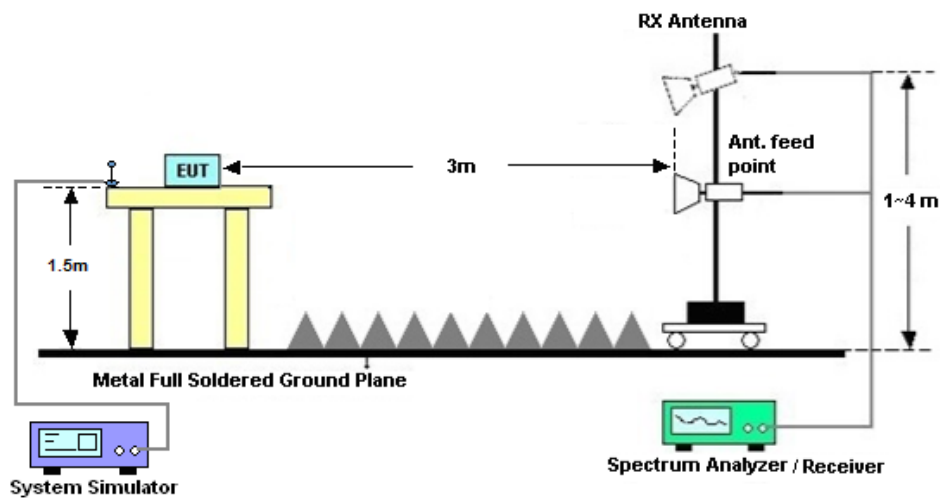
See list of measuring instruments of this test report.

### 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.

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

### 4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10.  $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
11.  $ERP \text{ (dBm)} = EIRP - 2.15$
12. 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)  
=  $P(W) - [43 + 10\log(P)] \text{ (dB)}$   
=  $[30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$   
= -13dBm.



## 5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Nov. 02, 2019	Jun. 09, 2020~ Jul. 02, 2020	Nov. 01, 2020	Conducted (TH01-KS)
Thermal Chamber	Ten Billion	TTC-B3S	TBN-960502	-40~+150°C	Oct. 28, 2019	Jun. 09, 2020~ Jul. 02, 2020	Oct. 27, 2020	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz-44G,MAX 30dB	Apr. 15, 2020	Jul. 13, 2020	Apr. 14, 2021	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	Jun. 08, 2020	Jul. 13, 2020	Jun. 07, 2021	Radiation (03CH04-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	1356	1GHz~18GHz	Apr. 20, 2020	Jul. 13, 2020	Apr. 19, 2021	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Nov. 10, 2019	Jul. 13, 2020	Nov. 09, 2020	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Aug. 06, 2019	Jul. 13, 2020	Aug. 05, 2020	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40G GA	060728	18~40GHz	Jan. 08, 2020	Jul. 13, 2020	Jan. 07, 2021	Radiation (03CH04-KS)
high gain Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P	2025788	1Ghz-18Ghz	Aug. 16, 2019	Jul. 13, 2020	Aug. 15, 2020	Radiation (03CH04-KS)
Amplifier	Keysight	83017A	MY57280106	500MHz~26.5GHz	Oct. 15, 2019	Jul. 13, 2020	Oct. 14, 2020	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jul. 13, 2020	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jul. 13, 2020	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jul. 13, 2020	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required



## 6 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.3dB
---	-------

### Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.8dB
---	-------



# Appendix A. Test Results of Conducted Test

## Conducted Output Power(Average power)

### LTE Band 2

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				18700	18900	19100
Frequency (MHz)				1860	1880	1900
20	QPSK	1	0	22.83	22.90	22.77
20	QPSK	1	49	22.51	22.68	22.74
20	QPSK	1	99	22.55	22.63	22.69
20	QPSK	50	0	21.35	21.75	21.53
20	QPSK	50	24	21.50	21.56	21.70
20	QPSK	50	50	21.45	21.58	21.64
20	QPSK	100	0	21.42	21.59	21.58
20	16QAM	1	0	21.83	21.83	21.96
20	16QAM	1	49	21.74	21.82	21.80
20	16QAM	1	99	21.73	21.78	21.83
20	16QAM	50	0	20.36	20.49	20.51
20	16QAM	50	24	20.49	20.59	20.71
20	16QAM	50	50	20.48	20.61	20.65
20	16QAM	100	0	20.44	20.49	20.54
20	64QAM	1	0	20.65	20.68	20.68
20	64QAM	1	49	20.73	20.53	20.53
20	64QAM	1	99	20.78	20.54	20.54
20	64QAM	50	0	19.41	19.60	19.45
20	64QAM	50	24	19.40	19.41	19.43
20	64QAM	50	50	19.35	19.39	19.40
20	64QAM	100	0	19.37	19.36	19.41





Channel				18675	18900	19125
Frequency (MHz)				1857.5	1880	1902.5
15	QPSK	1	0	22.47	22.75	22.77
15	QPSK	1	37	22.50	22.67	22.74
15	QPSK	1	74	22.53	22.66	22.80
15	QPSK	36	0	21.14	21.33	21.37
15	QPSK	36	20	21.28	21.39	21.44
15	QPSK	36	39	21.28	21.42	21.50
15	QPSK	75	0	21.23	21.35	21.42
15	16QAM	1	0	21.39	21.75	21.77
15	16QAM	1	37	21.54	21.77	21.69
15	16QAM	1	74	21.52	21.73	21.62
15	16QAM	36	0	20.34	20.51	20.56
15	16QAM	36	20	20.48	20.59	20.66
15	16QAM	36	39	20.46	20.64	20.69
15	16QAM	75	0	20.43	20.53	20.65
15	64QAM	1	0	20.61	20.95	20.85
15	64QAM	1	37	20.79	21.00	20.79
15	64QAM	1	74	20.78	20.99	20.82
15	64QAM	36	0	19.26	19.43	19.46
15	64QAM	36	20	19.40	19.47	19.54
15	64QAM	36	39	19.33	19.56	19.58
15	64QAM	75	0	19.34	19.41	19.51



Channel				18650	18900	19150
Frequency (MHz)				1855	1880	1905
10	QPSK	1	0	22.41	22.46	22.62
10	QPSK	1	25	22.56	22.83	22.71
10	QPSK	1	49	22.34	22.51	22.69
10	QPSK	25	0	21.22	21.34	21.40
10	QPSK	25	12	21.30	21.45	21.51
10	QPSK	25	25	21.17	21.38	21.45
10	QPSK	50	0	21.22	21.34	21.42
10	16QAM	1	0	21.35	21.46	21.84
10	16QAM	1	25	21.59	21.77	21.80
10	16QAM	1	49	21.41	21.51	21.84
10	16QAM	25	0	20.44	20.54	20.60
10	16QAM	25	12	20.50	20.65	20.68
10	16QAM	25	25	20.40	20.58	20.65
10	16QAM	50	0	20.40	20.58	20.55
10	64QAM	1	0	20.79	20.78	21.20
10	64QAM	1	25	20.91	21.23	21.12
10	64QAM	1	49	20.73	20.96	21.22
10	64QAM	25	0	19.34	19.47	19.55
10	64QAM	25	12	19.42	19.58	19.63
10	64QAM	25	25	19.29	19.52	19.56
10	64QAM	50	0	19.30	19.43	19.47



Channel				18625	18900	19175
Frequency (MHz)				1852.5	1880	1907.5
5	QPSK	1	0	22.61	22.68	22.79
5	QPSK	1	12	22.59	22.85	22.89
5	QPSK	1	24	22.50	22.71	22.76
5	QPSK	12	0	21.34	21.49	21.58
5	QPSK	12	7	21.35	21.58	21.59
5	QPSK	12	13	21.25	21.45	21.47
5	QPSK	25	0	21.25	21.40	21.50
5	16QAM	1	0	21.60	21.61	21.81
5	16QAM	1	12	21.54	21.70	21.81
5	16QAM	1	24	21.43	21.64	21.72
5	16QAM	12	0	20.53	20.66	20.80
5	16QAM	12	7	20.57	20.64	20.77
5	16QAM	12	13	20.49	20.68	20.71
5	16QAM	25	0	20.49	20.67	20.77
5	64QAM	1	0	20.78	20.93	21.05
5	64QAM	1	12	20.78	21.05	21.09
5	64QAM	1	24	20.60	20.87	20.96
5	64QAM	12	0	19.42	19.59	19.65
5	64QAM	12	7	19.42	19.54	19.65
5	64QAM	12	13	19.33	19.54	19.56
5	64QAM	25	0	19.38	19.51	19.69



Channel				18615	18900	19185
Frequency (MHz)				1851.5	1880	1908.5
3	QPSK	1	0	22.61	22.69	22.87
3	QPSK	1	8	22.63	22.84	22.81
3	QPSK	1	14	22.48	22.71	22.76
3	QPSK	8	0	21.28	21.47	21.55
3	QPSK	8	4	21.29	21.46	21.55
3	QPSK	8	7	21.27	21.42	21.51
3	QPSK	15	0	21.24	21.40	21.51
3	16QAM	1	0	21.58	21.69	21.87
3	16QAM	1	8	21.55	21.79	21.87
3	16QAM	1	14	21.49	21.69	21.73
3	16QAM	8	0	20.55	20.70	20.82
3	16QAM	8	4	20.56	20.67	20.81
3	16QAM	8	7	20.48	20.68	20.74
3	16QAM	15	0	20.52	20.60	20.78
3	64QAM	1	0	20.84	20.95	21.11
3	64QAM	1	8	20.84	20.95	21.12
3	64QAM	1	14	20.73	20.96	21.06
3	64QAM	8	0	19.42	19.53	19.70
3	64QAM	8	4	19.42	19.56	19.70
3	64QAM	8	7	19.33	19.56	19.60
3	64QAM	15	0	19.36	19.51	19.66



Channel				18607	18900	19193
Frequency (MHz)				1850.7	1880	1909.3
1.4	QPSK	1	0	22.47	22.63	22.75
1.4	QPSK	1	3	22.53	22.75	22.78
1.4	QPSK	1	5	22.43	22.63	22.69
1.4	QPSK	3	0	22.42	22.56	22.70
1.4	QPSK	3	1	22.46	22.68	22.70
1.4	QPSK	3	3	22.42	22.58	22.67
1.4	QPSK	6	0	21.20	21.30	21.41
1.4	16QAM	1	0	21.50	21.59	21.73
1.4	16QAM	1	3	21.52	21.70	21.76
1.4	16QAM	1	5	21.41	21.65	21.65
1.4	16QAM	3	0	21.44	21.56	21.64
1.4	16QAM	3	1	21.48	21.71	21.73
1.4	16QAM	3	3	21.39	21.62	21.65
1.4	16QAM	6	0	20.51	20.65	20.76
1.4	64QAM	1	0	20.52	20.72	20.66
1.4	64QAM	1	3	20.47	20.68	20.79
1.4	64QAM	1	5	20.41	20.66	20.73
1.4	64QAM	3	0	20.36	20.49	20.62
1.4	64QAM	3	1	20.40	20.55	20.65
1.4	64QAM	3	3	20.33	20.48	20.59
1.4	64QAM	6	0	19.27	19.40	19.58



LTE Band 2

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				20050	20175	20300
Frequency (MHz)				1720	1732.5	1745
20	QPSK	1	0	22.52	22.70	22.61
20	QPSK	1	49	22.44	22.33	22.52
20	QPSK	1	99	22.51	22.59	22.30
20	QPSK	50	0	21.32	21.41	21.29
20	QPSK	50	24	21.31	21.18	21.28
20	QPSK	50	50	21.09	21.13	21.29
20	QPSK	100	0	21.23	21.32	21.26
20	16QAM	1	0	21.42	21.20	21.19
20	16QAM	1	49	21.52	21.36	21.57
20	16QAM	1	99	21.15	21.22	21.36
20	16QAM	50	0	20.50	20.35	20.38
20	16QAM	50	24	20.54	20.40	20.54
20	16QAM	50	50	20.29	20.38	20.51
20	16QAM	100	0	20.43	20.37	20.40
20	64QAM	1	0	20.68	20.46	20.38
20	64QAM	1	49	20.87	20.65	20.84
20	64QAM	1	99	20.43	20.52	20.81
20	64QAM	50	0	19.38	19.23	19.27
20	64QAM	50	24	19.42	19.31	19.38
20	64QAM	50	50	19.19	19.25	19.39
20	64QAM	100	0	19.35	19.21	19.31



Channel				20025	20175	20325
Frequency (MHz)				1717.5	1732.5	1747.5
15	QPSK	1	0	22.44	22.34	22.39
15	QPSK	1	37	22.49	22.34	22.56
15	QPSK	1	74	22.29	22.28	22.43
15	QPSK	36	0	21.30	21.18	21.28
15	QPSK	36	20	21.34	21.22	21.36
15	QPSK	36	39	21.17	21.12	21.39
15	QPSK	75	0	21.23	21.17	21.30
15	16QAM	1	0	21.46	21.27	21.40
15	16QAM	1	37	21.52	21.37	21.67
15	16QAM	1	74	21.33	21.30	21.56
15	16QAM	36	0	20.56	20.37	20.53
15	16QAM	36	20	20.60	20.40	20.57
15	16QAM	36	39	20.42	20.33	20.60
15	16QAM	75	0	20.44	20.35	20.53
15	64QAM	1	0	20.67	20.42	20.57
15	64QAM	1	37	20.76	20.55	20.87
15	64QAM	1	74	20.50	20.51	20.80
15	64QAM	36	0	19.44	19.28	19.38
15	64QAM	36	20	19.45	19.29	19.45
15	64QAM	36	39	19.30	19.29	19.49
15	64QAM	75	0	19.33	19.24	19.45



Channel				20000	20175	20350
Frequency (MHz)				1715	1732.5	1750
10	QPSK	1	0	22.31	22.11	22.29
10	QPSK	1	25	22.58	22.37	22.39
10	QPSK	1	49	22.17	22.10	22.35
10	QPSK	25	0	21.34	21.11	21.32
10	QPSK	25	12	21.30	21.22	21.41
10	QPSK	25	25	21.18	21.09	21.32
10	QPSK	50	0	21.23	21.12	21.31
10	16QAM	1	0	21.43	21.21	21.38
10	16QAM	1	25	21.65	21.45	21.56
10	16QAM	1	49	21.23	21.21	21.42
10	16QAM	25	0	20.59	20.33	20.54
10	16QAM	25	12	20.58	20.42	20.62
10	16QAM	25	25	20.50	20.46	20.53
10	16QAM	50	0	20.42	20.43	20.48
10	64QAM	1	0	20.64	20.53	20.58
10	64QAM	1	25	20.94	20.74	20.92
10	64QAM	1	49	20.55	20.49	20.79
10	64QAM	25	0	19.44	19.23	19.46
10	64QAM	25	12	19.48	19.35	19.54
10	64QAM	25	25	19.26	19.18	19.44
10	64QAM	50	0	19.30	19.22	19.39





Channel				19975	20175	20375
Frequency (MHz)				1712.5	1732.5	1752.5
5	QPSK	1	0	22.61	22.41	22.66
5	QPSK	1	12	22.64	22.42	22.69
5	QPSK	1	24	22.52	22.34	22.57
5	QPSK	12	0	21.45	21.21	21.51
5	QPSK	12	7	21.44	21.23	21.49
5	QPSK	12	13	21.37	21.18	21.38
5	QPSK	25	0	21.37	21.20	21.45
5	16QAM	1	0	21.61	21.45	21.67
5	16QAM	1	12	21.55	21.39	21.64
5	16QAM	1	24	21.50	21.29	21.54
5	16QAM	12	0	20.64	20.43	20.70
5	16QAM	12	7	20.64	20.43	20.70
5	16QAM	12	13	20.57	20.39	20.63
5	16QAM	25	0	20.61	20.41	20.65
5	64QAM	1	0	20.72	20.52	20.80
5	64QAM	1	12	20.78	20.69	20.81
5	64QAM	1	24	20.63	20.46	20.76
5	64QAM	12	0	19.56	19.31	19.60
5	64QAM	12	7	19.54	19.31	19.59
5	64QAM	12	13	19.42	19.27	19.51
5	64QAM	25	0	19.50	19.31	19.56



Channel				19965	20175	20385
Frequency (MHz)				1711.5	1732.5	1753.5
3	QPSK	1	0	22.61	22.39	22.68
3	QPSK	1	8	22.61	22.45	22.65
3	QPSK	1	14	22.56	22.32	22.61
3	QPSK	8	0	21.38	21.17	21.46
3	QPSK	8	4	21.42	21.16	21.46
3	QPSK	8	7	21.35	21.16	21.43
3	QPSK	15	0	21.38	21.19	21.41
3	16QAM	1	0	21.61	21.40	21.69
3	16QAM	1	8	21.65	21.49	21.71
3	16QAM	1	14	21.54	21.38	21.61
3	16QAM	8	0	20.62	20.48	20.69
3	16QAM	8	4	20.64	20.44	20.72
3	16QAM	8	7	20.59	20.39	20.66
3	16QAM	15	0	20.60	20.38	20.66
3	64QAM	1	0	20.79	20.54	20.80
3	64QAM	1	8	20.75	20.55	20.88
3	64QAM	1	14	20.71	20.54	20.71
3	64QAM	8	0	19.53	19.28	19.56
3	64QAM	8	4	19.51	19.31	19.56
3	64QAM	8	7	19.51	19.26	19.53
3	64QAM	15	0	19.52	19.25	19.56



Channel				19957	20175	20393
Frequency (MHz)				1710.7	1732.5	1754.3
1.4	QPSK	1	0	22.45	22.29	22.58
1.4	QPSK	1	3	22.55	22.35	22.62
1.4	QPSK	1	5	22.47	22.29	22.54
1.4	QPSK	3	0	22.49	22.35	22.60
1.4	QPSK	3	1	22.55	22.35	22.63
1.4	QPSK	3	3	22.52	22.31	22.57
1.4	QPSK	6	0	21.29	21.07	21.34
1.4	16QAM	1	0	21.59	21.36	21.62
1.4	16QAM	1	3	21.57	21.40	21.62
1.4	16QAM	1	5	21.50	21.33	21.54
1.4	16QAM	3	0	21.50	21.36	21.60
1.4	16QAM	3	1	21.56	21.38	21.63
1.4	16QAM	3	3	21.48	21.27	21.53
1.4	16QAM	6	0	20.59	20.37	20.64
1.4	64QAM	1	0	20.41	20.37	20.69
1.4	64QAM	1	3	20.49	20.31	20.57
1.4	64QAM	1	5	20.53	20.43	20.57
1.4	64QAM	3	0	20.44	20.28	20.53
1.4	64QAM	3	1	20.47	20.27	20.54
1.4	64QAM	3	3	20.41	20.26	20.52
1.4	64QAM	6	0	19.40	19.21	19.44



LTE Band 5

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				20450	20525	20600
Frequency (MHz)				829	836.5	844
10	QPSK	1	0	22.97	23.10	23.05
10	QPSK	1	25	22.89	22.83	22.76
10	QPSK	1	49	22.91	22.88	22.71
10	QPSK	25	0	22.13	22.21	21.97
10	QPSK	25	12	22.20	22.02	22.08
10	QPSK	25	25	22.16	22.08	21.97
10	QPSK	50	0	22.12	22.13	21.97
10	16QAM	1	0	22.50	22.38	22.34
10	16QAM	1	25	22.42	22.35	22.32
10	16QAM	1	49	22.38	22.31	22.23
10	16QAM	25	0	21.15	21.05	21.04
10	16QAM	25	12	21.18	21.02	21.10
10	16QAM	25	25	21.15	21.11	20.99
10	16QAM	50	0	21.13	21.01	20.94
10	64QAM	1	0	21.51	21.53	21.37
10	64QAM	1	25	21.48	21.38	21.31
10	64QAM	1	49	21.47	21.39	21.23
10	64QAM	25	0	20.08	19.97	19.89
10	64QAM	25	12	20.12	19.95	19.95
10	64QAM	25	25	20.06	20.00	19.86
10	64QAM	50	0	20.05	19.88	19.85



Channel				20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	23.02	22.81	22.73
5	QPSK	1	12	23.03	22.93	22.85
5	QPSK	1	24	22.98	22.89	22.71
5	QPSK	12	0	22.18	22.10	21.96
5	QPSK	12	7	22.26	22.17	21.97
5	QPSK	12	13	22.20	22.08	21.96
5	QPSK	25	0	22.21	22.03	21.94
5	16QAM	1	0	22.41	22.28	22.12
5	16QAM	1	12	22.40	22.36	22.21
5	16QAM	1	24	22.39	22.30	22.10
5	16QAM	12	0	21.22	21.09	20.94
5	16QAM	12	7	21.25	21.19	21.00
5	16QAM	12	13	21.21	21.13	21.01
5	16QAM	25	0	21.23	21.09	20.97
5	64QAM	1	0	21.44	21.26	21.13
5	64QAM	1	12	21.34	21.32	21.23
5	64QAM	1	24	21.29	21.29	21.13
5	64QAM	12	0	20.12	19.95	19.86
5	64QAM	12	7	20.17	20.05	19.89
5	64QAM	12	13	20.12	20.00	19.85
5	64QAM	25	0	20.12	19.95	19.84



Channel				20415	20525	20635
Frequency (MHz)				825.5	836.5	847.5
3	QPSK	1	0	23.06	22.85	22.81
3	QPSK	1	8	23.09	22.98	22.85
3	QPSK	1	14	23.03	22.93	22.74
3	QPSK	8	0	22.22	22.03	22.01
3	QPSK	8	4	22.25	22.18	22.01
3	QPSK	8	7	22.22	22.11	21.94
3	QPSK	15	0	22.23	22.13	21.95
3	16QAM	1	0	22.48	22.32	22.25
3	16QAM	1	8	22.57	22.45	22.29
3	16QAM	1	14	22.41	22.36	22.20
3	16QAM	8	0	21.29	21.13	21.08
3	16QAM	8	4	21.33	21.23	21.09
3	16QAM	8	7	21.29	21.17	21.06
3	16QAM	15	0	21.25	21.14	21.03
3	64QAM	1	0	21.44	21.18	21.22
3	64QAM	1	8	21.54	21.44	21.29
3	64QAM	1	14	21.37	21.28	21.18
3	64QAM	8	0	20.12	19.97	19.88
3	64QAM	8	4	20.19	20.08	19.93
3	64QAM	8	7	20.14	20.04	19.89
3	64QAM	15	0	20.16	20.04	19.87



Channel				20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	23.00	22.85	22.69
1.4	QPSK	1	3	23.05	22.95	22.79
1.4	QPSK	1	5	23.00	22.89	22.67
1.4	QPSK	3	0	22.56	22.68	22.65
1.4	QPSK	3	1	22.51	22.61	22.66
1.4	QPSK	3	3	22.69	22.62	22.64
1.4	QPSK	6	0	22.16	22.07	21.91
1.4	16QAM	1	0	22.42	22.32	22.16
1.4	16QAM	1	3	22.50	22.41	22.24
1.4	16QAM	1	5	22.45	22.32	22.15
1.4	16QAM	3	0	22.21	22.07	21.97
1.4	16QAM	3	1	22.27	22.16	21.93
1.4	16QAM	3	3	22.16	22.12	21.88
1.4	16QAM	6	0	21.27	21.17	20.99
1.4	64QAM	1	0	21.18	21.06	20.98
1.4	64QAM	1	3	21.24	21.05	20.89
1.4	64QAM	1	5	21.14	21.01	20.88
1.4	64QAM	3	0	21.14	21.01	20.85
1.4	64QAM	3	1	21.16	21.08	20.90
1.4	64QAM	3	3	21.12	21.03	20.83
1.4	64QAM	6	0	20.11	19.99	19.81



LTE Band 25

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				26140	26340	26590
Frequency (MHz)				1860	1880	1905
20	QPSK	1	0	23.31	23.45	23.37
20	QPSK	1	49	23.27	23.44	23.36
20	QPSK	1	99	23.22	23.36	23.30
20	QPSK	50	0	22.01	22.28	22.13
20	QPSK	50	24	22.09	22.27	22.21
20	QPSK	50	50	21.99	22.20	22.15
20	QPSK	100	0	21.99	22.17	22.15
20	16QAM	1	0	22.25	22.39	22.40
20	16QAM	1	49	22.19	22.46	22.29
20	16QAM	1	99	22.23	22.36	22.27
20	16QAM	50	0	21.22	21.41	21.35
20	16QAM	50	24	21.27	21.48	21.39
20	16QAM	50	50	21.23	21.40	21.35
20	16QAM	100	0	21.17	21.26	21.32
20	64QAM	1	0	21.26	21.42	21.45
20	64QAM	1	49	21.23	21.48	21.33
20	64QAM	1	99	21.21	21.48	21.39
20	64QAM	50	0	20.12	20.28	20.19
20	64QAM	50	24	20.21	20.38	20.27
20	64QAM	50	50	20.13	20.30	20.24
20	64QAM	100	0	20.09	20.19	20.23





Channel				26115	26340	26615
Frequency (MHz)				1857.5	1880	1907.5
15	QPSK	1	0	23.05	23.24	23.44
15	QPSK	1	37	23.21	23.43	23.35
15	QPSK	1	74	23.19	23.39	23.36
15	QPSK	36	0	21.91	22.12	22.04
15	QPSK	36	20	22.10	22.32	22.13
15	QPSK	36	39	22.02	22.24	22.16
15	QPSK	75	0	22.03	22.15	22.06
15	16QAM	1	0	22.07	22.48	22.43
15	16QAM	1	37	22.28	22.50	22.43
15	16QAM	1	74	22.16	22.46	22.36
15	16QAM	36	0	21.07	21.25	21.11
15	16QAM	36	20	21.19	21.37	21.23
15	16QAM	36	39	21.13	21.33	21.26
15	16QAM	75	0	21.13	21.27	21.21
15	64QAM	1	0	21.42	21.59	21.57
15	64QAM	1	37	21.41	21.71	21.59
15	64QAM	1	74	21.32	21.70	21.61
15	64QAM	36	0	20.21	20.45	20.35
15	64QAM	36	20	20.39	20.58	20.42
15	64QAM	36	39	20.35	20.56	20.47
15	64QAM	75	0	20.32	20.46	20.37



Channel				26090	26340	26640
Frequency (MHz)				1855	1880	1910
10	QPSK	1	0	22.96	23.21	23.31
10	QPSK	1	25	23.14	23.38	23.30
10	QPSK	1	49	22.90	23.14	23.27
10	QPSK	25	0	21.95	22.08	21.97
10	QPSK	25	12	22.02	22.23	22.16
10	QPSK	25	25	21.96	22.19	22.09
10	QPSK	50	0	21.95	22.18	21.99
10	16QAM	1	0	22.09	22.29	22.44
10	16QAM	1	25	22.27	22.51	22.44
10	16QAM	1	49	22.03	22.28	22.43
10	16QAM	25	0	21.04	21.23	21.07
10	16QAM	25	12	21.12	21.35	21.28
10	16QAM	25	25	21.00	21.30	21.17
10	16QAM	50	0	21.04	21.30	21.12
10	64QAM	1	0	21.36	21.52	21.73
10	64QAM	1	25	21.58	21.78	21.75
10	64QAM	1	49	21.35	21.62	21.81
10	64QAM	25	0	20.23	20.39	20.27
10	64QAM	25	12	20.32	20.58	20.48
10	64QAM	25	25	20.21	20.51	20.39
10	64QAM	50	0	20.25	20.47	20.32



Channel				26065	26340	26665
Frequency (MHz)				1852.5	1880	1912.5
5	QPSK	1	0	23.19	23.37	23.35
5	QPSK	1	12	23.23	23.44	23.37
5	QPSK	1	24	23.24	23.21	23.34
5	QPSK	12	0	22.01	22.18	22.13
5	QPSK	12	7	22.06	22.23	22.15
5	QPSK	12	13	22.00	22.29	22.14
5	QPSK	25	0	21.99	22.23	22.13
5	16QAM	1	0	22.23	22.45	22.44
5	16QAM	1	12	22.23	22.45	22.36
5	16QAM	1	24	22.28	22.50	22.40
5	16QAM	12	0	21.13	21.29	21.22
5	16QAM	12	7	21.14	21.35	21.25
5	16QAM	12	13	21.13	21.35	21.27
5	16QAM	25	0	21.12	21.34	21.24
5	64QAM	1	0	21.45	21.61	21.63
5	64QAM	1	12	21.43	21.70	21.53
5	64QAM	1	24	21.42	21.69	21.56
5	64QAM	12	0	20.32	20.48	20.43
5	64QAM	12	7	20.32	20.55	20.46
5	64QAM	12	13	20.28	20.55	20.46
5	64QAM	25	0	20.29	20.54	20.43



Channel				26055	26340	26675
Frequency (MHz)				1851.5	1880	1913.5
3	QPSK	1	0	23.20	23.41	23.29
3	QPSK	1	8	23.28	23.24	23.38
3	QPSK	1	14	23.25	23.21	23.36
3	QPSK	8	0	22.00	22.16	22.07
3	QPSK	8	4	22.04	22.26	22.13
3	QPSK	8	7	22.01	22.23	22.11
3	QPSK	15	0	22.03	22.21	22.13
3	16QAM	1	0	22.17	22.37	22.30
3	16QAM	1	8	22.30	22.51	22.39
3	16QAM	1	14	22.25	22.48	22.35
3	16QAM	8	0	21.14	21.33	21.27
3	16QAM	8	4	21.19	21.42	21.32
3	16QAM	8	7	21.16	21.43	21.29
3	16QAM	15	0	21.12	21.32	21.23
3	64QAM	1	0	21.41	21.57	21.54
3	64QAM	1	8	21.47	21.71	21.61
3	64QAM	1	14	21.43	21.71	21.59
3	64QAM	8	0	20.31	20.49	20.39
3	64QAM	8	4	20.35	20.58	20.42
3	64QAM	8	7	20.34	20.54	20.42
3	64QAM	15	0	20.30	20.55	20.46



Channel				26047	26340	26683
Frequency (MHz)				1850.7	1880	1914.3
1.4	QPSK	1	0	23.20	23.31	23.25
1.4	QPSK	1	3	23.22	23.14	23.34
1.4	QPSK	1	5	23.16	23.41	23.24
1.4	QPSK	3	0	23.23	23.39	23.26
1.4	QPSK	3	1	23.23	23.43	23.35
1.4	QPSK	3	3	23.17	23.42	23.28
1.4	QPSK	6	0	21.94	22.17	22.05
1.4	16QAM	1	0	22.14	22.28	22.26
1.4	16QAM	1	3	22.26	22.46	22.35
1.4	16QAM	1	5	22.18	22.45	22.28
1.4	16QAM	3	0	22.01	22.17	22.09
1.4	16QAM	3	1	22.05	22.25	22.12
1.4	16QAM	3	3	21.99	22.22	22.09
1.4	16QAM	6	0	21.00	21.24	21.16
1.4	64QAM	1	0	21.32	21.53	21.48
1.4	64QAM	1	3	21.38	21.60	21.58
1.4	64QAM	1	5	21.34	21.66	21.56
1.4	64QAM	3	0	21.24	21.48	21.38
1.4	64QAM	3	1	21.30	21.52	21.42
1.4	64QAM	3	3	21.24	21.50	21.37
1.4	64QAM	6	0	20.29	20.47	20.39



LTE Band 26

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				26865	26915	26965
Frequency (MHz)				831.5	836.5	841.5
15	QPSK	1	0	23.19	23.22	23.12
15	QPSK	1	37	23.01	22.97	23.11
15	QPSK	1	74	22.97	22.88	22.95
15	QPSK	36	0	22.06	22.17	21.88
15	QPSK	36	20	22.16	21.99	21.99
15	QPSK	36	39	22.07	22.01	21.76
15	QPSK	75	0	22.09	22.10	21.82
15	16QAM	1	0	22.49	22.31	22.25
15	16QAM	1	37	22.35	22.26	22.16
15	16QAM	1	74	22.29	22.19	22.07
15	16QAM	36	0	21.15	21.04	20.98
15	16QAM	36	20	21.27	21.13	21.07
15	16QAM	36	39	21.18	21.09	20.97
15	16QAM	75	0	21.25	21.05	20.97
15	16QAM	1	0	21.62	21.45	21.48
15	16QAM	1	37	21.42	21.46	21.24
15	16QAM	1	74	21.30	21.29	21.17
15	16QAM	36	0	20.34	20.26	20.18
15	16QAM	36	20	20.47	20.31	20.30
15	16QAM	36	39	20.37	20.30	20.19
15	16QAM	75	0	20.43	20.25	20.13



Channel				26840	26915	26990
Frequency (MHz)				829	836.5	844
10	QPSK	1	0	23.20	23.05	22.92
10	QPSK	1	25	23.10	23.01	22.87
10	QPSK	1	49	23.08	22.93	22.78
10	QPSK	25	0	22.06	21.98	21.84
10	QPSK	25	12	22.24	22.04	21.92
10	QPSK	25	25	22.14	22.04	21.80
10	QPSK	50	0	22.18	21.93	21.84
10	16QAM	1	0	22.55	22.38	22.23
10	16QAM	1	25	22.46	22.29	22.19
10	16QAM	1	49	22.42	22.27	22.12
10	16QAM	25	0	21.25	21.07	20.92
10	16QAM	25	12	21.37	21.15	21.05
10	16QAM	25	25	21.25	21.15	21.03
10	16QAM	50	0	21.25	21.05	20.96
10	16QAM	1	0	21.84	21.62	21.51
10	16QAM	1	25	21.64	21.61	21.46
10	16QAM	1	49	21.65	21.56	21.42
10	16QAM	25	0	20.49	20.26	20.16
10	16QAM	25	12	20.58	20.38	20.24
10	16QAM	25	25	20.45	20.36	20.18
10	16QAM	50	0	20.43	20.27	20.19



Channel				26815	26915	27015
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	23.09	22.93	22.82
5	QPSK	1	12	23.21	22.98	22.81
5	QPSK	1	24	23.03	22.98	22.74
5	QPSK	12	0	22.22	21.99	21.88
5	QPSK	12	7	22.28	22.10	21.88
5	QPSK	12	13	22.23	22.06	21.82
5	QPSK	25	0	22.05	21.96	21.80
5	16QAM	1	0	22.39	22.25	22.13
5	16QAM	1	12	22.44	22.26	22.06
5	16QAM	1	24	22.37	22.28	22.04
5	16QAM	12	0	21.32	21.13	20.98
5	16QAM	12	7	21.40	21.23	21.02
5	16QAM	12	13	21.34	21.17	20.98
5	16QAM	25	0	21.32	21.11	20.97
5	16QAM	1	0	21.53	21.40	21.30
5	16QAM	1	12	21.60	21.40	21.20
5	16QAM	1	24	21.51	21.43	21.17
5	16QAM	12	0	20.53	20.27	20.15
5	16QAM	12	7	20.57	20.38	20.20
5	16QAM	12	13	20.49	20.34	20.09
5	16QAM	25	0	20.54	20.30	20.17





Channel				26805	26915	27025
Frequency (MHz)				825.5	836.5	847.5
3	QPSK	1	0	23.13	22.92	22.76
3	QPSK	1	8	23.20	22.98	22.79
3	QPSK	1	14	23.08	22.93	22.71
3	QPSK	8	0	22.20	21.94	21.78
3	QPSK	8	4	22.24	22.03	21.85
3	QPSK	8	7	22.21	22.02	21.79
3	QPSK	15	0	22.23	21.96	21.82
3	16QAM	1	0	22.41	22.23	22.07
3	16QAM	1	8	22.45	22.29	22.07
3	16QAM	1	14	22.39	22.25	22.03
3	16QAM	8	0	21.40	21.15	20.97
3	16QAM	8	4	21.43	21.25	21.02
3	16QAM	8	7	21.36	21.16	20.96
3	16QAM	15	0	21.35	21.10	20.95
3	16QAM	1	0	21.60	21.41	21.29
3	16QAM	1	8	21.66	21.36	21.18
3	16QAM	1	14	21.65	21.46	21.20
3	16QAM	8	0	20.57	20.29	20.15
3	16QAM	8	4	20.59	20.37	20.16
3	16QAM	8	7	20.57	20.37	20.13
3	16QAM	15	0	20.53	20.27	20.10



Channel				26797	26915	27033
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	23.07	22.87	22.82
1.4	QPSK	1	3	23.13	22.91	22.68
1.4	QPSK	1	5	23.03	22.83	22.92
1.4	QPSK	3	0	23.06	22.88	22.63
1.4	QPSK	3	1	23.12	22.89	22.70
1.4	QPSK	3	3	23.07	22.85	22.63
1.4	QPSK	6	0	22.17	21.96	21.71
1.4	16QAM	1	0	21.37	21.22	21.35
1.4	16QAM	1	3	21.46	21.25	21.04
1.4	16QAM	1	5	21.38	21.18	21.33
1.4	16QAM	3	0	21.17	21.33	21.32
1.4	16QAM	3	1	21.21	21.44	21.42
1.4	16QAM	3	3	21.14	21.35	21.33
1.4	16QAM	6	0	21.21	20.99	20.76
1.4	16QAM	1	0	21.65	21.51	21.18
1.4	16QAM	1	3	21.67	21.49	21.24
1.4	16QAM	1	5	21.66	21.43	21.21
1.4	16QAM	3	0	21.49	21.27	21.07
1.4	16QAM	3	1	21.51	21.31	21.11
1.4	16QAM	3	3	21.48	21.27	21.03
1.4	16QAM	6	0	20.45	20.24	20.01



LTE Band 66

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				132072	132322	132572
Frequency (MHz)				1720	1745	1770
20	QPSK	1	0	22.52	22.71	22.63
20	QPSK	1	49	22.47	22.49	22.53
20	QPSK	1	99	22.38	22.32	22.38
20	QPSK	50	0	21.37	21.50	21.40
20	QPSK	50	24	21.43	21.37	21.49
20	QPSK	50	50	21.28	21.33	21.34
20	QPSK	100	0	21.37	21.38	21.36
20	16QAM	1	0	21.68	21.70	21.91
20	16QAM	1	49	21.89	21.97	21.94
20	16QAM	1	99	21.55	21.63	21.82
20	16QAM	50	0	20.58	20.64	20.62
20	16QAM	50	24	20.66	20.64	20.71
20	16QAM	50	50	20.54	20.56	20.56
20	16QAM	100	0	20.58	20.53	20.52
20	64QAM	1	0	20.84	20.73	21.12
20	64QAM	1	49	20.96	21.07	21.08
20	64QAM	1	99	20.72	20.74	21.01
20	64QAM	50	0	19.75	19.75	19.80
20	64QAM	50	24	19.86	19.80	19.91
20	64QAM	50	50	19.72	19.76	19.77
20	64QAM	100	0	19.78	19.71	19.75



Channel				132047	132322	132597
Frequency (MHz)				1717.5	1745	1772.5
15	QPSK	1	0	22.42	22.43	22.59
15	QPSK	1	37	22.47	22.43	22.46
15	QPSK	1	74	22.29	22.22	22.39
15	QPSK	36	0	21.34	21.33	21.37
15	QPSK	36	20	21.40	21.32	21.48
15	QPSK	36	39	21.31	21.30	21.35
15	QPSK	75	0	21.38	21.27	21.34
15	16QAM	1	0	21.74	21.74	21.95
15	16QAM	1	37	21.81	21.86	21.92
15	16QAM	1	74	21.59	21.66	21.79
15	16QAM	36	0	20.58	20.56	20.66
15	16QAM	36	20	20.63	20.53	20.67
15	16QAM	36	39	20.52	20.53	20.55
15	16QAM	75	0	20.59	20.51	20.58
15	64QAM	1	0	20.87	20.78	21.04
15	64QAM	1	37	20.90	20.97	21.08
15	64QAM	1	74	20.61	20.79	20.99
15	64QAM	36	0	19.76	19.77	19.82
15	64QAM	36	20	19.80	19.73	19.87
15	64QAM	36	39	19.72	19.73	19.76
15	64QAM	75	0	19.79	19.72	19.77



Channel				132022	132322	132622
Frequency (MHz)				1715	1745	1775
10	QPSK	1	0	22.22	22.14	22.27
10	QPSK	1	25	22.40	22.44	22.51
10	QPSK	1	49	22.14	22.20	22.24
10	QPSK	25	0	21.33	21.27	21.32
10	QPSK	25	12	21.39	21.30	21.36
10	QPSK	25	25	21.26	21.28	21.32
10	QPSK	50	0	21.33	21.25	21.31
10	16QAM	1	0	21.58	21.59	21.66
10	16QAM	1	25	21.80	21.84	21.92
10	16QAM	1	49	21.57	21.60	21.63
10	16QAM	25	0	20.56	20.48	20.57
10	16QAM	25	12	20.60	20.56	20.58
10	16QAM	25	25	20.44	20.50	20.55
10	16QAM	50	0	20.51	20.48	20.52
10	64QAM	1	0	20.71	20.79	20.85
10	64QAM	1	25	20.94	21.17	21.20
10	64QAM	1	49	20.71	20.91	20.95
10	64QAM	25	0	19.74	19.73	19.76
10	64QAM	25	12	19.83	19.80	19.80
10	64QAM	25	25	19.67	19.69	19.74
10	64QAM	50	0	19.72	19.66	19.72



Channel				131997	132322	132647
Frequency (MHz)				1712.5	1745	1777.5
5	QPSK	1	0	22.50	22.45	22.55
5	QPSK	1	12	22.46	22.54	22.50
5	QPSK	1	24	22.36	22.43	22.42
5	QPSK	12	0	21.39	21.39	21.44
5	QPSK	12	7	21.40	21.44	21.43
5	QPSK	12	13	21.34	21.32	21.36
5	QPSK	25	0	21.36	21.31	21.41
5	16QAM	1	0	21.84	21.80	21.90
5	16QAM	1	12	21.79	21.76	21.80
5	16QAM	1	24	21.75	21.73	21.74
5	16QAM	12	0	20.64	20.63	20.68
5	16QAM	12	7	20.61	20.65	20.66
5	16QAM	12	13	20.54	20.57	20.57
5	16QAM	25	0	20.57	20.57	20.63
5	64QAM	1	0	20.96	20.94	21.02
5	64QAM	1	12	20.96	20.95	20.97
5	64QAM	1	24	20.83	20.87	20.85
5	64QAM	12	0	19.82	19.78	19.86
5	64QAM	12	7	19.78	19.85	19.86
5	64QAM	12	13	19.71	19.73	19.73
5	64QAM	25	0	19.79	19.75	19.81



Channel				131987	132322	132657
Frequency (MHz)				1711.5	1745	1778.5
3	QPSK	1	0	22.54	22.54	22.59
3	QPSK	1	8	22.56	22.56	22.54
3	QPSK	1	14	22.42	22.45	22.44
3	QPSK	8	0	21.45	21.36	21.43
3	QPSK	8	4	21.43	21.42	21.45
3	QPSK	8	7	21.35	21.34	21.37
3	QPSK	15	0	21.39	21.32	21.39
3	16QAM	1	0	21.90	21.84	21.85
3	16QAM	1	8	21.90	21.88	21.94
3	16QAM	1	14	21.77	21.77	21.78
3	16QAM	8	0	20.65	20.64	20.71
3	16QAM	8	4	20.64	20.68	20.68
3	16QAM	8	7	20.60	20.61	20.62
3	16QAM	15	0	20.60	20.59	20.68
3	64QAM	1	0	21.01	20.99	21.04
3	64QAM	1	8	21.03	21.02	21.02
3	64QAM	1	14	20.90	20.96	20.93
3	64QAM	8	0	19.84	19.82	19.89
3	64QAM	8	4	19.83	19.85	19.86
3	64QAM	8	7	19.76	19.80	19.78
3	64QAM	15	0	19.80	19.76	19.85



Channel				131979	132322	132665
Frequency (MHz)				1710.7	1745	1779.3
1.4	QPSK	1	0	22.42	22.43	22.45
1.4	QPSK	1	3	22.42	22.46	22.50
1.4	QPSK	1	5	22.34	22.38	22.42
1.4	QPSK	3	0	22.47	22.46	22.47
1.4	QPSK	3	1	22.50	22.47	22.51
1.4	QPSK	3	3	22.46	22.44	22.46
1.4	QPSK	6	0	21.52	21.42	21.52
1.4	16QAM	1	0	21.78	21.83	21.79
1.4	16QAM	1	3	21.81	21.87	21.87
1.4	16QAM	1	5	21.73	21.76	21.75
1.4	16QAM	3	0	21.61	21.59	21.60
1.4	16QAM	3	1	21.60	21.59	21.62
1.4	16QAM	3	3	21.50	21.52	21.58
1.4	16QAM	6	0	20.59	20.52	20.61
1.4	64QAM	1	0	20.64	20.65	20.64
1.4	64QAM	1	3	20.59	20.61	20.61
1.4	64QAM	1	5	20.50	20.57	20.55
1.4	64QAM	3	0	20.48	20.50	20.52
1.4	64QAM	3	1	20.53	20.53	20.53
1.4	64QAM	3	3	20.44	20.44	20.48
1.4	64QAM	6	0	19.52	19.55	19.52





**CA Power**

CA_5B							
Combination 10MHz+10MHz (100RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
20450	20549	QPSK	1	0	0	0	22.84
20476	20575	QPSK	1	0	0	0	22.91
20501	20600	QPSK	1	0	0	0	22.87
20450	20549	16QAM	1	0	0	0	21.99
20476	20575	16QAM	1	0	0	0	21.78
20501	20600	16QAM	1	0	0	0	22.01
20450	20549	64QAM	1	0	0	0	21.93
20476	20575	64QAM	1	0	0	0	21.97
20501	20600	64QAM	1	0	0	0	21.95



**ERP/EIRP**

LTE Band 25 / 1.4MHz (Average) (GT - LC = 1 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	3	1	23.23	0.2104	24.23	0.2649
Middle		3	1	23.43	0.2203	24.43	0.2773
Highest		3	1	23.35	0.2163	24.35	0.2723
Lowest	16QAM	1	3	22.26	0.1683	23.26	0.2118
Middle		1	3	22.46	0.1762	23.46	0.2218
Highest		1	3	22.35	0.1718	23.35	0.2163
Lowest	64QAM	1	5	21.34	0.1361	22.34	0.1714
Middle		1	5	21.66	0.1466	22.66	0.1845
Highest		1	5	21.56	0.1432	22.56	0.1803
Limit	EIRP < 2W			Result		PASS	

LTE Band 25 / 3MHz (Average) (GT - LC = 1 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	23.20	0.2089	24.20	0.2630
Middle		1	0	23.41	0.2193	24.41	0.2761
Highest		1	0	23.29	0.2133	24.29	0.2685
Lowest	16QAM	1	8	22.30	0.1698	23.30	0.2138
Middle		1	8	22.51	0.1782	23.51	0.2244
Highest		1	8	22.39	0.1734	23.39	0.2183
Lowest	64QAM	1	8	21.47	0.1403	22.47	0.1766
Middle		1	8	21.71	0.1483	22.71	0.1866
Highest		1	8	21.61	0.1449	22.61	0.1824
Limit	EIRP < 2W			Result		PASS	



LTE Band 25 / 5MHz (Average) (GT - LC = 1 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	12	23.23	0.2104	24.23	0.2649
Middle		1	12	23.44	0.2208	24.44	0.2780
Highest		1	12	23.37	0.2173	24.37	0.2735
Lowest	16QAM	1	24	22.28	0.1690	23.28	0.2128
Middle		1	24	22.50	0.1778	23.50	0.2239
Highest		1	24	22.40	0.1738	23.40	0.2188
Lowest	64QAM	1	12	21.43	0.1390	22.43	0.1750
Middle		1	12	21.70	0.1479	22.70	0.1862
Highest		1	12	21.53	0.1422	22.53	0.1791
Limit	EIRP < 2W			Result		PASS	

LTE Band 25 / 10MHz (Average) (GT - LC = 1 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	25	23.14	0.2061	24.14	0.2594
Middle		1	25	23.38	0.2178	24.38	0.2742
Highest		1	25	23.30	0.2138	24.30	0.2692
Lowest	16QAM	1	25	22.27	0.1687	23.27	0.2123
Middle		1	25	22.51	0.1782	23.51	0.2244
Highest		1	25	22.44	0.1754	23.44	0.2208
Lowest	64QAM	1	49	21.35	0.1365	22.35	0.1718
Middle		1	49	21.62	0.1452	22.62	0.1828
Highest		1	49	21.81	0.1517	22.81	0.1910
Limit	EIRP < 2W			Result		PASS	



LTE Band 25 / 15MHz (Average) (GT - LC = 1 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	23.05	0.2018	24.05	0.2541
Middle		1	0	23.24	0.2109	24.24	0.2655
Highest		1	0	23.44	0.2208	24.44	0.2780
Lowest	16QAM	1	37	22.28	0.1690	23.28	0.2128
Middle		1	37	22.50	0.1778	23.50	0.2239
Highest		1	37	22.43	0.1750	23.43	0.2203
Lowest	64QAM	1	37	21.41	0.1384	22.41	0.1742
Middle		1	37	21.71	0.1483	22.71	0.1866
Highest		1	37	21.59	0.1442	22.59	0.1816
Limit	EIRP < 2W			Result		PASS	

LTE Band 25 / 20MHz (Average) (GT - LC = 1 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	23.31	0.2143	24.31	0.2698
Middle		1	0	23.45	0.2213	24.45	0.2786
Highest		1	0	23.37	0.2173	24.37	0.2735
Lowest	16QAM	1	49	22.19	0.1656	23.19	0.2084
Middle		1	49	22.46	0.1762	23.46	0.2218
Highest		1	49	22.29	0.1694	23.29	0.2133
Lowest	64QAM	1	49	21.23	0.1327	22.23	0.1671
Middle		1	49	21.48	0.1406	22.48	0.1770
Highest		1	49	21.33	0.1358	22.33	0.1710
Limit	EIRP < 2W			Result		PASS	



LTE Band 26 / 1.4MHz (Average) (GT - LC = -3 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	3	23.13	0.2056	17.98	0.0628
Middle		1	3	22.91	0.1954	17.76	0.0597
Highest		1	3	22.68	0.1854	17.53	0.0566
Lowest	16QAM	1	3	21.46	0.1400	16.31	0.0428
Middle		1	3	21.25	0.1334	16.10	0.0407
Highest		1	3	21.04	0.1271	15.89	0.0388
Lowest	64QAM	1	3	21.67	0.1469	16.52	0.0449
Middle		1	3	21.49	0.1409	16.34	0.0431
Highest		1	3	21.24	0.1330	16.09	0.0406
Limit	ERP < 7W			Result		PASS	

LTE Band 26 / 3MHz (Average) (GT - LC = -3 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	8	23.20	0.2089	18.05	0.0638
Middle		1	8	22.98	0.1986	17.83	0.0607
Highest		1	8	22.79	0.1901	17.64	0.0581
Lowest	16QAM	1	8	22.45	0.1758	17.30	0.0537
Middle		1	8	22.29	0.1694	17.14	0.0518
Highest		1	8	22.07	0.1611	16.92	0.0492
Lowest	64QAM	1	8	21.66	0.1466	16.51	0.0448
Middle		1	8	21.36	0.1368	16.21	0.0418
Highest		1	8	21.18	0.1312	16.03	0.0401
Limit	ERP < 7W			Result		PASS	



LTE Band 26 / 5MHz (Average) (GT - LC = -3 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	12	23.21	0.2094	18.06	0.0640
Middle		1	12	22.98	0.1986	17.83	0.0607
Highest		1	12	22.81	0.1910	17.66	0.0583
Lowest	16QAM	1	12	22.44	0.1754	17.29	0.0536
Middle		1	12	22.26	0.1683	17.11	0.0514
Highest		1	12	22.06	0.1607	16.91	0.0491
Lowest	64QAM	1	12	21.60	0.1445	16.45	0.0442
Middle		1	12	21.40	0.1380	16.25	0.0422
Highest		1	12	21.20	0.1318	16.05	0.0403
Limit	ERP < 7W			Result		PASS	

LTE Band 26 / 10MHz (Average) (GT - LC = -3 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	23.20	0.2089	18.05	0.0638
Middle		1	0	23.05	0.2018	17.90	0.0617
Highest		1	0	22.92	0.1959	17.77	0.0598
Lowest	16QAM	1	0	22.55	0.1799	17.40	0.0550
Middle		1	0	22.38	0.1730	17.23	0.0528
Highest		1	0	22.23	0.1671	17.08	0.0511
Lowest	64QAM	1	0	21.84	0.1528	16.69	0.0467
Middle		1	0	21.62	0.1452	16.47	0.0444
Highest		1	0	21.51	0.1416	16.36	0.0433
Limit	ERP < 7W			Result		PASS	



LTE Band 26 / 15MHz (Average) (GT - LC = -3 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	23.19	0.2084	18.04	0.0637
Middle		1	0	23.22	0.2099	18.07	0.0641
Highest		1	0	23.12	0.2051	17.97	0.0627
Lowest	16QAM	1	0	22.49	0.1774	17.34	0.0542
Middle		1	0	22.31	0.1702	17.16	0.0520
Highest		1	0	22.25	0.1679	17.10	0.0513
Lowest	64QAM	1	0	21.62	0.1452	16.47	0.0444
Middle		1	0	21.45	0.1396	16.30	0.0427
Highest		1	0	21.48	0.1406	16.33	0.0430
Limit	ERP < 7W			Result		PASS	

LTE Band 26 / 15MHz (Channel 26765) (GT - LC = -3 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	23.19	0.21	18.04	0.06
Middle		-	-	-	-	-	-
Highest		-	-	-	-	-	-
Lowest	16QAM	1	0	22.49	0.18	17.34	0.05
Middle		-	-	-	-	-	-
Highest		-	-	-	-	-	-
Lowest	64QAM	1	0	21.62	0.15	16.47	0.04
Middle		-	-	-	-	-	-
Highest		-	-	-	-	-	-
Limit	ERP < 7W			Result		PASS	



LTE Band 66 / 1.4MHz (Average) (GT - LC = 1 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	3	1	22.50	0.1778	23.50	0.2239
Middle		3	1	22.47	0.1766	23.47	0.2223
Highest		3	1	22.51	0.1782	23.51	0.2244
Lowest	16QAM	1	3	21.81	0.1517	22.81	0.1910
Middle		1	3	21.87	0.1538	22.87	0.1936
Highest		1	3	21.87	0.1538	22.87	0.1936
Lowest	64QAM	1	0	20.64	0.1159	21.64	0.1459
Middle		1	0	20.65	0.1161	21.65	0.1462
Highest		1	0	20.64	0.1159	21.64	0.1459
Limit	EIRP < 1W			Result		PASS	

LTE Band 66 / 3MHz (Average) (GT - LC = 1 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.54	0.1795	23.54	0.2259
Middle		1	0	22.54	0.1795	23.54	0.2259
Highest		1	0	22.59	0.1816	23.59	0.2286
Lowest	16QAM	1	8	21.90	0.1549	22.90	0.1950
Middle		1	8	21.88	0.1542	22.88	0.1941
Highest		1	8	21.94	0.1563	22.94	0.1968
Lowest	64QAM	1	0	21.01	0.1262	22.01	0.1589
Middle		1	0	20.99	0.1256	21.99	0.1581
Highest		1	0	21.04	0.1271	22.04	0.1600
Limit	EIRP < 1W			Result		PASS	





LTE Band 66 / 5MHz (Average) (GT - LC = 1 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.50	0.1778	23.50	0.2239
Middle		1	0	22.45	0.1758	23.45	0.2213
Highest		1	0	22.55	0.1799	23.55	0.2265
Lowest	16QAM	1	0	21.84	0.1528	22.84	0.1923
Middle		1	0	21.80	0.1514	22.80	0.1905
Highest		1	0	21.90	0.1549	22.90	0.1950
Lowest	64QAM	1	0	20.96	0.1247	21.96	0.1570
Middle		1	0	20.94	0.1242	21.94	0.1563
Highest		1	0	21.02	0.1265	22.02	0.1592
Limit	EIRP < 1W			Result		PASS	

LTE Band 66 / 10MHz (Average) (GT - LC = 1 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	25	22.40	0.1738	23.40	0.2188
Middle		1	25	22.44	0.1754	23.44	0.2208
Highest		1	25	22.51	0.1782	23.51	0.2244
Lowest	16QAM	1	25	21.80	0.1514	22.80	0.1905
Middle		1	25	21.84	0.1528	22.84	0.1923
Highest		1	25	21.92	0.1556	22.92	0.1959
Lowest	64QAM	1	25	20.94	0.1242	21.94	0.1563
Middle		1	25	21.17	0.1309	22.17	0.1648
Highest		1	25	21.20	0.1318	22.20	0.1660
Limit	EIRP < 1W			Result		PASS	



LTE Band 66 / 15MHz (Average) (GT - LC = 1 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.42	0.1746	23.42	0.2198
Middle		1	0	22.43	0.1750	23.43	0.2203
Highest		1	0	22.59	0.1816	23.59	0.2286
Lowest	16QAM	1	0	21.74	0.1493	22.74	0.1879
Middle		1	0	21.74	0.1493	22.74	0.1879
Highest		1	0	21.95	0.1567	22.95	0.1972
Lowest	64QAM	1	37	20.90	0.1230	21.90	0.1549
Middle		1	37	20.97	0.1250	21.97	0.1574
Highest		1	37	21.08	0.1282	22.08	0.1614
Limit	EIRP < 1W			Result		PASS	

LTE Band 66 / 20MHz (Average) (GT - LC = 1 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.52	0.1786	23.52	0.2249
Middle		1	0	22.71	0.1866	23.71	0.2350
Highest		1	0	22.63	0.1832	23.63	0.2307
Lowest	16QAM	1	49	21.89	0.1545	22.89	0.1945
Middle		1	49	21.97	0.1574	22.97	0.1982
Highest		1	49	21.94	0.1563	22.94	0.1968
Lowest	64QAM	1	0	20.84	0.1213	21.84	0.1528
Middle		1	0	20.73	0.1183	21.73	0.1489
Highest		1	0	21.12	0.1294	22.12	0.1629
Limit	EIRP < 1W			Result		PASS	



**CA EIRP**

LTE Band 5B CA (GT - LC = -3.0 dB) QPSK			
Bandwidth	10M+10M		
Channel PCC	20450	20476	20501
	(Low)	(Mid)	(High)
Channel SCC	20549	20575	20600
	(Low)	(Mid)	(High)
Conducted Power (dBm)	22.84	22.91	22.87
Conducted Power (Watts)	0.1923	0.1954	0.1936
EIRP(dBm)	17.69	17.76	17.72
EIRP(Watts)	0.0587	0.0597	0.0592

LTE Band 5B CA (GT - LC = -3.0 dB) 16QPSK			
Bandwidth	10M+10M		
Channel PCC	20450	20476	20501
	(Low)	(Mid)	(High)
Channel SCC	20549	20575	20600
	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.99	21.78	22.01
Conducted Power (Watts)	0.1581	0.1507	0.1589
EIRP(dBm)	16.84	16.63	16.86
EIRP(Watts)	0.0483	0.0460	0.0485



LTE Band 5B CA (GT - LC = -3.0 dB) 64QPSK			
Bandwidth	10M+10M		
Channel PCC	20450	20476	20501
	(Low)	(Mid)	(High)
Channel SCC	20549	20575	20600
	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.93	21.97	21.95
Conducted Power (Watts)	0.1560	0.1574	0.1567
EIRP(dBm)	16.78	16.82	16.80
EIRP(Watts)	0.0476	0.0481	0.0479



# LTE Band 25

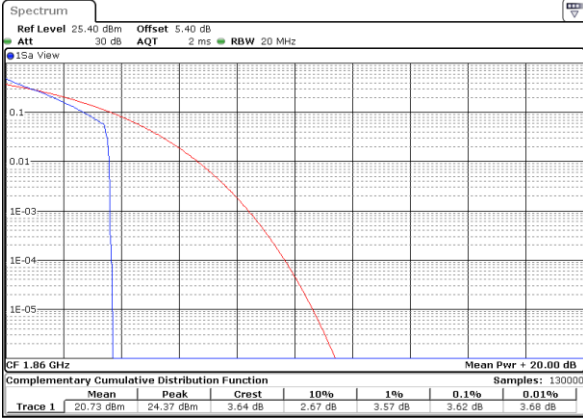
## Peak-to-Average Ratio

Mode	LTE Band 25 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.62	5.04	5.13	5.88	<b>PASS</b>
Middle CH	3.65	4.90	5.68	5.80	
Highest CH	3.51	4.93	5.13	5.88	
Mode	LTE Band 25 / 20MHz				
Mod.	64QAM		-		Limit: 13dB
RB Size	1RB	Full RB	-	-	Result
Lowest CH	6.99	6.49	-	-	<b>PASS</b>
Middle CH	6.64	6.35	-	-	
Highest CH	6.70	6.43	-	-	



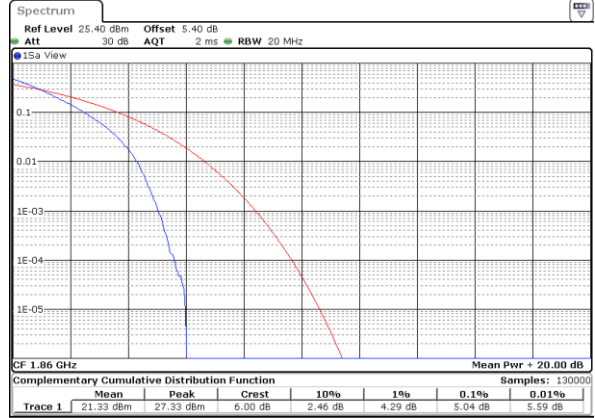
LTE Band 25 / 20MHz / QPSK

Lowest Channel / 1RB



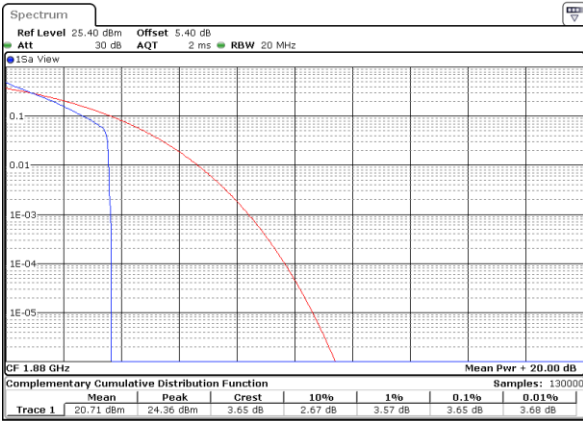
Date: 21 JUN 2020 02:20:33

Lowest Channel / Full RB



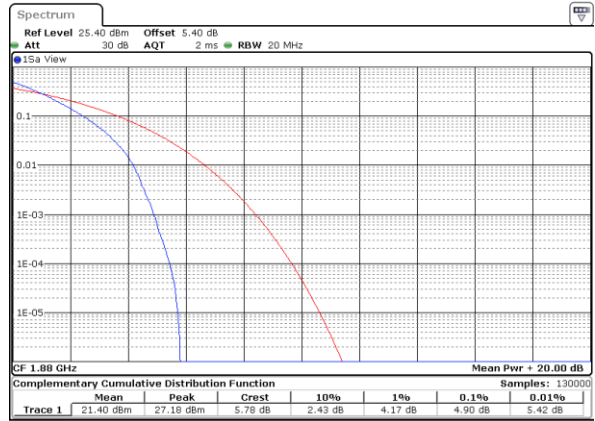
Date: 21 JUN 2020 02:21:30

Middle Channel / 1RB



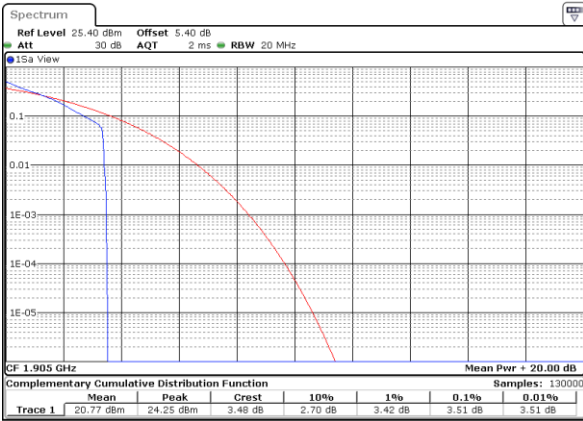
Date: 21 JUN 2020 02:22:26

Middle Channel / Full RB



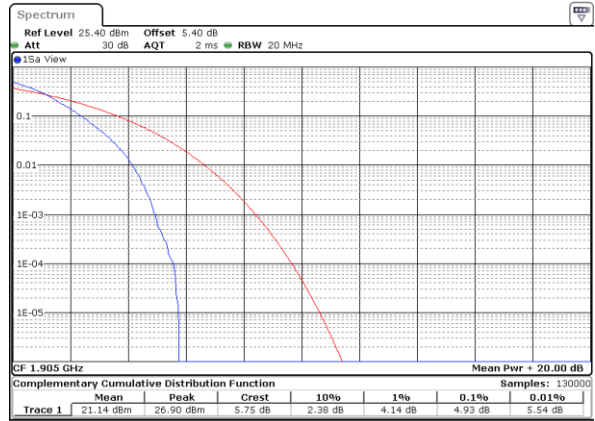
Date: 21 JUN 2020 02:21:39

Highest Channel / 1RB



Date: 21 JUN 2020 02:22:35

Highest Channel / Full RB

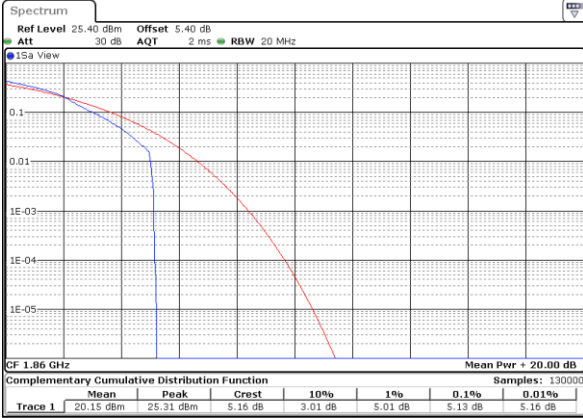


Date: 21 JUN 2020 02:23:53



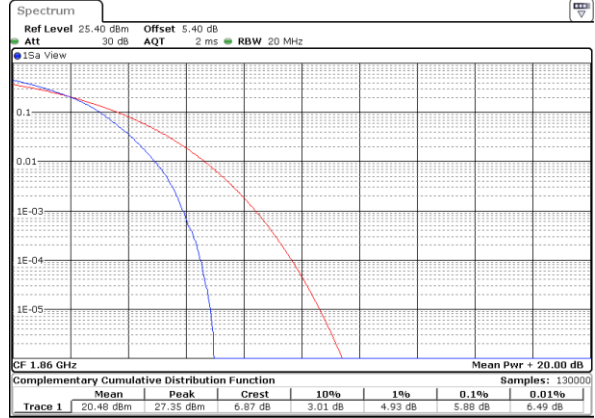
LTE Band 25 / 20MHz / 16QAM

Lowest Channel / 1RB



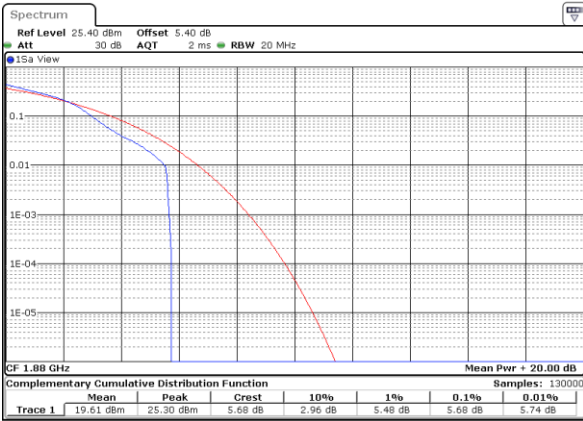
Date: 21 JUN 2020 02:20:43

Lowest Channel / Full RB



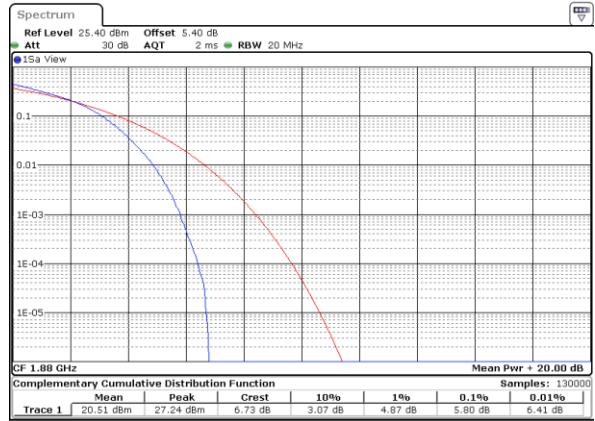
Date: 21 JUN 2020 02:21:17

Middle Channel / 1RB



Date: 21 JUN 2020 02:22:16

Middle Channel / Full RB



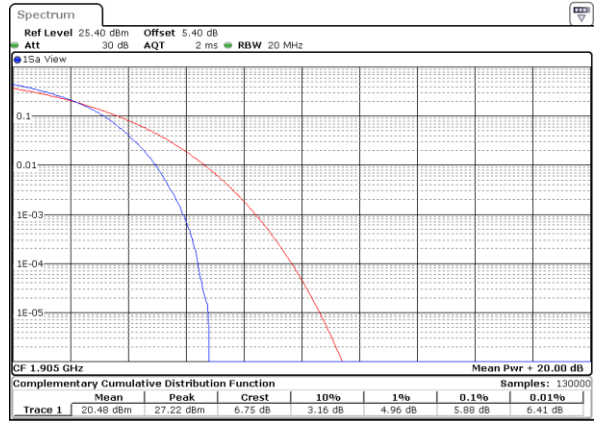
Date: 21 JUN 2020 02:21:48

Highest Channel / 1RB



Date: 21 JUN 2020 02:22:43

Highest Channel / Full RB

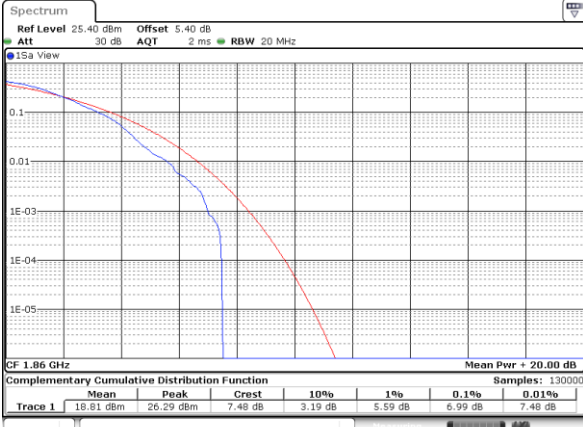


Date: 21 JUN 2020 02:24:04



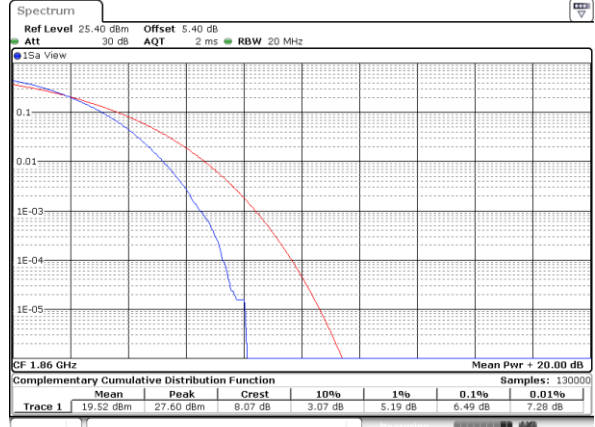
LTE Band 25 / 20MHz / 64QAM

Lowest Channel / 1RB



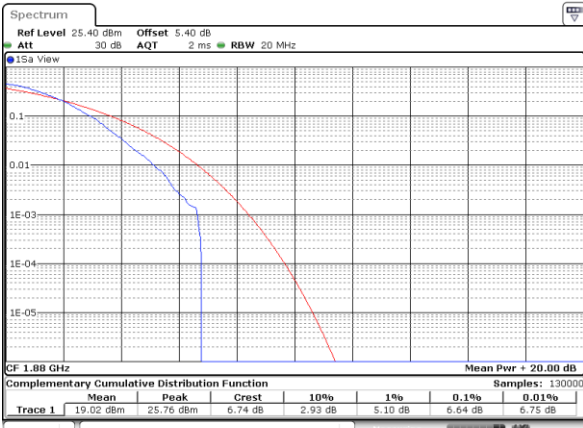
Date: 21 JUN 2020 02:20:57

Lowest Channel / Full RB



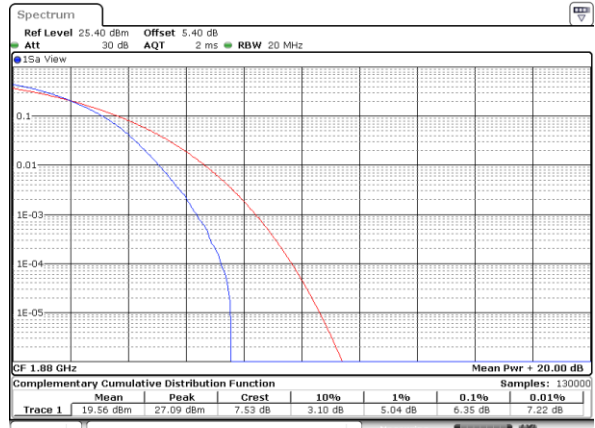
Date: 21 JUN 2020 02:21:08

Middle Channel / 1RB



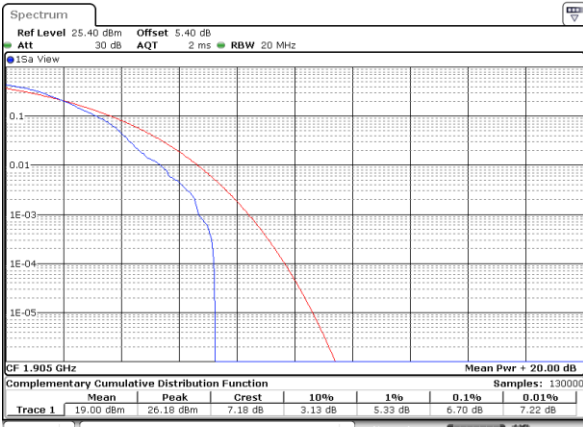
Date: 21 JUN 2020 02:22:07

Middle Channel / Full RB



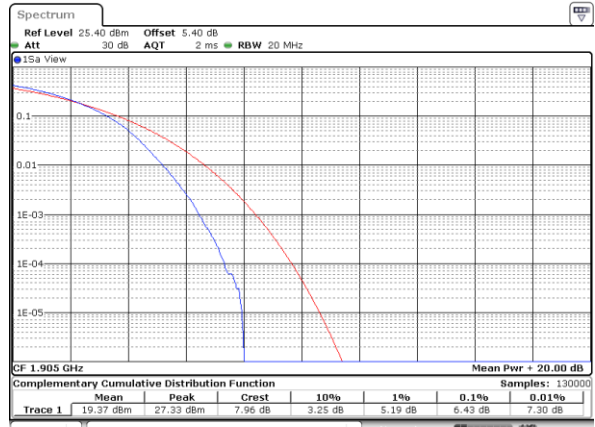
Date: 21 JUN 2020 02:21:58

Highest Channel / 1RB



Date: 21 JUN 2020 02:22:59

Highest Channel / Full RB



Date: 21 JUN 2020 02:24:14





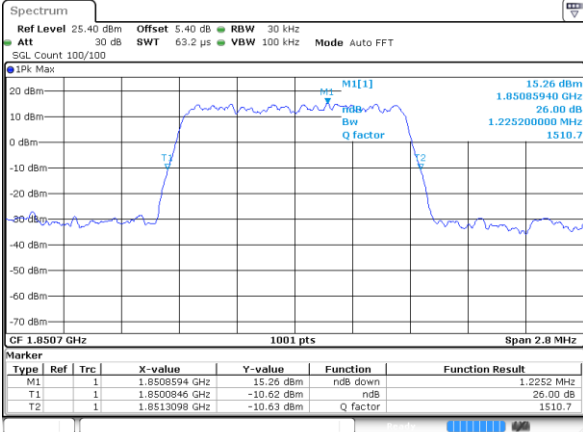
**26dB Bandwidth**

Mode	LTE Band 25 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.23	1.24	3.03	3.03	4.90	4.87	9.63	9.83	14.21	14.27	20.26	20.22
Middle CH	1.23	1.24	3.03	3.05	4.87	4.85	9.73	9.61	14.66	14.57	20.26	20.02
Highest CH	1.23	1.23	3.03	2.97	4.86	4.98	9.65	9.63	14.42	14.60	20.22	20.22
Mode	LTE Band 25 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.24		3.03		4.97		9.85		14.33		20.10	
Middle CH	1.23		3.00		4.92		9.93		14.51		20.38	
Highest CH	1.24		3.06		4.99		9.73		14.54		20.18	



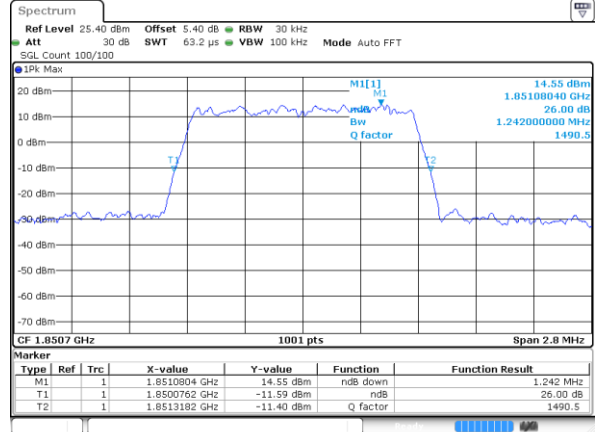
LTE Band 25

Lowest Channel / 1.4MHz / QPSK



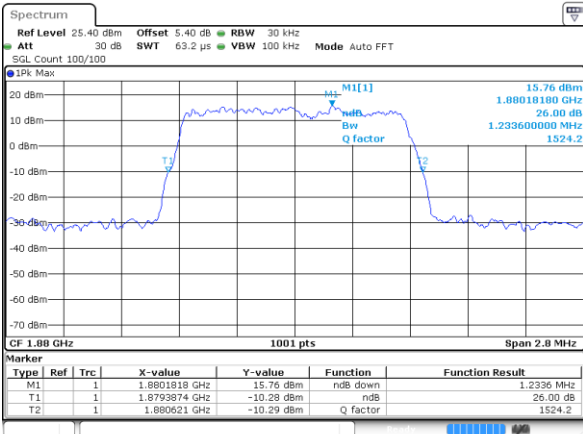
Date: 20 JUN 2020 23:46:37

Lowest Channel / 1.4MHz / 16QAM



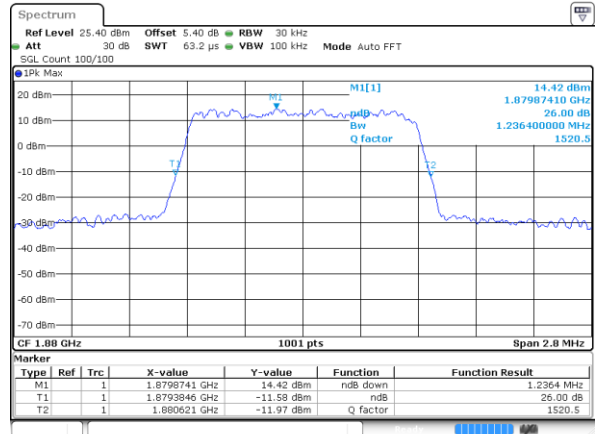
Date: 20 JUN 2020 23:46:57

Middle Channel / 1.4MHz / QPSK



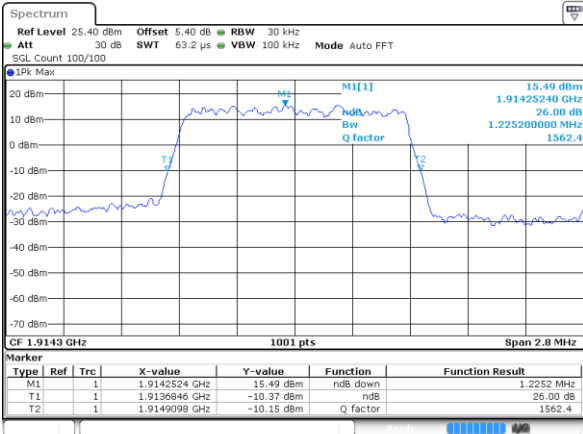
Date: 20 JUN 2020 23:51:31

Middle Channel / 1.4MHz / 16QAM



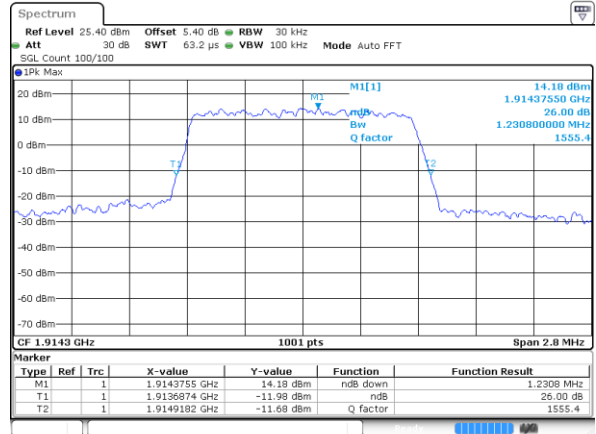
Date: 20 JUN 2020 23:51:51

Highest Channel / 1.4MHz / QPSK



Date: 20 JUN 2020 23:52:31

Highest Channel / 1.4MHz / 16QAM

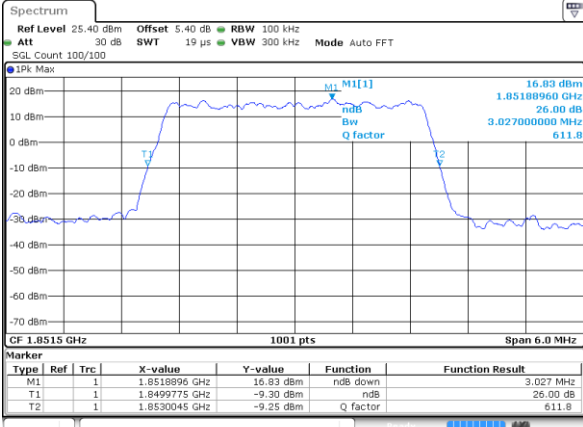


Date: 20 JUN 2020 23:52:51



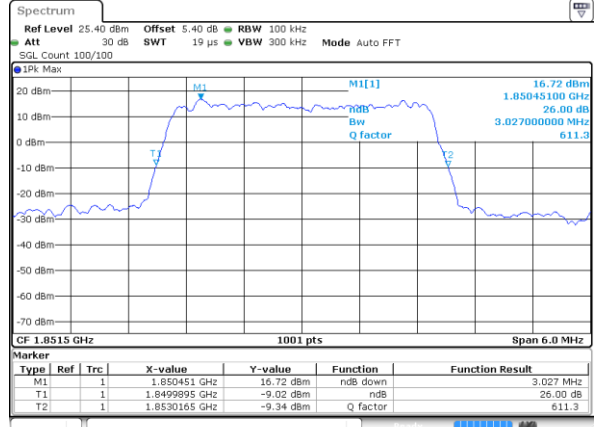
LTE Band 25

Lowest Channel / 3MHz / QPSK



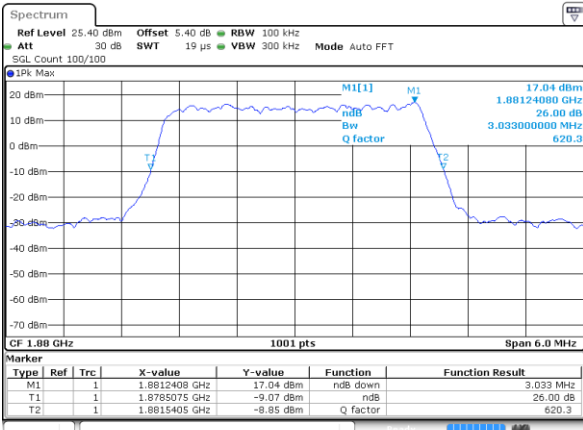
Date: 21 JUN 2020 00:15:13

Lowest Channel / 3MHz / 16QAM



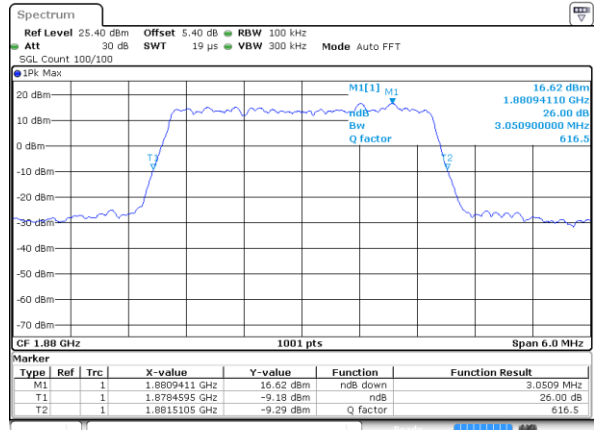
Date: 21 JUN 2020 00:15:33

Middle Channel / 3MHz / QPSK



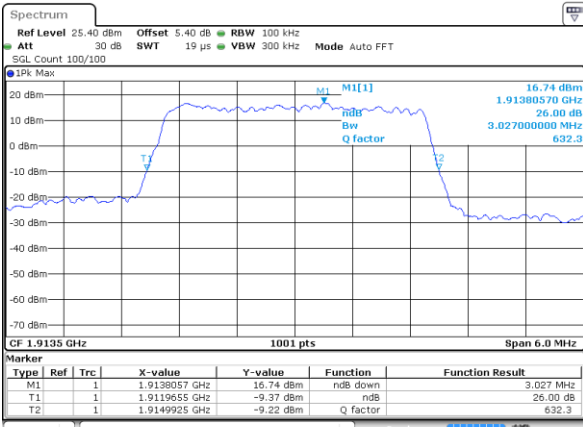
Date: 21 JUN 2020 00:16:13

Middle Channel / 3MHz / 16QAM



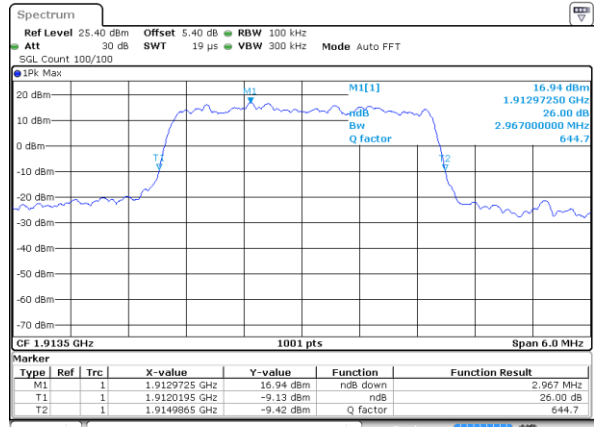
Date: 21 JUN 2020 00:16:33

Highest Channel / 3MHz / QPSK



Date: 21 JUN 2020 00:17:13

Highest Channel / 3MHz / 16QAM

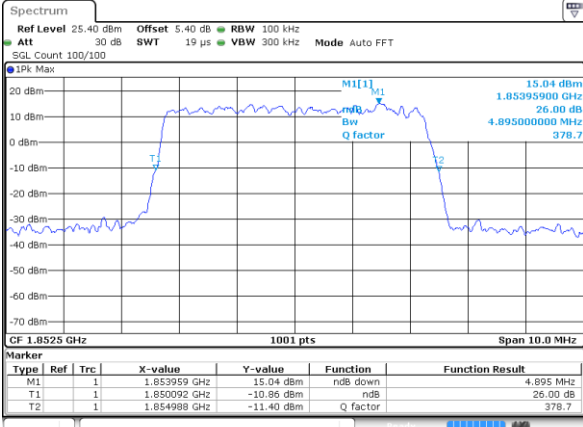


Date: 21 JUN 2020 00:17:33



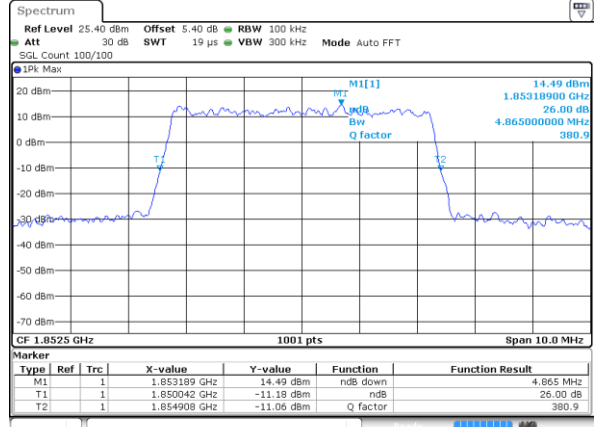
LTE Band 25

Lowest Channel / 5MHz / QPSK



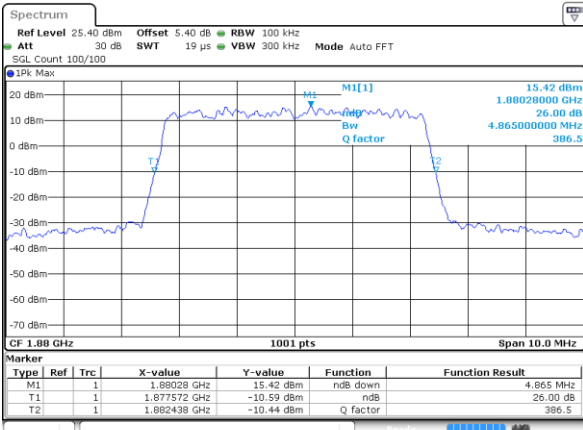
Date: 21 JUN 2020 00:39:55

Lowest Channel / 5MHz / 16QAM



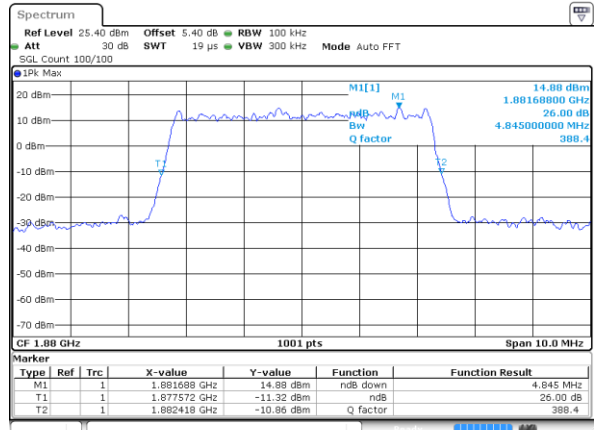
Date: 21 JUN 2020 00:40:15

Middle Channel / 5MHz / QPSK



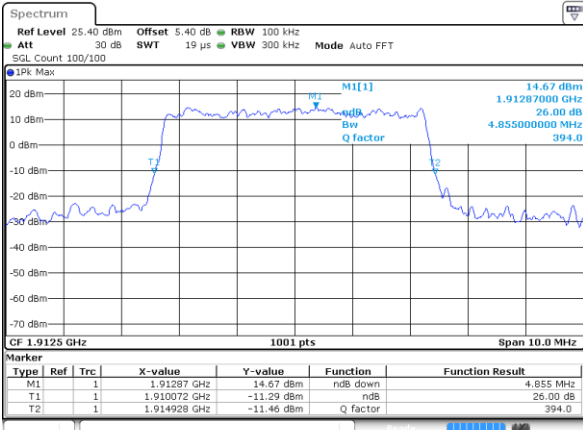
Date: 21 JUN 2020 00:53:47

Middle Channel / 5MHz / 16QAM



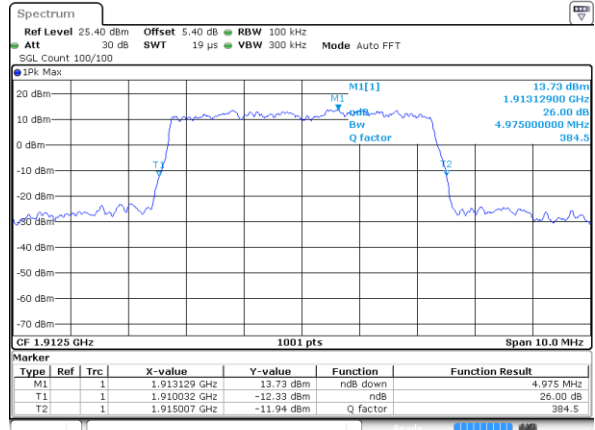
Date: 21 JUN 2020 00:53:27

Highest Channel / 5MHz / QPSK



Date: 21 JUN 2020 00:54:07

Highest Channel / 5MHz / 16QAM

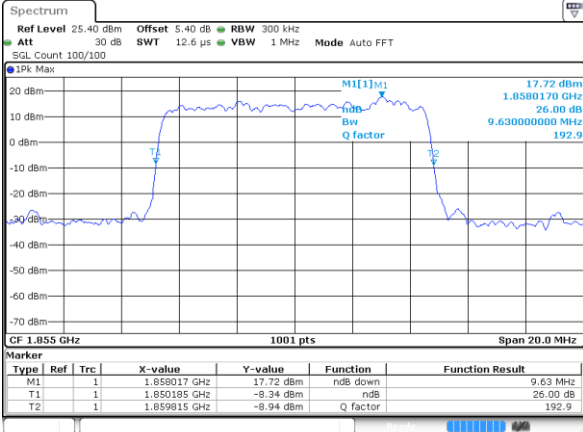


Date: 21 JUN 2020 00:54:27



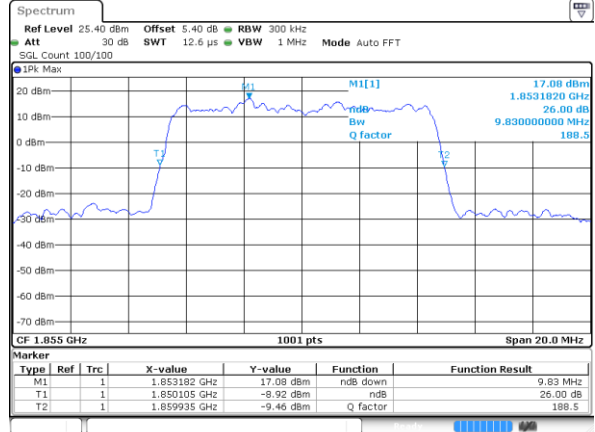
LTE Band 25

Lowest Channel / 10MHz / QPSK



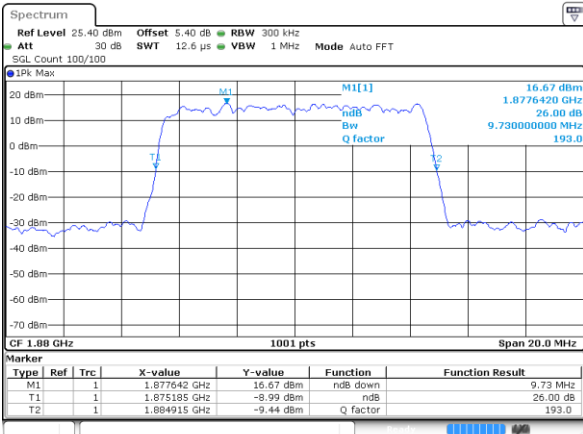
Date: 21 JUN 2020 01:04:36

Lowest Channel / 10MHz / 16QAM



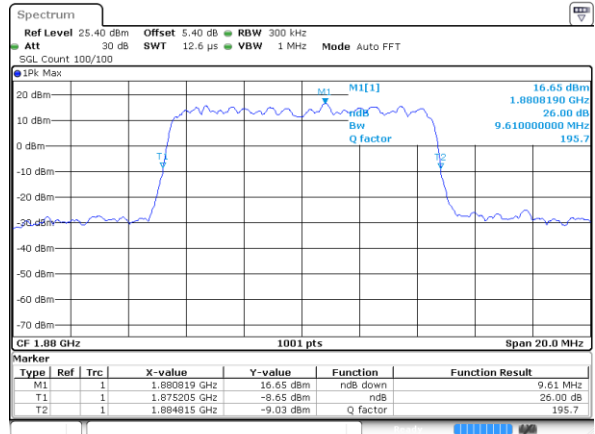
Date: 21 JUN 2020 01:04:56

Middle Channel / 10MHz / QPSK



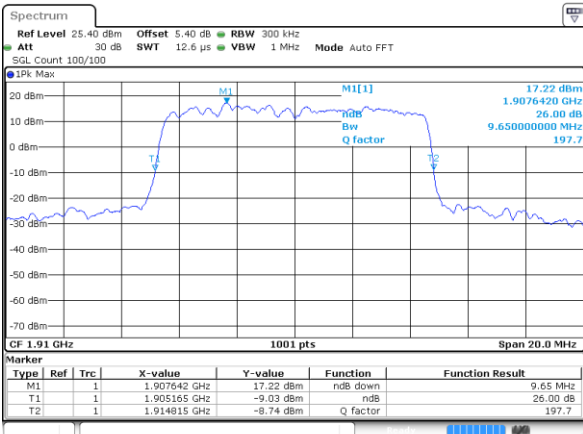
Date: 21 JUN 2020 01:18:29

Middle Channel / 10MHz / 16QAM



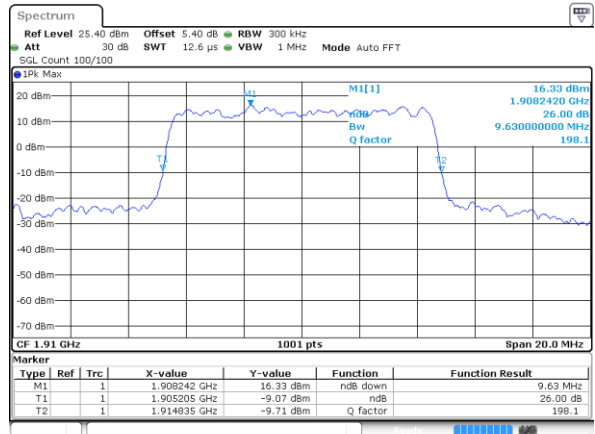
Date: 21 JUN 2020 01:18:09

Highest Channel / 10MHz / QPSK



Date: 21 JUN 2020 01:18:49

Highest Channel / 10MHz / 16QAM

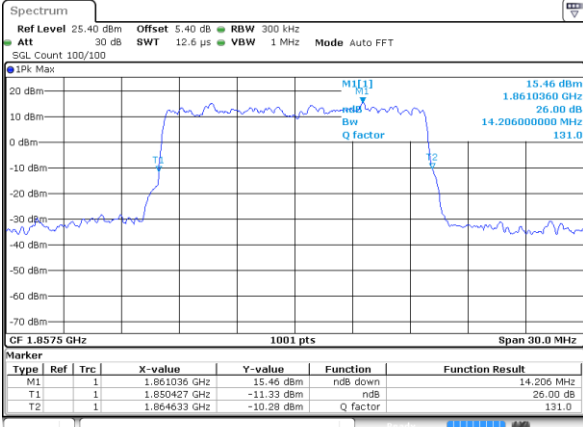


Date: 21 JUN 2020 01:19:09



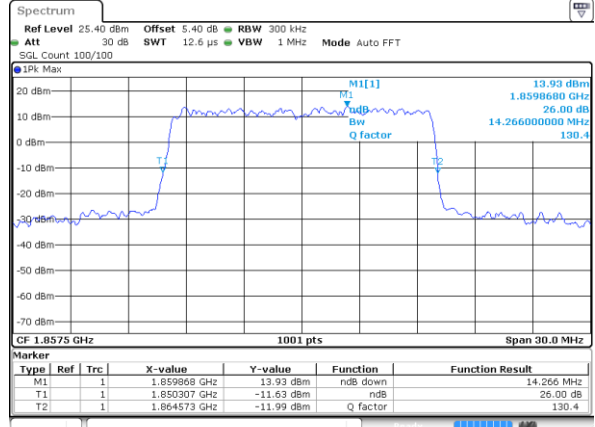
LTE Band 25

Lowest Channel / 15MHz / QPSK



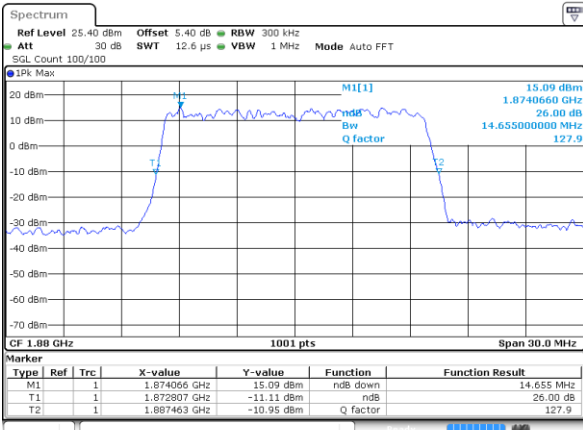
Date: 21 JUN 2020 01:29:19

Lowest Channel / 15MHz / 16QAM



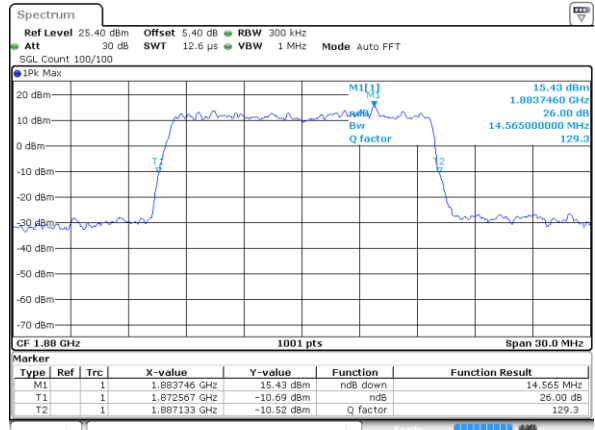
Date: 21 JUN 2020 01:29:39

Middle Channel / 15MHz / QPSK



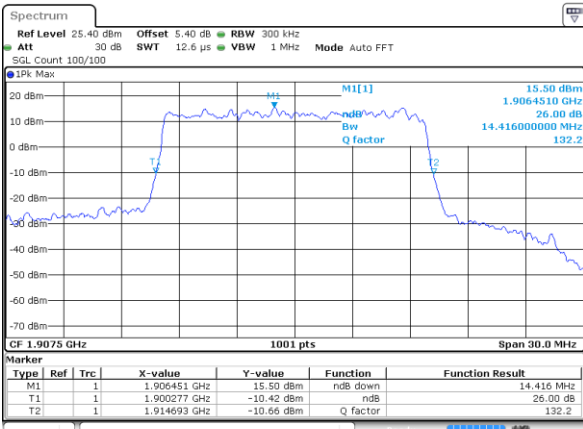
Date: 21 JUN 2020 01:43:12

Middle Channel / 15MHz / 16QAM



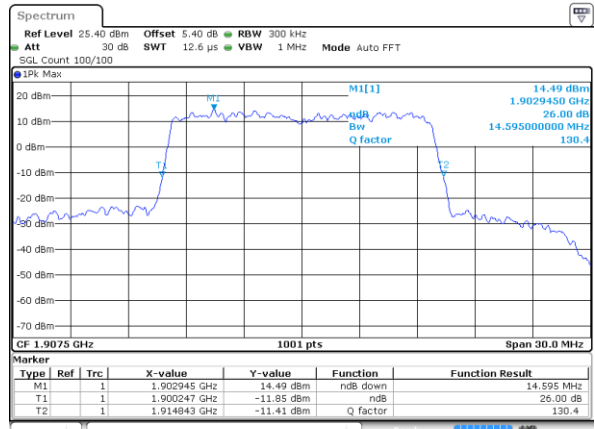
Date: 21 JUN 2020 01:42:52

Highest Channel / 15MHz / QPSK



Date: 21 JUN 2020 01:43:32

Highest Channel / 15MHz / 16QAM

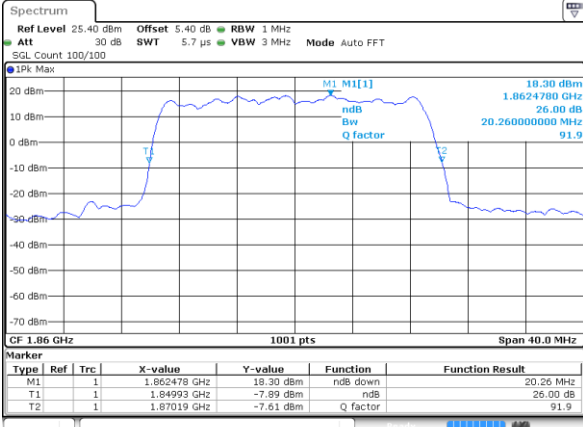


Date: 21 JUN 2020 01:43:52



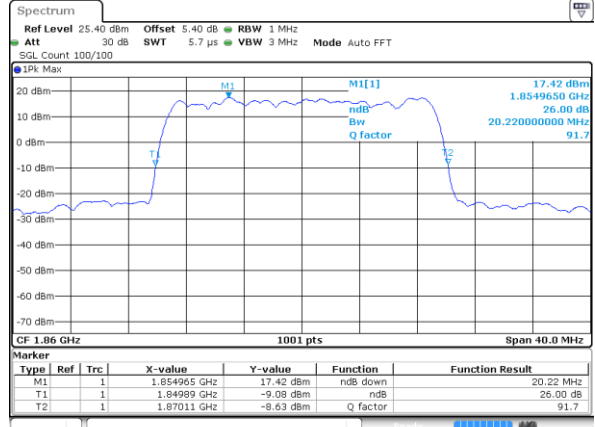
LTE Band 25

Lowest Channel / 20MHz / QPSK



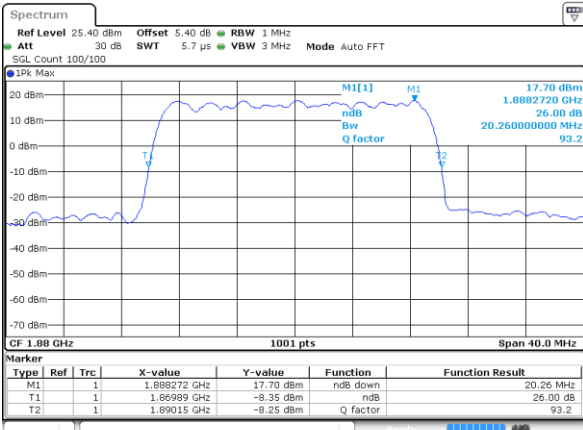
Date: 21 JUN 2020 01:54:01

Lowest Channel / 20MHz / 16QAM



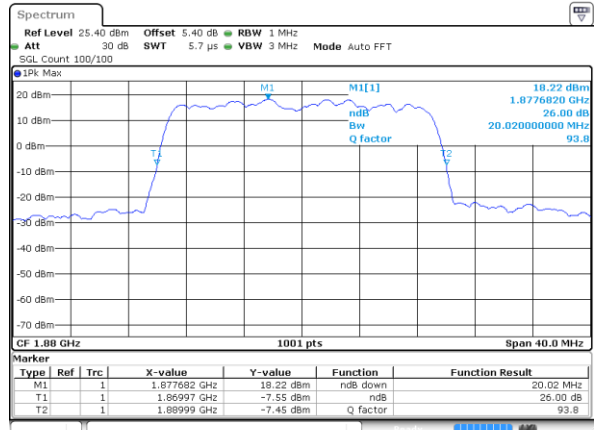
Date: 21 JUN 2020 01:54:21

Middle Channel / 20MHz / QPSK



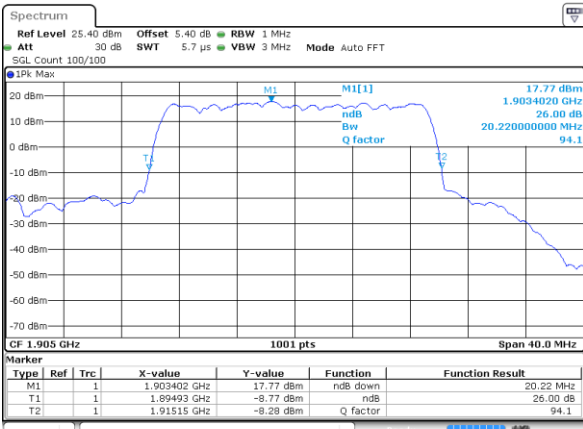
Date: 21 JUN 2020 02:07:54

Middle Channel / 20MHz / 16QAM



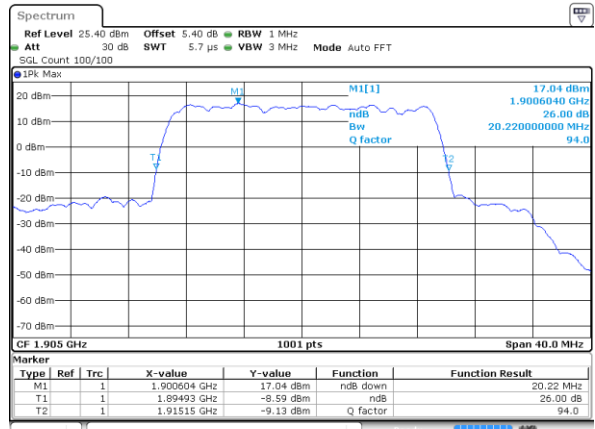
Date: 21 JUN 2020 02:07:34

Highest Channel / 20MHz / QPSK



Date: 21 JUN 2020 02:08:14

Highest Channel / 20MHz / 16QAM

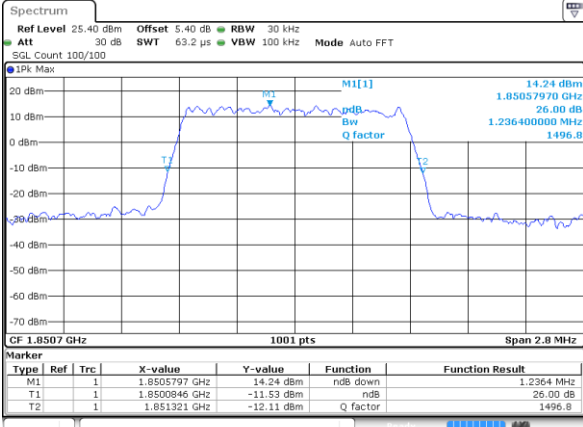


Date: 21 JUN 2020 02:08:34



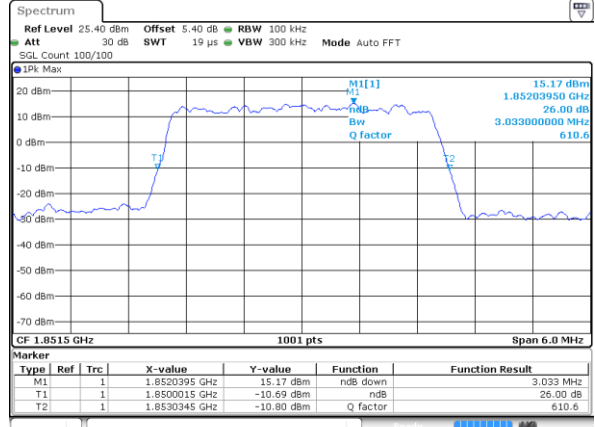
LTE Band 25

Lowest Channel / 1.4MHz / 64QAM



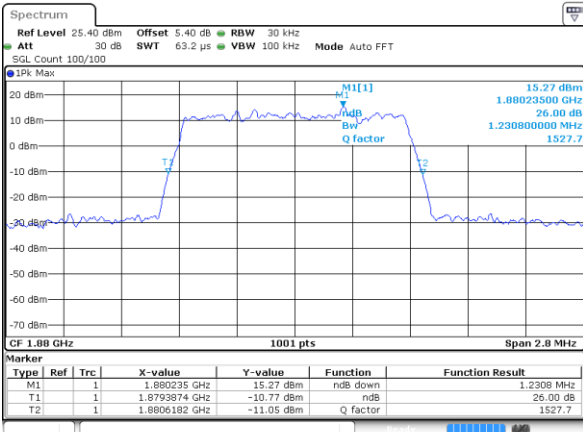
Date: 20 JUN 2020 23:47:17

Lowest Channel / 3MHz / 64QAM



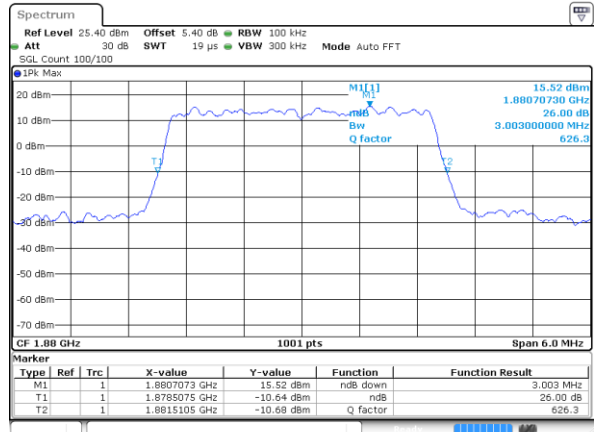
Date: 21 JUN 2020 00:15:53

Middle Channel / 1.4MHz / 64QAM



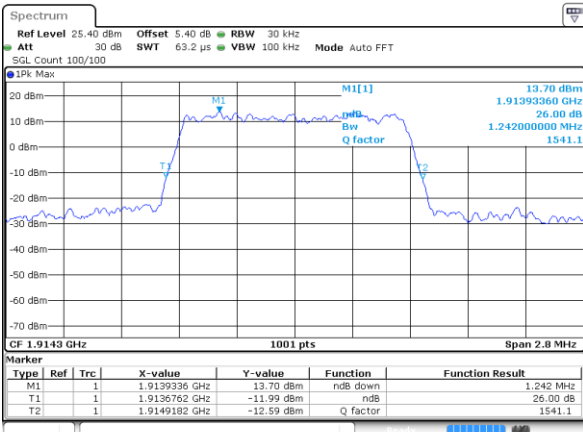
Date: 20 JUN 2020 23:52:11

Middle Channel / 3MHz / 64QAM



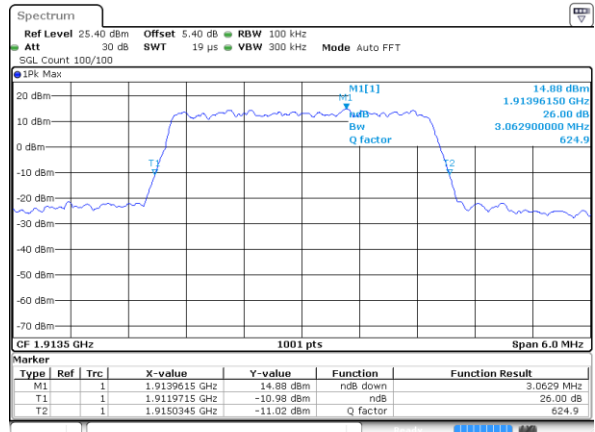
Date: 21 JUN 2020 00:16:53

Highest Channel / 1.4MHz / 64QAM



Date: 20 JUN 2020 23:53:11

Highest Channel / 3MHz / 64QAM



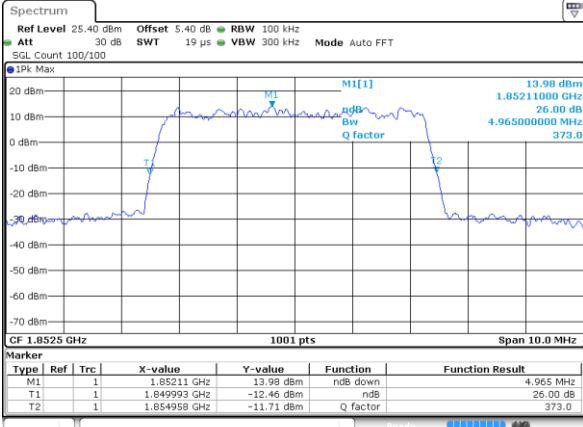
Date: 21 JUN 2020 00:17:53





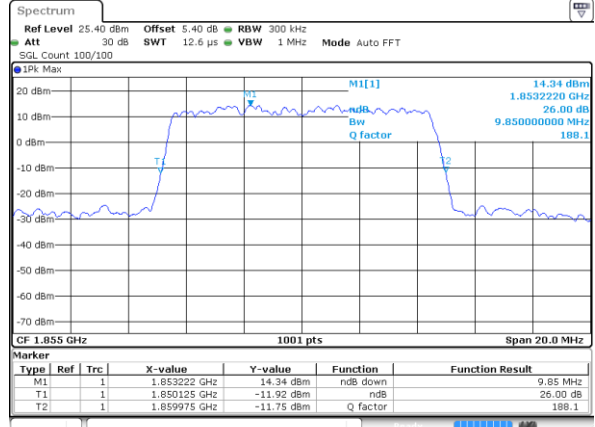
LTE Band 25

Lowest Channel / 5MHz / 64QAM



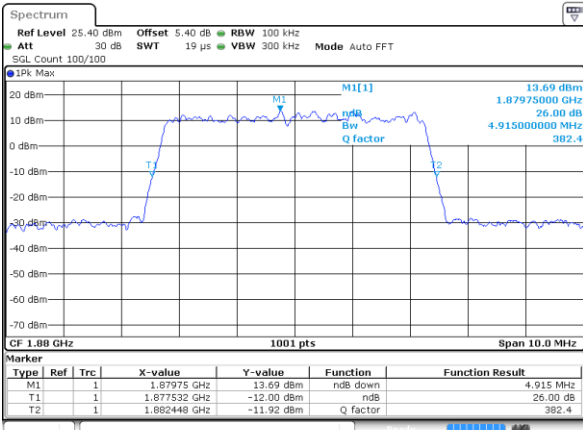
Date: 21 JUN 2020 00:40:35

Lowest Channel / 10MHz / 64QAM



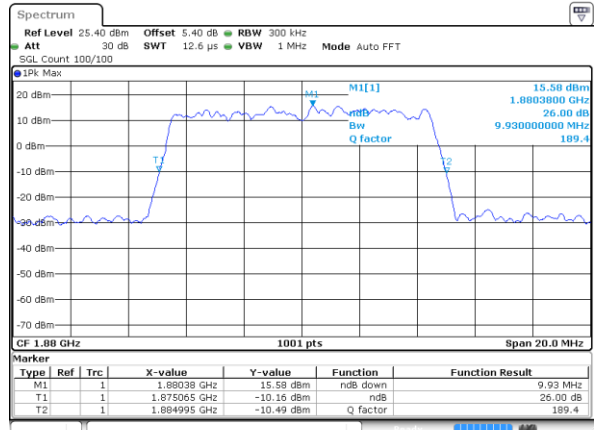
Date: 21 JUN 2020 01:05:17

Middle Channel / 5MHz / 64QAM



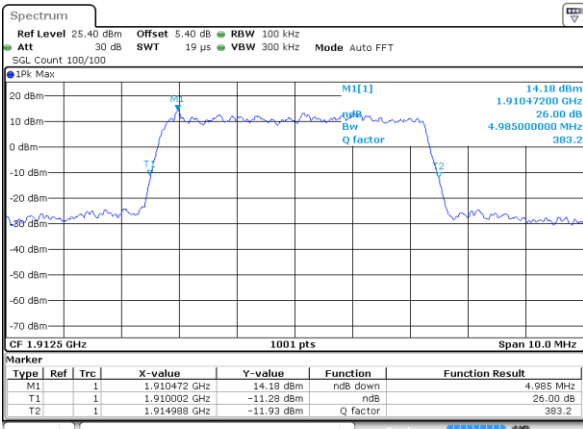
Date: 21 JUN 2020 00:53:07

Middle Channel / 10MHz / 64QAM



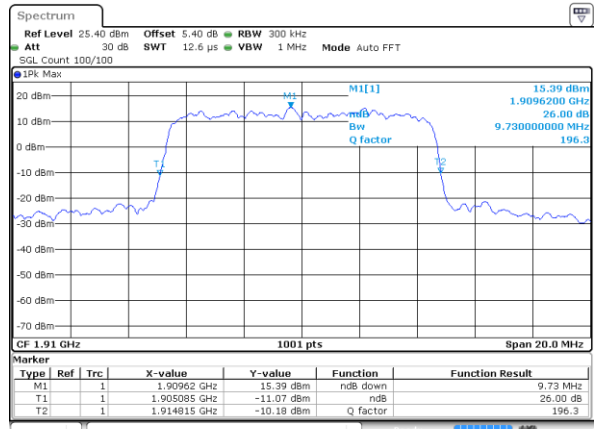
Date: 21 JUN 2020 01:17:49

Highest Channel / 5MHz / 64QAM



Date: 21 JUN 2020 00:54:47

Highest Channel / 10MHz / 64QAM

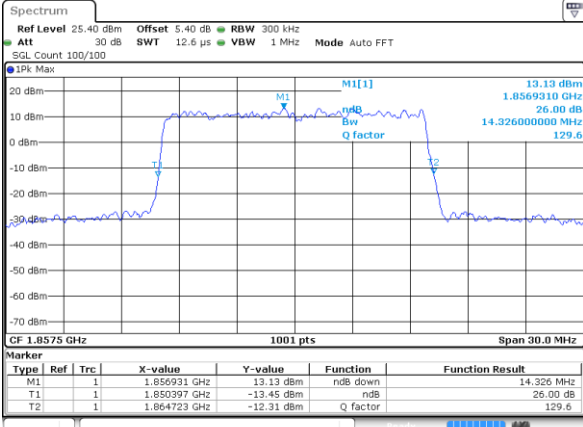


Date: 21 JUN 2020 01:19:29



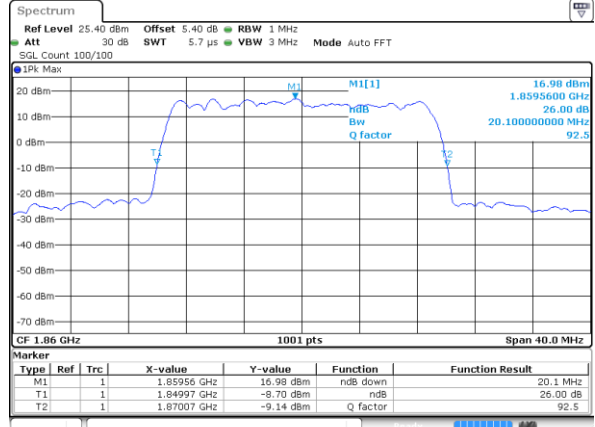
LTE Band 25

Lowest Channel / 15MHz / 64QAM



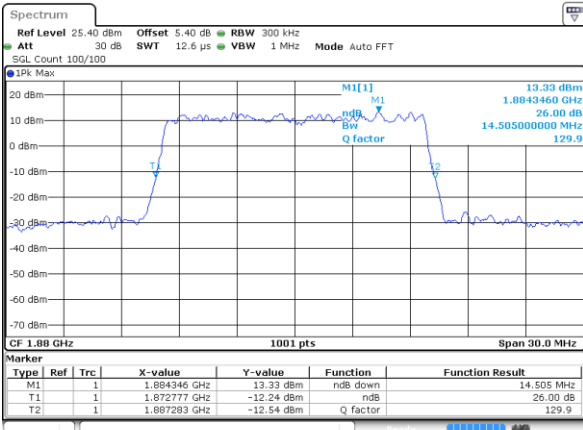
Date: 21 JUN 2020 01:29:59

Lowest Channel / 20MHz / 64QAM



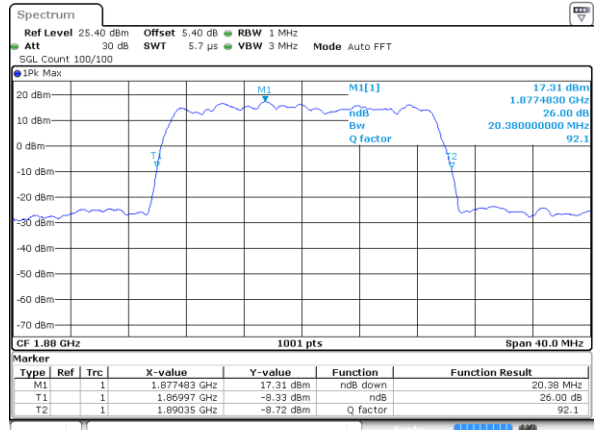
Date: 21 JUN 2020 01:54:41

Middle Channel / 15MHz / 64QAM



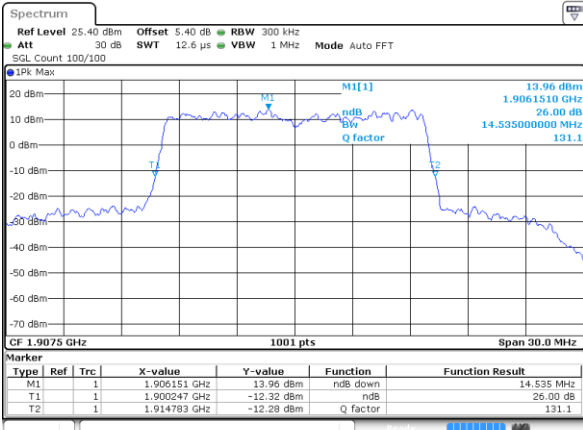
Date: 21 JUN 2020 01:42:32

Middle Channel / 20MHz / 64QAM



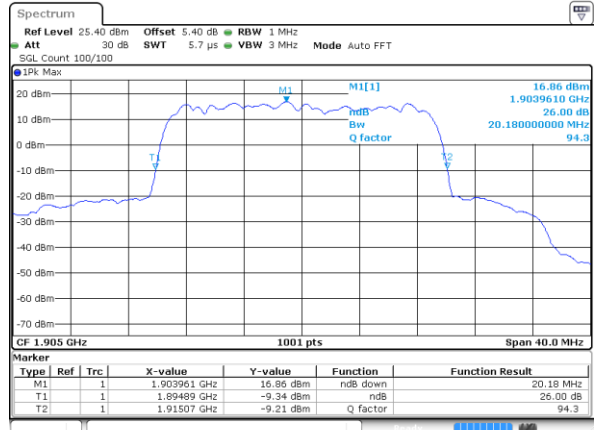
Date: 21 JUN 2020 02:07:14

Highest Channel / 15MHz / 64QAM



Date: 21 JUN 2020 01:44:12

Highest Channel / 20MHz / 64QAM



Date: 21 JUN 2020 02:08:54



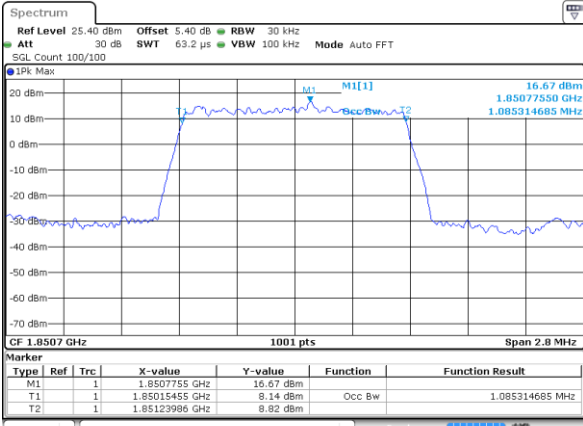
### Occupied Bandwidth

Mode	LTE Band 25 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.09	2.73	2.73	4.50	4.49	9.07	8.95	13.43	13.49	18.26	18.34
Middle CH	1.09	1.09	2.73	2.69	4.49	4.50	9.03	9.01	13.43	13.46	18.42	18.50
Highest CH	1.09	1.09	2.73	2.72	4.50	4.48	9.03	8.97	13.40	13.43	18.26	18.30
Mode	LTE Band 25 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.09		2.73		4.50		9.01		13.46		18.38	
Middle CH	1.10		2.72		4.50		8.97		13.43		18.50	
Highest CH	1.08		2.73		4.50		8.95		13.43		18.38	



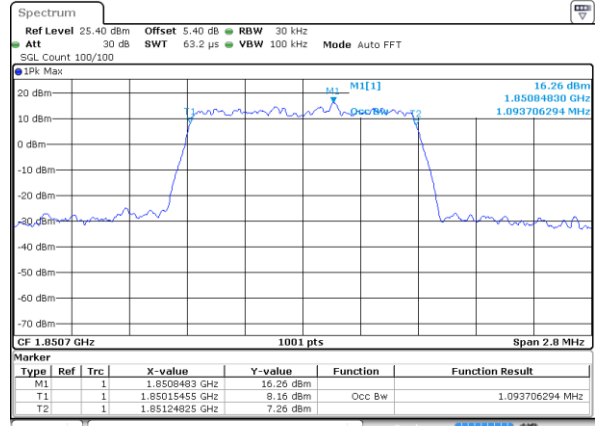
LTE Band 25

Lowest Channel / 1.4MHz / QPSK



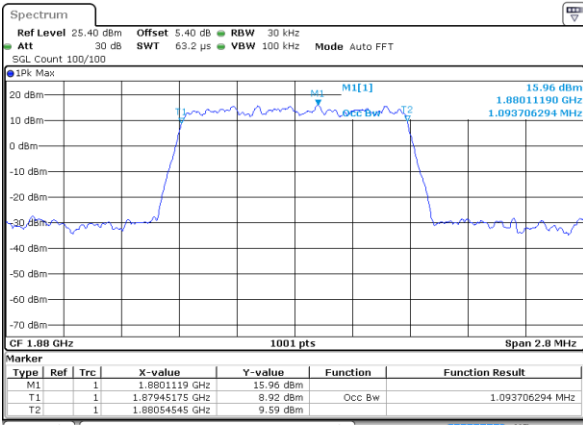
Date: 20 JUN 2020 23:46:27

Lowest Channel / 1.4MHz / 16QAM



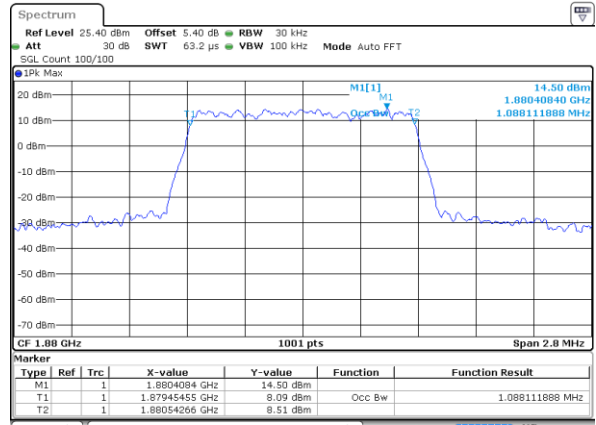
Date: 20 JUN 2020 23:46:47

Middle Channel / 1.4MHz / QPSK



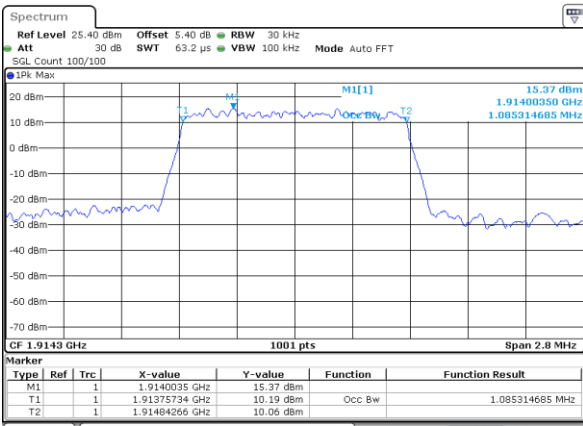
Date: 20 JUN 2020 23:51:21

Middle Channel / 1.4MHz / 16QAM



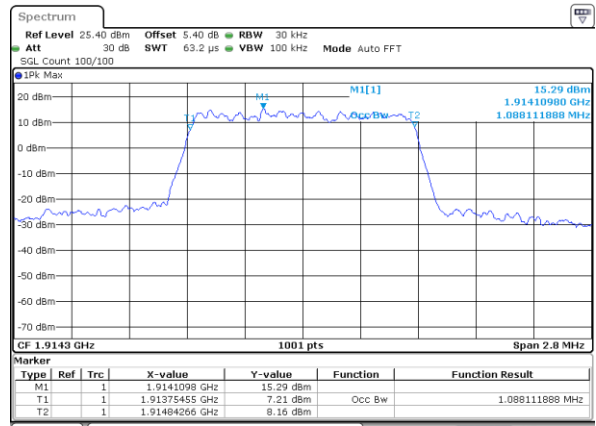
Date: 20 JUN 2020 23:51:41

Highest Channel / 1.4MHz / QPSK



Date: 20 JUN 2020 23:52:21

Highest Channel / 1.4MHz / 16QAM

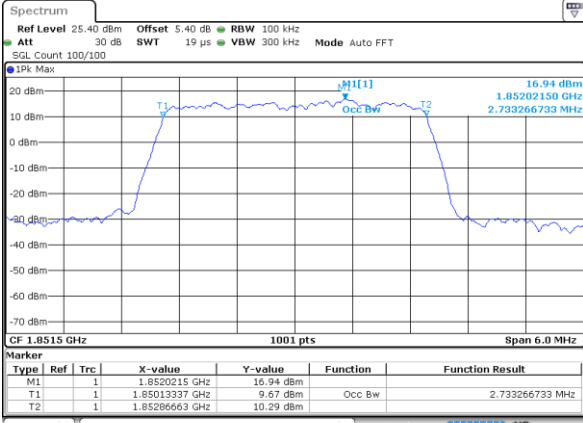


Date: 20 JUN 2020 23:52:41



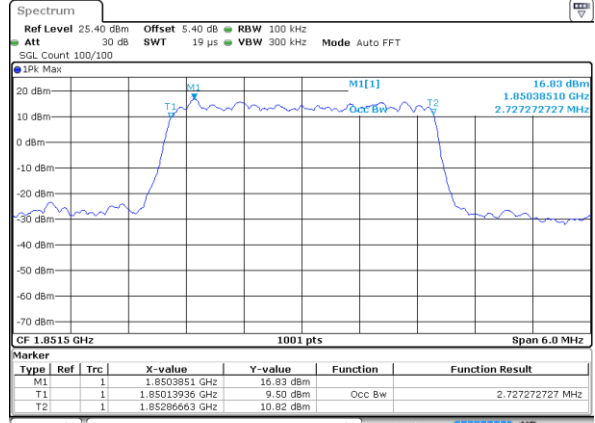
LTE Band 25

Lowest Channel / 3MHz / QPSK



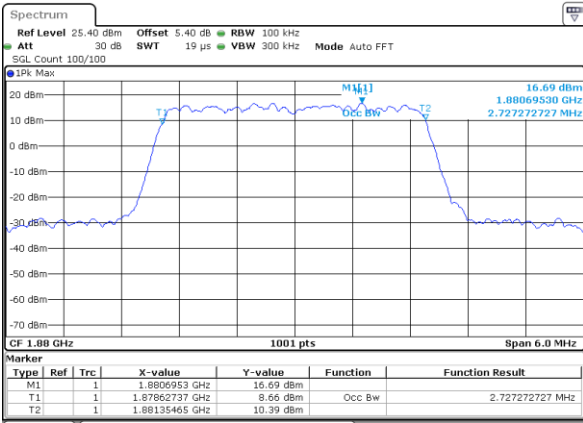
Date: 21 JUN 2020 00:15:03

Lowest Channel / 3MHz / 16QAM



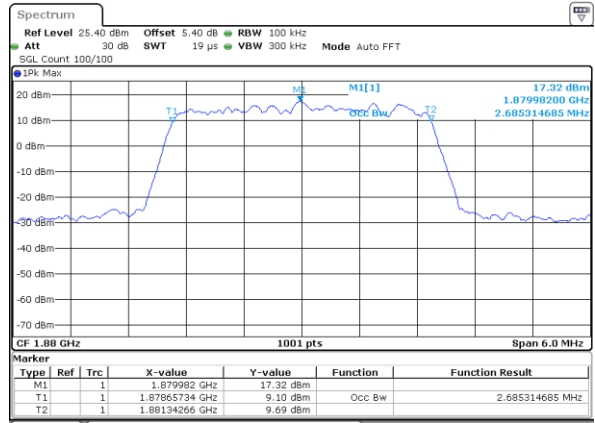
Date: 21 JUN 2020 00:15:23

Middle Channel / 3MHz / QPSK



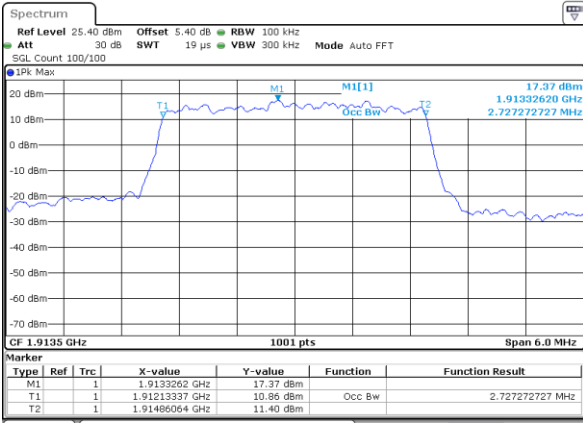
Date: 21 JUN 2020 00:16:03

Middle Channel / 3MHz / 16QAM



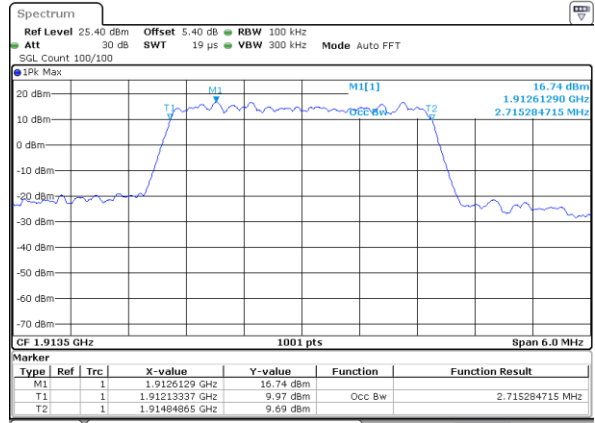
Date: 21 JUN 2020 00:16:23

Highest Channel / 3MHz / QPSK



Date: 21 JUN 2020 00:17:03

Highest Channel / 3MHz / 16QAM

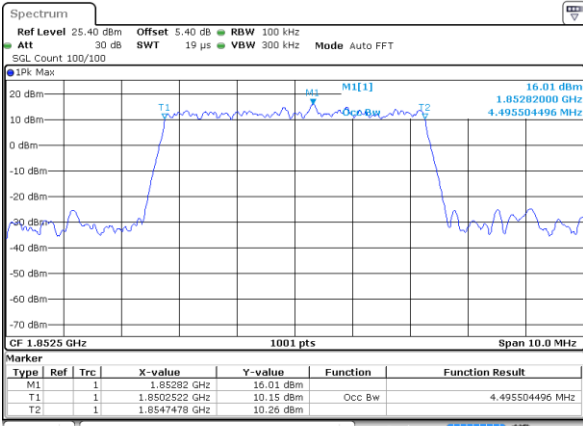


Date: 21 JUN 2020 00:17:23



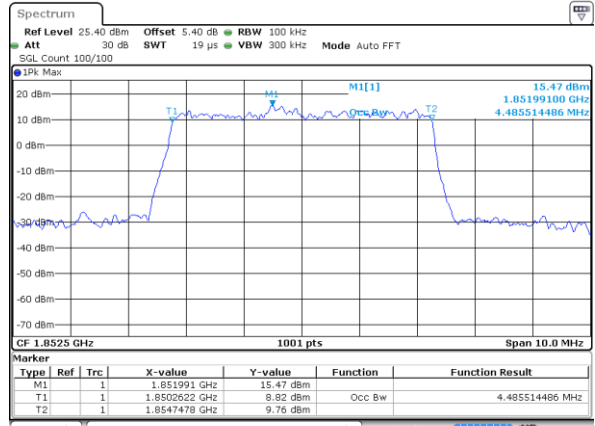
LTE Band 25

Lowest Channel / 5MHz / QPSK



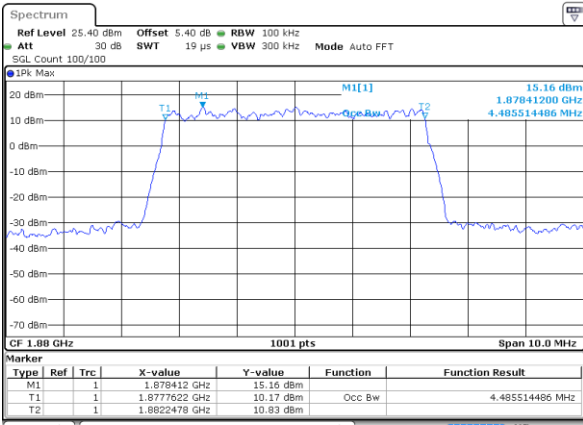
Date: 21 JUN 2020 00:39:45

Lowest Channel / 5MHz / 16QAM



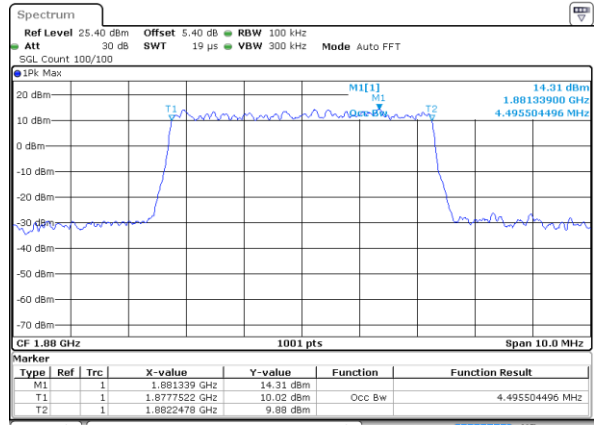
Date: 21 JUN 2020 00:40:05

Middle Channel / 5MHz / QPSK



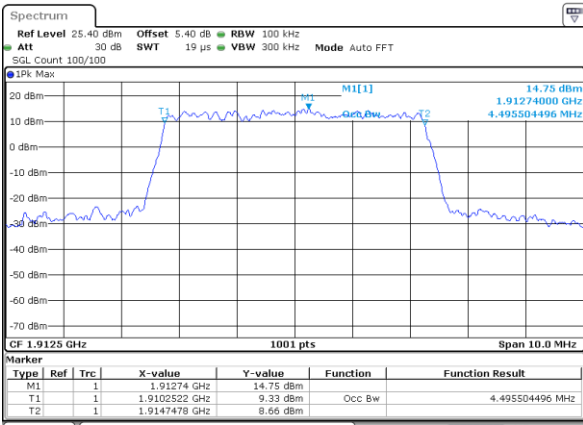
Date: 21 JUN 2020 00:53:37

Middle Channel / 5MHz / 16QAM



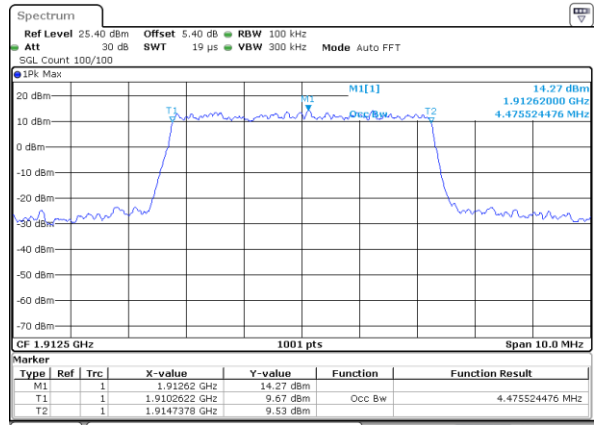
Date: 21 JUN 2020 00:53:17

Highest Channel / 5MHz / QPSK



Date: 21 JUN 2020 00:53:57

Highest Channel / 5MHz / 16QAM

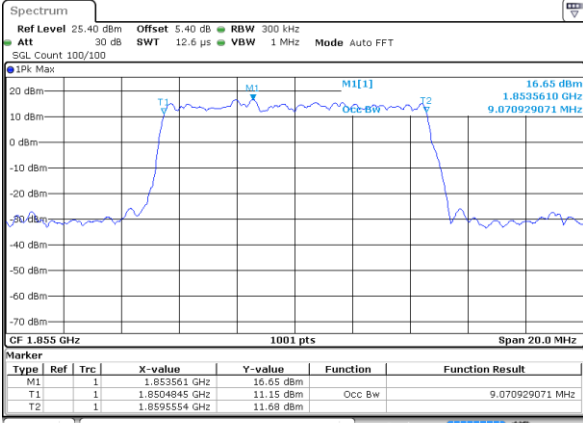


Date: 21 JUN 2020 00:54:17



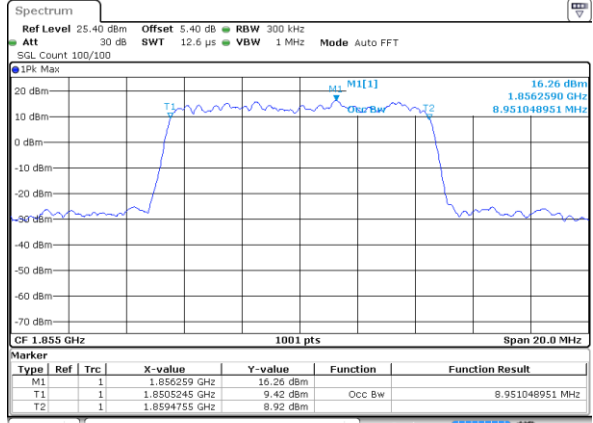
LTE Band 25

Lowest Channel / 10MHz / QPSK



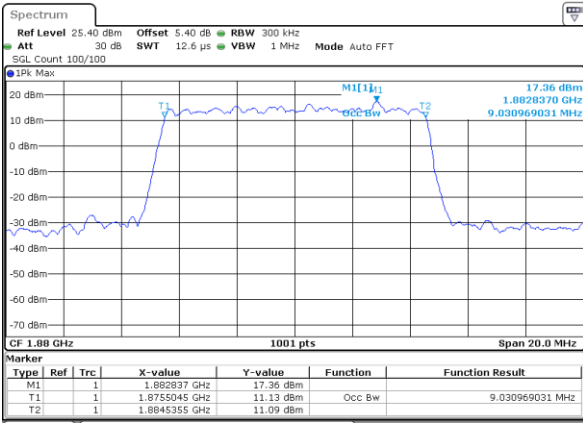
Date: 21 JUN 2020 01:04:26

Lowest Channel / 10MHz / 16QAM



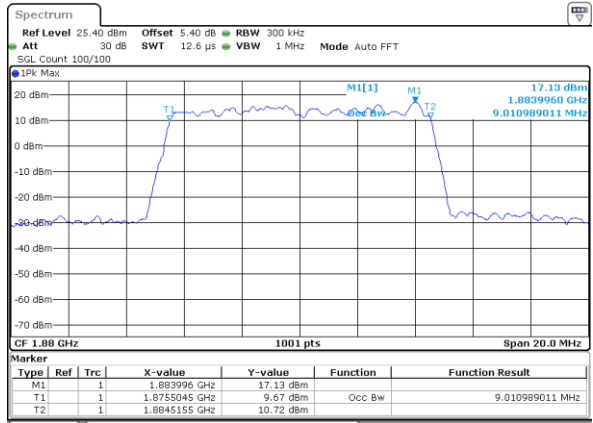
Date: 21 JUN 2020 01:04:46

Middle Channel / 10MHz / QPSK



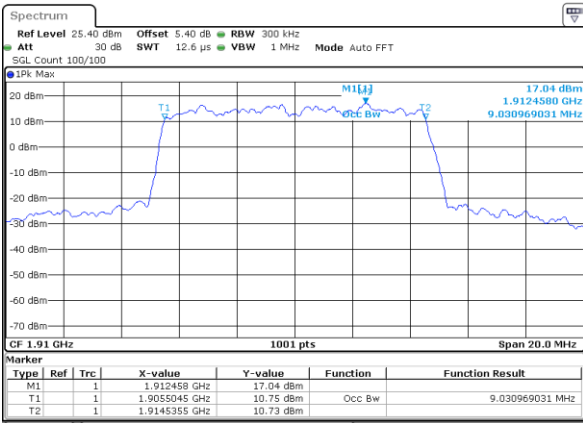
Date: 21 JUN 2020 01:18:19

Middle Channel / 10MHz / 16QAM



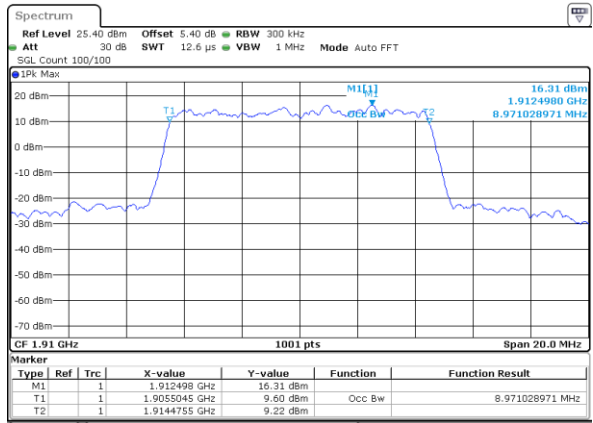
Date: 21 JUN 2020 01:17:59

Highest Channel / 10MHz / QPSK



Date: 21 JUN 2020 01:18:39

Highest Channel / 10MHz / 16QAM



Date: 21 JUN 2020 01:18:59