



# TEST REPORT

No.I22N01939-RF LTE

for

**FEITIAN Technologies Co., Ltd.**

**Android POS Terminal**

**Model Name: F310**

**FCC ID: ZD3FTF310**

with

**Hardware Version: V1.01**

**Software Version: F310\_OS\_1.01.06.00**

**Issued Date: 2022-11-17**

**Note:**

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of SAICT.

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## **REPORT HISTORY**

<b>Report Number</b>	<b>Revision</b>	<b>Description</b>	<b>Issue Date</b>
I22N01939-RF LTE	Rev.0	1st edition	2022-11-17

## **CONTENTS**

<b>1. SUMMARY OF TEST REPORT .....</b>	<b>4</b>
<b>1.1. TEST ITEMS.....</b>	<b>4</b>
<b>1.2. TEST STANDARDS .....</b>	<b>4</b>
<b>1.3. TEST RESULT .....</b>	<b>4</b>
<b>1.4. TESTING LOCATION .....</b>	<b>4</b>
<b>1.5. PROJECT DATA .....</b>	<b>4</b>
<b>1.6. SIGNATURE.....</b>	<b>4</b>
<b>2. CLIENT INFORMATION .....</b>	<b>5</b>
<b>2.1. APPLICANT INFORMATION.....</b>	<b>5</b>
<b>2.2. MANUFACTURER INFORMATION.....</b>	<b>5</b>
<b>3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT (AE) .....</b>	<b>6</b>
<b>3.1. ABOUT EUT.....</b>	<b>6</b>
<b>3.2. INTERNAL IDENTIFICATION OF EUT USED DURING THE TEST .....</b>	<b>6</b>
<b>3.3. INTERNAL IDENTIFICATION OF AE USED DURING THE TEST.....</b>	<b>6</b>
<b>3.4. GENERAL DESCRIPTION .....</b>	<b>6</b>
<b>4. REFERENCE DOCUMENTS.....</b>	<b>7</b>
<b>5. LABORATORY ENVIRONMENT.....</b>	<b>8</b>
<b>6. SUMMARY OF TEST RESULTS.....</b>	<b>9</b>
<b>7. STATEMENT .....</b>	<b>14</b>
<b>8. TEST EQUIPMENTS UTILIZED.....</b>	<b>15</b>
<b>ANNEX A: MEASUREMENT RESULTS.....</b>	<b>16</b>
A.1 OUTPUT POWER .....	16
A.2 FIELD STRENGTH OF SPURIOUS RADIATION.....	86
A.3 FREQUENCY STABILITY.....	124
A.4 OCCUPIED BANDWIDTH .....	131
A.5 EMISSION BANDWIDTH .....	241
A.6 BAND EDGE COMPLIANCE.....	352
A.7 CONDUCTED SPURIOUS EMISSION .....	397
A.8 PEAK-TO-AVERAGE POWER RATIO .....	405



## 1. SUMMARY OF TEST REPORT

### 1.1. Test Items

Description	Android POS Terminal
Model Name	F310
Brand Name	FEITIAN
Applicant's name	FEITIAN Technologies Co., Ltd.
Manufacturer's Name	FEITIAN Technologies Co., Ltd.

### 1.2. Test Standards

FCC Part 2/22/24/27/90	10-1-20 Edition
ANSI C63.26	2015
KDB971168 D01	v03r01

### 1.3. Test Result

All test items are passed. Please refer to "6 Summary of Test Results" for detail.

### 1.4. Testing Location

Address: Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China 518000

### 1.5. Project Data

Testing Start Date: 2022-09-26

Testing End Date: 2022-11-17

### 1.6. Signature

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Wang Ping  
(Prepared this test report)

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Huang Qiuqin  
(Reviewed this test report)

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Zhang Hao  
(Approved this test report)



## **2. CLIENT INFORMATION**

### **2.1. Applicant Information**

Company Name: FEITIAN Technologies Co., Ltd.  
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### **2.2. Manufacturer Information**

Company Name: FEITIAN Technologies Co., Ltd.  
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Telephone: 13811812336  
Fax: +86 10 62304477



### **3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT**

#### **(AE)**

#### **3.1. About EUT**

Description	Android POS Terminal
Model Name	F310
FCC ID	ZD3FTF310
Frequency Bands	LTE Bands 2,4,5,7,12,17,25,26,38,66,41(2535M Hz -2655M Hz)
Antenna	Integrated
Extreme vol. Limits	3.50V to 4.30V (nominal: 3.80V)
Condition of EUT as received	No abnormality in appearance

Note1: Components list, please refer to documents of the manufacturer; it is also included in the original test record of SAICT.

#### **3.2. Internal Identification of EUT used during the test**

<b>EUT ID*</b>	<b>SN or IMEI</b>	<b>HW Version</b>	<b>SW Version</b>	<b>Date of receipt</b>
UT06aa	864255060100075	V1.01	F310_OS_1.01.06.00	2022-09-24
UT09aa	867400020316612	V1.01	F310_OS_1.01.06.00	2022-09-24

\*EUT ID: is used to identify the test sample in the lab internally.  
UT06aa is used for conduction test, UT09aa is used for radiation test.

#### **3.3. Internal Identification of AE used during the test**

<b>AE ID*</b>	<b>Description</b>
AE1	/

\*AE ID: is used to identify the test sample in the lab internally.  
AE: ancillary equipment

#### **3.4. General Description**

The Equipment Under Test (EUT) is a model Android POS Terminal with integrated antenna. It consists of normal options: lithium battery, charger. Manual and specifications of the EUT were provided to fulfil the test. Samples undergoing test were selected by the Client.



#### **4. REFERENCE DOCUMENTS**

The following documents listed in this section are referred for testing.

<b>Reference</b>	<b>Title</b>	<b>Version</b>
FCC Part 22	PUBLIC MOBILE SERVICES	10-1-20 Edition
FCC Part 24	PERSONAL COMMUNICATIONS SERVICES	10-1-20 Edition
FCC Part 2	FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS	10-1-20 Edition
FCC Part 27	MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES	10-1-20 Edition
FCC Part 90	PRIVATE LAND MOBILE RADIO SERVICES	10-1-20 Edition
ANSI C63.26	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services	2015
KDB971168 D01	Power Meas License Digital Systems	v03r01

## 5. LABORATORY ENVIRONMENT

**Shielded room** did not exceed following limits along the RF testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz>60 dB; 1MHz-18000MHz>90 dB
Electrical insulation	>2 MΩ
Ground system resistance	< 4 Ω

**Fully-anechoic chamber** did not exceed following limits along the EMC testing

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz> 60 dB; 1MHz-18000MHz>90 dB
Electrical insulation	> 2MΩ
Ground system resistance	< 4 Ω
Voltage Standing Wave Ratio (VSWR)	≤ 6 dB, from 1 to 18 GHz, 3 m distance
Uniformity of field strength	Between 0 and 6 dB, from 80 to 6000 MHz



## 6. SUMMARY OF TEST RESULTS

Abbreviations used in this clause:		
Verdict Column	P	Pass
	F	Fail
	NA	Not applicable
	NM	Not measured

### LTE Band 2

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/24.232	A.1	P
2	Field Strength of Spurious Radiation	2.1053/24.238	A.2	P
3	Frequency Stability	2.1055/24.235	A.3	P
4	Occupied Bandwidth	2.1049/24.238	A.4	P
5	Emission Bandwidth	2.1049/24.238	A.5	P
6	Band Edge Compliance	2.1051/24.238	A.6	P
7	Conducted Spurious Emission	2.1051/24.238	A.7	P
8	Peak-to-Average Power Ratio	24.232/ KDB971168 D01	A.8	P

### LTE Band 4

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/27.50(d)	A.1	P
2	Field Strength of Spurious Radiation	2.1053/27.53(h)	A.2	P
3	Frequency Stability	2.1055/27.54	A.3	P
4	Occupied Bandwidth	2.1049/27.53(g)	A.4	P
5	Emission Bandwidth	2.1049/27.53(g)	A.5	P
6	Band Edge Compliance	2.1051/27.53(h)	A.6	P
7	Conducted Spurious Emission	2.1051/27.53(h)	A.7	P
8	Peak-to-Average Power Ratio	27.50(d)/ KDB971168 D01	A.8	P



## LTE band 5

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/22.913	A.1	P
2	Field Strength of Spurious Radiation	2.1053/22.917	A.2	P
3	Frequency Stability	2.1055/22.355	A.3	P
4	Occupied Bandwidth	2.1049/22.917	A.4	P
5	Emission Bandwidth	2.1049/22.917	A.5	P
6	Band Edge Compliance	2.1051/22.917	A.6	P
7	Conducted Spurious Emission	2.1051/22.917	A.7	P
8	Peak-to-Average Power Ratio	KDB971168 D01	A.8	P

## LTE Band 7

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/27.50(h)	A.1	P
2	Field Strength of Spurious Radiation	2.1053/27.53(m)	A.2	P
3	Frequency Stability	2.1055/27.54	A.3	P
4	Occupied Bandwidth	2.1049/27.53(m)	A.4	P
5	Emission Bandwidth	2.1049/27.53(m)	A.5	P
6	Band Edge Compliance	2.1051/27.53(m)	A.6	P
7	Conducted Spurious Emission	2.1051/27.53(m)	A.7	P
8	Peak-to-Average Power Ratio	27.50(a)/ KDB971168 D01	A.8	P

## LTE Band 12

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/27.50(c)	A.1	P
2	Field Strength of Spurious Radiation	2.1053/27.53(g)	A.2	P
3	Frequency Stability	2.1055/27.54	A.3	P
4	Occupied Bandwidth	2.1049/27.53(g)	A.4	P
5	Emission Bandwidth	2.1049/27.53(g)	A.5	P
6	Band Edge Compliance	2.1051/27.53(g)	A.6	P
7	Conducted Spurious Emission	2.1051/27.53(g)	A.7	P
8	Peak-to-Average Power Ratio	27.50(a)/ KDB971168 D01	A.8	P



## LTE Band 17

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/27.50(c)	A.1	P
2	Field Strength of Spurious Radiation	2.1053/27.53(g)	A.2	P
3	Frequency Stability	2.1055/27.54	A.3	P
4	Occupied Bandwidth	2.1049/27.53(g)	A.4	P
5	Emission Bandwidth	2.1049/27.53(g)	A.5	P
6	Band Edge Compliance	2.1051/27.53(g)	A.6	P
7	Conducted Spurious Emission	2.1051/27.53(g)	A.7	P
8	Peak-to-Average Power Ratio	27.50(a)/ KDB971168 D01	A.8	P

## LTE Band 25

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/24.232	A.1	P
2	Field Strength of Spurious Radiation	2.1053/24.238	A.2	P
3	Frequency Stability	2.1055/24.235	A.3	P
4	Occupied Bandwidth	2.1049/24.238	A.4	P
5	Emission Bandwidth	2.1049/24.238	A.5	P
6	Band Edge Compliance	2.1051/24.238	A.6	P
7	Conducted Spurious Emission	2.1051/24.238	A.7	P
8	Peak-to-Average Power Ratio	24.232/ KDB971168 D01	A.8	P

## LTE Band 26(814MHz-824MHz)

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/90.635	A.1	P
2	Field Strength of Spurious Radiation	2.1053/90.691	A.2	P
3	Frequency Stability	2.1055/90.213	A.3	P
4	Occupied Bandwidth	2.1049/90.1215	A.4	P
5	Emission Bandwidth	2.1049/90.1215	A.5	P
6	Band Edge Compliance	2.1051/90.691	A.6	P
7	Conducted Spurious Emission	2.1051/90.691	A.7	P
8	Peak-to-Average Power Ratio	KDB971168 D01	A.8	P

**LTE band 26(824MHz-849MHz)**

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/22.913	A.1	P
2	Field Strength of Spurious Radiation	2.1053/22.917	A.2	P
3	Frequency Stability	2.1055/22.355	A.3	P
4	Occupied Bandwidth	2.1049/22.917	A.4	P
5	Emission Bandwidth	2.1049/22.917	A.5	P
6	Band Edge Compliance	2.1051/22.917	A.6	P
7	Conducted Spurious Emission	2.1051/22.917	A.7	P
8	Peak-to-Average Power Ratio	KDB971168 D01	A.8	P

**LTE Band 38**

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/27.50(h)	A.1	P
2	Field Strength of Spurious Radiation	2.1053/27.53(m)	A.2	P
3	Frequency Stability	2.1055/27.54	A.3	P
4	Occupied Bandwidth	2.1049/27.53(m)	A.4	P
5	Emission Bandwidth	2.1049/27.53(m)	A.5	P
6	Band Edge Compliance	2.1051/27.53(m)	A.6	P
7	Conducted Spurious Emission	2.1051/27.53(m)	A.7	P
8	Peak-to-Average Power Ratio	27.50(a)/ KDB971168 D01	A.8	P

**LTE Band 41**

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/27.50(h)	A.1	P
2	Field Strength of Spurious Radiation	2.1053/27.53(m)	A.2	P
3	Frequency Stability	2.1055/27.54	A.3	P
4	Occupied Bandwidth	2.1049/27.53(m)	A.4	P
5	Emission Bandwidth	2.1049/27.53(m)	A.5	P
6	Band Edge Compliance	2.1051/27.53(m)	A.6	P
7	Conducted Spurious Emission	2.1051/27.53(m)	A.7	P
8	Peak-to-Average Power Ratio	27.50(a)/ KDB971168 D01	A.8	P



## LTE Band 66

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/27.50(d)	A.1	P
2	Field Strength of Spurious Radiation	2.1053/27.53(h)	A.2	P
3	Frequency Stability	2.1055/27.54	A.3	P
4	Occupied Bandwidth	2.1049/27.53(h)	A.4	P
5	Emission Bandwidth	2.1049/27.53(h)	A.5	P
6	Band Edge Compliance	2.1051/27.53(h)	A.6	P
7	Conducted Spurious Emission	2.1051/27.53(h)	A.7	P
8	Peak-to-Average Power Ratio	27.50(a)/ KDB971168 D01	A.8	P



## **7. STATEMENT**

Since the information of samples in this report is provided by the client, the laboratory is not responsible for the authenticity of sample information.

This report takes measured values as criterion of test conclusion. The test conclusion meets the limit requirements.

## 8. TEST EQUIPMENTS UTILIZED

NO.	Description	TYPE	Manufacture	series number	CAL DUE DATE
1	Test Receiver	ESR7	R&S	101676	2022-11-24
2	BiLog Antenna	3142E	ETS-Lindgren	0224831	2024-05-27
3	Horn Antenna	3117	ETS-Lindgren	00066577	2025-04-17
4	Horn Antenna	QSH-SL-18-26-S-20	Q-par	17013	2023-01-06
5	Antenna	BBHA 9120D	Schwarzbeck	1593	2022-12-05
6	Antenna	VUBA 9117	Schwarzbeck	207	2023-07-15
7	Antenna	QWH-SL-18-40-K-SG	Q-par	15979	2023-01-06
8	preamplifier	83017A	Agilent	MY39501110	/
9	Signal Generator	SMB100A	R&S	179725	2022-11-24
10	Fully Anechoic Chamber	FACT3-2.0	ETS-Lindgren	1285	2023-05-29
11	Spectrum Analyzer	FSV40	R&S	101192	2023-01-12
12	Universal Radio Communication Tester	CMU200	R&S	114545	2023-01-12
13	Universal Radio Communication Tester	CMW500	R&S	152499	2023-07-14
14	Universal Radio Communication Tester	CMW500	R&S	129146	2023-04-24
15	Spectrum Analyzer	FSU	R&S	101506	2022-12-13
16	Temperature Chamber	SH-241	ESPEC	92007516	2023-10-15
17	DC Power Supply	U3606A	Agilent Technologies	MY50450012	2023-11-13
18	Spectrum Analyzer	FSW26	R&S	102197	2022-11-24

### Test software

Item	Name	Vesion
Radiated	EMC32	V10.50.40

## ANNEX A: MEASUREMENT RESULTS

### A.1 OUTPUT POWER

#### Reference

FCC: CFR Part 2.1046, 22.913, 24.232, 27.50,90.635.

#### A.1.1 Summary

During the process of testing, the EUT was controlled via Rhode & Schwarz Digital Radio Communication tester (CMW500) to ensure max power transmission and proper modulation.

This result contains peak output power and ERP/EIRP measurements for the EUT.

In all cases, output power is within the specified limits.

#### A.1.2 Conducted

##### A.1.2.1 Method of Measurements

The EUT was set up for the max output power with pseudo random data modulation.

These measurements were done at 3 frequencies (bottom, middle and top of operational frequency range) for each bandwidth.

##### A.1.2.2 Measurement result

#### LTE band 2

Bandwidth	Number of RBs	Frequency(MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	23.31	22.80	22.59
		1880 (18900)	23.12	22.31	21.97
		1850.7 (18607)	23.42	22.43	22.29
	1RB-Middle (3)	1909.3 (19193)	23.47	23.01	22.52
		1880 (18900)	23.43	22.34	21.77
		1850.7 (18607)	23.45	22.55	22.34
	1RB-Low (0)	1909.3 (19193)	23.83	22.83	22.64
		1880 (18900)	23.12	22.26	21.72
		1850.7 (18607)	23.30	22.51	22.41
	3RB-High (3)	1909.3 (19193)	23.60	22.64	22.59
		1880 (18900)	23.26	22.58	22.17
		1850.7 (18607)	23.47	22.69	22.24
	3RB-Middle (1)	1909.3 (19193)	23.87	22.93	22.87
		1880 (18900)	23.14	22.42	22.01
		1850.7 (18607)	23.30	22.61	22.12
	3RB-Low (0)	1909.3 (19193)	23.64	22.82	22.62
		1880 (18900)	23.38	22.39	22.19
		1850.7 (18607)	23.34	22.66	22.23
6RB (0)	1909.3 (19193)	22.65	21.98	21.58	
	1880 (18900)	22.06	20.90	21.20	
	1850.7 (18607)	22.26	21.17	21.37	
3MHz	1RB-High (14)	1908.5 (19185)	23.20	22.44	22.29
		1880 (18900)	23.31	22.28	21.80





Bandwidth	Number of RBs	Frequency(MHz)	Power(dBm)			
			QPSK	16QAM	64QAM	
	1RB-Middle (7)	1851.5 (18615)	23.23	22.46	22.21	
		1908.5 (19185)	23.90	22.99	22.43	
		1880 (18900)	23.19	22.48	21.91	
	1RB-Low (0)	1851.5 (18615)	23.34	22.50	22.27	
		1908.5 (19185)	23.63	22.72	22.29	
		1880 (18900)	22.99	22.36	21.95	
	8RB-High (7)	1851.5 (18615)	23.38	22.39	22.33	
		1908.5 (19185)	22.81	21.98	21.58	
		1880 (18900)	22.39	21.39	21.05	
	8RB-Middle (4)	1851.5 (18615)	22.46	21.56	21.14	
		1908.5 (19185)	23.05	22.15	21.82	
		1880 (18900)	22.27	21.29	20.88	
	8RB-Low (0)	1851.5 (18615)	22.46	21.70	21.13	
		1908.5 (19185)	22.98	22.00	21.66	
		1880 (18900)	22.28	21.28	21.10	
	15RB (0)	1851.5 (18615)	22.58	21.61	21.26	
		1908.5 (19185)	22.89	22.09	21.52	
		1880 (18900)	22.34	21.55	21.03	
	5MHz	1RB-High (24)	1851.5 (18615)	22.29	21.53	21.39
			1907.5 (19175)	22.89	22.09	21.52
1880 (18900)			22.34	21.55	21.03	
1RB-Middle (12)		1907.5 (19175)	23.23	22.76	22.88	
		1880 (18900)	23.21	23.05	22.53	
		1852.5 (18625)	23.32	23.12	22.55	
1RB-Low (0)		1907.5 (19175)	23.92	23.09	23.35	
		1880 (18900)	23.35	22.88	22.42	
		1852.5 (18625)	23.17	23.17	22.36	
12RB-High (13)		1907.5 (19175)	23.16	22.91	22.53	
		1880 (18900)	23.36	22.89	22.30	
		1852.5 (18625)	23.16	22.90	22.66	
12RB-Middle (6)		1907.5 (19175)	22.78	21.65	21.72	
		1880 (18900)	22.04	21.44	21.32	
		1852.5 (18625)	22.52	21.56	21.43	
12RB-Low (0)		1907.5 (19175)	22.69	21.72	21.65	
		1880 (18900)	22.42	21.63	21.20	
		1852.5 (18625)	22.17	21.77	21.21	
25RB (0)		1907.5 (19175)	22.40	21.56	21.22	
		1880 (18900)	22.48	21.58	21.40	
	1852.5 (18625)	22.53	21.79	21.57		
		1907.5 (19175)	22.88	21.80	21.87	
		1880 (18900)	22.28	21.69	21.18	
		1852.5 (18625)	22.33	21.58	21.45	



Bandwidth	Number of RBs	Frequency(MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
10MHz	1RB-High (49)	1905 (19150)	23.14	23.20	22.73
		1880 (18900)	22.93	22.92	22.23
		1855 (18650)	23.24	22.85	22.19
	1RB-Middle (24)	1905 (19150)	23.36	22.88	22.28
		1880 (18900)	23.09	22.88	22.18
		1855 (18650)	22.91	23.00	22.26
	1RB-Low (0)	1905 (19150)	23.04	23.14	22.07
		1880 (18900)	23.23	22.76	22.16
		1855 (18650)	23.31	22.67	22.39
	25RB-High (25)	1905 (19150)	22.70	22.06	21.86
		1880 (18900)	22.48	21.50	21.05
		1855 (18650)	22.23	21.34	21.20
	25RB-Middle (12)	1905 (19150)	22.26	21.63	21.39
		1880 (18900)	22.12	21.51	21.22
		1855 (18650)	22.39	21.33	21.20
	25RB-Low (0)	1905 (19150)	22.32	21.26	21.25
		1880 (18900)	22.19	21.67	21.24
		1855 (18650)	22.46	21.30	21.41
	50RB (0)	1905 (19150)	22.19	21.52	21.25
		1880 (18900)	22.25	21.26	21.09
		1855 (18650)	22.41	21.17	21.28
15MHz	1RB-High (74)	1902.5 (19125)	22.86	22.22	22.18
		1880 (18900)	23.11	22.39	22.34
		1857.5 (18675)	22.94	22.85	22.65
	1RB-Middle (37)	1902.5 (19125)	23.20	22.69	21.98
		1880 (18900)	22.98	22.04	22.17
		1857.5 (18675)	22.91	22.92	22.51
	1RB-Low (0)	1902.5 (19125)	23.28	22.53	22.28
		1880 (18900)	22.96	22.30	22.19
		1857.5 (18675)	23.17	23.24	22.54
	36RB-High (38)	1902.5 (19125)	22.11	21.43	21.05
		1880 (18900)	22.27	21.31	21.29
		1857.5 (18675)	22.45	21.42	21.24
	36RB-Middle (19)	1902.5 (19125)	22.18	21.45	21.17
		1880 (18900)	22.22	21.21	20.90
		1857.5 (18675)	22.32	21.69	21.40
	36RB-Low (0)	1902.5 (19125)	22.36	21.38	21.39
		1880 (18900)	22.47	21.27	21.13
		1857.5 (18675)	22.26	21.39	21.16
	75RB (0)	1902.5 (19125)	22.27	21.48	21.38



Bandwidth	Number of RBs	Frequency(MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
20MHz		1880 (18900)	22.10	21.37	21.21
		1857.5 (18675)	22.39	21.44	21.39
		1900 (19100)	22.71	22.07	22.07
	1RB-High (99)	1880 (18900)	23.17	22.52	22.02
		1860 (18700)	22.88	22.32	22.47
		1900 (19100)	23.36	22.83	22.49
	1RB-Middle (50)	1880 (18900)	23.29	22.14	21.70
		1860 (18700)	22.93	22.13	22.49
		1900 (19100)	23.21	22.98	22.73
	1RB-Low (0)	1880 (18900)	23.04	22.37	21.90
		1860 (18700)	23.04	22.58	22.58
		1900 (19100)	22.39	21.40	21.18
	50RB-High (50)	1880 (18900)	22.14	21.32	21.23
		1860 (18700)	22.18	21.35	21.15
		1900 (19100)	22.30	21.36	21.23
	50RB-Middle (25)	1880 (18900)	22.21	21.18	21.22
		1860 (18700)	22.22	21.36	21.36
		1900 (19100)	22.09	21.50	21.49
	50RB-Low (0)	1880 (18900)	22.42	21.24	21.09
		1860 (18700)	22.21	21.27	21.09
		1900 (19100)	22.36	21.63	21.33
	100RB (0)	1880 (18900)	22.28	21.37	21.13
		1860 (18700)	22.23	21.29	20.96

Note: Expanded measurement uncertainty is U = 0.49dB, k = 1.96



LTE band 4

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1754.3 (20393)	23.18	22.49	22.73
		1732.5 (20175)	23.63	22.71	22.72
		1710.7 (19957)	23.53	22.80	22.51
	1RB-Middle (3)	1754.3 (20393)	23.45	22.64	22.72
		1732.5 (20175)	23.25	22.57	22.39
		1710.7 (19957)	23.56	22.72	22.61
	1RB-Low (0)	1754.3 (20393)	23.20	22.87	22.70
		1732.5 (20175)	23.28	22.80	22.45
		1710.7 (19957)	23.42	22.95	22.95
	3RB-High (3)	1754.3 (20393)	23.32	22.76	22.30
		1732.5 (20175)	23.91	22.94	22.07
		1710.7 (19957)	23.84	22.72	22.82
	3RB-Middle (1)	1754.3 (20393)	23.56	22.87	22.40
		1732.5 (20175)	23.48	22.70	22.21
		1710.7 (19957)	23.77	23.01	22.53
	3RB-Low (0)	1754.3 (20393)	23.63	22.77	22.53
		1732.5 (20175)	23.57	22.66	22.12
		1710.7 (19957)	23.64	22.93	22.65
	6RB (0)	1754.3 (20393)	22.31	21.45	21.16
		1732.5 (20175)	22.54	21.40	21.29
		1710.7 (19957)	22.68	21.54	21.45
3MHz	1RB-High (14)	1753.5 (20385)	23.39	22.84	22.47
		1732.5 (20175)	23.30	22.56	22.70
		1711.5 (19965)	23.34	22.72	22.25
	1RB-Middle (7)	1753.5 (20385)	23.49	22.65	22.42
		1732.5 (20175)	23.49	22.50	22.65
		1711.5 (19965)	23.48	22.87	22.30
	1RB-Low (0)	1753.5 (20385)	23.48	22.86	22.20
		1732.5 (20175)	23.42	22.66	22.70
		1711.5 (19965)	23.37	22.61	22.61
	8RB-High (7)	1753.5 (20385)	22.38	21.78	21.19
		1732.5 (20175)	22.59	21.93	21.05
		1711.5 (19965)	22.62	21.74	21.46
	8RB-Middle (4)	1753.5 (20385)	22.35	21.78	21.35
		1732.5 (20175)	22.68	21.77	21.24
		1711.5 (19965)	22.87	22.08	21.27
	8RB-Low (0)	1753.5 (20385)	22.51	21.86	21.22
		1732.5 (20175)	22.63	21.54	21.02
		1711.5 (19965)	22.76	21.99	21.49



Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)			
			QPSK	16QAM	64QAM	
	15RB (0)	1753.5 (20385)	22.66	21.67	21.18	
		1732.5 (20175)	22.65	21.80	21.25	
		1711.5 (19965)	22.67	21.70	21.51	
5MHz	1RB-High (24)	1752.5 (20375)	23.34	22.88	22.58	
		1732.5 (20175)	23.51	23.02	22.44	
		1712.5 (19975)	23.77	22.85	22.57	
	1RB-Middle (12)	1752.5 (20375)	23.34	22.75	22.81	
		1732.5 (20175)	23.30	22.69	22.64	
		1712.5 (19975)	23.56	22.84	22.81	
	1RB-Low (0)	1752.5 (20375)	23.35	22.71	22.42	
		1732.5 (20175)	23.74	22.74	22.79	
		1712.5 (19975)	23.86	23.27	22.52	
	12RB-High (13)	1752.5 (20375)	22.67	21.48	21.18	
		1732.5 (20175)	22.81	21.84	21.50	
		1712.5 (19975)	22.67	21.65	21.52	
	12RB-Middle (6)	1752.5 (20375)	22.37	21.55	21.58	
		1732.5 (20175)	22.51	21.54	21.36	
		1712.5 (19975)	22.43	21.89	21.79	
	12RB-Low (0)	1752.5 (20375)	22.31	21.64	21.23	
		1732.5 (20175)	22.41	21.55	21.31	
		1712.5 (19975)	22.73	21.82	21.61	
	25RB (0)	1752.5 (20375)	22.61	21.57	21.45	
		1732.5 (20175)	22.62	21.98	21.45	
		1712.5 (19975)	22.64	21.94	21.40	
	10MHz	1RB-High (49)	1750 (20350)	23.52	22.68	22.35
			1732.5 (20175)	23.58	22.81	22.04
			1715 (20000)	23.42	23.00	22.55
1RB-Middle (24)		1750 (20350)	23.42	22.92	22.09	
		1732.5 (20175)	23.38	22.96	22.18	
		1715 (20000)	23.49	22.96	22.45	
1RB-Low (0)		1750 (20350)	23.54	22.90	22.22	
		1732.5 (20175)	23.49	22.77	22.31	
		1715 (20000)	23.52	22.98	22.48	
25RB-High (25)		1750 (20350)	22.58	21.42	21.09	
		1732.5 (20175)	22.45	21.51	21.35	
		1715 (20000)	22.73	21.56	21.49	
25RB-Middle (12)		1750 (20350)	22.39	21.40	21.36	
		1732.5 (20175)	22.66	21.49	21.07	
		1715 (20000)	22.80	21.87	21.55	
25RB-Low (0)		1750 (20350)	22.63	21.70	21.26	



Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)			
			QPSK	16QAM	64QAM	
		1732.5 (20175)	22.38	21.60	21.10	
		1715 (20000)	22.58	21.60	21.43	
		1750 (20350)	22.60	21.66	21.41	
	50RB (0)	1732.5 (20175)	22.26	21.75	21.06	
		1715 (20000)	22.80	21.59	21.39	
		1747.5 (20325)	23.36	22.79	22.26	
15MHz	1RB-High (74)	1732.5 (20175)	23.51	22.88	21.93	
		1717.5 (20025)	23.30	22.75	22.54	
		1747.5 (20325)	23.32	22.97	22.30	
	1RB-Middle (37)	1732.5 (20175)	23.49	22.71	21.94	
		1717.5 (20025)	23.53	23.03	22.90	
		1747.5 (20325)	23.59	22.89	22.46	
	1RB-Low (0)	1732.5 (20175)	23.34	23.07	22.22	
		1717.5 (20025)	23.43	22.82	23.03	
		1747.5 (20325)	22.69	21.65	21.14	
	36RB-High (38)	1732.5 (20175)	22.77	21.66	21.62	
		1717.5 (20025)	22.69	21.77	21.72	
		1747.5 (20325)	22.38	21.52	21.29	
	36RB-Middle (19)	1732.5 (20175)	22.79	21.59	21.30	
		1717.5 (20025)	22.54	21.71	21.73	
		1747.5 (20325)	22.34	21.72	21.42	
	36RB-Low (0)	1732.5 (20175)	22.47	21.92	21.43	
		1717.5 (20025)	22.82	21.76	21.54	
		1747.5 (20325)	22.55	21.73	21.27	
	75RB (0)	1732.5 (20175)	22.40	21.42	21.43	
		1717.5 (20025)	22.61	21.93	21.45	
		1745 (20300)	23.67	22.78	22.56	
	20MHz	1RB-High (99)	1732.5 (20175)	23.58	22.60	22.57
			1720 (20050)	23.26	23.18	22.74
			1745 (20300)	23.45	22.82	22.72
		1RB-Middle (50)	1732.5 (20175)	23.36	22.81	22.76
			1720 (20050)	23.55	23.12	22.76
			1745 (20300)	23.56	23.09	22.59
1RB-Low (0)		1732.5 (20175)	23.25	22.65	22.49	
		1720 (20050)	23.39	22.25	23.05	
		1745 (20300)	22.51	21.50	21.12	
50RB-High (50)		1732.5 (20175)	22.60	21.68	21.17	
		1720 (20050)	22.56	21.85	21.43	
		1745 (20300)	22.55	21.84	21.35	
50RB-Middle (25)		1732.5 (20175)	22.51	21.77	21.05	



Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)			
			QPSK	16QAM	64QAM	
		1720 (20050)	22.85	21.62	21.57	
		50RB-Low (0)	1745 (20300)	22.58	21.53	21.32
			1732.5 (20175)	22.40	21.67	21.15
	100RB (0)		1720 (20050)	22.75	21.62	21.52
			1745 (20300)	22.57	21.74	21.31
			1732.5 (20175)	22.31	21.82	21.21
			1720 (20050)	22.60	21.84	21.36

Note: Expanded measurement uncertainty is U = 0.49dB, k = 1.96



LTE band 5

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	848.3 (20643)	22.79	21.93	21.25
		836.5 (20525)	22.76	22.01	21.81
		824.7 (20407)	23.26	21.95	21.76
	1RB-Middle (3)	848.3 (20643)	22.77	21.93	21.33
		836.5 (20525)	22.88	22.01	21.72
		824.7 (20407)	23.25	22.18	21.79
	1RB-Low (0)	848.3 (20643)	22.72	21.97	21.28
		836.5 (20525)	22.48	21.81	21.67
		824.7 (20407)	22.90	22.28	21.73
	3RB-High (3)	848.3 (20643)	23.06	21.93	21.82
		836.5 (20525)	22.93	22.13	21.91
		824.7 (20407)	22.95	22.42	22.24
	3RB-Middle (1)	848.3 (20643)	22.92	22.19	21.83
		836.5 (20525)	22.66	22.18	21.77
		824.7 (20407)	23.13	22.20	22.37
	3RB-Low (0)	848.3 (20643)	22.82	21.72	21.80
		836.5 (20525)	22.73	21.97	21.75
		824.7 (20407)	22.93	22.34	22.26
	6RB (0)	848.3 (20643)	22.05	20.50	20.65
		836.5 (20525)	21.97	20.70	20.59
		824.7 (20407)	22.34	21.05	21.06
3MHz	1RB-High (14)	847.5 (20635)	22.54	22.26	21.64
		836.5 (20525)	22.74	22.28	21.78
		825.5 (20415)	23.06	22.14	22.22
	1RB-Middle (7)	847.5 (20635)	22.84	22.10	21.56
		836.5 (20525)	22.90	22.20	21.78
		825.5 (20415)	23.37	22.28	22.22
	1RB-Low (0)	847.5 (20635)	22.69	22.28	21.34
		836.5 (20525)	22.68	22.15	21.77
		825.5 (20415)	23.03	22.29	22.21
	8RB-High (7)	847.5 (20635)	21.76	20.69	20.41
		836.5 (20525)	21.67	20.80	20.25
		825.5 (20415)	22.42	21.49	21.26
	8RB-Middle (4)	847.5 (20635)	21.61	21.06	20.43
		836.5 (20525)	21.82	20.66	20.36
		825.5 (20415)	22.31	21.62	21.06
	8RB-Low (0)	847.5 (20635)	21.72	21.14	20.53
		836.5 (20525)	21.80	20.75	20.65
		825.5 (20415)	22.41	21.57	21.26





Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)			
			QPSK	16QAM	64QAM	
	15RB (0)	847.5 (20635)	21.70	20.78	20.69	
		836.5 (20525)	21.81	20.85	20.48	
		825.5 (20415)	22.26	21.37	21.59	
5MHz	1RB-High (24)	846.5 (20625)	22.53	22.22	21.60	
		836.5 (20525)	22.91	22.25	21.89	
		826.5 (20425)	22.84	22.68	21.78	
	1RB-Middle (12)	846.5 (20625)	22.66	22.43	21.39	
		836.5 (20525)	22.79	22.39	22.11	
		826.5 (20425)	23.13	22.38	21.72	
	1RB-Low (0)	846.5 (20625)	22.83	22.57	21.67	
		836.5 (20525)	22.77	22.17	22.10	
		826.5 (20425)	23.16	22.37	21.96	
	12RB-High (13)	846.5 (20625)	21.51	20.67	20.70	
		836.5 (20525)	21.66	20.75	20.73	
		826.5 (20425)	22.35	21.02	20.85	
	12RB-Middle (6)	846.5 (20625)	21.82	20.86	20.53	
		836.5 (20525)	22.04	20.93	20.57	
		826.5 (20425)	22.00	21.13	21.18	
	12RB-Low (0)	846.5 (20625)	21.83	20.77	20.63	
		836.5 (20525)	22.06	20.96	20.88	
		826.5 (20425)	22.06	21.08	21.06	
	25RB (0)	846.5 (20625)	21.81	20.69	20.69	
		836.5 (20525)	21.97	20.93	20.82	
		826.5 (20425)	21.98	21.28	21.19	
	10MHz	1RB-High (49)	844 (20600)	22.90	21.92	21.84
			836.5 (20525)	22.83	21.94	21.42
			829 (20450)	22.68	22.41	21.85
1RB-Middle (24)		844 (20600)	22.67	21.65	21.58	
		836.5 (20525)	22.75	21.55	21.72	
		829 (20450)	22.86	22.60	21.89	
1RB-Low (0)		844 (20600)	22.68	21.85	21.70	
		836.5 (20525)	22.97	21.92	21.76	
		829 (20450)	23.09	22.39	22.06	
25RB-High (25)		844 (20600)	21.82	20.93	20.51	
		836.5 (20525)	21.68	20.54	20.72	
		829 (20450)	22.19	21.27	21.04	
25RB-Middle (12)		844 (20600)	21.78	20.55	20.51	
		836.5 (20525)	21.86	20.89	20.55	
		829 (20450)	22.33	21.13	20.79	
25RB-Low (0)		844 (20600)	21.97	20.80	20.73	



Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
		836.5 (20525)	21.77	20.63	20.44
		829 (20450)	22.15	21.22	20.83
		844 (20600)	21.84	20.57	20.72
	50RB (0)	836.5 (20525)	21.77	20.90	20.55
		829 (20450)	22.08	20.90	20.87

Note: Expanded measurement uncertainty is  $U = 0.49\text{dB}$ ,  $k = 1.96$



LTE band 7

Bandwidth	Number of RBs	Frequency(MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2567.5 (21425)	22.38	22.34	22.37
		2535 (21100)	22.69	22.34	22.07
		2502.5 (20775)	22.57	22.33	22.16
	1RB-Middle (12)	2567.5 (21425)	22.91	22.44	22.31
		2535 (21100)	22.96	22.38	22.01
		2502.5 (20775)	23.08	22.47	22.28
	1RB-Low (0)	2567.5 (21425)	22.30	22.46	22.21
		2535 (21100)	22.65	22.09	22.02
		2502.5 (20775)	22.43	22.08	22.15
	12RB-High (13)	2567.5 (21425)	22.28	21.54	21.39
		2535 (21100)	22.04	21.19	21.22
		2502.5 (20775)	22.20	21.24	21.23
	12RB-Middle (6)	2567.5 (21425)	22.23	21.46	21.40
		2535 (21100)	22.16	21.14	21.19
		2502.5 (20775)	22.13	21.30	21.25
	12RB-Low (0)	2567.5 (21425)	22.30	21.45	21.40
		2535 (21100)	22.02	21.22	21.17
		2502.5 (20775)	22.19	21.21	21.21
	25RB (0)	2567.5 (21425)	22.20	21.45	21.40
		2535 (21100)	22.03	21.42	21.15
		2502.5 (20775)	22.09	21.21	21.21
10MHz	1RB-High (49)	2565 (21400)	23.10	22.49	22.41
		2535 (21100)	23.01	22.53	22.17
		2505 (20800)	23.05	22.31	22.33
	1RB-Middle (24)	2565 (21400)	22.85	22.47	22.30
		2535 (21100)	23.02	22.42	22.15
		2505 (20800)	23.04	22.23	22.30
	1RB-Low (0)	2565 (21400)	22.49	22.44	22.41
		2535 (21100)	22.94	22.57	22.13
		2505 (20800)	22.74	22.22	22.16
	25RB-High (25)	2565 (21400)	22.37	21.42	21.34
		2535 (21100)	22.11	21.23	21.10
		2505 (20800)	22.15	21.25	21.18
	25RB-Middle (12)	2565 (21400)	22.29	21.35	21.26
		2535 (21100)	22.05	21.15	21.16
		2505 (20800)	22.16	21.20	21.06
25RB-Low (0)	2565 (21400)	22.26	21.38	21.24	
	2535 (21100)	22.03	21.21	21.18	
	2505 (20800)	21.99	21.30	21.26	



Bandwidth	Number of RBs	Frequency(MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
	50RB (0)	2565 (21400)	22.24	21.37	21.29
		2535 (21100)	22.06	21.19	21.09
		2505 (20800)	22.17	21.24	21.19
15MHz	1RB-High (74)	2562.5 (21375)	22.98	22.27	22.16
		2535 (21100)	23.05	22.28	22.04
		2507.5 (20825)	23.13	22.14	21.97
	1RB-Middle (37)	2562.5 (21375)	22.87	22.22	22.15
		2535 (21100)	22.92	22.09	21.97
		2507.5 (20825)	23.05	22.05	22.05
	1RB-Low (0)	2562.5 (21375)	22.81	22.08	22.03
		2535 (21100)	22.93	22.08	21.97
		2507.5 (20825)	22.99	22.37	21.98
	36RB-High (38)	2562.5 (21375)	22.40	21.38	21.48
		2535 (21100)	22.15	21.36	21.25
		2507.5 (20825)	22.23	21.39	21.37
	36RB-Middle (19)	2562.5 (21375)	22.24	21.36	21.47
		2535 (21100)	22.04	21.38	21.26
		2507.5 (20825)	22.10	21.41	21.28
	36RB-Low (0)	2562.5 (21375)	22.24	21.30	21.39
		2535 (21100)	22.02	21.27	21.28
		2507.5 (20825)	22.07	21.24	21.27
	75RB (0)	2562.5 (21375)	22.20	21.37	21.25
		2535 (21100)	21.99	21.18	21.10
		2507.5 (20825)	22.24	21.32	21.20
20MHz	1RB-High (99)	2560 (21350)	23.42	22.55	22.48
		2535 (21100)	23.17	22.13	22.46
		2510 (20850)	23.26	22.31	21.96
	1RB-Middle (50)	2560 (21350)	22.86	22.29	22.31
		2535 (21100)	23.10	22.09	21.84
		2510 (20850)	23.19	22.34	21.97
	1RB-Low (0)	2560 (21350)	23.11	22.28	22.07
		2535 (21100)	23.07	22.06	21.83
		2510 (20850)	23.13	22.37	21.87
	50RB-High (50)	2560 (21350)	22.43	21.57	21.28
		2535 (21100)	22.20	21.38	21.11
		2510 (20850)	22.16	21.28	21.20
	50RB-Middle (25)	2560 (21350)	22.30	21.35	21.19
		2535 (21100)	22.08	21.20	21.00
		2510 (20850)	22.09	21.29	21.23
50RB-Low (0)	2560 (21350)	22.19	21.33	21.18	



Bandwidth	Number of RBs	Frequency(MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
		2535 (21100)	21.97	21.27	21.00
		2510 (20850)	22.15	21.23	21.15
		2560 (21350)	22.19	21.49	21.28
	100RB (0)	2535 (21100)	22.08	21.26	21.06
		2510 (20850)	22.05	21.30	21.13

Note: Expanded measurement uncertainty is  $U = 0.49$  dB,  $k = 1.96$



LTE band 12

Bandwidth	Number of RBs	Frequency(MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	715.3	22.67	22.14	21.26
		707.5	22.45	22.13	21.38
		699.7	22.64	22.09	21.27
	1RB-Middle (3)	715.3	22.77	22.10	21.31
		707.5	22.48	22.01	21.42
		699.7	22.68	22.10	21.40
	1RB-Low (0)	715.3	22.66	22.04	21.24
		707.5	22.51	21.98	21.22
		699.7	22.65	22.08	21.30
	3RB-High (3)	715.3	22.75	21.84	21.81
		707.5	22.67	21.91	21.74
		699.7	22.78	21.99	21.75
	3RB-Middle (1)	715.3	22.68	21.89	21.88
		707.5	22.58	21.99	21.79
		699.7	22.74	21.93	21.74
	3RB-Low (0)	715.3	22.71	21.83	21.82
		707.5	22.60	21.91	21.74
		699.7	22.72	21.96	21.72
	6RB (0)	715.3	21.86	20.41	20.46
		707.5	21.66	20.56	20.56
		699.7	21.73	20.53	20.58
3MHz	1RB-High (14)	714.5	22.72	22.20	21.75
		707.5	22.50	21.73	21.65
		700.5	22.61	22.17	21.72
	1RB-Middle (7)	714.5	22.78	22.13	21.73
		707.5	22.46	21.71	21.72
		700.5	22.71	22.09	21.56
	1RB-Low (0)	714.5	22.78	22.25	21.67
		707.5	22.57	21.48	21.70
		700.5	22.67	22.10	21.61
	8RB-High (7)	714.5	21.71	20.77	20.49
		707.5	21.74	20.83	20.42
		700.5	21.67	20.71	20.38
	8RB-Middle (4)	714.5	21.75	20.78	20.47
		707.5	21.71	20.83	20.43
		700.5	21.66	20.86	20.44
	8RB-Low (0)	714.5	21.66	20.83	20.50
		707.5	21.56	20.79	20.37
		700.5	21.77	20.86	20.41



Bandwidth	Number of RBs	Frequency(MHz)	Power(dBm)			
			QPSK	16QAM	64QAM	
	15RB (0)	714.5	21.74	20.86	20.71	
		707.5	21.71	20.81	20.60	
		700.5	21.64	20.79	20.68	
5MHz	1RB-High (24)	713.5	22.60	22.12	21.84	
		707.5	22.60	22.08	21.54	
		701.5	22.87	22.17	21.73	
	1RB-Middle (12)	713.5	22.49	22.17	21.84	
		707.5	22.45	22.07	21.51	
		701.5	22.73	22.21	21.83	
	1RB-Low (0)	713.5	22.58	22.17	21.76	
		707.5	22.59	22.04	21.44	
		701.5	22.81	22.29	21.76	
	12RB-High (13)	713.5	21.73	20.65	20.69	
		707.5	21.76	20.58	20.66	
		701.5	21.64	20.66	20.65	
	12RB-Middle (6)	713.5	21.82	20.68	20.70	
		707.5	21.65	20.73	20.72	
		701.5	21.70	20.56	20.67	
	12RB-Low (0)	713.5	21.65	20.79	20.78	
		707.5	21.59	20.75	20.75	
		701.5	21.79	20.64	20.68	
	25RB (0)	713.5	21.75	20.89	20.75	
		707.5	21.76	20.63	20.74	
		701.5	21.57	20.91	20.67	
	10MHz	1RB-High (49)	711	22.73	22.16	21.78
			707.5	22.74	21.70	21.41
			704	22.62	22.06	21.59
1RB-Middle (24)		711	22.63	21.90	21.57	
		707.5	22.61	21.61	21.53	
		704	22.71	21.97	21.58	
1RB-Low (0)		711	22.51	21.90	21.60	
		707.5	22.62	21.43	21.48	
		704	22.65	21.98	21.61	
25RB-High (25)		711	21.86	20.78	20.71	
		707.5	21.75	20.73	20.69	
		704	21.65	20.79	20.61	
25RB-Middle (12)		711	21.71	20.66	20.66	
		707.5	21.69	20.72	20.64	
		704	21.69	20.59	20.44	
25RB-Low (0)		711	21.81	20.55	20.58	



Bandwidth	Number of RBs	Frequency(MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
		707.5	21.58	20.69	20.60
		704	21.78	20.63	20.57
		711	21.65	20.74	20.68
	50RB (0)	707.5	21.71	20.79	20.64
		704	21.78	20.53	20.51

Note: Expanded measurement uncertainty is U = 0.49dB, k = 1.96





LTE band 17

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
5MHz	1RB-High (24)	713.5 (23825)	22.43	22.22	21.68
		710 (23790)	22.46	21.98	21.68
		706.5 (23755)	22.88	22.14	21.69
	1RB-Low (0)	713.5 (23825)	22.70	22.37	21.85
		710 (23790)	22.41	21.85	21.64
		706.5 (23755)	22.69	22.43	21.68
	12RB-Middle (6)	713.5 (23825)	21.71	20.83	20.88
		710 (23790)	21.77	20.91	20.56
		706.5 (23755)	21.61	20.41	20.63
	25RB (0)	713.5 (23825)	21.80	21.01	20.56
		710 (23790)	21.64	20.75	20.88
		706.5 (23755)	21.77	20.82	20.50
10MHz	1RB-High (49)	711 (23800)	22.78	22.13	21.89
		710 (23790)	22.94	21.58	21.43
		709 (23780)	22.65	22.06	21.43
	1RB-Low (0)	711 (23800)	22.51	22.01	21.50
		710 (23790)	22.69	21.57	21.35
		709 (23780)	22.83	22.14	21.70
	25RB-Middle (12)	711 (23800)	21.91	20.66	20.84
		710 (23790)	21.50	20.77	20.61
		709 (23780)	21.89	20.77	20.36
	50RB (0)	711 (23800)	21.48	20.77	20.48
		710 (23790)	21.61	20.59	20.84
		709 (23780)	21.64	20.62	20.47

Note: Expanded measurement uncertainty is U = 0.49dB, k = 1.96



LTE band 25

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)			
			QPSK	16QAM	64QAM	
1.4MHz	1RB-High (5)	1914.3 (26683)	23.30	22.63	22.43	
		1882.5 (26365)	23.25	22.35	21.82	
		1850.7 (26047)	23.33	22.42	22.33	
	1RB-Middle (3)	1914.3 (26683)	23.65	22.94	22.68	
		1882.5 (26365)	23.29	22.34	21.92	
		1850.7 (26047)	23.32	22.39	22.39	
	1RB-Low (0)	1914.3 (26683)	23.74	22.94	22.76	
		1882.5 (26365)	23.17	22.31	21.90	
		1850.7 (26047)	23.33	22.40	22.32	
	3RB-High (3)	1914.3 (26683)	23.54	22.56	22.57	
		1882.5 (26365)	23.38	22.43	22.11	
		1850.7 (26047)	23.37	22.81	22.23	
	3RB-Middle (1)	1914.3 (26683)	23.74	22.75	22.72	
		1882.5 (26365)	23.31	22.40	22.09	
		1850.7 (26047)	23.35	22.80	22.26	
	3RB-Low (0)	1914.3 (26683)	23.75	22.75	22.70	
		1882.5 (26365)	23.27	22.49	22.16	
		1850.7 (26047)	23.43	22.76	22.23	
	6RB (0)	1914.3 (26683)	22.75	21.96	21.73	
		1882.5 (26365)	22.25	21.06	21.22	
		1850.7 (26047)	22.36	21.35	21.30	
	3MHz	1RB-High (14)	1913.5 (26675)	23.26	22.61	22.10
			1882.5 (26365)	23.18	22.28	21.90
			1851.5 (26055)	23.19	22.36	22.23
		1RB-Middle (7)	1913.5 (26675)	23.90	22.99	22.59
			1882.5 (26365)	23.19	22.35	21.83
			1851.5 (26055)	23.24	22.40	22.28
1RB-Low (0)		1913.5 (26675)	23.68	22.90	22.37	
		1882.5 (26365)	23.16	22.32	21.95	
		1851.5 (26055)	23.21	22.39	22.29	
8RB-High (7)		1913.5 (26675)	22.81	21.97	21.70	
		1882.5 (26365)	22.33	21.46	21.05	
		1851.5 (26055)	22.31	21.71	21.25	
8RB-Middle (4)		1913.5 (26675)	22.96	22.11	21.81	
		1882.5 (26365)	22.15	21.35	21.05	
		1851.5 (26055)	22.41	21.62	21.24	
8RB-Low (0)		1913.5 (26675)	22.91	22.07	21.68	
		1882.5 (26365)	22.20	21.43	21.09	
		1851.5 (26055)	22.46	21.60	21.16	



Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)			
			QPSK	16QAM	64QAM	
	15RB (0)	1913.5 (26675)	22.87	22.03	21.70	
		1882.5 (26365)	22.29	21.47	21.20	
		1851.5 (26055)	22.39	21.58	21.30	
5MHz	1RB-High (24)	1912.5 (26665)	23.19	22.76	22.72	
		1882.5 (26365)	23.22	22.88	22.38	
		1852.5 (26065)	23.27	22.97	22.42	
	1RB-Middle (12)	1912.5 (26665)	23.92	22.91	23.26	
		1882.5 (26365)	23.24	22.79	22.31	
		1852.5 (26065)	23.30	22.97	22.50	
	1RB-Low (0)	1912.5 (26665)	23.06	22.85	22.44	
		1882.5 (26365)	23.16	22.81	22.33	
		1852.5 (26065)	23.30	22.85	22.67	
	12RB-High (13)	1912.5 (26665)	22.63	21.82	21.75	
		1882.5 (26365)	22.22	21.46	21.28	
		1852.5 (26065)	22.37	21.56	21.51	
	12RB-Middle (6)	1912.5 (26665)	22.72	21.90	21.76	
		1882.5 (26365)	22.30	21.48	21.27	
		1852.5 (26065)	22.30	21.64	21.41	
	12RB-Low (0)	1912.5 (26665)	22.21	21.44	21.24	
		1882.5 (26365)	22.28	21.46	21.24	
		1852.5 (26065)	22.42	21.62	21.39	
	25RB (0)	1912.5 (26665)	22.86	21.99	21.75	
		1882.5 (26365)	22.18	21.54	21.27	
		1852.5 (26065)	22.35	21.70	21.43	
	10MHz	1RB-High (49)	1910 (26640)	23.33	23.13	22.66
			1882.5 (26365)	23.11	22.86	22.27
			1855 (26090)	23.11	22.81	22.11
1RB-Middle (24)		1910 (26640)	23.17	22.96	22.19	
		1882.5 (26365)	23.07	22.80	22.19	
		1855 (26090)	23.10	22.87	22.18	
1RB-Low (0)		1910 (26640)	23.23	22.96	22.27	
		1882.5 (26365)	23.11	22.74	22.18	
		1855 (26090)	23.17	22.87	22.26	
25RB-High (25)		1910 (26640)	22.81	21.96	21.76	
		1882.5 (26365)	22.30	21.54	21.19	
		1855 (26090)	22.23	21.37	21.21	
25RB-Middle (12)		1910 (26640)	22.34	21.47	21.26	
		1882.5 (26365)	22.27	21.46	21.11	
		1855 (26090)	22.29	21.32	21.21	
25RB-Low (0)		1910 (26640)	22.31	21.41	21.30	



Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)			
			QPSK	16QAM	64QAM	
		1882.5 (26365)	22.13	21.55	21.12	
		1855 (26090)	22.32	21.42	21.27	
		1910 (26640)	22.31	21.52	21.30	
	50RB (0)	1882.5 (26365)	22.16	21.37	21.11	
		1855 (26090)	22.31	21.33	21.24	
15MHz	1RB-High (74)	1907.5 (26615)	23.01	22.34	22.02	
		1882.5 (26365)	23.09	22.25	22.21	
		1857.5 (26115)	23.07	22.94	22.49	
	1RB-Middle (37)	1907.5 (26615)	23.20	22.56	22.18	
		1882.5 (26365)	23.11	22.21	22.13	
		1857.5 (26115)	23.09	22.99	22.59	
	1RB-Low (0)	1907.5 (26615)	23.25	22.54	22.37	
		1882.5 (26365)	23.05	22.17	22.15	
		1857.5 (26115)	23.19	23.08	22.62	
	36RB-High (38)	1907.5 (26615)	22.22	21.34	21.19	
		1882.5 (26365)	22.15	21.28	21.18	
		1857.5 (26115)	22.31	21.35	21.36	
	36RB-Middle (19)	1907.5 (26615)	22.27	21.41	21.30	
		1882.5 (26365)	22.18	21.20	21.08	
		1857.5 (26115)	22.21	21.50	21.34	
	36RB-Low (0)	1907.5 (26615)	22.27	21.49	21.30	
		1882.5 (26365)	22.28	21.30	21.08	
		1857.5 (26115)	22.27	21.40	21.29	
	75RB (0)	1907.5 (26615)	22.27	21.56	21.33	
		1882.5 (26365)	22.11	21.50	21.22	
		1857.5 (26115)	22.27	21.48	21.20	
	20MHz	1RB-High (99)	1905 (26590)	22.85	22.18	21.94
			1882.5 (26365)	23.29	22.46	21.88
			1860 (26140)	23.04	22.30	22.48
		1RB-Middle (50)	1905 (26590)	23.19	22.93	22.54
			1882.5 (26365)	23.14	22.27	21.72
			1860 (26140)	23.02	22.29	22.35
		1RB-Low (0)	1905 (26590)	23.21	22.88	22.61
			1882.5 (26365)	23.20	22.26	21.77
			1860 (26140)	23.12	22.44	22.48
50RB-High (50)		1905 (26590)	22.28	21.44	21.26	
		1882.5 (26365)	22.16	21.44	21.23	
		1860 (26140)	22.19	21.34	21.24	
50RB-Middle (25)		1905 (26590)	22.31	21.50	21.33	
		1882.5 (26365)	22.29	21.33	21.22	



Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)			
			QPSK	16QAM	64QAM	
		1860 (26140)	22.17	21.36	21.24	
		50RB-Low (0)	1905 (26590)	22.29	21.58	21.37
			1882.5 (26365)	22.28	21.35	21.20
	100RB (0)		1860 (26140)	22.29	21.43	21.25
			1905 (26590)	22.34	21.49	21.29
			1882.5 (26365)	22.27	21.39	21.22
			1860 (26140)	22.25	21.34	21.14

Note: Expanded measurement uncertainty is U = 0.49dB, k = 1.96



LTE band 26(814MHz-824MHz)

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	814.7 (26697)	22.46	22.25	21.45
		819(26740)	22.97	21.72	21.83
		823.3(26783)	22.96	21.90	22.07
	1RB-Middle (3)	814.7 (26697)	22.58	21.95	21.27
		819(26740)	22.76	21.97	21.60
		823.3(26783)	23.14	22.10	21.74
	1RB-Low (0)	814.7 (26697)	22.78	22.10	21.27
		819(26740)	22.83	21.79	21.62
		823.3(26783)	23.05	22.22	21.61
	3RB-High (3)	814.7 (26697)	22.98	21.88	21.85
		819(26740)	22.99	21.96	21.90
		823.3(26783)	22.95	22.50	22.35
	3RB-Middle (1)	814.7 (26697)	22.81	21.85	21.91
		819(26740)	22.90	22.35	21.78
		823.3(26783)	23.11	22.29	22.32
	3RB-Low (0)	814.7 (26697)	22.86	21.66	21.97
		819(26740)	23.02	22.16	21.93
		823.3(26783)	23.05	22.19	22.22
	6RB (0)	814.7 (26697)	21.75	20.67	20.47
		819(26740)	22.10	20.92	20.61
		823.3(26783)	22.06	20.71	20.95
3MHz	1RB-High (14)	815.5 (26705)	22.62	22.37	21.48
		819(26740)	22.88	22.24	21.76
		822.5(26775)	23.01	22.37	22.11
	1RB-Middle (7)	815.5 (26705)	22.65	22.28	21.42
		819(26740)	22.86	22.36	21.77
		822.5(26775)	23.18	22.47	22.29
	1RB-Low (0)	815.5 (26705)	22.97	22.35	21.36
		819(26740)	22.85	22.54	21.54
		822.5(26775)	23.35	22.23	22.04
	8RB-High (7)	815.5 (26705)	21.74	20.93	20.72
		819(26740)	21.67	20.97	20.52
		822.5(26775)	22.11	21.26	21.16
	8RB-Middle (4)	815.5 (26705)	21.69	21.09	20.58
		819(26740)	21.85	20.66	20.30
		822.5(26775)	22.17	21.53	21.33
	8RB-Low (0)	815.5 (26705)	21.53	20.89	20.75
		819(26740)	21.92	20.95	20.62
		822.5(26775)	22.11	21.55	21.24



Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)			
			QPSK	16QAM	64QAM	
	15RB (0)	815.5 (26705)	21.57	20.97	20.78	
		819(26740)	21.79	21.02	20.80	
		822.5(26775)	22.29	21.35	21.61	
5MHz	1RB-High (24)	816.5 (26715)	22.57	22.46	21.85	
		819(26740)	22.93	22.07	21.94	
		821.5(26765)	23.17	22.53	22.06	
	1RB-Middle (12)	816.5 (26715)	22.87	22.39	21.55	
		819(26740)	22.95	22.33	22.03	
		821.5(26765)	22.87	22.46	21.74	
	1RB-Low (0)	816.5 (26715)	22.68	22.28	21.61	
		819(26740)	22.94	22.26	21.92	
		821.5(26765)	22.93	22.61	21.79	
	12RB-High (13)	816.5 (26715)	21.60	20.75	20.44	
		819(26740)	21.87	21.05	20.52	
		821.5(26765)	22.13	21.29	20.90	
	12RB-Middle (6)	816.5 (26715)	21.72	20.88	20.74	
		819(26740)	21.79	20.83	20.65	
		821.5(26765)	21.91	21.24	20.95	
	12RB-Low (0)	816.5 (26715)	21.79	20.85	20.63	
		819(26740)	22.07	20.67	20.78	
		821.5(26765)	22.29	21.21	21.18	
	25RB (0)	816.5 (26715)	21.47	20.98	20.53	
		819(26740)	21.91	20.81	20.97	
		821.5(26765)	21.91	21.22	20.88	
	10MHz	1RB-High (49)	819(26740)	22.87	21.77	21.64
		1RB-Middle (24)	819(26740)	23.07	21.87	21.43
		1RB-Low (0)	819(26740)	22.96	22.26	21.78
25RB-High (25)		819(26740)	22.67	21.89	21.93	
25RB-Middle (12)		819(26740)	22.79	21.64	21.88	
25RB-Low (0)		819(26740)	22.85	22.69	22.05	
50RB (0)		819(26740)	21.76	20.74	20.43	

Note: Expanded measurement uncertainty is U = 0.49dB, k = 1.96



LTE band 26(824MHz-849MHz)

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	848.3 (20643)	22.66	22.09	21.41
		836.5 (20525)	22.82	21.90	21.65
		824.7 (20407)	23.09	22.09	21.88
	1RB-Middle (3)	848.3 (20643)	22.72	22.07	21.38
		836.5 (20525)	22.72	21.86	21.69
		824.7 (20407)	23.12	22.10	21.84
	1RB-Low (0)	848.3 (20643)	22.75	22.10	21.22
		836.5 (20525)	22.68	21.85	21.62
		824.7 (20407)	23.03	22.12	21.78
	3RB-High (3)	848.3 (20643)	22.86	22.02	21.90
		836.5 (20525)	22.90	22.14	21.90
		824.7 (20407)	23.12	22.33	22.28
	3RB-Middle (1)	848.3 (20643)	22.91	21.99	21.95
		836.5 (20525)	22.86	22.26	21.85
		824.7 (20407)	23.08	22.31	22.27
	3RB-Low (0)	848.3 (20643)	22.93	21.86	21.77
		836.5 (20525)	22.86	22.13	21.89
		824.7 (20407)	23.12	22.26	22.31
	6RB (0)	848.3 (20643)	21.87	20.53	20.65
		836.5 (20525)	21.90	20.73	20.67
		824.7 (20407)	22.21	20.91	20.98
3MHz	1RB-High (14)	847.5 (20635)	22.68	22.24	21.52
		836.5 (20525)	22.71	22.20	21.63
		825.5 (20415)	23.12	22.32	22.16
	1RB-Middle (7)	847.5 (20635)	22.77	22.24	21.45
		836.5 (20525)	22.77	22.28	21.77
		825.5 (20415)	23.18	22.35	22.30
	1RB-Low (0)	847.5 (20635)	22.78	22.32	21.53
		836.5 (20525)	22.73	22.34	21.73
		825.5 (20415)	23.15	22.20	22.22
	8RB-High (7)	847.5 (20635)	21.82	20.89	20.61
		836.5 (20525)	21.83	20.88	20.41
		825.5 (20415)	22.28	21.43	21.07
	8RB-Middle (4)	847.5 (20635)	21.70	20.90	20.52
		836.5 (20525)	21.95	20.82	20.49
		825.5 (20415)	22.32	21.57	21.14
8RB-Low (0)	847.5 (20635)	21.70	21.00	20.62	
	836.5 (20525)	21.90	20.88	20.48	
	825.5 (20415)	22.31	21.53	21.13	





Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)			
			QPSK	16QAM	64QAM	
	15RB (0)	847.5 (20635)	21.72	20.97	20.73	
		836.5 (20525)	21.89	20.90	20.65	
		825.5 (20415)	22.30	21.48	21.45	
5MHz	1RB-High (24)	846.5 (20625)	22.64	22.29	21.66	
		836.5 (20525)	22.88	22.24	22.00	
		826.5 (20425)	22.98	22.52	21.92	
	1RB-Middle (12)	846.5 (20625)	22.67	22.31	21.53	
		836.5 (20525)	22.87	22.33	22.01	
		826.5 (20425)	22.98	22.47	21.88	
	1RB-Low (0)	846.5 (20625)	22.69	22.48	21.67	
		836.5 (20525)	22.77	22.36	22.03	
		826.5 (20425)	23.01	22.57	21.98	
	12RB-High (13)	846.5 (20625)	21.68	20.87	20.51	
		836.5 (20525)	21.86	20.85	20.72	
		826.5 (20425)	22.23	21.11	20.97	
	12RB-Middle (6)	846.5 (20625)	21.85	20.96	20.54	
		836.5 (20525)	21.92	20.73	20.77	
		826.5 (20425)	22.00	21.16	20.98	
	12RB-Low (0)	846.5 (20625)	21.79	20.82	20.51	
		836.5 (20525)	21.91	20.83	20.76	
		826.5 (20425)	22.18	21.22	21.05	
	25RB (0)	846.5 (20625)	21.67	20.79	20.70	
		836.5 (20525)	21.94	20.93	20.80	
		826.5 (20425)	22.11	21.34	21.08	
	10MHz	1RB-High (49)	844 (20600)	22.83	21.77	21.73
			836.5 (20525)	22.92	21.84	21.50
			829 (20450)	22.88	22.33	21.85
1RB-Middle (24)		844 (20600)	22.81	21.76	21.65	
		836.5 (20525)	22.86	21.75	21.75	
		829 (20450)	22.95	22.46	21.86	
1RB-Low (0)		844 (20600)	22.73	21.78	21.73	
		836.5 (20525)	22.89	21.84	21.74	
		829 (20450)	23.00	22.55	21.98	
25RB-High (25)		844 (20600)	21.86	20.84	20.67	
		836.5 (20525)	21.80	20.70	20.56	
		829 (20450)	22.11	21.30	20.89	
25RB-Middle (12)		844 (20600)	21.89	20.70	20.54	
		836.5 (20525)	21.93	20.70	20.56	
		829 (20450)	22.17	21.30	20.88	
25RB-Low (0)		844 (20600)	21.78	20.75	20.66	



Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
		836.5 (20525)	21.89	20.77	20.56
		829 (20450)	21.99	21.25	20.94
		844 (20600)	21.77	20.75	20.53
	50RB (0)	836.5 (20525)	21.96	20.82	20.69
		829 (20450)	22.12	21.03	20.93
		831.5(20525)	22.88	22.28	21.74
15MHz	1RB-High (74)	836.5 (20525)	22.69	22.29	21.62
		841.5 (26965)	22.86	21.82	21.78
		831.5(20525)	22.79	22.25	21.65
	1RB-Middle (37)	836.5 (20525)	22.69	22.32	21.61
		841.5 (26965)	22.89	21.87	21.96
		831.5(20525)	22.89	22.25	21.63
	1RB-Low (0)	836.5 (20525)	22.65	22.38	21.62
		841.5 (26965)	22.96	21.91	21.98
		831.5(20525)	21.85	20.97	20.81
	36RB-High (38)	836.5 (20525)	21.84	20.92	20.72
		841.5 (26965)	21.97	20.94	20.83
		831.5(20525)	21.90	20.84	20.63
	36RB-Middle (19)	836.5 (20525)	21.87	20.89	20.62
		841.5 (26965)	22.09	21.10	20.88
		831.5(20525)	21.89	20.93	20.73
	36RB-Low (0)	836.5 (20525)	21.95	20.94	20.71
		841.5 (26965)	22.18	21.03	20.91
		831.5(20525)	21.88	20.92	20.74
	75RB (0)	836.5 (20525)	22.01	20.87	20.75
		841.5 (26965)	22.08	21.04	21.01

Note: Expanded measurement uncertainty is U = 0.49dB, k = 1.96



LTE band 38

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
5MHz	1 RB high	2617.5	23.38	22.13	21.33
		2595.0	23.32	22.27	21.36
		2572.5	23.05	21.72	21.16
	1 RB low	2617.5	23.62	21.98	21.47
		2595.0	23.48	22.43	21.53
		2572.5	23.01	22.37	21.40
	50% RB mid	2617.5	23.47	22.56	21.84
		2595.0	23.53	22.76	21.66
		2572.5	23.08	22.11	21.78
	100% RB	2617.5	22.22	21.56	21.87
		2595.0	22.51	21.77	21.68
		2572.5	22.33	21.32	21.12
10MHz	1 RB high	2615.0	22.39	21.53	21.58
		2595.0	22.30	21.22	21.47
		2575.0	22.17	21.25	21.27
	1 RB low	2615.0	22.54	21.39	21.45
		2595.0	22.59	21.65	21.53
		2575.0	21.93	21.30	21.29
	50% RB mid	2615.0	22.36	21.42	21.48
		2595.0	22.22	21.67	21.51
		2575.0	22.31	21.08	21.33
	100% RB	2615.0	23.39	22.13	21.67
		2595.0	23.46	22.18	21.52
		2575.0	23.18	21.89	21.09
15MHz	1 RB high	2612.5	23.39	22.01	21.36
		2595.0	23.45	21.94	21.57
		2577.5	22.94	22.27	21.27
	1 RB low	2612.5	23.28	22.66	21.71
		2595.0	23.39	22.47	21.50
		2577.5	22.86	22.09	21.39
	50% RB mid	2612.5	22.35	21.70	21.88
		2595.0	22.46	21.77	21.52
		2577.5	22.24	21.49	21.30
	100% RB	2612.5	22.41	21.69	21.57
		2595.0	22.48	21.52	21.63
		2577.5	22.31	21.32	21.21



20MHz	1 RB high	2610.0	22.44	21.46	21.63
		2595.0	22.29	21.84	21.47
		2580.0	22.15	21.52	21.37
	1 RB low	2610.0	22.29	21.59	21.85
		2595.0	22.50	21.72	21.41
		2580.0	22.33	21.52	21.18
	50% RB mid	2610.0	23.46	21.98	21.36
		2595.0	23.15	21.77	21.46
		2580.0	23.44	21.68	21.43
	100% RB	2610.0	23.38	22.22	21.54
		2595.0	23.32	22.02	21.88
		2580.0	23.20	22.20	21.41

Note: Expanded measurement uncertainty is  $U = 0.49\text{dB}$ ,  $k = 1.96$



LTE band 41

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2537.5	23.50	22.51	21.21
		2595	23.50	22.49	21.16
		2652.5	23.50	22.53	21.17
	1RB-Middle (12)	2537.5	23.50	22.49	21.17
		2595	23.55	22.50	21.18
		2652.5	23.50	22.51	21.21
	1RB-Low (0)	2537.5	22.40	21.37	20.37
		2595	22.43	21.40	20.41
		2652.5	22.44	21.38	20.41
	12RB-High (13)	2537.5	22.43	21.42	20.40
		2595	22.40	21.45	20.42
		2652.5	22.28	21.24	20.28
	12RB-Middle (6)	2537.5	23.47	22.53	21.14
		2595	23.56	22.52	21.24
		2652.5	23.08	22.33	20.97
	12RB-Low (0)	2537.5	23.49	22.55	21.17
		2595	23.50	22.51	21.17
		2652.5	23.10	22.28	20.99
	25RB (0)	2537.5	22.34	21.41	20.45
		2595	22.41	21.48	20.44
		2652.5	22.48	21.48	20.45
10MHz	1RB-High (49)	2540	22.43	21.45	20.41
		2595	22.46	21.45	20.41
		2650	22.47	21.50	20.39
	1RB-Middle (24)	2540	23.41	22.51	21.13
		2595	23.43	22.49	21.16
		2650	23.48	22.51	21.19
	1RB-Low (0)	2540	23.43	22.49	21.12
		2595	23.46	22.45	21.19
		2650	23.07	22.26	20.95
	25RB-High (25)	2540	22.40	21.35	20.34
		2595	22.30	21.30	20.31
		2650	22.26	21.20	20.15
	25RB-Middle (12)	2540	22.41	21.39	20.33
		2595	22.43	21.41	20.39
		2650	22.42	21.42	20.39
	25RB-Low (0)	2540	23.38	22.47	21.10



Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)			
			QPSK	16QAM	64QAM	
		2595	23.42	22.47	21.13	
		2650	23.45	22.47	21.19	
		2540	23.45	22.49	21.11	
	50RB (0)	2595	23.45	22.46	21.13	
		2650	23.48	22.47	21.14	
		2542.5	22.44	21.42	20.39	
15MHz	1RB-High (74)	2595	22.46	21.45	20.42	
		2647.5	22.55	21.51	20.46	
		2542.5	22.38	21.43	20.35	
	1RB-Middle (37)	2595	22.46	21.49	20.40	
		2647.5	22.51	21.45	20.39	
		2542.5	23.50	22.51	21.21	
	1RB-Low (0)	2595	23.50	22.49	21.16	
		2647.5	23.50	22.53	21.17	
		2542.5	23.50	22.49	21.17	
	36RB-High (38)	2595	23.55	22.50	21.18	
		2647.5	23.50	22.51	21.21	
		2542.5	22.40	21.37	20.37	
	36RB-Middle (19)	2595	22.43	21.40	20.41	
		2647.5	22.44	21.38	20.41	
		2542.5	22.43	21.42	20.40	
	36RB-Low (0)	2595	22.40	21.45	20.42	
		2647.5	22.49	21.48	20.45	
		2542.5	23.47	22.53	21.14	
	75RB (0)	2595	23.56	22.52	21.24	
		2647.5	23.53	22.57	21.22	
		2545	23.49	22.55	21.17	
	20MHz	1RB-High (99)	2595	23.50	22.51	21.17
			2645	23.48	22.50	21.14
			2545	22.34	21.41	20.45
1RB-Middle (50)		2595	22.41	21.48	20.44	
		2645	22.48	21.48	20.45	
		2545	22.43	21.45	20.41	
1RB-Low (0)		2595	22.46	21.45	20.41	
		2645	22.25	21.27	20.20	
		2545	23.41	22.51	21.13	
50RB-High (50)		2595	23.43	22.49	21.16	
		2645	23.48	22.51	21.19	



Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
	50RB-Middle (25)	2545	23.43	22.49	21.12
		2595	23.46	22.45	21.19
		2645	23.43	22.45	21.16
	50RB-Low (0)	2545	22.40	21.35	20.34
		2595	22.44	21.33	20.40
		2645	22.44	21.42	20.41
	100RB (0)	2545	22.41	21.39	20.33
		2595	22.43	21.41	20.39
		2645	22.25	21.26	20.19

Note: Expanded measurement uncertainty is  $U = 0.49\text{dB}$ ,  $k = 1.96$



LTE band 66

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	1779.3	23.37	22.65	22.58
		1745.0	23.43	22.62	22.53
		1710.7	23.53	22.90	22.65
	1 RB low	1779.3	23.40	22.67	22.61
		1745.0	23.42	22.63	22.64
		1710.7	23.57	22.86	22.75
	50% RB mid	1779.3	23.56	22.95	22.45
		1745.0	23.58	22.86	22.24
		1710.7	23.80	22.94	22.60
	100% RB	1779.3	22.51	21.46	21.28
		1745.0	22.48	21.45	21.24
		1710.7	22.80	21.65	21.53
3MHz	1 RB high	1778.5	23.34	22.74	22.27
		1745.0	23.38	22.60	22.60
		1711.5	23.51	22.70	22.32
	1 RB low	1778.5	23.36	22.84	22.20
		1745.0	23.41	22.68	22.59
		1711.5	23.55	22.78	22.41
	50% RB mid	1778.5	22.55	21.73	21.20
		1745.0	22.52	21.74	21.05
		1711.5	22.72	21.88	21.39
	100% RB	1778.5	22.51	21.65	21.33
		1745.0	22.63	21.71	21.28
		1711.5	22.67	21.89	21.53
5MHz	1 RB high	1777.5	23.36	22.87	22.53
		1745.0	23.54	22.92	22.48
		1712.5	23.68	22.97	22.57
	1 RB low	1777.5	23.31	22.89	22.62
		1745.0	23.56	22.90	22.66
		1712.5	23.66	23.08	22.68
	50% RB mid	1777.5	22.42	21.69	21.38
		1745.0	22.63	21.70	21.41
		1712.5	22.58	21.83	21.67
	100% RB	1777.5	22.54	21.59	21.38
		1745.0	22.55	21.84	21.40
		1712.5	22.66	21.94	21.60
10MHz	1 RB high	1775.0	23.32	22.81	22.54





		1745.0	23.44	22.80	22.23	
		1715.0	23.49	22.92	22.36	
		1775.0	23.37	22.95	22.35	
	1 RB low	1745.0	23.46	22.84	22.38	
		1715.0	23.56	23.11	22.39	
		1775.0	22.49	21.52	21.28	
	50% RB mid	1745.0	22.50	21.53	21.22	
		1715.0	22.62	21.74	21.44	
		1775.0	22.46	21.64	21.25	
	100% RB	1745.0	22.41	21.71	21.23	
		1715.0	22.74	21.78	21.53	
		1775.0	22.46	21.64	21.25	
15MHz	1 RB high	1772.5	23.34	22.87	22.26	
		1745.0	23.54	22.87	22.01	
		1717.5	23.43	22.78	22.65	
	1 RB low	1772.5	23.43	22.73	22.42	
		1745.0	23.46	22.90	22.06	
		1717.5	23.49	22.88	22.86	
	50% RB mid	1772.5	22.53	21.61	21.31	
		1745.0	22.59	21.70	21.43	
		1717.5	22.68	21.77	21.58	
	100% RB	1772.5	22.57	21.62	21.26	
		1745.0	22.59	21.57	21.27	
		1717.5	22.74	21.80	21.43	
	20MHz	1 RB high	1770.0	23.47	22.81	22.53
			1745.0	23.42	22.60	22.57
			1720.0	23.38	22.99	22.68
1 RB low		1770.0	23.64	22.89	22.73	
		1745.0	23.31	22.75	22.60	
		1720.0	23.55	22.30	22.85	
50% RB mid		1770.0	22.58	21.66	21.35	
		1745.0	22.52	21.64	21.24	
		1720.0	22.71	21.76	21.48	
100% RB		1770.0	22.57	21.70	21.31	
		1745.0	22.39	21.67	21.31	
		1720.0	22.63	21.74	21.43	

Note: Expanded measurement uncertainty is  $U = 0.49\text{dB}$ ,  $k = 1.96$



### **A.1.3 Radiated**

#### **A.1.3.1 Description**

This is the test for the maximum radiated power from the EUT.

Rule Part 24.232(b) specifies, "Mobile/portable stations are limited to 2 watts e.i.r.p. Peak power" and 24.232(c) specifies that "Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage."

Rule Part 27.50(d) specifies "Fixed, mobile, and portable (handheld) stations operating in the 1710–1755 MHz band are limited to 1 watt EIRP".

Rule Part 27.50(h)(2) specifies "Mobile stations are limited to 2.0 watts EIRP".

Rule Part 27.50(c) specifies "Portable stations (hand-held de-vices) are limited to 3 watts ERP".

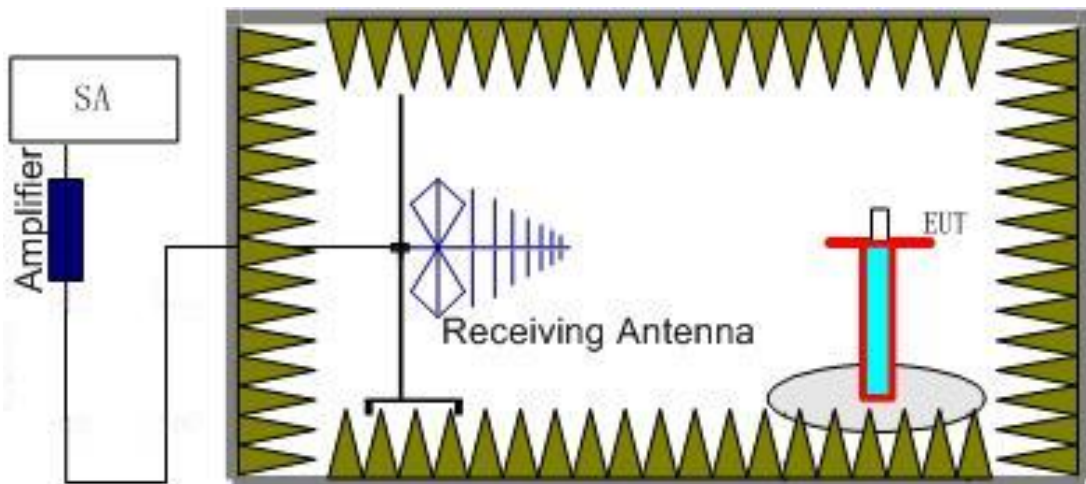
Rule Part 27.50(a)(3) specifies "For mobile and portable stations transmitting in the 2305–2315 MHz band or the 2350–2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth."

Rule Part 22.913(a) specifies "The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts."

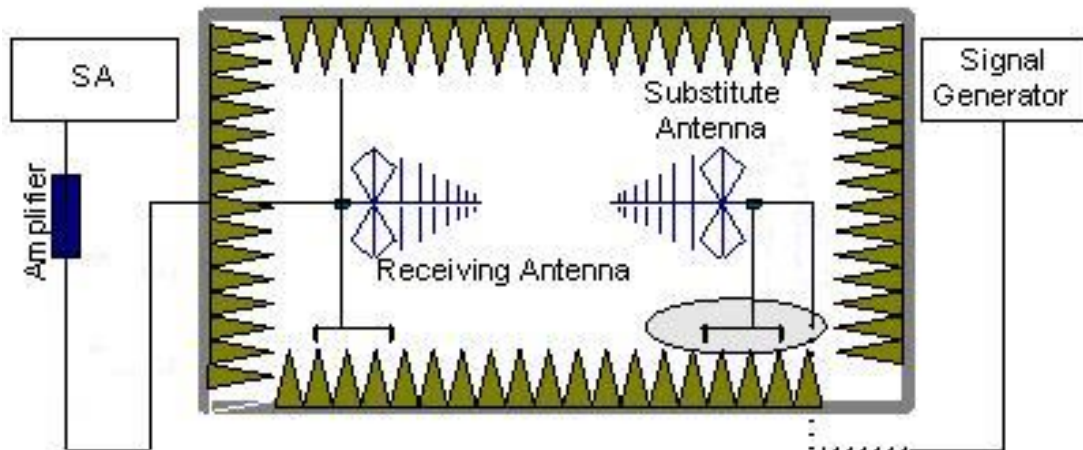
Rule Part 90.542 specifies "Portable stations (hand-held devices) transmitting in the 758-768 MHz band and the 788-798 MHz band are limited to 3 watts ERP."

#### **A.1.3.2 Method of Measurement**

1. For radiated emissions measurements performed at frequencies less than or equal to 1 GHz, EUT was placed on a 80 cm high non-conductive stand at a 3 meter test distance from the receive antenna. For radiated measurements performed at frequencies above 1 GHz, EUT was placed on a 1.5 meter high non-conductive stand at a 3 meter test distance from the receive antenna. Receiving antenna was placed on the antenna mast 3 meters from the EUT. For emission measurements. The receiving antenna shall be varied from 1 m to 4 m in height above the reference ground in a search for the relative positioning that produces the maximum radiated signal level. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.



2. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as ( $P_r$ ).
3. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.



In the chamber, a substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power ( $P_{Mea}$ ) is applied to the input of the substitution antenna and adjusts the level of the signal generator output until the value of the receiver reaches the previously recorded ( $P_r$ ). The power of signal source ( $P_{Mea}$ ) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

4. An amplifier should be connected to the Signal Source output port. And the cable should be connected between the amplifier and the substitution antenna. The cable loss ( $P_{cl}$ ), the substitution Antenna Gain(dBi) ( $G_a$ ) and the amplifier Gain ( $P_{Ag}$ ) should be recorded after test.

The measurement results are obtained as described below:

$$\text{Power (EIRP)} = P_{Mea} - P_{Ag} - P_{cl} + G_a$$



5. This value is EIRP since the measurement is calibrated using an antenna of known gain (unit dBi) and known input power.
6. ERP can be calculated from EIRP by subtracting the gain of the dipole,  $ERP = EIRP - 2.15dB$ .

**A.1.3.3 Measurement result**

**LTE Band 2- EIRP Part 24. 232(c)**

Limits: ≤33dBm (2W)

**LTE Band 2\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-14.56	-29.30	8.10	22.84	33.00	H
1880.00	-14.94	-29.40	8.10	22.56	33.00	H
1909.30	-14.91	-29.30	8.10	22.49	33.00	H

**LTE Band 2\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-14.64	-29.30	8.10	22.76	33.00	H
1880.00	-15.00	-29.40	8.10	22.50	33.00	H
1908.50	-14.95	-29.30	8.10	22.45	33.00	H

**LTE Band 2\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-14.69	-29.30	8.10	22.71	33.00	H
1880.00	-15.07	-29.40	8.10	22.43	33.00	H
1907.50	-15.02	-29.30	8.10	22.38	33.00	H

**LTE Band 2\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-14.75	-29.30	8.10	22.65	33.00	H
1880.00	-15.14	-29.40	8.10	22.36	33.00	H
1905.00	-15.06	-29.30	8.10	22.34	33.00	H

**LTE Band 2\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-14.78	-29.30	8.10	22.62	33.00	H
1880.00	-15.16	-29.40	8.10	22.34	33.00	H
1902.50	-15.11	-29.30	8.10	22.29	33.00	H

**LTE Band 2\_20MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-14.81	-29.30	8.10	22.59	33.00	H
1880.00	-15.21	-29.40	8.10	22.29	33.00	H
1900.00	-15.15	-29.30	8.10	22.25	33.00	H

**LTE Band 2\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-14.62	-29.30	8.10	22.79	33.00	H
1880.00	-14.99	-29.40	8.10	22.51	33.00	H
1909.30	-14.93	-29.30	8.10	22.47	33.00	H

**LTE Band 2\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-14.68	-29.30	8.10	22.72	33.00	H
1880.00	-15.05	-29.40	8.10	22.45	33.00	H
1908.50	-14.97	-29.30	8.10	22.43	33.00	H

**LTE Band 2\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-14.75	-29.30	8.10	22.65	33.00	H
1880.00	-15.09	-29.40	8.10	22.41	33.00	H
1907.50	-15.04	-29.30	8.10	22.36	33.00	H

**LTE Band 2\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-14.82	-29.30	8.10	22.58	33.00	H
1880.00	-15.14	-29.40	8.10	22.36	33.00	H
1905.00	-15.07	-29.30	8.10	22.33	33.00	H

**LTE Band 2\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-14.86	-29.30	8.10	22.54	33.00	H
1880.00	-15.18	-29.40	8.10	22.32	33.00	H
1902.50	-15.12	-29.30	8.10	22.28	33.00	H

**LTE Band 2\_20MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-14.90	-29.30	8.10	22.50	33.00	H
1880.00	-15.21	-29.40	8.10	22.29	33.00	H
1900.00	-15.16	-29.30	8.10	22.24	33.00	H

**LTE Band 2\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-14.64	-29.30	8.10	22.76	33.00	H
1880.00	-15.02	-29.40	8.10	22.48	33.00	H
1909.30	-14.96	-29.30	8.10	22.44	33.00	H

**LTE Band 2\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-14.68	-29.30	8.10	22.72	33.00	H
1880.00	-15.07	-29.40	8.10	22.43	33.00	H
1908.50	-15.01	-29.30	8.10	22.39	33.00	H

**LTE Band 2\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-14.69	-29.30	8.10	22.71	33.00	H
1880.00	-15.10	-29.40	8.10	22.40	33.00	H
1907.50	-15.06	-29.30	8.10	22.34	33.00	H

**LTE Band 2\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-14.75	-29.30	8.10	22.65	33.00	H
1880.00	-15.12	-29.40	8.10	22.38	33.00	H
1905.00	-15.11	-29.30	8.10	22.29	33.00	H

**LTE Band 2\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-14.78	-29.30	8.10	22.62	33.00	H
1880.00	-15.18	-29.40	8.10	22.32	33.00	H
1902.50	-15.15	-29.30	8.10	22.25	33.00	H

**LTE Band 2\_20MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-14.85	-29.30	8.10	22.55	33.00	H
1880.00	-15.23	-29.40	8.10	22.27	33.00	H
1900.00	-15.18	-29.30	8.10	22.22	33.00	H

**LTE Band 4- EIRP Part 27.50(d)(4)**

Limits: ≤30dBm (1W)

**LTE Band 4\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-15.19	-29.60	8.10	22.51	30.00	H
1732.50	-14.90	-29.60	8.10	22.80	30.00	H
1754.30	-15.02	-29.50	8.10	22.58	30.00	H

**LTE Band 4\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-15.20	-29.60	8.10	22.50	30.00	H
1732.50	-14.94	-29.60	8.10	22.76	30.00	H
1753.50	-15.03	-29.50	8.10	22.57	30.00	H

**LTE Band 4\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-15.25	-29.60	8.10	22.45	30.00	H
1732.50	-14.98	-29.60	8.10	22.72	30.00	H
1752.50	-15.11	-29.50	8.10	22.49	30.00	H

**LTE Band 4\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-15.28	-29.60	8.10	22.42	30.00	H
1732.50	-15.03	-29.60	8.10	22.67	30.00	H
1750.00	-15.15	-29.50	8.10	22.45	30.00	H

**LTE Band 4\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-15.30	-29.60	8.10	22.40	30.00	H
1732.50	-15.07	-29.60	8.10	22.63	30.00	H
1747.50	-15.17	-29.50	8.10	22.43	30.00	H

**LTE Band 4\_20MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-15.34	-29.60	8.10	22.36	30.00	H
1732.50	-15.13	-29.60	8.10	22.57	30.00	H
1745.00	-15.19	-29.50	8.10	22.41	30.00	H



**LTE Band 4\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-15.21	-29.60	8.10	22.49	30.00	H
1732.50	-14.93	-29.60	8.10	22.77	30.00	H
1754.30	-15.05	-29.50	8.10	22.55	30.00	H

**LTE Band 4\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-15.26	-29.60	8.10	22.44	30.00	H
1732.50	-15.02	-29.60	8.10	22.68	30.00	H
1753.50	-15.08	-29.50	8.10	22.52	30.00	H

**LTE Band 4\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-15.28	-29.60	8.10	22.42	30.00	H
1732.50	-15.04	-29.60	8.10	22.66	30.00	H
1752.50	-15.11	-29.50	8.10	22.49	30.00	H

**LTE Band 4\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-15.31	-29.60	8.10	22.39	30.00	H
1732.50	-15.07	-29.60	8.10	22.63	30.00	H
1750.00	-15.15	-29.50	8.10	22.45	30.00	H

**LTE Band 4\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-15.34	-29.60	8.10	22.36	30.00	H
1732.50	-15.10	-29.60	8.10	22.60	30.00	H
1747.50	-15.21	-29.50	8.10	22.39	30.00	H

**LTE Band 4\_20MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-15.36	-29.60	8.10	22.34	30.00	H
1732.50	-15.15	-29.60	8.10	22.55	30.00	H
1745.00	-15.24	-29.50	8.10	22.36	30.00	H

**LTE Band 4\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-15.24	-29.60	8.10	22.46	30.00	H
1732.50	-14.97	-29.60	8.10	22.73	30.00	H
1754.30	-15.08	-29.50	8.10	22.52	30.00	H

**LTE Band 4\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-15.27	-29.60	8.10	22.43	30.00	H
1732.50	-15.02	-29.60	8.10	22.68	30.00	H
1753.50	-15.15	-29.50	8.10	22.45	30.00	H

**LTE Band 4\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-15.29	-29.60	8.10	22.41	30.00	H
1732.50	-15.06	-29.60	8.10	22.64	30.00	H
1752.50	-15.17	-29.50	8.10	22.43	30.00	H

**LTE Band 4\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-15.34	-29.60	8.10	22.36	30.00	H
1732.50	-15.10	-29.60	8.10	22.60	30.00	H
1750.00	-15.21	-29.50	8.10	22.39	30.00	H

**LTE Band 4\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-15.37	-29.60	8.10	22.33	30.00	H
1732.50	-15.14	-29.60	8.10	22.56	30.00	H
1747.50	-15.24	-29.50	8.10	22.36	30.00	H

**LTE Band 4\_20MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-15.41	-29.60	8.10	22.29	30.00	H
1732.50	-15.16	-29.60	8.10	22.54	30.00	H
1745.00	-15.27	-29.50	8.10	22.33	30.00	H

**LTE Band 5- ERP Part 22.913(a)**Limits:  $\leq 38.45\text{dBm}$  (7W)**LTE Band 5\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-8.22	-33.60	-0.79	2.15	22.44	38.45	V
836.50	-8.05	-33.50	-0.74	2.15	22.56	38.45	V
848.30	-8.27	-33.50	-0.73	2.15	22.34	38.45	V

**LTE Band 5\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-8.20	-33.60	-0.84	2.15	22.41	38.45	V
836.50	-8.08	-33.50	-0.74	2.15	22.53	38.45	V
847.50	-8.32	-33.50	-0.73	2.15	22.30	38.45	V

**LTE Band 5\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-8.23	-33.60	-0.84	2.15	22.38	38.45	V
836.50	-8.12	-33.50	-0.74	2.15	22.49	38.45	V
846.50	-8.36	-33.50	-0.73	2.15	22.26	38.45	V

**LTE Band 5\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-8.25	-33.60	-0.84	2.15	22.36	38.45	V
836.50	-8.21	-33.50	-0.74	2.15	22.40	38.45	V
844.00	-8.35	-33.50	-0.78	2.15	22.22	38.45	V

**LTE Band 5\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-8.24	-33.60	-0.79	2.15	22.42	38.45	V
836.50	-8.09	-33.50	-0.74	2.15	22.52	38.45	V
848.30	-8.31	-33.50	-0.73	2.15	22.31	38.45	V

**LTE Band 5\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-8.24	-33.60	-0.84	2.15	22.37	38.45	V
836.50	-8.15	-33.50	-0.74	2.15	22.46	38.45	V
847.50	-8.35	-33.50	-0.73	2.15	22.27	38.45	V

**LTE Band 5\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-8.27	-33.60	-0.84	2.15	22.34	38.45	V
836.50	-8.17	-33.50	-0.74	2.15	22.44	38.45	V
846.50	-8.39	-33.50	-0.73	2.15	22.23	38.45	V

**LTE Band 5\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-8.31	-33.60	-0.84	2.15	22.30	38.45	V
836.50	-8.21	-33.50	-0.74	2.15	22.40	38.45	V
844.00	-8.38	-33.50	-0.78	2.15	22.19	38.45	V

**LTE Band 5\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-8.27	-33.60	-0.79	2.15	22.39	38.45	V
836.50	-8.13	-33.50	-0.74	2.15	22.48	38.45	V
848.30	-8.39	-33.50	-0.73	2.15	22.23	38.45	V

**LTE Band 5\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-8.25	-33.60	-0.84	2.15	22.36	38.45	V
836.50	-8.16	-33.50	-0.74	2.15	22.45	38.45	V
847.50	-8.43	-33.50	-0.73	2.15	22.19	38.45	V

**LTE Band 5\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-8.29	-33.60	-0.84	2.15	22.32	38.45	V
836.50	-8.20	-33.50	-0.74	2.15	22.41	38.45	V
846.50	-8.48	-33.50	-0.73	2.15	22.14	38.45	V

**LTE Band 5\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-8.34	-33.60	-0.84	2.15	22.27	38.45	V
836.50	-8.22	-33.50	-0.74	2.15	22.39	38.45	V
844.00	-8.46	-33.50	-0.78	2.15	22.11	38.45	V

**LTE Band 7- EIRP Part 27.50(h)(2)**Limits:  $\leq 33$  dBm (2W)**LTE Band 7\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2502.50	-16.92	-28.70	10.70	22.48	33.00	H
2535.00	-16.64	-28.60	10.70	22.66	33.00	H
2567.50	-16.61	-28.60	10.70	22.70	33.00	H

**LTE Band 7\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2505.00	-17.01	-28.70	10.70	22.39	33.00	H
2535.00	-16.67	-28.60	10.70	22.63	33.00	H
2565.00	-16.63	-28.60	10.70	22.67	33.00	H

**LTE Band 7\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2507.50	-17.02	-28.70	10.70	22.38	33.00	H
2535.00	-16.70	-28.60	10.70	22.60	33.00	H
2562.50	-16.68	-28.60	10.70	22.62	33.00	H

**LTE Band 7\_20MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2510.00	-17.07	-28.70	10.70	22.33	33.00	H
2535.00	-16.75	-28.60	10.70	22.55	33.00	H
2560.00	-16.72	-28.60	10.70	22.58	33.00	H

**LTE Band 7\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2502.50	-16.97	-28.70	10.70	22.43	33.00	H
2535.00	-16.68	-28.60	10.70	22.62	33.00	H
2567.50	-16.62	-28.60	10.70	22.68	33.00	H

**LTE Band 7\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2505.00	-17.01	-28.70	10.70	22.39	33.00	H
2535.00	-16.73	-28.60	10.70	22.57	33.00	H
2565.00	-16.67	-28.60	10.70	22.63	33.00	H

**LTE Band 7\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2507.50	-17.00	-28.70	10.70	22.40	33.00	H
2535.00	-16.77	-28.60	10.70	22.53	33.00	H
2562.50	-16.72	-28.60	10.70	22.58	33.00	H

**LTE Band 7\_20MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2510.00	-17.06	-28.70	10.70	22.34	33.00	H
2535.00	-16.81	-28.60	10.70	22.49	33.00	H
2560.00	-16.76	-28.60	10.70	22.54	33.00	H

**LTE Band 7\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2502.50	-17.00	-28.70	10.70	22.40	33.00	H
2535.00	-16.72	-28.60	10.70	22.58	33.00	H
2567.50	-16.68	-28.60	10.70	22.62	33.00	H

**LTE Band 7\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2505.00	-17.04	-28.70	10.70	22.36	33.00	H
2535.00	-16.75	-28.60	10.70	22.55	33.00	H
2565.00	-16.70	-28.60	10.70	22.60	33.00	H

**LTE Band 7\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2507.50	-17.08	-28.70	10.70	22.32	33.00	H
2535.00	-16.78	-28.60	10.70	22.52	33.00	H
2562.50	-16.74	-28.60	10.70	22.56	33.00	H

**LTE Band 7\_20MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2510.00	-17.12	-28.70	10.70	22.28	33.00	H
2535.00	-16.81	-28.60	10.70	22.49	33.00	H
2560.00	-16.78	-28.60	10.70	22.52	33.00	H



**LTE Band 12 - ERP Part 27.50(c)(10)**Limits:  $\leq 34.77$ dBm (3W)**LTE Band 12\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
699.70	-11.58	-34.80	-0.93	2.15	20.14	34.77	V
707.50	-11.00	-34.70	-0.91	2.15	20.64	34.77	V
715.30	-11.60	-34.70	-0.68	2.15	20.27	34.77	V

**LTE Band 12\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
700.50	-11.56	-34.80	-0.97	2.15	20.12	34.77	V
707.50	-11.04	-34.70	-0.91	2.15	20.60	34.77	V
714.50	-11.66	-34.70	-0.64	2.15	20.25	34.77	V

**LTE Band 12\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
701.50	-11.59	-34.80	-0.97	2.15	20.09	34.77	V
707.50	-11.07	-34.70	-0.91	2.15	20.57	34.77	V
713.50	-11.69	-34.70	-0.64	2.15	20.22	34.77	V

**LTE Band 12\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
704.00	-11.62	-34.80	-0.97	2.15	20.06	34.77	V
707.50	-11.10	-34.70	-0.91	2.15	20.54	34.77	V
711.00	-11.72	-34.70	-0.64	2.15	20.19	34.77	V

**LTE Band 12\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
699.70	-11.63	-34.80	-0.93	2.15	20.09	34.77	V
707.50	-11.08	-34.70	-0.91	2.15	20.56	34.77	V
715.30	-11.68	-34.70	-0.68	2.15	20.19	34.77	V

**LTE Band 12\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
700.50	-11.62	-34.80	-0.97	2.15	20.06	34.77	V
707.50	-11.13	-34.70	-0.91	2.15	20.51	34.77	V
714.50	-11.77	-34.70	-0.64	2.15	20.14	34.77	V

**LTE Band 12\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
701.50	-11.61	-34.80	-0.97	2.15	20.07	34.77	V
707.50	-11.17	-34.70	-0.91	2.15	20.47	34.77	V
713.50	-11.79	-34.70	-0.64	2.15	20.12	34.77	V

**LTE Band 12\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
704.00	-11.66	-34.80	-0.97	2.15	20.02	34.77	V
707.50	-11.22	-34.70	-0.91	2.15	20.42	34.77	V
711.00	-11.82	-34.70	-0.64	2.15	20.09	34.77	V



**LTE Band 17- ERP 27.50(c)(10)**

**Limits:** ≤34.77dBm (3W)

**LTE Band 17\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
706.50	-11.19	-34.70	-0.91	2.15	20.45	34.77	V
710.00	-11.26	-34.70	-0.64	2.15	20.65	34.77	V
713.50	-11.40	-34.70	-0.64	2.15	20.51	34.77	V

**LTE Band 17\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
709.00	-11.15	-34.70	-0.91	2.15	20.49	34.77	V
710.00	-11.31	-34.70	-0.64	2.15	20.60	34.77	V
711.00	-11.38	-34.70	-0.64	2.15	20.53	34.77	V

**LTE Band 17\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
706.50	-11.21	-34.70	-0.91	2.15	20.43	34.77	V
710.00	-11.33	-34.70	-0.64	2.15	20.58	34.77	V
713.50	-11.40	-34.70	-0.64	2.15	20.51	34.77	V

**LTE Band 17\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
709.00	-11.18	-34.70	-0.91	2.15	20.46	34.77	V
710.00	-11.38	-34.70	-0.64	2.15	20.53	34.77	V
711.00	-11.42	-34.70	-0.64	2.15	20.49	34.77	V

**LTE Band 17\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
706.50	-11.24	-34.70	-0.91	2.15	20.40	34.77	V
710.00	-11.35	-34.70	-0.64	2.15	20.56	34.77	V
713.50	-11.43	-34.70	-0.64	2.15	20.48	34.77	V

**LTE Band 17\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
709.00	-11.22	-34.70	-0.91	2.15	20.42	34.77	V
710.00	-11.37	-34.70	-0.64	2.15	20.54	34.77	V
711.00	-11.46	-34.70	-0.64	2.15	20.45	34.77	V

**LTE band 25- ERP Part 24. 232(c)**Limits:  $\leq 33.00\text{dBm}$  (2W)**LTE Band 25\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-14.74	-29.30	8.10	22.66	33.00	H
1882.50	-14.94	-29.40	8.10	22.56	33.00	H
1914.30	-14.87	-29.30	8.10	22.53	33.00	H

**LTE Band 25\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-14.80	-29.30	8.10	22.60	33.00	H
1882.50	-14.99	-29.40	8.10	22.51	33.00	H
1913.50	-14.91	-29.30	8.10	22.49	33.00	H

**LTE Band 25\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-14.84	-29.30	8.10	22.56	33.00	H
1882.50	-15.03	-29.40	8.10	22.47	33.00	H
1912.50	-14.94	-29.30	8.10	22.46	33.00	H

**LTE Band 25\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-14.87	-29.30	8.10	22.53	33.00	H
1882.00	-15.03	-29.40	8.10	22.47	33.00	H
1910.00	-14.97	-29.30	8.10	22.43	33.00	H

**LTE Band 25\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-14.91	-29.30	8.10	22.49	33.00	H
1882.50	-15.04	-29.40	8.10	22.46	33.00	H
1907.50	-14.99	-29.30	8.10	22.41	33.00	H

**LTE Band 25\_20MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-14.95	-29.30	8.10	22.45	33.00	H
1882.50	-15.10	-29.40	8.10	22.40	33.00	H
1905.00	-15.03	-29.30	8.10	22.37	33.00	H

**LTE Band 25\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-14.80	-29.30	8.10	22.60	33.00	H
1882.50	-14.96	-29.40	8.10	22.54	33.00	H
1914.30	-14.90	-29.30	8.10	22.50	33.00	H

**LTE Band 25\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-14.84	-29.30	8.10	22.56	33.00	H
1882.50	-15.01	-29.40	8.10	22.49	33.00	H
1913.50	-14.94	-29.30	8.10	22.46	33.00	H

**LTE Band 25\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-14.89	-29.30	8.10	22.51	33.00	H
1882.50	-15.03	-29.40	8.10	22.47	33.00	H
1912.50	-14.97	-29.30	8.10	22.43	33.00	H

**LTE Band 25\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-14.94	-29.30	8.10	22.46	33.00	H
1882.00	-15.08	-29.40	8.10	22.42	33.00	H
1910.00	-15.00	-29.30	8.10	22.40	33.00	H

**LTE Band 25\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-14.99	-29.30	8.10	22.41	33.00	H
1882.50	-15.10	-29.40	8.10	22.40	33.00	H
1907.50	-15.03	-29.30	8.10	22.37	33.00	H

**LTE Band 25\_20MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-15.01	-29.30	8.10	22.39	33.00	H
1882.50	-15.14	-29.40	8.10	22.36	33.00	H
1905.00	-15.06	-29.30	8.10	22.34	33.00	H

**LTE Band 25\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-14.84	-29.30	8.10	22.56	33.00	H
1882.50	-15.00	-29.40	8.10	22.50	33.00	H
1914.30	-14.92	-29.30	8.10	22.48	33.00	H

**LTE Band 25\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-14.87	-29.30	8.10	22.53	33.00	H
1882.50	-14.99	-29.40	8.10	22.51	33.00	H
1913.50	-14.95	-29.30	8.10	22.45	33.00	H

**LTE Band 25\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-14.93	-29.30	8.10	22.47	33.00	H
1882.50	-15.06	-29.40	8.10	22.44	33.00	H
1912.50	-14.98	-29.30	8.10	22.42	33.00	H

**LTE Band 25\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-14.95	-29.30	8.10	22.45	33.00	H
1882.00	-15.09	-29.40	8.10	22.41	33.00	H
1910.00	-15.02	-29.30	8.10	22.38	33.00	H

**LTE Band 25\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-14.97	-29.30	8.10	22.43	33.00	H
1882.50	-15.10	-29.40	8.10	22.40	33.00	H
1907.50	-15.07	-29.30	8.10	22.33	33.00	H

**LTE Band 25\_20MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-15.01	-29.30	8.10	22.39	33.00	H
1882.50	-15.16	-29.40	8.10	22.34	33.00	H
1905.00	-15.11	-29.30	8.10	22.29	33.00	H

**LTE band 26(824MHz-849MHz)- ERP Part 22.913(a)**

Limits: ≤38.45dBm (7W)

**LTE Band 26(824MHz-849MHz)\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-8.22	-33.60	-0.79	2.15	22.44	38.45	V
836.50	-8.08	-33.50	-0.74	2.15	22.54	38.45	V
848.30	-8.29	-33.50	-0.73	2.15	22.33	38.45	V

**LTE Band 26(824MHz-849MHz)\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-8.24	-33.60	-0.79	2.15	22.42	38.45	V
836.50	-8.10	-33.50	-0.74	2.15	22.51	38.45	V
847.50	-8.33	-33.50	-0.73	2.15	22.29	38.45	V

**LTE Band 26(824MHz-849MHz)\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-8.28	-33.60	-0.79	2.15	22.38	38.45	V
836.50	-8.14	-33.50	-0.74	2.15	22.47	38.45	V
846.50	-8.37	-33.50	-0.73	2.15	22.25	38.45	V

**LTE Band 26(824MHz-849MHz)\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-8.34	-33.60	-0.79	2.15	22.32	38.45	V
836.50	-8.13	-33.50	-0.74	2.15	22.48	38.45	V
844.00	-8.42	-33.50	-0.73	2.15	22.20	38.45	V

**LTE Band 26(824MHz-849MHz)\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
831.50	-8.33	-33.60	-0.79	2.15	22.33	38.45	V
836.50	-8.16	-33.50	-0.74	2.15	22.45	38.45	V
841.50	-8.47	-33.50	-0.73	2.15	22.15	38.45	V

**LTE Band 26(824MHz-849MHz)\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-8.24	-33.60	-0.79	2.15	22.42	38.45	V
836.50	-8.11	-33.50	-0.74	2.15	22.50	38.45	V
848.30	-8.33	-33.50	-0.73	2.15	22.29	38.45	V

**LTE Band 26(824MHz-849MHz)\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-8.30	-33.60	-0.79	2.15	22.36	38.45	V
836.50	-8.14	-33.50	-0.74	2.15	22.47	38.45	V
847.50	-8.37	-33.50	-0.73	2.15	22.25	38.45	V

**LTE Band 26(824MHz-849MHz)\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-8.34	-33.60	-0.79	2.15	22.32	38.45	V
836.50	-8.20	-33.50	-0.74	2.15	22.41	38.45	V
846.50	-8.42	-33.50	-0.73	2.15	22.20	38.45	V

**LTE Band 26(824MHz-849MHz)\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-8.38	-33.60	-0.79	2.15	22.28	38.45	V
836.50	-8.22	-33.50	-0.74	2.15	22.39	38.45	V
844.00	-8.47	-33.50	-0.73	2.15	22.15	38.45	V

**LTE Band 26(824MHz-849MHz)\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
831.50	-8.42	-33.60	-0.79	2.15	22.24	38.45	V
836.50	-8.25	-33.50	-0.74	2.15	22.36	38.45	V
841.50	-8.49	-33.50	-0.73	2.15	22.13	38.45	V



**LTE Band 26(824MHz-849MHz)\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-8.26	-33.60	-0.79	2.15	22.40	38.45	V
836.50	-8.13	-33.50	-0.74	2.15	22.48	38.45	V
848.30	-8.36	-33.50	-0.73	2.15	22.26	38.45	V

**LTE Band 26(824MHz-849MHz)\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-8.31	-33.60	-0.79	2.15	22.35	38.45	V
836.50	-8.14	-33.50	-0.74	2.15	22.47	38.45	V
847.50	-8.39	-33.50	-0.73	2.15	22.23	38.45	V

**LTE Band 26(824MHz-849MHz)\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-8.35	-33.60	-0.79	2.15	22.31	38.45	V
836.50	-8.18	-33.50	-0.74	2.15	22.43	38.45	V
846.50	-8.43	-33.50	-0.73	2.15	22.19	38.45	V

**LTE Band 26(824MHz-849MHz)\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-8.38	-33.60	-0.79	2.15	22.28	38.45	V
836.50	-8.19	-33.50	-0.74	2.15	22.42	38.45	V
844.00	-8.47	-33.50	-0.73	2.15	22.15	38.45	V

**LTE Band 26(824MHz-849MHz)\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
831.50	-8.43	-33.60	-0.79	2.15	22.23	38.45	V
836.50	-8.26	-33.50	-0.74	2.15	22.35	38.45	V
841.50	-8.52	-33.50	-0.73	2.15	22.10	38.45	V

**LTE band 26(814MHz-824MHz)- ERP Part 90.635(b)**

Limits: ≤50.00dBm (100W)

**LTE Band 26(814MHz-824MHz)\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
814.70	-8.36	-33.70	-0.80	2.15	22.39	50.00	V
819.00	-8.07	-33.60	-0.75	2.15	22.63	50.00	V
823.30	-8.22	-33.60	-0.79	2.15	22.44	50.00	V

**LTE Band 26(814MHz-824MHz)\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
815.50	-8.41	-33.70	-0.80	2.15	22.34	50.00	V
819.00	-8.12	-33.60	-0.75	2.15	22.58	50.00	V
822.50	-8.23	-33.60	-0.79	2.15	22.43	50.00	V

**LTE Band 26(814MHz-824MHz)\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
816.50	-8.45	-33.70	-0.80	2.15	22.30	50.00	V
819.00	-8.12	-33.60	-0.75	2.15	22.58	50.00	V
821.50	-8.25	-33.60	-0.79	2.15	22.41	50.00	V

**LTE Band 26(814MHz-824MHz)\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
819.00	-8.37	-33.60	-0.80	2.15	22.28	50.00	V
819.00	-8.17	-33.60	-0.75	2.15	22.53	50.00	V
819.00	-8.28	-33.60	-0.79	2.15	22.38	50.00	V

**LTE Band 26(814MHz-824MHz)\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
814.70	-8.38	-33.70	-0.80	2.15	22.37	50.00	V
819.00	-8.11	-33.60	-0.75	2.15	22.59	50.00	V
823.30	-8.26	-33.60	-0.79	2.15	22.40	50.00	V

**LTE Band 26(814MHz-824MHz)\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
815.50	-8.40	-33.70	-0.80	2.15	22.35	50.00	V
819.00	-8.14	-33.60	-0.75	2.15	22.56	50.00	V
822.50	-8.29	-33.60	-0.79	2.15	22.37	50.00	V

**LTE Band 26(814MHz-824MHz)\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
816.50	-8.43	-33.70	-0.80	2.15	22.32	50.00	V
819.00	-8.20	-33.60	-0.75	2.15	22.50	50.00	V
821.50	-8.33	-33.60	-0.79	2.15	22.33	50.00	V

**LTE Band 26(814MHz-824MHz)\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
819.00	-8.37	-33.60	-0.80	2.15	22.28	50.00	V
819.00	-8.22	-33.60	-0.75	2.15	22.48	50.00	V
819.00	-8.37	-33.60	-0.79	2.15	22.29	50.00	V



**LTE Band 26(814MHz-824MHz)\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
814.70	-8.42	-33.70	-0.80	2.15	22.33	50.00	V
819.00	-8.13	-33.60	-0.75	2.15	22.57	50.00	V
823.30	-8.29	-33.60	-0.79	2.15	22.37	50.00	V

**LTE Band 26(814MHz-824MHz)\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
815.50	-8.45	-33.70	-0.80	2.15	22.30	50.00	V
819.00	-8.16	-33.60	-0.75	2.15	22.54	50.00	V
822.50	-8.34	-33.60	-0.79	2.15	22.32	50.00	V

**LTE Band 26(814MHz-824MHz)\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
816.50	-8.48	-33.70	-0.80	2.15	22.27	50.00	V
819.00	-8.18	-33.60	-0.75	2.15	22.52	50.00	V
821.50	-8.40	-33.60	-0.79	2.15	22.26	50.00	V

**LTE Band 26(814MHz-824MHz)\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
819.00	-8.43	-33.60	-0.80	2.15	22.22	50.00	V
819.00	-8.22	-33.60	-0.75	2.15	22.48	50.00	V
819.00	-8.36	-33.60	-0.79	2.15	22.30	50.00	V

**LTE Band 38 - EIRP Part 27.50(h)(2)**

Limits: ≤33dBm (2W)

**LTE Band 38\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2572.50	-16.42	-28.60	10.70	22.88	33.00	H
2595.00	-16.59	-28.60	10.70	22.71	33.00	H
2617.50	-16.72	-28.60	10.70	22.58	33.00	H

**LTE Band 38\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2575.00	-16.45	-28.60	10.70	22.85	33.00	H
2595.00	-16.63	-28.60	10.70	22.67	33.00	H
2615.00	-16.75	-28.60	10.70	22.55	33.00	H

**LTE Band 38\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2577.50	-16.48	-28.60	10.70	22.82	33.00	H
2595.00	-16.67	-28.60	10.70	22.63	33.00	H
2612.50	-16.80	-28.60	10.70	22.50	33.00	H

**LTE Band 38\_20MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2580.00	-16.52	-28.60	10.70	22.79	33.00	H
2595.00	-16.73	-28.60	10.70	22.57	33.00	H
2610.00	-16.83	-28.60	10.70	22.47	33.00	H

**LTE Band 38\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2572.50	-16.48	-28.60	10.70	22.82	33.00	H
2595.00	-16.61	-28.60	10.70	22.69	33.00	H
2617.50	-16.74	-28.60	10.70	22.56	33.00	H

**LTE Band 38\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2575.00	-16.52	-28.60	10.70	22.78	33.00	H
2595.00	-16.65	-28.60	10.70	22.65	33.00	H
2615.00	-16.80	-28.60	10.70	22.50	33.00	H

**LTE Band 38\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2577.50	-16.57	-28.60	10.70	22.73	33.00	H
2595.00	-16.70	-28.60	10.70	22.60	33.00	H
2612.50	-16.84	-28.60	10.70	22.46	33.00	H

**LTE Band 38\_20MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2580.00	-16.62	-28.60	10.70	22.68	33.00	H
2595.00	-16.68	-28.60	10.70	22.62	33.00	H
2610.00	-16.87	-28.60	10.70	22.43	33.00	H

**LTE Band 38\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2572.50	-16.52	-28.60	10.70	22.78	33.00	H
2595.00	-16.64	-28.60	10.70	22.66	33.00	H
2617.50	-16.77	-28.60	10.70	22.53	33.00	H

**LTE Band 38\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2575.00	-16.57	-28.60	10.70	22.73	33.00	H
2595.00	-16.69	-28.60	10.70	22.61	33.00	H
2615.00	-16.80	-28.60	10.70	22.50	33.00	H

**LTE Band 38\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2577.50	-16.62	-28.60	10.70	22.68	33.00	H
2595.00	-16.73	-28.60	10.70	22.57	33.00	H
2612.50	-16.83	-28.60	10.70	22.47	33.00	H

**LTE Band 38\_20MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2580.00	-16.68	-28.60	10.70	22.62	33.00	H
2595.00	-16.75	-28.60	10.70	22.55	33.00	H
2610.00	-16.88	-28.60	10.70	22.42	33.00	H

**LTE Band 41- EIRP Part 27.50(d)(2)**Limits:  $\leq 33\text{dBm}$  (2W)**LTE Band 41\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2537.50	-16.82	-28.70	10.70	22.58	33.00	H
2595.00	-16.79	-28.60	10.70	22.51	33.00	H
2652.50	-16.76	-28.60	10.70	22.54	33.00	H

**LTE Band 41\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2540.00	-16.84	-28.70	10.70	22.56	33.00	H
2595.00	-16.82	-28.60	10.70	22.48	33.00	H
2650.00	-16.79	-28.60	10.70	22.51	33.00	H

**LTE Band 41\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2542.50	-16.87	-28.70	10.70	22.53	33.00	H
2595.00	-16.84	-28.60	10.70	22.46	33.00	H
2647.50	-16.81	-28.60	10.70	22.49	33.00	H

**LTE Band 41\_20MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2545.00	-16.90	-28.70	10.70	22.50	33.00	H
2595.00	-16.87	-28.60	10.70	22.43	33.00	H
2645.00	-16.84	-28.60	10.70	22.46	33.00	H



**LTE Band 41\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2537.50	-16.82	-28.70	10.70	22.58	33.00	H
2595.00	-16.76	-28.60	10.70	22.54	33.00	H
2652.50	-16.74	-28.60	10.70	22.56	33.00	H

**LTE Band 41\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2540.00	-16.86	-28.70	10.70	22.54	33.00	H
2595.00	-16.81	-28.60	10.70	22.49	33.00	H
2650.00	-16.79	-28.60	10.70	22.51	33.00	H

**LTE Band 41\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2542.50	-16.88	-28.70	10.70	22.52	33.00	H
2595.00	-16.83	-28.60	10.70	22.47	33.00	H
2647.50	-16.81	-28.60	10.70	22.49	33.00	H

**LTE Band 41\_20MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2545.00	-16.91	-28.70	10.70	22.49	33.00	H
2595.00	-16.87	-28.60	10.70	22.43	33.00	H
2645.00	-16.84	-28.60	10.70	22.46	33.00	H

**LTE Band 41\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2537.50	-16.85	-28.70	10.70	22.55	33.00	H
2595.00	-16.78	-28.60	10.70	22.52	33.00	H
2652.50	-16.77	-28.60	10.70	22.53	33.00	H

**LTE Band 41\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2540.00	-16.89	-28.70	10.70	22.51	33.00	H
2595.00	-16.84	-28.60	10.70	22.46	33.00	H
2650.00	-16.80	-28.60	10.70	22.50	33.00	H

**LTE Band 41\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2542.50	-16.92	-28.70	10.70	22.48	33.00	H
2595.00	-16.87	-28.60	10.70	22.43	33.00	H
2647.50	-16.85	-28.60	10.70	22.45	33.00	H

**LTE Band 41\_20MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2545.00	-16.95	-28.70	10.70	22.45	33.00	H
2595.00	-16.91	-28.60	10.70	22.39	33.00	H
2645.00	-16.89	-28.60	10.70	22.41	33.00	H

**LTE Band 66- EIRP Part 27.50(d)(4)**

Limits: ≤30dBm (1W)

**LTE Band 66\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-15.11	-29.60	8.10	22.59	30.00	H
1745.00	-14.79	-29.50	8.10	22.81	30.00	H
1779.30	-15.13	-29.50	8.10	22.47	30.00	H

**LTE Band 66\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-15.14	-29.60	8.10	22.56	30.00	H
1745.00	-14.82	-29.50	8.10	22.78	30.00	H
1778.50	-15.15	-29.50	8.10	22.45	30.00	H

**LTE Band 66\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-15.17	-29.60	8.10	22.53	30.00	H
1745.00	-14.88	-29.50	8.10	22.72	30.00	H
1777.50	-15.19	-29.50	8.10	22.41	30.00	H

**LTE Band 66\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-15.20	-29.60	8.10	22.50	30.00	H
1745.00	-14.91	-29.50	8.10	22.69	30.00	H
1775.00	-15.22	-29.50	8.10	22.38	30.00	H

**LTE Band 66\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-15.22	-29.60	8.10	22.48	30.00	H
1745.00	-14.94	-29.50	8.10	22.66	30.00	H
1772.53	-15.26	-29.50	8.10	22.34	30.00	H

**LTE Band 66\_20MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-15.25	-29.60	8.10	22.45	30.00	H
1745.00	-14.97	-29.50	8.10	22.63	30.00	H
1770.00	-15.28	-29.50	8.10	22.32	30.00	H

**LTE Band 66\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-15.14	-29.60	8.10	22.56	30.00	H
1745.00	-14.83	-29.50	8.10	22.77	30.00	H
1779.30	-15.15	-29.50	8.10	22.45	30.00	H

**LTE Band 66\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-15.19	-29.60	8.10	22.51	30.00	H
1745.00	-14.88	-29.50	8.10	22.72	30.00	H
1778.50	-15.18	-29.50	8.10	22.42	30.00	H

**LTE Band 66\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-15.23	-29.60	8.10	22.47	30.00	H
1745.00	-14.92	-29.50	8.10	22.68	30.00	H
1777.50	-15.21	-29.50	8.10	22.39	30.00	H

**LTE Band 66\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-15.27	-29.60	8.10	22.43	30.00	H
1745.00	-14.95	-29.50	8.10	22.65	30.00	H
1775.00	-15.25	-29.50	8.10	22.35	30.00	H

**LTE Band 66\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-15.29	-29.60	8.10	22.41	30.00	H
1745.00	-14.98	-29.50	8.10	22.62	30.00	H
1772.53	-15.28	-29.50	8.10	22.32	30.00	H

**LTE Band 66\_20MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-15.31	-29.60	8.10	22.39	30.00	H
1745.00	-15.04	-29.50	8.10	22.56	30.00	H
1770.00	-15.32	-29.50	8.10	22.28	30.00	H

**LTE Band 66\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-15.16	-29.60	8.10	22.54	30.00	H
1745.00	-14.88	-29.50	8.10	22.72	30.00	H
1779.30	-15.16	-29.50	8.10	22.44	30.00	H

**LTE Band 66\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-15.20	-29.60	8.10	22.50	30.00	H
1745.00	-14.92	-29.50	8.10	22.68	30.00	H
1778.50	-15.19	-29.50	8.10	22.41	30.00	H

**LTE Band 66\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-15.24	-29.60	8.10	22.46	30.00	H
1745.00	-14.94	-29.50	8.10	22.66	30.00	H
1777.50	-15.21	-29.50	8.10	22.39	30.00	H

**LTE Band 66\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-15.27	-29.60	8.10	22.43	30.00	H
1745.00	-14.98	-29.50	8.10	22.62	30.00	H
1775.00	-15.27	-29.50	8.10	22.33	30.00	H

**LTE Band 66\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-15.31	-29.60	8.10	22.39	30.00	H
1745.00	-15.02	-29.50	8.10	22.58	30.00	H
1772.53	-15.31	-29.50	8.10	22.29	30.00	H

**LTE Band 66\_20MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-15.34	-29.60	8.10	22.36	30.00	H
1745.00	-15.09	-29.50	8.10	22.51	30.00	H
1770.00	-15.35	-29.50	8.10	22.25	30.00	H

**ANALYZER SETTINGS:**

RBW = VBW = 8MHz for occupied bandwidths equal to or less than 5MHz.

RBW = VBW = 20MHz for occupied bandwidths equal to or greater than 10MHz.

Note: The maximum value of expanded measurement uncertainty for this test item is U = 2.87dB(30MHz-3GHz)/3.35dB(3GHz-18GHz), k = 2

**Note: Both of Vertical and Horizontal polarizations are evaluated, but only the worst case is recorded in this report.**

## A.2 FIELD STRENGTH OF SPURIOUS RADIATION

### Reference

FCC: CFR 2.1053, 22.917, 24.238, 27.53,90.691.

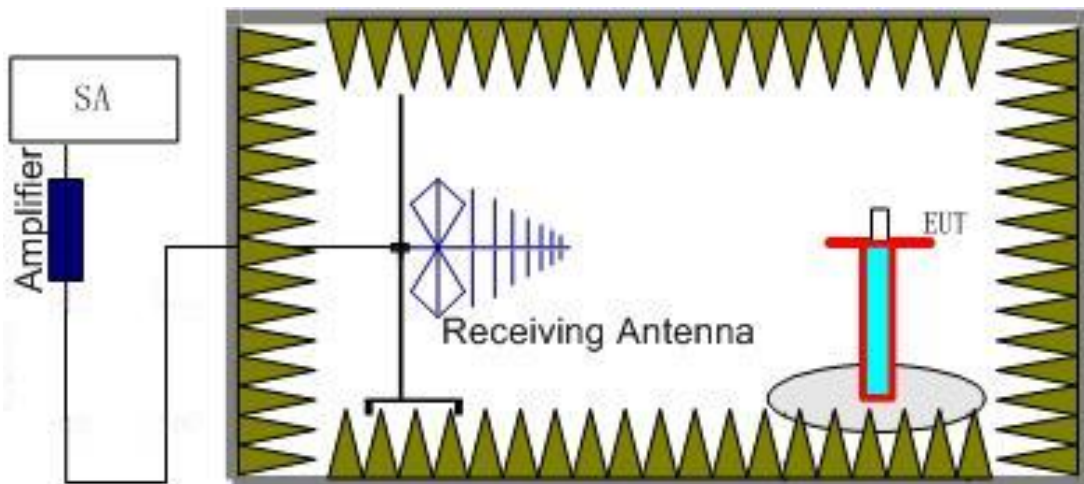
### A.2.1 Measurement Method

This measurement is carried out in fully-anechoic chamber FAC-3.

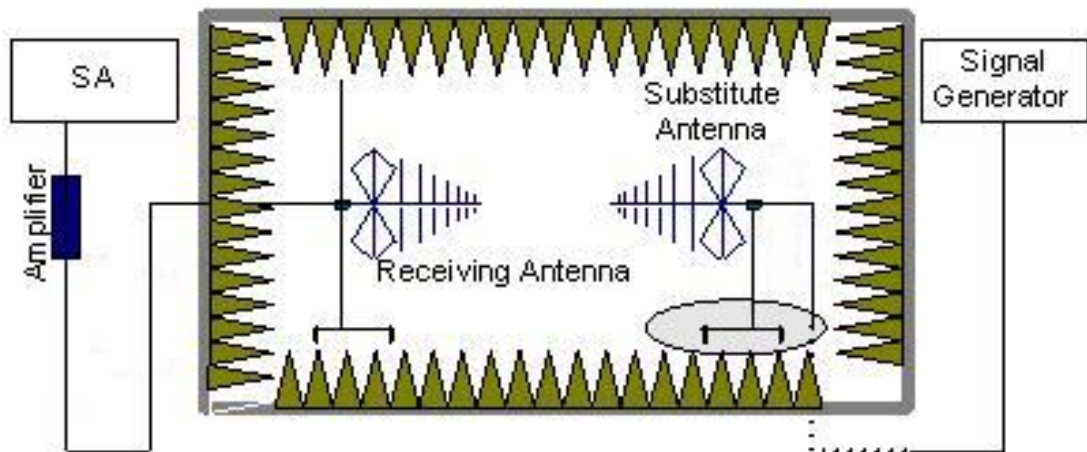
The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment, which is the transmitted carrier. The resolution bandwidth is set 1MHz as outlined in Part 22.917, 24.238, 27.53(h) and 90.691. The spectrum was scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of the all LTE Bands

### The procedure of radiated spurious emissions is as follows:

1. For radiated emissions measurements performed at frequencies less than or equal to 1 GHz, EUT was placed on a 80 cm high non-conductive stand at a 3 meter test distance from the receive antenna. For radiated measurements performed at frequencies above 1 GHz, EUT was placed on a 1.5 meter high non-conductive stand at a 3 meter test distance from the receive antenna. Receiving antenna was placed on the antenna mast 3 meters from the EUT. For emission measurements. The receiving antenna shall be varied from 1 m to 4 m in height above the reference ground in a search for the relative positioning that produces the maximum radiated signal level. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.



2. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as (Pr).
3. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.



In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power ( $P_{Mea}$ ) is applied to the input of the substitution antenna and adjusts the level of the signal generator output until the value of the receiver reaches the previously recorded ( $P_r$ ). The power of signal source ( $P_{Mea}$ ) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

4. The Path loss ( $P_{pl}$ ) between the Signal Source with the Substitution Antenna and the Substitution Antenna Gain(dBi) ( $G_a$ ) should be recorded after test.

An amplifier should be connected in for the test.

The Path loss ( $P_{pl}$ ) is the summation of the cable loss and the gain of the amplifier.

The measurement results are obtained as described below:

$$\text{Power (EIRP)} = P_{Mea} - P_{pl} + G_a$$

5. This value is EIRP since the measurement is calibrated using an antenna of known gain (unit: dBi) and known input power.
6. ERP can be calculated from EIRP by subtracting the gain of the dipole,  $ERP = EIRP - 2.15\text{dB}$ .

### A.2.2 Measurement Results

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies of the test LTE Bands. It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of the test LTE Bands. into any of the other blocks. The equipment must still, however, meet emissions requirements with the carrier at all frequencies over which it is capable of operating and it is the manufacturer's responsibility to verify this.

Only worst case result is given below.

**LTE Band 2, 1.4MHz, QPSK, Channel 18607**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5550.75	-43.98	1.40	13.10	-32.28	-13.00	H
17171.25	-43.67	2.90	14.50	-32.07	-13.00	H
17286.88	-43.08	3.20	14.50	-31.78	-13.00	H
17507.50	-41.21	2.90	12.80	-31.31	-13.00	H
17546.25	-40.58	2.90	12.80	-30.68	-13.00	H
17716.25	-40.93	3.30	12.80	-31.43	-13.00	H

**LTE Band 2, 1.4MHz, QPSK, Channel 18900**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3759.00	-40.24	1.10	12.20	-29.14	-13.00	V
16952.50	-45.22	2.90	16.50	-31.62	-13.00	H
17300.00	-43.64	3.20	14.50	-32.34	-13.00	H
17508.75	-39.49	2.90	12.80	-29.59	-13.00	H
17573.75	-40.45	3.30	12.80	-30.95	-13.00	H
17775.62	-40.14	3.60	12.80	-30.94	-13.00	H

**LTE Band 2, 1.4MHz, QPSK, Channel 19193**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5726.62	-35.70	1.50	13.10	-24.10	-13.00	H
16928.75	-45.72	2.90	16.50	-32.12	-13.00	H
17347.50	-43.36	3.20	14.50	-32.06	-13.00	H
17515.00	-40.87	2.90	12.80	-30.97	-13.00	H
17610.00	-39.86	3.30	12.80	-30.36	-13.00	H
17824.38	-40.55	3.60	12.80	-31.35	-13.00	H



**LTE Band 2, 1.4MHz, 16QAM, Channel 18607**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3700.50	-42.60	1.20	12.20	-31.60	-13.00	V
16973.75	-45.57	2.90	16.50	-31.97	-13.00	H
17368.75	-43.25	3.20	14.50	-31.95	-13.00	H
17511.25	-39.84	2.90	12.80	-29.94	-13.00	H
17526.88	-40.39	2.90	12.80	-30.49	-13.00	H
17840.00	-39.94	3.60	12.80	-30.74	-13.00	H

**LTE Band 2, 1.4MHz, 16QAM, Channel 18900**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3759.00	-39.79	1.10	12.20	-28.69	-13.00	V
17125.62	-44.05	2.90	14.50	-32.45	-13.00	H
17236.25	-42.97	3.20	14.50	-31.67	-13.00	H
17445.62	-42.38	2.90	14.50	-30.78	-13.00	H
17610.00	-40.15	3.30	12.80	-30.65	-13.00	H
17820.00	-40.62	3.60	12.80	-31.42	-13.00	H

**LTE Band 2, 1.4MHz, 16QAM, Channel 19193**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3817.50	-43.67	1.20	12.20	-32.67	-13.00	V
16960.62	-45.24	2.90	16.50	-31.64	-13.00	H
17354.38	-42.92	3.20	14.50	-31.62	-13.00	H
17496.25	-42.12	2.90	14.50	-30.52	-13.00	H
17551.25	-40.43	2.90	12.80	-30.53	-13.00	H
17840.00	-39.79	3.60	12.80	-30.59	-13.00	H

**LTE Band 2, 1.4MHz, 64QAM, Channel 18607**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3700.50	-40.47	1.20	12.20	-29.47	-13.00	V
16938.75	-45.64	2.90	16.50	-32.04	-13.00	H
17271.25	-42.96	3.20	14.50	-31.66	-13.00	H
17523.75	-39.55	2.90	12.80	-29.65	-13.00	H
17612.50	-39.62	3.30	12.80	-30.12	-13.00	H
17838.75	-40.00	3.60	12.80	-30.80	-13.00	H

**LTE Band 2, 1.4MHz, 64QAM, Channel 18900**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
17004.38	-43.22	2.90	14.50	-31.62	-13.00	H
17201.25	-43.46	2.90	14.50	-31.86	-13.00	H
17360.62	-43.11	3.20	14.50	-31.81	-13.00	H
17511.88	-40.36	2.90	12.80	-30.46	-13.00	H
17611.88	-39.40	3.30	12.80	-29.90	-13.00	H
17838.75	-40.26	3.60	12.80	-31.06	-13.00	H

**LTE Band 2, 1.4MHz, 64QAM, Channel 19193**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3817.50	-42.88	1.20	12.20	-31.88	-13.00	H
16978.75	-45.34	2.90	16.50	-31.74	-13.00	H
17278.12	-42.64	3.20	14.50	-31.34	-13.00	H
17496.25	-41.25	2.90	14.50	-29.65	-13.00	H
17643.12	-38.97	3.30	12.80	-29.47	-13.00	H
17830.62	-40.25	3.60	12.80	-31.05	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is U =

2.87dB(30MHz-3GHz)/3.35dB(3GHz-18GHz)/2.68dB(18GHz-40GHz), k = 2

**LTE Band 4, 1.4MHz, QPSK, Channel 19957**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3420.38	-34.03	1.20	11.50	-23.73	-13.00	H
16986.25	-45.19	2.90	16.50	-31.59	-13.00	H
17361.25	-43.36	3.20	14.50	-32.06	-13.00	H
17458.12	-41.87	2.90	14.50	-30.27	-13.00	H
17538.12	-40.72	2.90	12.80	-30.82	-13.00	H
17828.75	-39.92	3.60	12.80	-30.72	-13.00	H

**LTE Band 4, 1.4MHz, QPSK, Channel 20175**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3463.88	-32.54	1.10	11.50	-22.14	-13.00	H
17001.88	-43.02	2.90	14.50	-31.42	-13.00	H
17236.88	-43.19	3.20	14.50	-31.89	-13.00	H
17455.62	-41.70	2.90	14.50	-30.10	-13.00	H
17533.75	-40.20	2.90	12.80	-30.30	-13.00	H
17829.38	-40.38	3.60	12.80	-31.18	-13.00	H

**LTE Band 4, 1.4MHz, QPSK, Channel 20393**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3507.38	-37.51	1.10	12.20	-26.41	-13.00	H
16937.50	-44.81	2.90	16.50	-31.21	-13.00	H
17360.62	-43.15	3.20	14.50	-31.85	-13.00	H
17458.12	-42.54	2.90	14.50	-30.94	-13.00	H
17623.12	-39.19	3.30	12.80	-29.69	-13.00	H
17772.50	-40.17	3.60	12.80	-30.97	-13.00	H

**LTE Band 4, 1.4MHz, 16QAM, Channel 19957**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3420.38	-33.33	1.20	11.50	-23.03	-13.00	H
5130.75	-39.15	1.30	12.50	-27.95	-13.00	V
16953.12	-45.00	2.90	16.50	-31.40	-13.00	H
17519.38	-40.99	2.90	12.80	-31.09	-13.00	H
17536.25	-40.54	2.90	12.80	-30.64	-13.00	H
17780.00	-40.77	3.60	12.80	-31.57	-13.00	H

**LTE Band 4, 1.4MHz, 16QAM, Channel 20175**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3463.88	-33.50	1.10	11.50	-23.10	-13.00	H
16928.75	-45.92	2.90	16.50	-32.32	-13.00	H
17343.75	-43.23	3.20	14.50	-31.93	-13.00	H
17464.38	-41.63	2.90	14.50	-30.03	-13.00	H
17589.38	-39.94	3.30	12.80	-30.44	-13.00	H
17826.25	-40.50	3.60	12.80	-31.30	-13.00	H

**LTE Band 4, 1.4MHz, 16QAM, Channel 20393**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3507.75	-36.76	1.10	12.20	-25.66	-13.00	H
5261.62	-40.50	1.80	12.50	-29.80	-13.00	V
16980.00	-44.80	2.90	16.50	-31.20	-13.00	H
17450.62	-42.21	2.90	14.50	-30.61	-13.00	H
17600.00	-39.97	3.30	12.80	-30.47	-13.00	H
17835.00	-40.10	3.60	12.80	-30.90	-13.00	H

**LTE Band 4, 1.4MHz, 64QAM, Channel 19957**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3420.38	-33.54	1.20	11.50	-23.24	-13.00	H
16984.38	-45.11	2.90	16.50	-31.51	-13.00	H
17273.75	-43.69	3.20	14.50	-32.39	-13.00	H
17519.38	-40.39	2.90	12.80	-30.49	-13.00	H
17630.00	-40.31	3.30	12.80	-30.81	-13.00	H
17809.38	-40.21	3.60	12.80	-31.01	-13.00	H

**LTE Band 4, 1.4MHz, 64QAM, Channel 20175**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3463.88	-32.84	1.10	11.50	-22.44	-13.00	H
16940.00	-44.95	2.90	16.50	-31.35	-13.00	H
17365.62	-43.79	3.20	14.50	-32.49	-13.00	H
17450.62	-42.12	2.90	14.50	-30.52	-13.00	H
17624.38	-40.03	3.30	12.80	-30.53	-13.00	H
17793.12	-40.46	3.60	12.80	-31.26	-13.00	H

**LTE Band 4, 1.4MHz, 64QAM, Channel 20393**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3507.75	-37.42	1.10	12.20	-26.32	-13.00	H
16996.25	-45.52	2.90	16.50	-31.92	-13.00	H
17285.00	-44.08	3.20	14.50	-32.78	-13.00	H
17458.12	-42.79	2.90	14.50	-31.19	-13.00	H
17628.75	-39.98	3.30	12.80	-30.48	-13.00	H
17839.38	-40.57	3.60	12.80	-31.37	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is U =

2.87dB(30MHz-3GHz)/3.35dB(3GHz-18GHz)/2.68dB(18GHz-40GHz), k = 2

**LTE Band 5, 1.4MHz, QPSK, Channel 20407**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1648.50	-30.71	0.80	8.10	-25.56	-13.00	H
2472.50	-45.13	0.90	9.80	-38.38	-13.00	V
9297.88	-50.49	2.00	11.60	-43.04	-13.00	H
9468.62	-51.15	2.10	11.60	-43.80	-13.00	V
9731.25	-51.32	2.20	11.20	-44.47	-13.00	H
9796.00	-50.96	2.30	11.20	-44.21	-13.00	H

**LTE Band 5, 1.4MHz, QPSK, Channel 20525**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1672.00	-33.28	0.80	8.10	-28.13	-13.00	H
2508.00	-45.55	0.90	10.70	-37.90	-13.00	H
9297.75	-49.87	2.00	11.60	-42.42	-13.00	H
9474.00	-50.86	2.10	11.60	-43.51	-13.00	V
9749.62	-50.24	2.20	11.20	-43.39	-13.00	H
9800.38	-50.29	2.30	11.20	-43.54	-13.00	H

**LTE Band 5, 1.4MHz, QPSK, Channel 20643**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1695.50	-36.12	0.80	8.10	-30.97	-13.00	H
2543.50	-38.45	0.90	10.70	-30.80	-13.00	V
4239.00	-49.55	1.20	12.40	-40.50	-13.00	V
9222.75	-50.46	2.10	11.60	-43.11	-13.00	H
9474.88	-50.53	2.10	11.60	-43.18	-13.00	V
9722.38	-51.23	2.20	11.20	-44.38	-13.00	H

**LTE Band 5, 1.4MHz, 16QAM, Channel 20407**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1648.50	-32.05	0.80	8.10	-26.90	-13.00	H
2473.00	-50.75	0.90	9.80	-44.00	-13.00	V
9097.25	-51.51	2.20	11.60	-44.26	-13.00	H
9225.62	-50.09	2.10	11.60	-42.74	-13.00	H
9473.12	-50.71	2.10	11.60	-43.36	-13.00	V
9736.38	-50.82	2.20	11.20	-43.97	-13.00	H

**LTE Band 5, 1.4MHz, 16QAM, Channel 20525**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1672.00	-32.67	0.80	8.10	-27.52	-13.00	H
2508.50	-40.37	0.90	10.70	-32.72	-13.00	H
9101.88	-51.30	2.20	11.60	-44.05	-13.00	H
9301.38	-50.48	2.00	11.60	-43.03	-13.00	H
9473.38	-50.98	2.10	11.60	-43.63	-13.00	V
9735.75	-50.92	2.20	11.20	-44.07	-13.00	H

**LTE Band 5, 1.4MHz, 16QAM, Channel 20643**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1695.50	-35.21	0.80	8.10	-30.06	-13.00	H
2543.50	-35.84	0.90	10.70	-28.19	-13.00	H
9098.50	-51.46	2.20	11.60	-44.21	-13.00	H
9302.00	-50.71	2.00	11.60	-43.26	-13.00	H
9473.00	-51.29	2.10	11.60	-43.94	-13.00	V
9749.62	-50.53	2.20	11.20	-43.68	-13.00	H

**LTE Band 5, 1.4MHz, 64QAM, Channel 20407**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1648.00	-32.14	0.80	8.10	-26.99	-13.00	H
2473.00	-50.92	0.90	9.80	-44.17	-13.00	H
9098.62	-51.59	2.20	11.60	-44.34	-13.00	H
9299.88	-50.88	2.00	11.60	-43.43	-13.00	H
9474.00	-50.99	2.10	11.60	-43.64	-13.00	V
9744.38	-50.80	2.20	11.20	-43.95	-13.00	H

**LTE Band 5, 1.4MHz, 64QAM, Channel 20525**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1672.00	-33.93	0.80	8.10	-28.78	-13.00	H
2508.50	-49.11	0.90	10.70	-41.46	-13.00	V
9097.88	-51.04	2.20	11.60	-43.79	-13.00	H
9301.00	-50.75	2.00	11.60	-43.30	-13.00	H
9471.75	-50.84	2.10	11.60	-43.49	-13.00	V
9791.62	-50.58	2.30	11.20	-43.83	-13.00	H

**LTE Band 5, 1.4MHz, 64QAM, Channel 20643**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1695.50	-34.89	0.80	8.10	-29.74	-13.00	H
2544.00	-48.20	0.90	10.70	-40.55	-13.00	H
8478.38	-51.76	1.80	11.30	-44.41	-13.00	V
9296.25	-50.98	2.00	11.60	-43.53	-13.00	H
9473.12	-50.67	2.10	11.60	-43.32	-13.00	V
9728.25	-50.61	2.20	11.20	-43.76	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is U =

2.87dB(30MHz-3GHz)/3.35dB(3GHz-18GHz)/2.68dB(18GHz-40GHz), k = 2



**LTE Band 7, 5MHz, QPSK, Channel 20775**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16980.62	-48.71	2.90	16.50	-35.11	-25.00	H
17188.75	-45.54	2.90	14.50	-33.94	-25.00	H
17315.00	-45.87	3.20	14.50	-34.57	-25.00	H
17440.62	-46.04	2.90	14.50	-34.44	-25.00	H
17590.00	-43.84	3.30	12.80	-34.34	-25.00	H
17835.00	-43.06	3.60	12.80	-33.86	-25.00	H

**LTE Band 7, 5MHz, QPSK, Channel 21100**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
17001.88	-46.65	2.90	14.50	-35.05	-25.00	H
17121.25	-46.17	2.90	14.50	-34.57	-25.00	H
17298.12	-45.53	3.20	14.50	-34.23	-25.00	H
17428.75	-45.69	2.90	14.50	-34.09	-25.00	H
17572.50	-43.97	3.30	12.80	-34.47	-25.00	H
17827.50	-44.01	3.60	12.80	-34.81	-25.00	H

**LTE Band 7, 5MHz, QPSK, Channel 21425**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16961.25	-49.18	2.90	16.50	-35.58	-25.00	H
17197.50	-46.36	2.90	14.50	-34.76	-25.00	H
17361.88	-45.84	3.20	14.50	-34.54	-25.00	H
17467.50	-46.06	2.90	14.50	-34.46	-25.00	H
17541.88	-44.37	2.90	12.80	-34.47	-25.00	H
17833.12	-43.40	3.60	12.80	-34.20	-25.00	H

**LTE Band 7, 5MHz, 16QAM, Channel 20775**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16936.88	-49.44	2.90	16.50	-35.84	-25.00	H
17113.75	-46.15	2.90	14.50	-34.55	-25.00	H
17367.50	-46.06	3.20	14.50	-34.76	-25.00	H
17498.12	-46.28	2.90	14.50	-34.68	-25.00	H
17584.38	-44.18	3.30	12.80	-34.68	-25.00	H
17773.12	-43.20	3.60	12.80	-34.00	-25.00	H

**LTE Band 7, 5MHz, 16QAM, Channel 21100**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16965.62	-48.46	2.90	16.50	-34.86	-25.00	H
17096.25	-47.12	2.90	14.50	-35.52	-25.00	H
17269.38	-46.29	3.20	14.50	-34.99	-25.00	H
17418.75	-45.65	2.90	14.50	-34.05	-25.00	H
17576.25	-44.43	3.30	12.80	-34.93	-25.00	H
17770.00	-43.86	3.60	12.80	-34.66	-25.00	H

**LTE Band 7, 5MHz, 16QAM, Channel 21425**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16974.38	-48.79	2.90	16.50	-35.19	-25.00	H
17067.50	-45.85	2.90	14.50	-34.25	-25.00	H
17220.00	-46.18	3.20	14.50	-34.88	-25.00	H
17450.62	-45.50	2.90	14.50	-33.90	-25.00	H
17599.38	-44.25	3.30	12.80	-34.75	-25.00	H
17814.38	-43.68	3.60	12.80	-34.48	-25.00	H

**LTE Band 7, 5MHz, 64QAM, Channel 20775**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16994.38	-48.60	2.90	16.50	-35.00	-25.00	H
17193.75	-46.19	2.90	14.50	-34.59	-25.00	H
17294.38	-45.35	3.20	14.50	-34.05	-25.00	H
17521.88	-43.77	2.90	12.80	-33.87	-25.00	H
17579.38	-43.52	3.30	12.80	-34.02	-25.00	H
17803.75	-43.39	3.60	12.80	-34.19	-25.00	H

**LTE Band 7, 5MHz, 64QAM, Channel 21100**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16939.38	-48.19	2.90	16.50	-34.59	-25.00	H
17175.00	-46.74	2.90	14.50	-35.14	-25.00	H
17323.12	-45.42	3.20	14.50	-34.12	-25.00	H
17441.88	-46.29	2.90	14.50	-34.69	-25.00	H
17609.38	-43.88	3.30	12.80	-34.38	-25.00	H
17838.75	-43.79	3.60	12.80	-34.59	-25.00	H

**LTE Band 7, 5MHz, 64QAM, Channel 21425**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
17003.75	-47.10	2.90	14.50	-35.50	-25.00	H
17063.12	-46.23	2.90	14.50	-34.63	-25.00	H
17286.25	-45.31	3.20	14.50	-34.01	-25.00	H
17482.50	-46.32	2.90	14.50	-34.72	-25.00	H
17612.50	-44.05	3.30	12.80	-34.55	-25.00	H
17698.12	-43.49	3.30	12.80	-33.99	-25.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is U = 2.87dB(30MHz-3GHz)/3.35dB(3GHz-18GHz)/2.68dB(18GHz-40GHz), k = 2

**LTE Band 12, 1.4MHz, QPSK, Channel 23017**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7198.12	-53.16	1.80	12.00	-45.11	-13.00	V
9096.75	-51.75	2.20	11.60	-44.50	-13.00	H
9224.75	-50.15	2.10	11.60	-42.80	-13.00	H
9468.62	-51.08	2.10	11.60	-43.73	-13.00	V
9736.25	-50.86	2.20	11.20	-44.01	-13.00	H
9789.88	-51.54	2.30	11.20	-44.79	-13.00	H

**LTE Band 12, 1.4MHz, QPSK, Channel 23095**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7324.12	-53.02	1.70	12.00	-44.87	-13.00	H
9093.62	-51.81	2.20	11.60	-44.56	-13.00	H
9300.00	-50.47	2.00	11.60	-43.02	-13.00	H
9474.88	-51.28	2.10	11.60	-43.93	-13.00	V
9759.62	-51.11	2.20	11.20	-44.26	-13.00	H
9788.38	-51.61	2.30	11.20	-44.86	-13.00	H

**LTE Band 12, 1.4MHz, QPSK, Channel 23173**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8373.00	-52.25	1.80	11.30	-44.90	-13.00	H
9102.25	-51.87	2.20	11.60	-44.62	-13.00	H
9300.25	-50.89	2.00	11.60	-43.44	-13.00	H
9379.25	-51.39	2.00	11.60	-43.94	-13.00	V
9739.38	-51.27	2.20	11.20	-44.42	-13.00	H
9780.75	-51.44	2.30	11.20	-44.69	-13.00	H

**LTE Band 12, 1.4MHz, 16QAM, Channel 23017**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8901.75	-52.94	1.90	12.00	-44.99	-13.00	H
9096.25	-51.55	2.20	11.60	-44.30	-13.00	H
9297.88	-50.93	2.00	11.60	-43.48	-13.00	H
9473.75	-51.25	2.10	11.60	-43.90	-13.00	V
9725.25	-51.32	2.20	11.20	-44.47	-13.00	H
9807.00	-51.12	2.30	11.20	-44.37	-13.00	H

**LTE Band 12, 1.4MHz, 16QAM, Channel 23095**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7199.25	-53.36	1.80	12.00	-45.31	-13.00	V
8433.75	-51.81	1.80	11.30	-44.46	-13.00	H
9296.25	-51.10	2.00	11.60	-43.65	-13.00	H
9474.50	-51.41	2.10	11.60	-44.06	-13.00	V
9731.25	-50.77	2.20	11.20	-43.92	-13.00	H
9830.75	-51.18	2.30	11.20	-44.43	-13.00	H

**LTE Band 12, 1.4MHz, 16QAM, Channel 23173**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8476.50	-51.86	1.80	11.30	-44.51	-13.00	H
9103.12	-52.13	2.20	11.60	-44.88	-13.00	H
9304.88	-50.19	2.00	11.60	-42.74	-13.00	H
9426.88	-50.70	2.10	11.60	-43.35	-13.00	H
9729.75	-51.20	2.20	11.20	-44.35	-13.00	H
9786.00	-50.73	2.30	11.20	-43.98	-13.00	H

**LTE Band 12, 1.4MHz, 64QAM, Channel 23017**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
2098.00	-45.55	0.90	9.80	-38.80	-13.00	H
8422.88	-52.54	1.80	11.30	-45.19	-13.00	V
9102.50	-51.49	2.20	11.60	-44.24	-13.00	H
9303.62	-50.94	2.00	11.60	-43.49	-13.00	H
9477.00	-50.76	2.10	11.60	-43.41	-13.00	V
9756.62	-51.33	2.20	11.20	-44.48	-13.00	H

**LTE Band 12, 1.4MHz, 64QAM, Channel 23095**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8841.00	-53.56	1.90	12.00	-45.61	-13.00	H
9106.62	-51.49	2.10	11.60	-44.14	-13.00	H
9303.62	-50.72	2.00	11.60	-43.27	-13.00	H
9424.38	-51.27	2.10	11.60	-43.92	-13.00	H
9729.50	-51.30	2.20	11.20	-44.45	-13.00	H
9782.62	-51.42	2.30	11.20	-44.67	-13.00	H

**LTE Band 12, 1.4MHz, 64QAM, Channel 23173**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8443.50	-52.48	1.80	11.30	-45.13	-13.00	H
9094.75	-51.82	2.20	11.60	-44.57	-13.00	H
9304.62	-50.36	2.00	11.60	-42.91	-13.00	H
9421.88	-50.01	2.10	11.60	-42.66	-13.00	H
9758.00	-51.11	2.20	11.20	-44.26	-13.00	H
9799.75	-51.49	2.30	11.20	-44.74	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is U = 2.87dB(30MHz-3GHz)/3.35dB(3GHz-18GHz)/2.68dB(18GHz-40GHz), k = 2

**LTE Band 17, 1.4MHz, 16QAM, Channel 23755**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
2113.00	-52.26	0.90	9.80	-45.51	-13.00	H
9100.00	-51.41	2.20	11.60	-44.16	-13.00	H
9229.00	-50.51	2.10	11.60	-43.16	-13.00	H
9474.38	-50.80	2.10	11.60	-43.45	-13.00	V
9726.75	-51.50	2.20	11.20	-44.65	-13.00	H
9790.25	-51.91	2.30	11.20	-45.16	-13.00	H

**LTE Band 17, 1.4MHz, 16QAM, Channel 23790**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8409.38	-52.62	1.80	11.30	-45.27	-13.00	H
9098.13	-51.69	2.20	11.60	-44.44	-13.00	H
9298.25	-51.00	2.00	11.60	-43.55	-13.00	H
9473.75	-51.09	2.10	11.60	-43.74	-13.00	V
9760.25	-51.20	2.20	11.20	-44.35	-13.00	H
9792.25	-51.28	2.30	11.20	-44.53	-13.00	H

**LTE Band 17, 1.4MHz, 16QAM, Channel 23825**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7220.63	-52.92	1.80	12.00	-44.87	-13.00	H
8475.00	-52.42	1.80	11.30	-45.07	-13.00	H
9098.63	-51.34	2.20	11.60	-44.09	-13.00	H
9303.00	-50.46	2.00	11.60	-43.01	-13.00	H
9470.75	-50.65	2.10	11.60	-43.30	-13.00	V
9733.75	-50.88	2.20	11.20	-44.03	-13.00	H

**LTE Band 17, 1.4MHz, 16QAM, Channel 23755**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8481.00	-52.35	1.80	11.30	-45.00	-13.00	H
9101.25	-51.69	2.20	11.60	-44.44	-13.00	H
9299.38	-50.56	2.00	11.60	-43.11	-13.00	H
9471.25	-51.28	2.10	11.60	-43.93	-13.00	V
9743.12	-50.29	2.20	11.20	-43.44	-13.00	H
9805.12	-51.12	2.30	11.20	-44.37	-13.00	H

**LTE Band 17, 1.4MHz, 16QAM, Channel 23790**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8374.12	-52.77	1.80	11.30	-45.42	-13.00	H
9099.50	-52.05	2.20	11.60	-44.80	-13.00	H
9224.12	-50.41	2.10	11.60	-43.06	-13.00	H
9470.00	-50.66	2.10	11.60	-43.31	-13.00	V
9726.75	-51.10	2.20	11.20	-44.25	-13.00	H
9836.12	-51.71	2.30	11.20	-44.96	-13.00	H

**LTE Band 17, 1.4MHz, 16QAM, Channel 23825**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7200.75	-52.57	1.80	12.00	-44.52	-13.00	V
9099.88	-51.56	2.20	11.60	-44.31	-13.00	H
9223.50	-51.16	2.10	11.60	-43.81	-13.00	H
9474.75	-51.47	2.10	11.60	-44.12	-13.00	V
9733.62	-50.52	2.20	11.20	-43.67	-13.00	H
9783.00	-51.49	2.30	11.20	-44.74	-13.00	H



**LTE Band 17, 1.4MHz, 64QAM, Channel 23755**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7191.38	-52.92	1.80	12.00	-44.87	-13.00	V
9106.00	-52.05	2.20	11.60	-44.80	-13.00	H
9298.00	-50.49	2.00	11.60	-43.04	-13.00	H
9475.62	-50.71	2.10	11.60	-43.36	-13.00	V
9747.75	-50.30	2.20	11.20	-43.45	-13.00	H
9792.12	-50.67	2.30	11.20	-43.92	-13.00	H

**LTE Band 17, 1.4MHz, 64QAM, Channel 23790**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8473.50	-52.51	1.80	11.30	-45.16	-13.00	H
8736.38	-52.56	2.00	12.00	-44.71	-13.00	V
9104.38	-51.31	2.20	11.60	-44.06	-13.00	H
9299.00	-50.12	2.00	11.60	-42.67	-13.00	H
9467.12	-51.20	2.10	11.60	-43.85	-13.00	V
9727.12	-49.86	2.20	11.20	-43.01	-13.00	H

**LTE Band 17, 1.4MHz, 64QAM, Channel 23825**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7320.38	-53.20	1.70	12.00	-45.05	-13.00	H
9090.62	-51.07	2.20	11.60	-43.82	-13.00	H
9226.88	-50.75	2.10	11.60	-43.40	-13.00	H
9476.50	-51.34	2.10	11.60	-43.99	-13.00	V
9729.75	-51.02	2.20	11.20	-44.17	-13.00	H
9795.38	-51.52	2.30	11.20	-44.77	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is U = 2.87dB(30MHz-3GHz)/3.35dB(3GHz-18GHz)/2.68dB(18GHz-40GHz), k = 2

**LTE Band 25, 1.4MHz, QPSK, Channel 26047**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3700.12	-40.43	1.20	12.20	-29.43	-13.00	H
17209.38	-43.53	2.90	14.50	-31.93	-13.00	H
17362.50	-43.48	3.20	14.50	-32.18	-13.00	H
17458.75	-41.11	2.90	14.50	-29.51	-13.00	H
17591.25	-39.43	3.30	12.80	-29.93	-13.00	H
17837.50	-39.81	3.60	12.80	-30.61	-13.00	H

**LTE Band 25, 1.4MHz, QPSK, Channel 26365**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3763.88	-39.38	1.10	12.20	-28.28	-13.00	H
16982.50	-45.70	2.90	16.50	-32.10	-13.00	H
17297.50	-43.11	3.20	14.50	-31.81	-13.00	H
17455.00	-41.63	2.90	14.50	-30.03	-13.00	H
17616.25	-40.09	3.30	12.80	-30.59	-13.00	H
17709.38	-40.95	3.30	12.80	-31.45	-13.00	H

**LTE Band 25, 1.4MHz, QPSK, Channel 26683**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16958.75	-45.19	2.90	16.50	-31.59	-13.00	H
17110.62	-44.31	2.90	14.50	-32.71	-13.00	H
17360.00	-43.39	3.20	14.50	-32.09	-13.00	H
17498.75	-41.83	2.90	14.50	-30.23	-13.00	H
17529.38	-39.82	2.90	12.80	-29.92	-13.00	H
17782.50	-40.21	3.60	12.80	-31.01	-13.00	H

**LTE Band 25, 1.4MHz, 16QAM, Channel 26047**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3700.12	-40.37	1.20	12.20	-29.37	-13.00	H
16985.00	-45.18	2.90	16.50	-31.58	-13.00	H
17288.75	-43.74	3.20	14.50	-32.44	-13.00	H
17482.50	-42.01	2.90	14.50	-30.41	-13.00	H
17612.50	-39.72	3.30	12.80	-30.22	-13.00	H
17773.12	-40.31	3.60	12.80	-31.11	-13.00	H

**LTE Band 25, 1.4MHz, 16QAM, Channel 26365**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3764.25	-40.91	1.10	12.20	-29.81	-13.00	H
16965.00	-45.11	2.90	16.50	-31.51	-13.00	H
17361.88	-43.58	3.20	14.50	-32.28	-13.00	H
17440.62	-42.51	2.90	14.50	-30.91	-13.00	H
17568.75	-40.12	3.30	12.80	-30.62	-13.00	H
17776.25	-40.25	3.60	12.80	-31.05	-13.00	H

**LTE Band 25, 1.4MHz, 16QAM, Channel 26683**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16965.00	-45.39	2.90	16.50	-31.79	-13.00	H
17093.12	-44.45	2.90	14.50	-32.85	-13.00	H
17280.62	-43.77	3.20	14.50	-32.47	-13.00	H
17512.50	-40.74	2.90	12.80	-30.84	-13.00	H
17623.75	-39.79	3.30	12.80	-30.29	-13.00	H
17831.25	-40.51	3.60	12.80	-31.31	-13.00	H

**LTE Band 25, 1.4MHz, 64QAM, Channel 26047**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3700.50	-40.24	1.20	12.20	-29.24	-13.00	H
16981.25	-45.38	2.90	16.50	-31.78	-13.00	H
17197.50	-44.02	2.90	14.50	-32.42	-13.00	H
17507.50	-40.55	2.90	12.80	-30.65	-13.00	H
17610.62	-40.52	3.30	12.80	-31.02	-13.00	H
17832.50	-39.15	3.60	12.80	-29.95	-13.00	H

**LTE Band 25, 1.4MHz, 64QAM, Channel 26365**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3764.25	-39.91	1.10	12.20	-28.81	-13.00	H
16994.38	-45.06	2.90	16.50	-31.46	-13.00	H
17367.50	-43.09	3.20	14.50	-31.79	-13.00	H
17510.00	-40.70	2.90	12.80	-30.80	-13.00	H
17590.62	-39.98	3.30	12.80	-30.48	-13.00	H
17837.50	-40.62	3.60	12.80	-31.42	-13.00	H

**LTE Band 25, 1.4MHz, 64QAM, Channel 26683**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16962.50	-45.26	2.90	16.50	-31.66	-13.00	H
17182.50	-44.47	2.90	14.50	-32.87	-13.00	H
17297.50	-43.09	3.20	14.50	-31.79	-13.00	H
17445.62	-41.96	2.90	14.50	-30.36	-13.00	H
17568.12	-39.70	3.30	12.80	-30.20	-13.00	H
17833.12	-40.75	3.60	12.80	-31.55	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is U = 2.87dB(30MHz-3GHz)/3.35dB(3GHz-18GHz)/2.68dB(18GHz-40GHz), k = 2

**LTE Band 26(824MHz-849MHz), 1.4MHz, QPSK, Channel 26797**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1648.50	-29.61	0.80	8.10	-24.46	-13.00	H
2473.00	-47.10	0.90	9.80	-40.35	-13.00	V
9087.00	-51.03	2.20	11.60	-43.78	-13.00	H
9225.62	-50.83	2.10	11.60	-43.48	-13.00	H
9476.25	-51.40	2.10	11.60	-44.05	-13.00	V
9742.50	-51.17	2.20	11.20	-44.32	-13.00	H

**LTE Band 26(824MHz-849MHz), 1.4MHz, QPSK, Channel 26915**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1672.00	-33.31	0.80	8.10	-28.16	-13.00	H
2508.00	-45.12	0.90	10.70	-37.47	-13.00	V
9223.50	-50.13	2.10	11.60	-42.78	-13.00	H
9472.50	-51.16	2.10	11.60	-43.81	-13.00	V
9725.88	-50.84	2.20	11.20	-43.99	-13.00	H
9785.62	-50.74	2.30	11.20	-43.99	-13.00	H

**LTE Band 26(824MHz-849MHz), 1.4MHz, QPSK, Channel 27033**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1695.50	-37.71	0.80	8.10	-32.56	-13.00	H
2543.50	-47.46	0.90	10.70	-39.81	-13.00	V
9097.62	-51.46	2.20	11.60	-44.21	-13.00	H
9223.12	-50.35	2.10	11.60	-43.00	-13.00	H
9476.25	-50.28	2.10	11.60	-42.93	-13.00	V
9718.50	-50.67	2.20	11.20	-43.82	-13.00	H

**LTE Band 26(824MHz-849MHz), 1.4MHz, 16QAM, Channel 26797**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1648.00	-31.12	0.80	8.10	-25.97	-13.00	H
2473.00	-47.18	0.90	9.80	-40.43	-13.00	V
9101.88	-50.93	2.20	11.60	-43.68	-13.00	H
9301.00	-50.87	2.00	11.60	-43.42	-13.00	H
9472.12	-50.83	2.10	11.60	-43.48	-13.00	V
9733.62	-50.58	2.20	11.20	-43.73	-13.00	H

**LTE Band 26(824MHz-849MHz), 1.4MHz, 16QAM, Channel 26915**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1672.00	-35.09	0.80	8.10	-29.94	-13.00	H
2508.50	-47.71	0.90	10.70	-40.06	-13.00	V
9101.88	-51.52	2.20	11.60	-44.27	-13.00	H
9296.62	-50.11	2.00	11.60	-42.66	-13.00	H
9472.38	-50.19	2.10	11.60	-42.84	-13.00	V
9747.50	-50.03	2.20	11.20	-43.18	-13.00	H

**LTE Band 26(824MHz-849MHz), 1.4MHz, 16QAM, Channel 27033**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1695.50	-35.83	0.80	8.10	-30.68	-13.00	H
2544.00	-48.93	0.90	10.70	-41.28	-13.00	V
9103.62	-51.82	2.20	11.60	-44.57	-13.00	H
9223.75	-50.14	2.10	11.60	-42.79	-13.00	H
9469.75	-51.23	2.10	11.60	-43.88	-13.00	V
9774.25	-51.02	2.30	11.20	-44.27	-13.00	V

**LTE Band 26(824MHz-849MHz), 1.4MHz, 64QAM, Channel 26797**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1648.50	-30.43	0.80	8.10	-25.28	-13.00	H
2473.00	-48.49	0.90	9.80	-41.74	-13.00	V
8242.50	-50.90	2.20	11.30	-43.95	-13.00	V
9092.38	-51.27	2.20	11.60	-44.02	-13.00	H
9298.62	-50.72	2.00	11.60	-43.27	-13.00	H
9475.12	-51.06	2.10	11.60	-43.71	-13.00	V

**LTE Band 26(824MHz-849MHz), 1.4MHz, 64QAM, Channel 26915**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1671.50	-32.85	0.80	8.10	-27.70	-13.00	H
2508.50	-47.00	0.90	10.70	-39.35	-13.00	V
9108.25	-51.60	2.10	11.60	-44.25	-13.00	H
9301.12	-51.16	2.00	11.60	-43.71	-13.00	H
9476.00	-49.88	2.10	11.60	-42.53	-13.00	V
9732.62	-50.84	2.20	11.20	-43.99	-13.00	H

**LTE Band 26(824MHz-849MHz), 1.4MHz, 64QAM, Channel 27033**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1695.50	-37.09	0.80	8.10	-31.94	-13.00	H
2543.50	-48.21	0.90	10.70	-40.56	-13.00	V
9300.38	-50.14	2.00	11.60	-42.69	-13.00	H
9474.50	-50.54	2.10	11.60	-43.19	-13.00	V
9749.25	-50.33	2.20	11.20	-43.48	-13.00	H
9808.50	-50.86	2.30	11.20	-44.11	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, QPSK, Channel 26697**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1628.50	-35.77	0.80	8.10	-30.62	-13.00	H
2443.00	-45.95	0.90	9.80	-39.20	-13.00	V
9099.75	-51.76	2.20	11.60	-44.51	-13.00	H
9297.62	-50.04	2.00	11.60	-42.59	-13.00	H
9476.62	-51.04	2.10	11.60	-43.69	-13.00	V
9725.88	-50.49	2.20	11.20	-43.64	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, QPSK, Channel 26740**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1637.00	-32.55	0.80	8.10	-27.40	-13.00	H
2455.50	-45.40	0.90	9.80	-38.65	-13.00	V
9104.12	-51.40	2.20	11.60	-44.15	-13.00	H
9299.75	-50.50	2.00	11.60	-43.05	-13.00	H
9671.38	-50.72	2.20	11.20	-43.87	-13.00	H
9797.12	-50.59	2.30	11.20	-43.84	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, QPSK, Channel 26783**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1645.50	-31.17	0.80	8.10	-26.02	-13.00	H
2469.00	-47.34	0.90	9.80	-40.59	-13.00	V
9102.75	-51.14	2.20	11.60	-43.89	-13.00	H
9296.62	-50.17	2.00	11.60	-42.72	-13.00	H
9478.50	-51.13	2.10	11.60	-43.78	-13.00	V
9719.62	-49.97	2.20	11.20	-43.12	-13.00	H



**LTE Band 26(814MHz-824MHz), 1.4MHz, 16QAM, Channel 26697**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1628.50	-37.28	0.80	8.10	-32.13	-13.00	H
2442.50	-45.50	0.90	9.80	-38.75	-13.00	V
7321.12	-52.68	1.70	12.00	-44.53	-13.00	H
9099.62	-51.68	2.20	11.60	-44.43	-13.00	H
9303.38	-50.27	2.00	11.60	-42.82	-13.00	H
9471.38	-50.83	2.10	11.60	-43.48	-13.00	V

**LTE Band 26(814MHz-824MHz), 1.4MHz, 16QAM, Channel 26740**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1637.00	-33.96	0.80	8.10	-28.81	-13.00	H
2455.50	-45.08	0.90	9.80	-38.33	-13.00	V
9301.62	-50.59	2.00	11.60	-43.14	-13.00	H
9476.62	-51.06	2.10	11.60	-43.71	-13.00	V
9734.88	-50.92	2.20	11.20	-44.07	-13.00	H
9800.62	-51.39	2.30	11.20	-44.64	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, 16QAM, Channel 26783**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1645.50	-31.52	0.80	8.10	-26.37	-13.00	H
2468.50	-47.99	0.90	9.80	-41.24	-13.00	V
9300.00	-50.70	2.00	11.60	-43.25	-13.00	H
9475.50	-51.44	2.10	11.60	-44.09	-13.00	V
9734.88	-50.43	2.20	11.20	-43.58	-13.00	H
9800.75	-51.07	2.30	11.20	-44.32	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, 64QAM, Channel 26697**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1628.00	-37.89	0.80	8.10	-32.74	-13.00	H
2443.00	-47.58	0.90	9.80	-40.83	-13.00	V
9301.12	-50.47	2.00	11.60	-43.02	-13.00	H
9474.50	-51.09	2.10	11.60	-43.74	-13.00	V
9745.25	-50.65	2.20	11.20	-43.80	-13.00	H
9796.88	-50.77	2.30	11.20	-44.02	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, 64QAM, Channel 26740**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1637.00	-33.68	0.80	8.10	-28.53	-13.00	H
2456.00	-45.75	0.90	9.80	-39.00	-13.00	V
9103.38	-51.16	2.20	11.60	-43.91	-13.00	H
9226.50	-50.05	2.10	11.60	-42.70	-13.00	H
9474.12	-50.46	2.10	11.60	-43.11	-13.00	V
9727.38	-51.23	2.20	11.20	-44.38	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, 64QAM, Channel 26783**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1645.50	-31.79	0.80	8.10	-26.64	-13.00	H
2468.50	-47.38	0.90	9.80	-40.63	-13.00	V
9299.00	-50.18	2.00	11.60	-42.73	-13.00	H
9477.62	-50.96	2.10	11.60	-43.61	-13.00	V
9736.00	-50.43	2.20	11.20	-43.58	-13.00	H
9800.50	-51.13	2.30	11.20	-44.38	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is U =

2.87dB(30MHz-3GHz)/3.35dB(3GHz-18GHz)/2.68dB(18GHz-40GHz), k = 2

**LTE Band 38, 5MHz, QPSK, Channel 37775**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16981.25	-48.80	2.90	16.50	-35.20	-25.00	H
17128.12	-46.06	2.90	14.50	-34.46	-25.00	H
17271.25	-45.90	3.20	14.50	-34.60	-25.00	H
17459.38	-46.36	2.90	14.50	-34.76	-25.00	H
17633.12	-43.53	3.30	12.80	-34.03	-25.00	H
17833.75	-43.47	3.60	12.80	-34.27	-25.00	H

**LTE Band 38, 5MHz, QPSK, Channel 38000**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16960.00	-49.29	2.90	16.50	-35.69	-25.00	H
17198.75	-46.55	2.90	14.50	-34.95	-25.00	H
17363.12	-46.10	3.20	14.50	-34.80	-25.00	H
17441.25	-45.97	2.90	14.50	-34.37	-25.00	H
17576.25	-43.74	3.30	12.80	-34.24	-25.00	H
17815.00	-43.30	3.60	12.80	-34.10	-25.00	H

**LTE Band 38, 5MHz, QPSK, Channel 38225**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16946.88	-48.75	2.90	16.50	-35.15	-25.00	H
17179.38	-46.42	2.90	14.50	-34.82	-25.00	H
17300.00	-45.63	3.20	14.50	-34.33	-25.00	H
17522.50	-44.71	2.90	12.80	-34.81	-25.00	H
17610.62	-43.37	3.30	12.80	-33.87	-25.00	H
17821.25	-44.05	3.60	12.80	-34.85	-25.00	H

**LTE Band 38, 5MHz, 16QAM, Channel 37775**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16984.38	-48.67	2.90	16.50	-35.07	-25.00	H
17144.38	-46.46	2.90	14.50	-34.86	-25.00	H
17362.50	-45.36	3.20	14.50	-34.06	-25.00	H
17510.00	-43.83	2.90	12.80	-33.93	-25.00	H
17595.00	-44.06	3.30	12.80	-34.56	-25.00	H
17826.88	-43.61	3.60	12.80	-34.41	-25.00	H

**LTE Band 38, 5MHz, 16QAM, Channel 38000**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16916.88	-49.21	2.90	16.50	-35.61	-25.00	H
17096.25	-45.93	2.90	14.50	-34.33	-25.00	H
17301.88	-45.92	3.20	14.50	-34.62	-25.00	H
17448.75	-45.69	2.90	14.50	-34.09	-25.00	H
17602.50	-43.88	3.30	12.80	-34.38	-25.00	H
17778.12	-43.67	3.60	12.80	-34.47	-25.00	H

**LTE Band 38, 5MHz, 16QAM, Channel 38225**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16982.50	-48.47	2.90	16.50	-34.87	-25.00	H
17185.00	-46.60	2.90	14.50	-35.00	-25.00	H
17271.25	-45.44	3.20	14.50	-34.14	-25.00	H
17448.12	-45.72	2.90	14.50	-34.12	-25.00	H
17527.50	-44.40	2.90	12.80	-34.50	-25.00	H
17747.50	-43.21	3.60	12.80	-34.01	-25.00	H

**LTE Band 38, 5MHz, 64QAM, Channel 37775**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16940.00	-49.31	2.90	16.50	-35.71	-25.00	H
17112.50	-46.29	2.90	14.50	-34.69	-25.00	H
17305.62	-45.39	3.20	14.50	-34.09	-25.00	H
17459.38	-46.22	2.90	14.50	-34.62	-25.00	H
17606.88	-44.16	3.30	12.80	-34.66	-25.00	H
17780.00	-43.67	3.60	12.80	-34.47	-25.00	H

**LTE Band 38, 5MHz, 64QAM, Channel 38000**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16995.62	-48.62	2.90	16.50	-35.02	-25.00	H
17202.50	-46.39	2.90	14.50	-34.79	-25.00	H
17272.50	-46.03	3.20	14.50	-34.73	-25.00	H
17501.88	-43.86	2.90	12.80	-33.96	-25.00	H
17619.38	-43.78	3.30	12.80	-34.28	-25.00	H
17770.62	-43.44	3.60	12.80	-34.24	-25.00	H

**LTE Band 38, 5MHz, 64QAM, Channel 38225**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16985.00	-48.54	2.90	16.50	-34.94	-25.00	H
17176.88	-46.15	2.90	14.50	-34.55	-25.00	H
17363.75	-45.79	3.20	14.50	-34.49	-25.00	H
17443.12	-45.97	2.90	14.50	-34.37	-25.00	H
17595.62	-43.36	3.30	12.80	-33.86	-25.00	H
17800.62	-43.47	3.60	12.80	-34.27	-25.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 2.87\text{dB}(30\text{MHz}-3\text{GHz})/3.35\text{dB}(3\text{GHz}-18\text{GHz})/2.68\text{dB}(18\text{GHz}-40\text{GHz})$ ,  $k = 2$

**LTE Band 41, 5MHz, QPSK, Channel 40065**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16991.25	-48.74	2.90	16.50	-35.14	-25.00	H
17094.38	-46.30	2.90	14.50	-34.70	-25.00	H
17273.75	-45.73	3.20	14.50	-34.43	-25.00	H
17486.88	-45.85	2.90	14.50	-34.25	-25.00	H
17585.62	-43.62	3.30	12.80	-34.12	-25.00	H
17819.38	-43.16	3.60	12.80	-33.96	-25.00	H

**LTE Band 41, 5MHz, QPSK, Channel 40640**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16986.88	-48.68	2.90	16.50	-35.08	-25.00	H
17205.00	-45.98	2.90	14.50	-34.38	-25.00	H
17276.25	-45.51	3.20	14.50	-34.21	-25.00	H
17435.00	-45.77	2.90	14.50	-34.17	-25.00	H
17629.38	-43.65	3.30	12.80	-34.15	-25.00	H
17780.00	-43.75	3.60	12.80	-34.55	-25.00	H

**LTE Band 41, 5MHz, QPSK, Channel 41215**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
17050.00	-47.13	2.90	14.50	-35.53	-25.00	H
17116.88	-45.70	2.90	14.50	-34.10	-25.00	H
17356.88	-45.59	3.20	14.50	-34.29	-25.00	H
17490.00	-46.08	2.90	14.50	-34.48	-25.00	H
17625.00	-43.95	3.30	12.80	-34.45	-25.00	H
17825.00	-43.27	3.60	12.80	-34.07	-25.00	H

**LTE Band 41, 5MHz, 16QAM, Channel 40065**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16993.75	-48.01	2.90	16.50	-34.41	-25.00	H
17110.62	-46.56	2.90	14.50	-34.96	-25.00	H
17274.38	-45.57	3.20	14.50	-34.27	-25.00	H
17501.88	-44.24	2.90	12.80	-34.34	-25.00	H
17566.88	-43.40	3.30	12.80	-33.90	-25.00	H
17839.38	-43.74	3.60	12.80	-34.54	-25.00	H

**LTE Band 41, 5MHz, 16QAM, Channel 40640**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16983.12	-47.87	2.90	16.50	-34.27	-25.00	H
17195.62	-46.53	2.90	14.50	-34.93	-25.00	H
17295.00	-45.66	3.20	14.50	-34.36	-25.00	H
17524.38	-44.10	2.90	12.80	-34.20	-25.00	H
17583.12	-44.08	3.30	12.80	-34.58	-25.00	H
17836.25	-43.13	3.60	12.80	-33.93	-25.00	H

**LTE Band 41, 5MHz, 16QAM, Channel 41215**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16954.38	-47.92	2.90	16.50	-34.32	-25.00	H
17205.62	-46.53	2.90	14.50	-34.93	-25.00	H
17276.25	-45.35	3.20	14.50	-34.05	-25.00	H
17429.38	-46.23	2.90	14.50	-34.63	-25.00	H
17623.75	-43.89	3.30	12.80	-34.39	-25.00	H
17779.38	-43.62	3.60	12.80	-34.42	-25.00	H

**LTE Band 41, 5MHz, 64QAM, Channel 40065**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16961.25	-48.43	2.90	16.50	-34.83	-25.00	H
17203.12	-46.06	2.90	14.50	-34.46	-25.00	H
17284.38	-46.26	3.20	14.50	-34.96	-25.00	H
17433.75	-45.90	2.90	14.50	-34.30	-25.00	H
17593.12	-43.36	3.30	12.80	-33.86	-25.00	H
17821.88	-43.13	3.60	12.80	-33.93	-25.00	H

**LTE Band 41, 5MHz, 64QAM, Channel 40640**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16956.25	-48.67	2.90	16.50	-35.07	-25.00	H
17110.62	-45.87	2.90	14.50	-34.27	-25.00	H
17348.12	-46.21	3.20	14.50	-34.91	-25.00	H
17494.38	-46.02	2.90	14.50	-34.42	-25.00	H
17608.12	-43.70	3.30	12.80	-34.20	-25.00	H
17738.75	-43.30	3.60	12.80	-34.10	-25.00	H

**LTE Band 41, 5MHz, 64QAM, Channel 41215**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16980.00	-48.34	2.90	16.50	-34.74	-25.00	H
17187.50	-46.36	2.90	14.50	-34.76	-25.00	H
17285.62	-45.68	3.20	14.50	-34.38	-25.00	H
17523.12	-44.14	2.90	12.80	-34.24	-25.00	H
17616.25	-44.22	3.30	12.80	-34.72	-25.00	H
17768.75	-43.35	3.60	12.80	-34.15	-25.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 2.87\text{dB}(30\text{MHz}-3\text{GHz})/3.35\text{dB}(3\text{GHz}-18\text{GHz})/2.68\text{dB}(18\text{GHz}-40\text{GHz})$ ,  $k = 2$



**LTE Band 66, 1.4MHz, QPSK, Channel 131979**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3420.38	-32.16	1.20	11.50	-21.86	-13.00	H
16934.38	-45.49	2.90	16.50	-31.89	-13.00	H
17300.00	-43.76	3.20	14.50	-32.46	-13.00	H
17413.12	-42.40	2.90	14.50	-30.80	-13.00	H
17591.88	-39.33	3.30	12.80	-29.83	-13.00	H
17839.38	-40.24	3.60	12.80	-31.04	-13.00	H

**LTE Band 66, 1.4MHz, QPSK, Channel 132322**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3489.00	-35.61	1.10	11.50	-25.21	-13.00	H
16994.38	-45.84	2.90	16.50	-32.24	-13.00	H
17253.12	-43.52	3.20	14.50	-32.22	-13.00	H
17514.38	-40.45	2.90	12.80	-30.55	-13.00	H
17538.12	-40.43	2.90	12.80	-30.53	-13.00	H
17696.25	-40.83	3.30	12.80	-31.33	-13.00	H

**LTE Band 66, 1.4MHz, QPSK, Channel 132665**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3557.62	-40.97	1.20	12.20	-29.97	-13.00	H
17198.12	-43.67	2.90	14.50	-32.07	-13.00	H
17356.25	-43.62	3.20	14.50	-32.32	-13.00	H
17485.62	-42.36	2.90	14.50	-30.76	-13.00	H
17527.50	-40.55	2.90	12.80	-30.65	-13.00	H
17775.62	-40.46	3.60	12.80	-31.26	-13.00	H

**LTE Band 66, 1.4MHz, 16QAM, Channel 131979**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3420.38	-31.17	1.20	11.50	-20.87	-13.00	H
16988.75	-44.41	2.90	16.50	-30.81	-13.00	H
17279.38	-42.10	3.20	14.50	-30.80	-13.00	H
17458.12	-40.65	2.90	14.50	-29.05	-13.00	H
17569.38	-38.87	3.30	12.80	-29.37	-13.00	H
17830.62	-38.52	3.60	12.80	-29.32	-13.00	H

**LTE Band 66, 1.4MHz, 16QAM, Channel 132322**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3489.00	-35.73	1.10	11.50	-25.33	-13.00	H
16941.88	-43.50	2.90	16.50	-29.90	-13.00	H
17340.62	-41.74	3.20	14.50	-30.44	-13.00	H
17450.00	-40.96	2.90	14.50	-29.36	-13.00	H
17568.12	-38.67	3.30	12.80	-29.17	-13.00	H
17781.25	-39.03	3.60	12.80	-29.83	-13.00	H

**LTE Band 66, 1.4MHz, 16QAM, Channel 132665**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3557.62	-41.78	1.20	12.20	-30.78	-13.00	H
16928.75	-45.08	2.90	16.50	-31.48	-13.00	H
17277.50	-42.56	3.20	14.50	-31.26	-13.00	H
17521.88	-40.01	2.90	12.80	-30.11	-13.00	H
17570.62	-39.14	3.30	12.80	-29.64	-13.00	H
17779.38	-39.90	3.60	12.80	-30.70	-13.00	H

**LTE Band 66, 1.4MHz, 64QAM, Channel 131979**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3420.38	-32.43	1.20	11.50	-22.13	-13.00	H
16980.62	-44.95	2.90	16.50	-31.35	-13.00	H
17128.75	-44.22	2.90	14.50	-32.62	-13.00	H
17430.62	-42.19	2.90	14.50	-30.59	-13.00	H
17588.75	-39.79	3.30	12.80	-30.29	-13.00	H
17775.00	-40.48	3.60	12.80	-31.28	-13.00	H

**LTE Band 66, 1.4MHz, 64QAM, Channel 132322**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3489.00	-36.64	1.10	11.50	-26.24	-13.00	H
16947.50	-45.73	2.90	16.50	-32.13	-13.00	H
17278.12	-43.22	3.20	14.50	-31.92	-13.00	H
17498.12	-42.14	2.90	14.50	-30.54	-13.00	H
17625.62	-39.65	3.30	12.80	-30.15	-13.00	H
17755.00	-39.89	3.60	12.80	-30.69	-13.00	H

**LTE Band 66, 1.4MHz, 64QAM, Channel 132665**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
3557.62	-41.47	1.20	12.20	-30.47	-13.00	H
16951.25	-45.65	2.90	16.50	-32.05	-13.00	H
17297.50	-43.43	3.20	14.50	-32.13	-13.00	H
17391.88	-41.37	2.90	14.50	-29.77	-13.00	H
17631.25	-39.75	3.30	12.80	-30.25	-13.00	H
17775.62	-40.42	3.60	12.80	-31.22	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 2.87\text{dB}(30\text{MHz}-3\text{GHz})/3.35\text{dB}(3\text{GHz}-18\text{GHz})/2.68\text{dB}(18\text{GHz}-40\text{GHz})$ ,  $k = 2$



### **A.3 FREQUENCY STABILITY**

#### **Reference**

FCC: CFR Part 2.1055, 22.355, 24.235, 27.54, 90.213.

#### **A.3.1 Method of Measurement**

In order to measure the carrier frequency under the condition of AFC lock, it is necessary to make measurements with the EUT in a "call mode". This is accomplished with the use of R&S CMW500.

1. Measure the carrier frequency at room temperature.
2. Subject the EUT to overnight soak at -30°C.
3. With the EUT, powered via nominal voltage, connected to the CMW500 and in a simulated call on mid channel of all bands, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
4. Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
5. Remeasure carrier frequency at room temperature with nominal voltage. Vary supply voltage from minimum voltage to maximum voltage, in 0.1Volt increments remeasuring carrier frequency at each voltage. Pause at nominal voltage for 1.5 hours unpowered, to allow any self-heating to stabilize, before continuing.
6. Subject the EUT to overnight soak at +50°C.
7. With the EUT, powered via nominal voltage, connected to the CMW500 and in a simulated call on the centre channel, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
8. Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1 1/2 hours at each temperature, unpowered, before making measurements.
9. At all temperature levels hold the temperature to +/- 0.5°C during the measurement procedure.

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. As this transceiver is considered "Hand carried, battery powered equipment" Section 2.1055(d)(2) applies. This requires that the lower voltage for frequency stability testing be specified by the manufacturer. This transceiver is specified to operate with an input voltage of the lower, higher and nominal voltage. Operation above or below these voltage limits is prohibited by transceiver software in order to prevent improper operation as well as to protect components from overstress.

**A.3.2 Measurement results**
**LTE band 2, 20MHz bandwidth QPSK(worst case of all bandwidths)**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.80	1850.780	1909.210	0.83	0.0004
50					
40					
30					
10					
0					
-10					
-20					
-30					

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	1850.780	1909.210	4.76	0.0025
4.35				5.50	0.0029

 Expanded measurement uncertainty is 10 Hz,  $k = 2$ 
**LTE band 4, 20MHz bandwidth QPSK(worst case of all bandwidths)**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.80	1710.760	1754.590	0.11	0.0001
50					
40					
30					
10					
0					
-10					
-20					
-30					

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	1710.760	1754.590	-1.12	0.0006
4.35				-1.22	0.0007

 Expanded measurement uncertainty is 10 Hz,  $k = 2$



**LTE band 5, 10MHz bandwidth QPSK(worst case of all bandwidths)**

**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.80	824.360	848.590		
50				-0.74	0.0009
40				-1.57	0.0019
30				-2.06	0.0025
10				-2.53	0.0030
0				-2.71	0.0032
-10				-2.99	0.0036
-20				-3.22	0.0039
-30				-3.53	0.0042

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	824.360	848.590	-3.82	0.0046
4.35				-3.82	0.0046

Expanded measurement uncertainty is 10 Hz,  $k = 2$

**LTE band 7, 20MHz bandwidth QPSK(worst case of all bandwidths)**

**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.80	2500.500	2569.520		
50				-1.87	0.0007
40				-2.95	0.0012
30				-3.70	0.0015
10				-4.26	0.0017
0				-4.45	0.0018
-10				-5.34	0.0021
-20				-6.04	0.0024
-30				-6.39	0.0025

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	2500.500	2569.520	-7.53	0.0030
4.35				-7.72	0.0030

Expanded measurement uncertainty is 10 Hz,  $k = 2$



**LTE band 12, 10MHz bandwidth QPSK(worst case of all bandwidths)**

**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.80	699.450	715.550		
50				-0.22	0.0003
40				-0.28	0.0004
30				-0.50	0.0007
10				-0.53	0.0008
0				-0.70	0.0010
-10				-0.61	0.0009
-20				-0.50	0.0007
-30				-0.46	0.0006

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	699.450	715.550	-0.35	0.0005
4.35				-0.41	0.0006

Expanded measurement uncertainty is 10 Hz,  $k = 2$

**LTE band 17, 10MHz bandwidth QPSK(worst case of all bandwidths)**

**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.80	704.380	715.880		
50				-0.14	0.0002
40				-0.28	0.0004
30				0.06	0.0001
10				-0.14	0.0002
0				-0.25	0.0004
-10				-0.24	0.0003
-20				-0.13	0.0002
-30				-0.22	0.0003

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	704.380	715.880	-0.21	0.0003
4.35				-0.11	0.0002

Expanded measurement uncertainty is 10 Hz,  $k = 2$



**LTE band 25, 20MHz bandwidth QPSK(worst case of all bandwidths)**

**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.80	1850.790	1914.260		
50				-0.32	0.0002
40				0.21	0.0001
30				0.68	0.0004
10				1.17	0.0006
0				1.81	0.0010
-10				1.10	0.0006
-20				0.93	0.0005
-30				1.32	0.0007

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	1850.790	1914.260	1.61	0.0009
4.35				1.47	0.0008

Expanded measurement uncertainty is 10 Hz,  $k = 2$

**LTE band 26 PART22, 15MHz bandwidth QPSK(worst case of all bandwidths)**

**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.80	824.520	848.450		
50				-0.32	0.0004
40				-0.59	0.0007
30				-0.89	0.0011
10				-0.93	0.0011
0				-0.99	0.0012
-10				-1.23	0.0015
-20				-1.12	0.0013
-30				-1.11	0.0013

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	824.520	848.450	-1.27	0.0015
4.35				-1.47	0.0018

Expanded measurement uncertainty is 10 Hz,  $k = 2$





**LTE band 26 PART90, 10MHz bandwidth QPSK(worst case of all bandwidths)**

**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.80	814.380	823.790		
50				-0.63	0.0008
40				-0.73	0.0009
30				-0.42	0.0005
10				-0.46	0.0006
0				-0.70	0.0009
-10				-0.57	0.0007
-20				-0.30	0.0004
-30				-0.65	0.0008

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	814.380	823.790	-0.19	0.0002
4.35				-0.39	0.0005

Expanded measurement uncertainty is 10 Hz,  $k = 2$

**LTE band 38, 20MHz bandwidth QPSK(worst case of all bandwidths)**

**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.80	2570.600	2619.400		
50				-1.98	0.0008
40				-2.92	0.0011
30				-4.55	0.0018
10				-5.50	0.0021
0				-6.15	0.0024
-10				-6.77	0.0026
-20				-7.89	0.0030
-30				-9.55	0.0037

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	2570.600	2619.400	-10.15	0.0039
4.35				-11.49	0.0044

Expanded measurement uncertainty is 10 Hz,  $k = 2$

**LTE band 41, 20MHz bandwidth QPSK(worst case of all bandwidths)**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.80	2535.520	2654.420		
50				5.67	0.0022
40				10.80	0.0042
30				14.23	0.0055
10				18.01	0.0069
0				22.50	0.0087
-10				25.76	0.0099
-20				29.28	0.0113
-30				32.22	0.0124

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	2535.520	2654.420	34.65	0.0134
4.35				37.15	0.0143

 Expanded measurement uncertainty is 10 Hz,  $k = 2$ 
**LTE band 66, 20MHz bandwidth QPSK(worst case of all bandwidths)**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.80	1710.770	1779.440		
50				-0.69	0.0004
40				-1.10	0.0006
30				-1.95	0.0011
10				-2.17	0.0012
0				-1.51	0.0009
-10				-1.27	0.0007
-20				-1.63	0.0009
-30				-0.94	0.0005

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	1710.770	1779.440	-1.14	0.0007
4.35				-0.58	0.0003

 Expanded measurement uncertainty is 10 Hz,  $k = 2$

## A.4 OCCUPIED BANDWIDTH

### Reference

FCC: CFR Part 2.1049, 22.917, 24.238, 27.53, 90.1215.

### A.4.1 Occupied Bandwidth Results

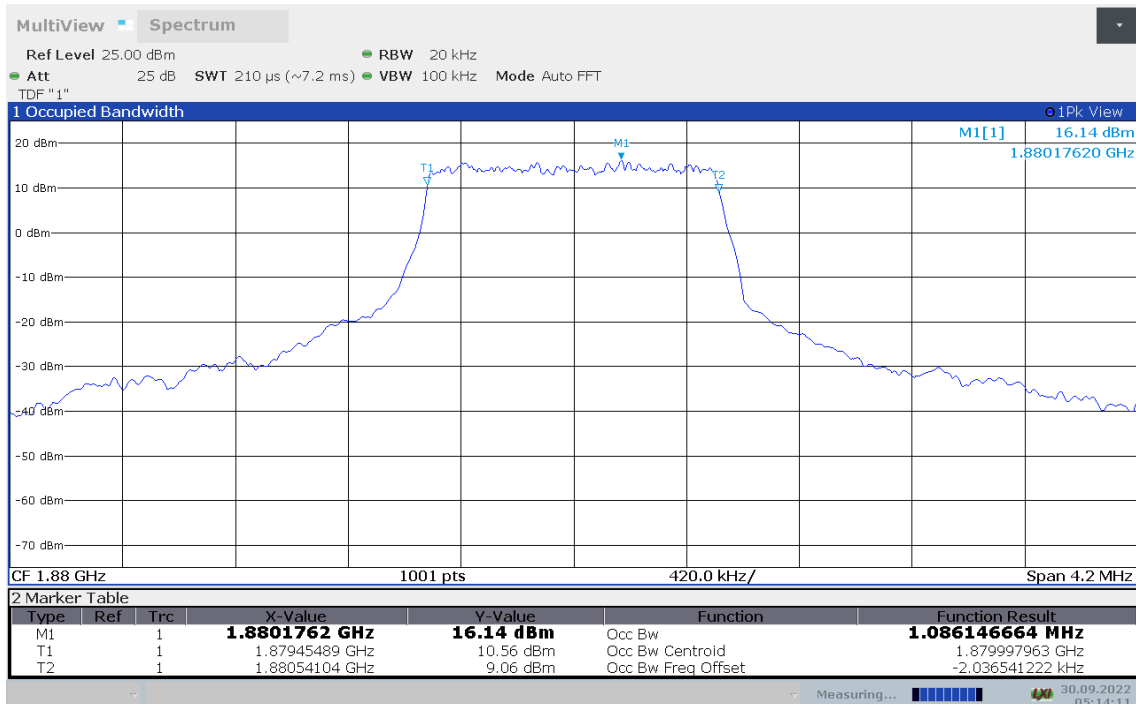
Occupied bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the extreme and mid frequencies of the US Cellular/PCS frequency bands. The table below lists the measured 99% BW. Spectrum analyzer plots are included on the following pages.

- The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (i.e., two to five times the OBW).
- The nominal IF filter bandwidth (3 dB 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.
- Set the reference level of the instrument as required to keep the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope must be at least  $10\log(\text{OBW} / \text{RBW})$  below the reference level.
- Set the detection mode to peak, and the trace mode to max hold.
- Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

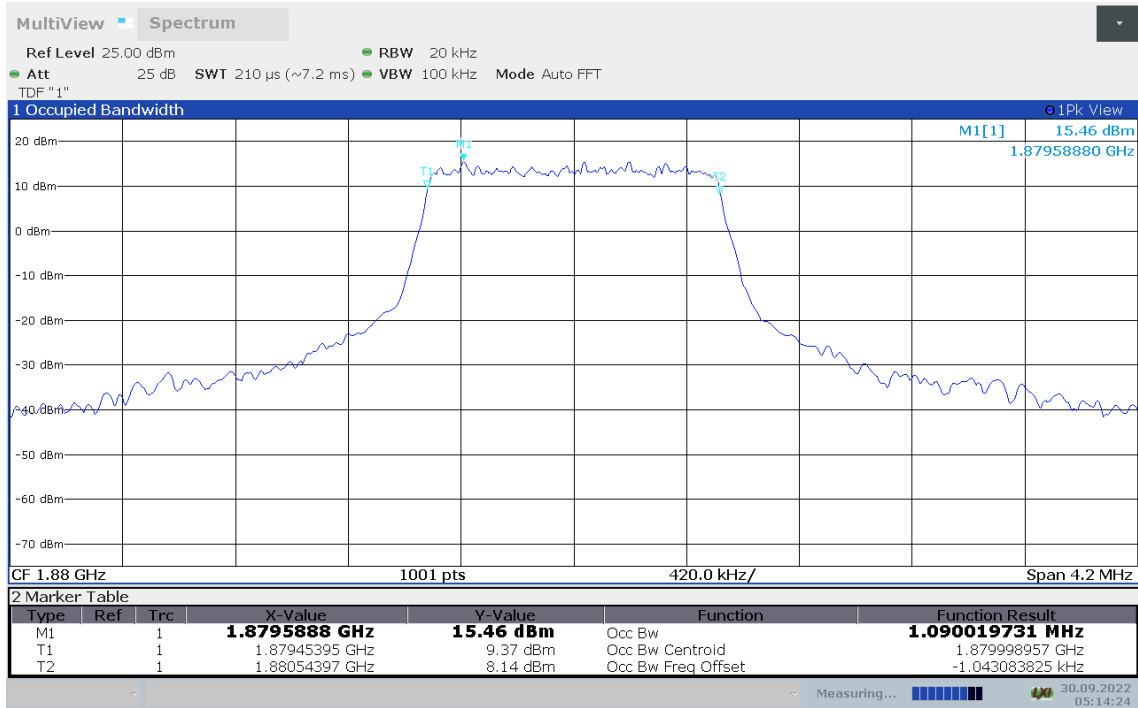
### LTE band 2, 1.4MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)( kHz)		
	QPSK	16QAM	64QAM
1880.0	1.086	1.090	1.094

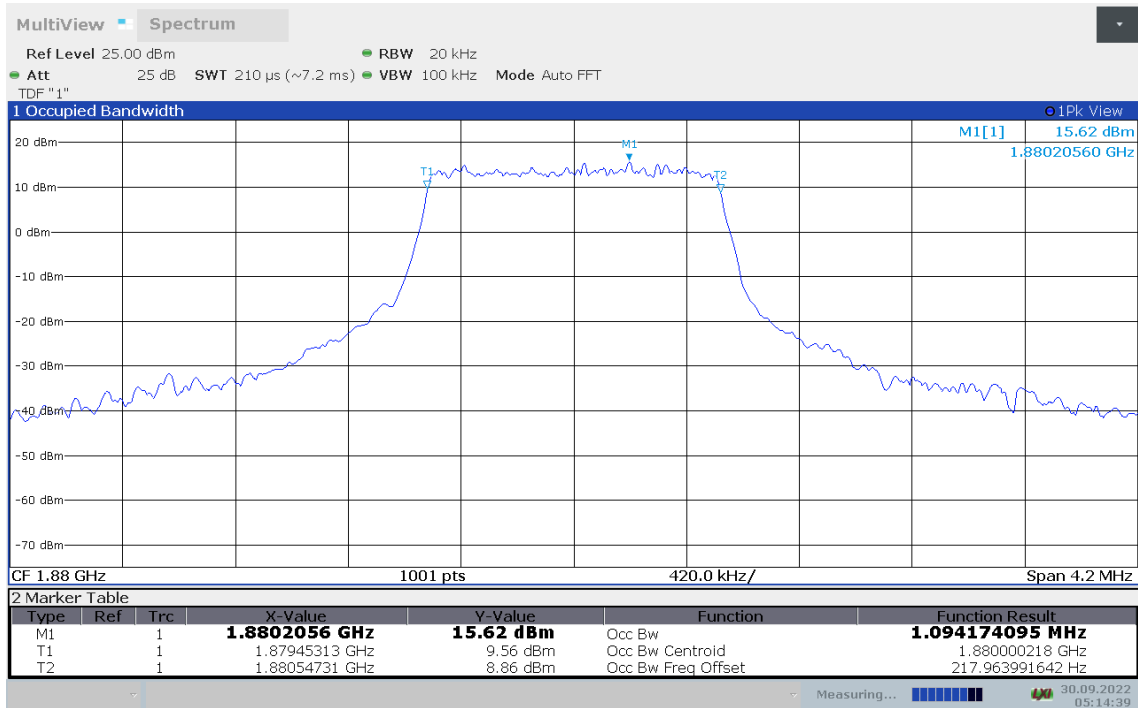
### LTE band 2, 1.4MHz Bandwidth, QPSK (99% BW)



**LTE band 2, 1.4MHz Bandwidth, 16QAM (99% BW)**



**LTE band 2, 1.4MHz Bandwidth, 64QAM (99% BW)**

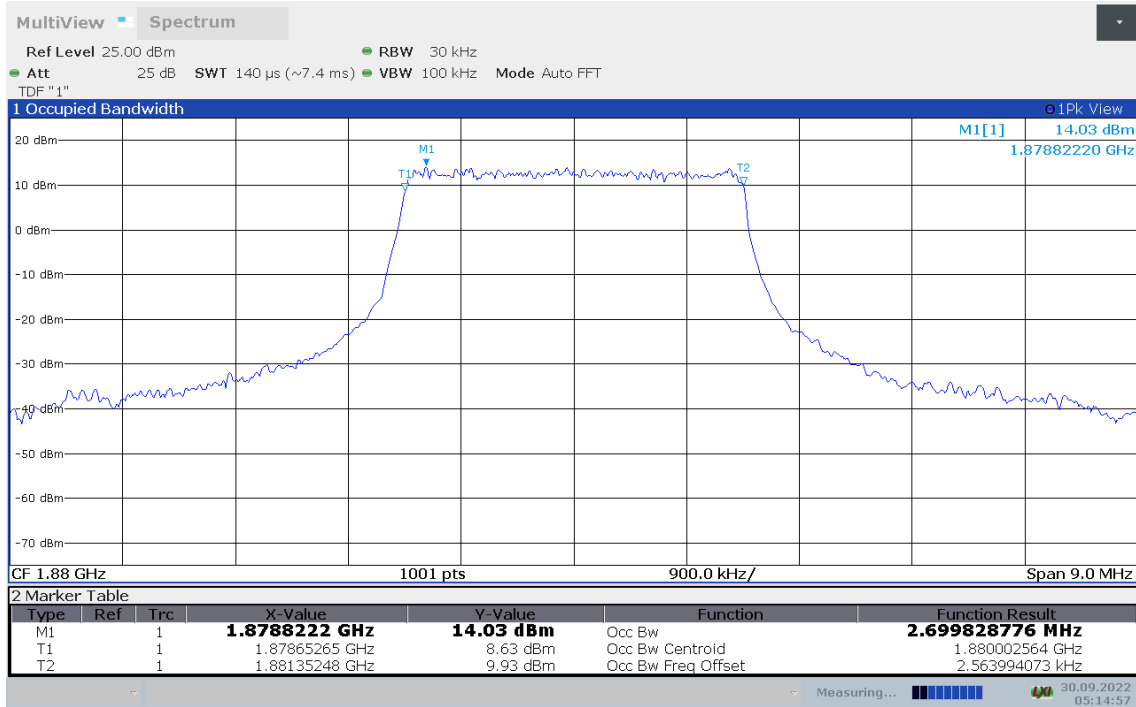




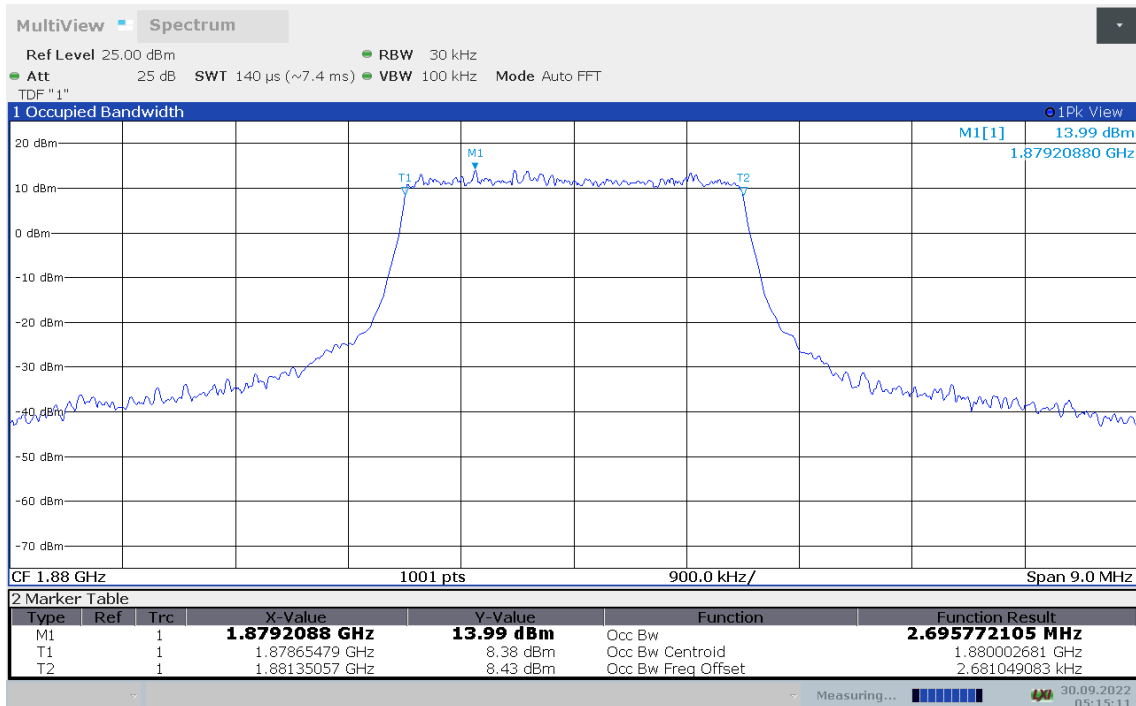
**LTE band 2, 3MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)( kHz)		
1880.0	QPSK	16QAM	64QAM
	2.700	2.696	2.692

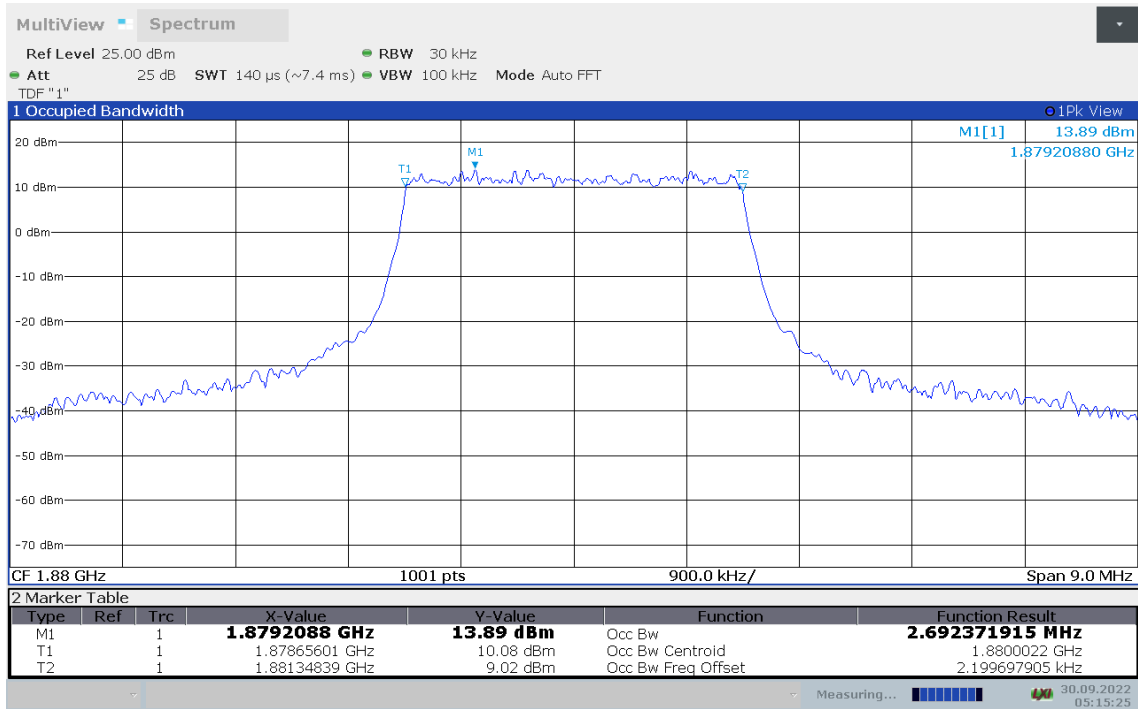
**LTE band 2, 3MHz Bandwidth, QPSK (99% BW)**



**LTE band 2, 3MHz Bandwidth, 16QAM (99% BW)**



**LTE Band 2, 3MHz Bandwidth, 64QAM (99% BW)**

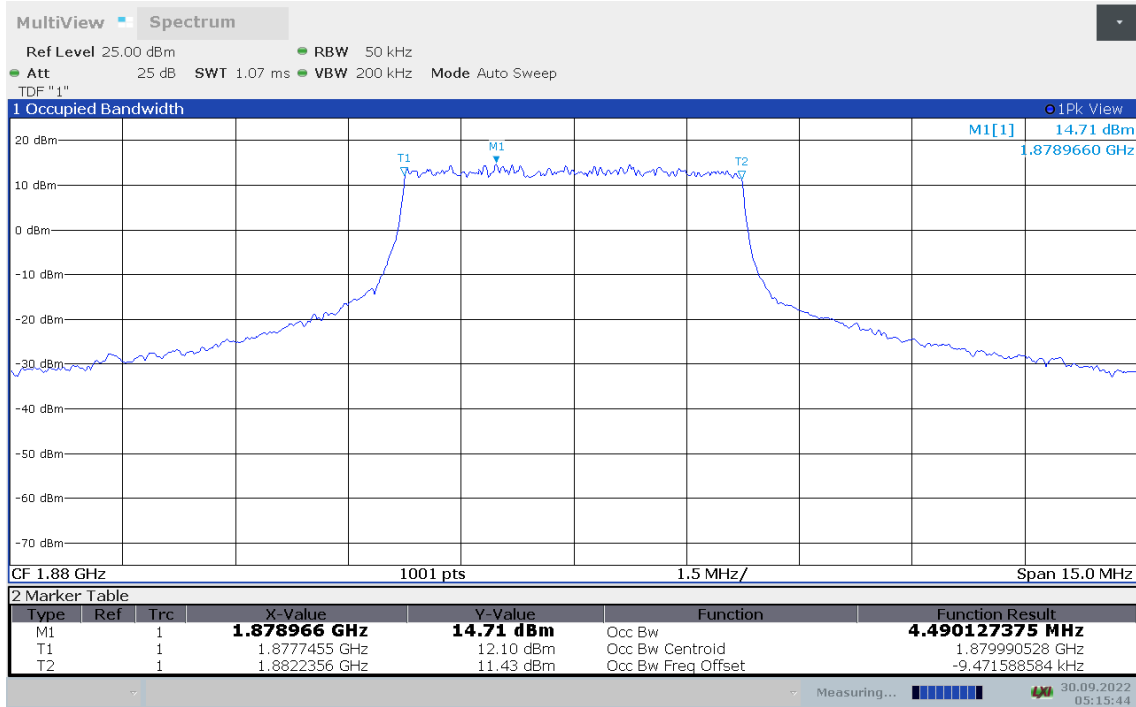




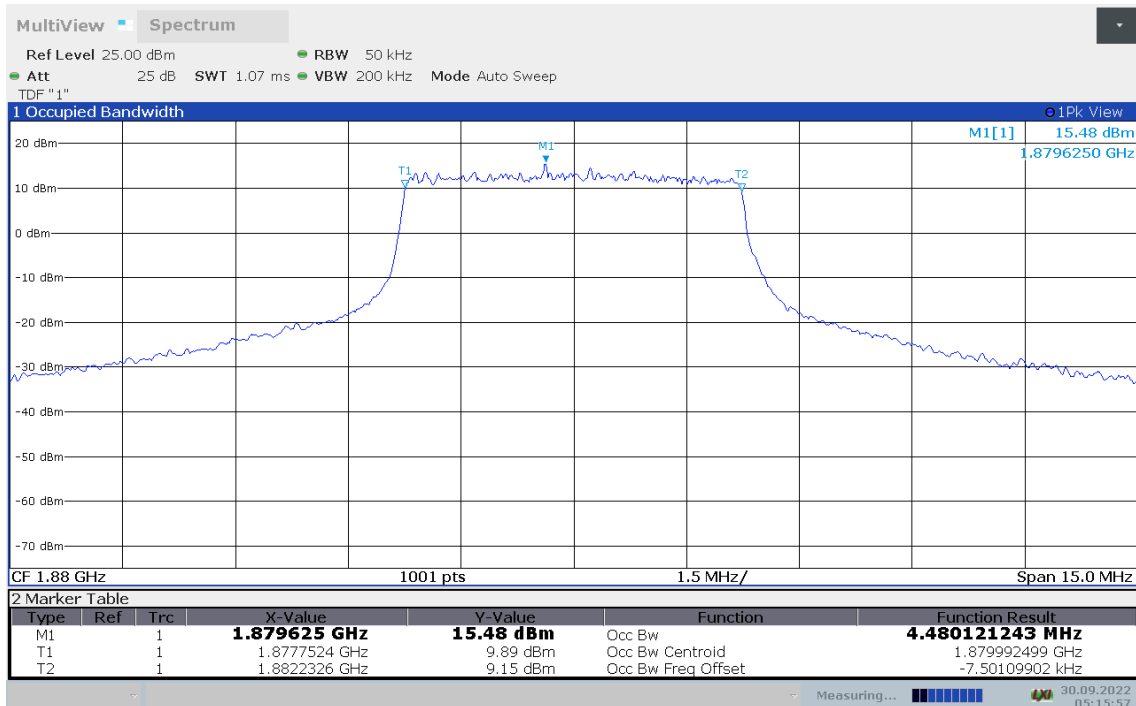
**LTE band 2, 5MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)( kHz)		
1880.0	QPSK	16QAM	64QAM
	4.490	4.480	4.480

**LTE band 2, 5MHz Bandwidth, QPSK (99% BW)**

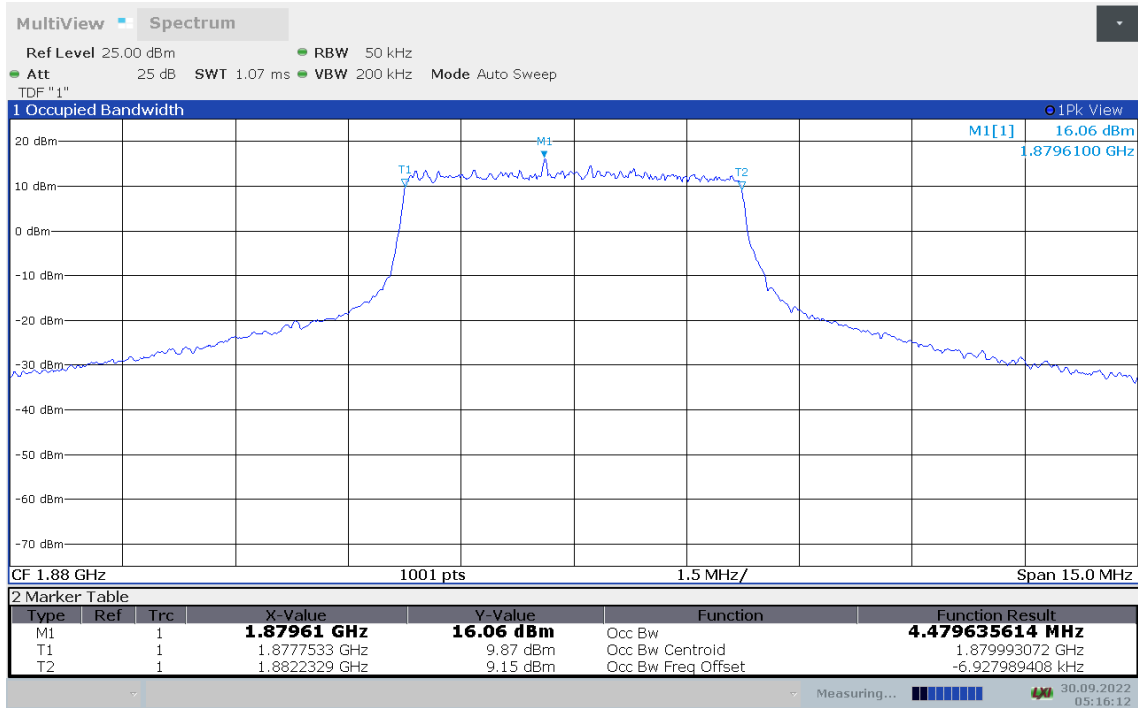


**LTE band 2, 5MHz Bandwidth,16QAM (99% BW)**





LTE Band 2, 5MHz Bandwidth,64QAM (99% BW)



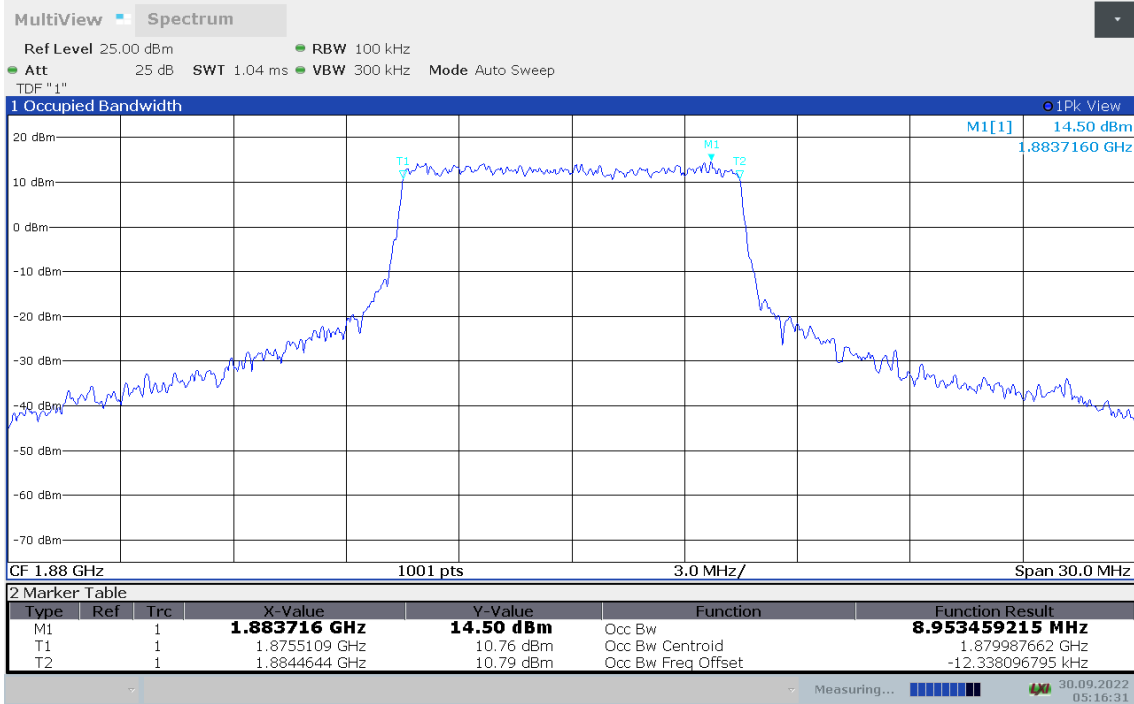




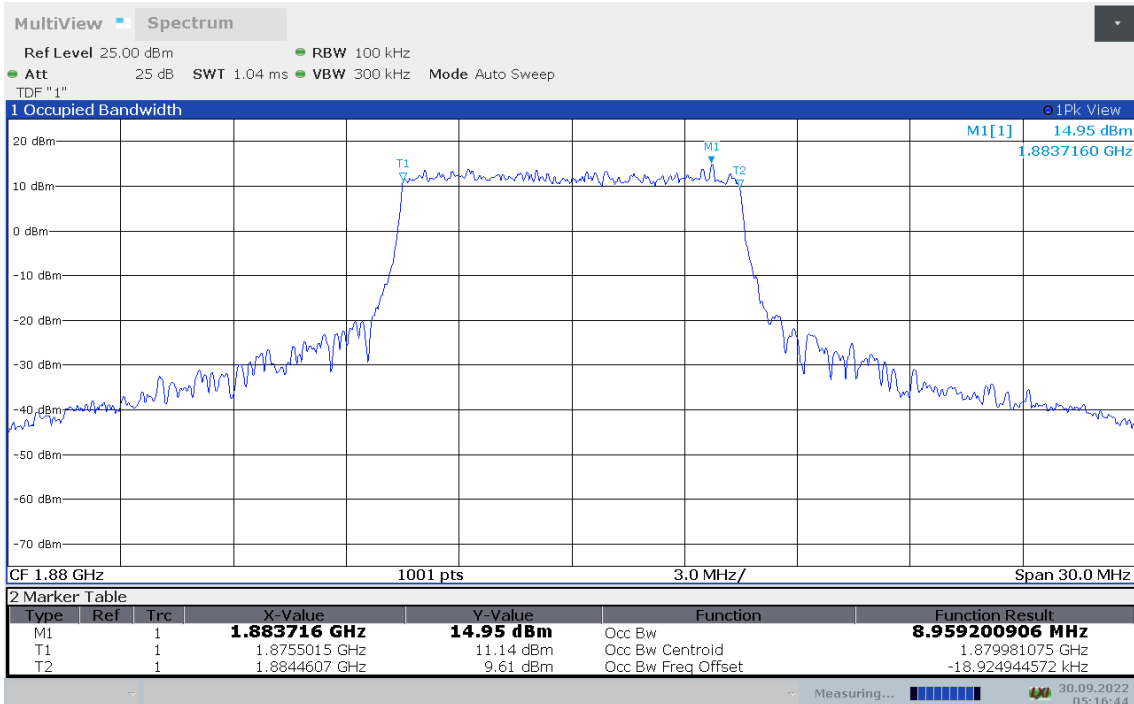
**LTE band 2, 10MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)( kHz)		
1880.0	QPSK	16QAM	64QAM
	8.953	8.959	8.946

**LTE band 2, 10MHz Bandwidth, QPSK (99% BW)**

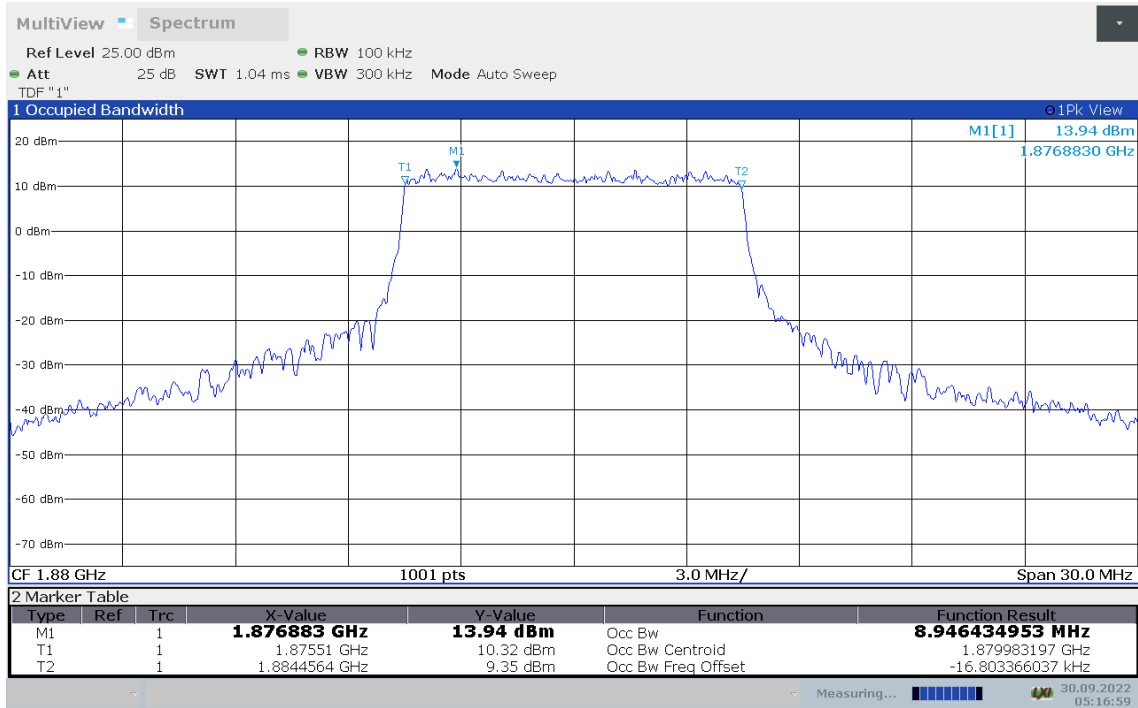


**LTE band 2, 10MHz Bandwidth, 16QAM (99% BW)**





LTE Band 2, 10MHz Bandwidth, 64QAM (99% BW)

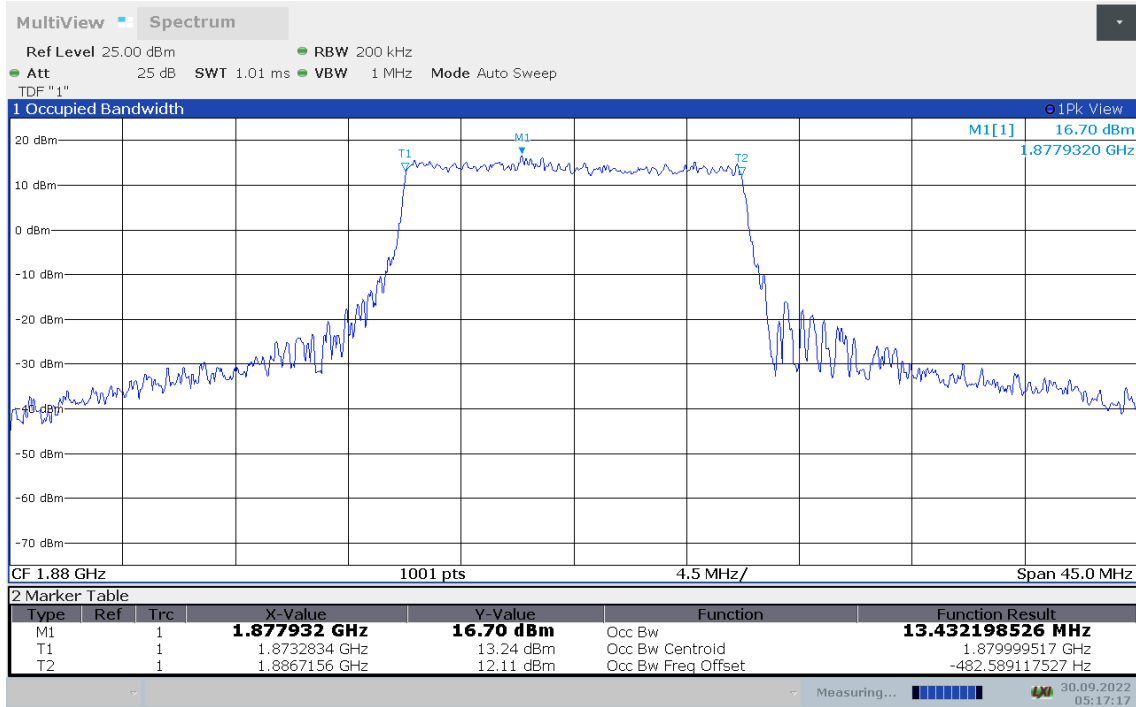




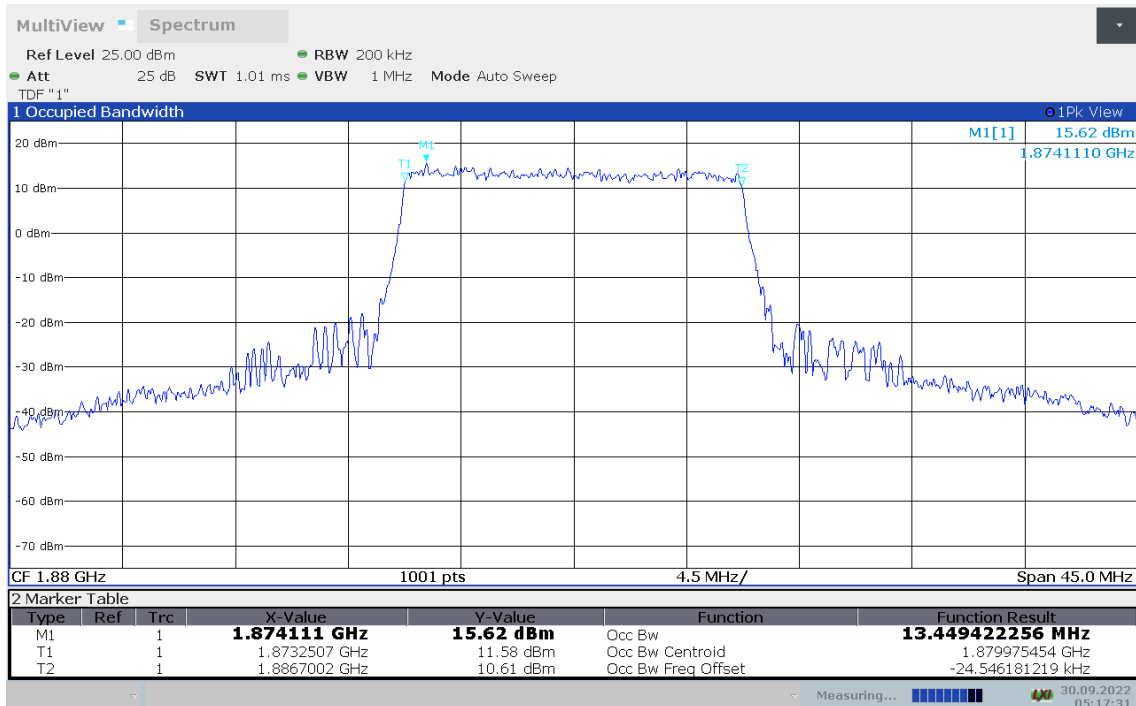
**LTE band 2, 15MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)( kHz)		
1880.0	QPSK	16QAM	64QAM
	13.432	13.449	13.437

**LTE band 2, 15MHz Bandwidth, QPSK (99% BW)**

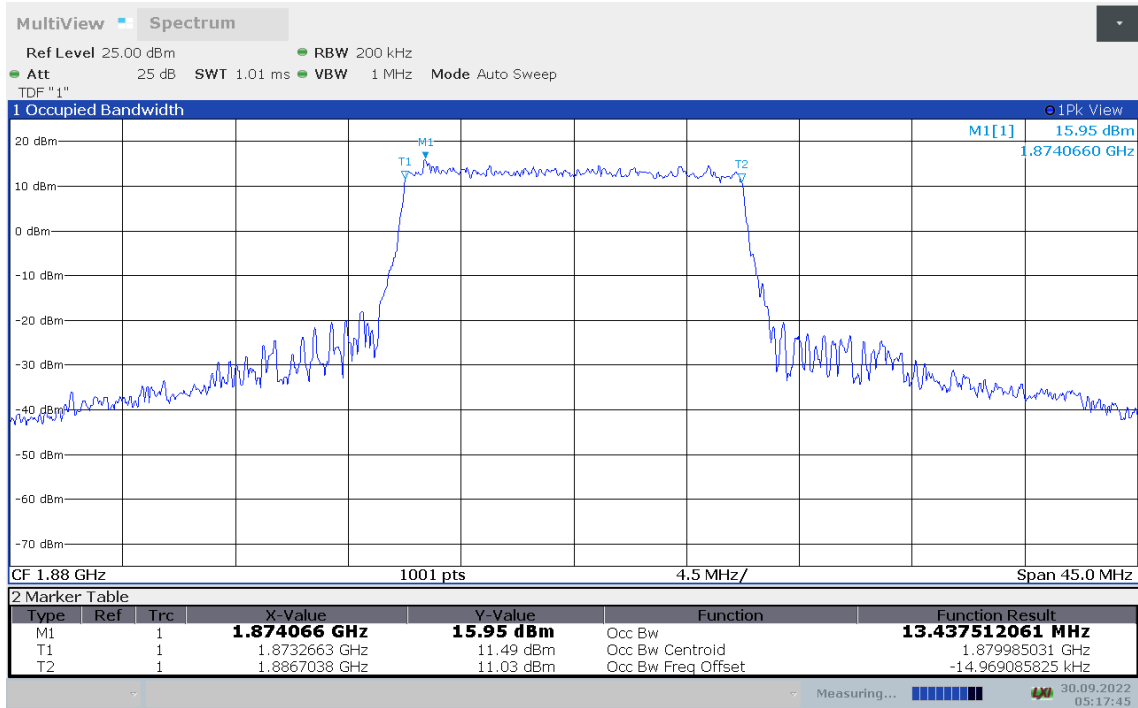


**LTE band 2, 15MHz Bandwidth, 16QAM (99% BW)**





LTE Band 2, 15MHz Bandwidth, 64QAM (99% BW)

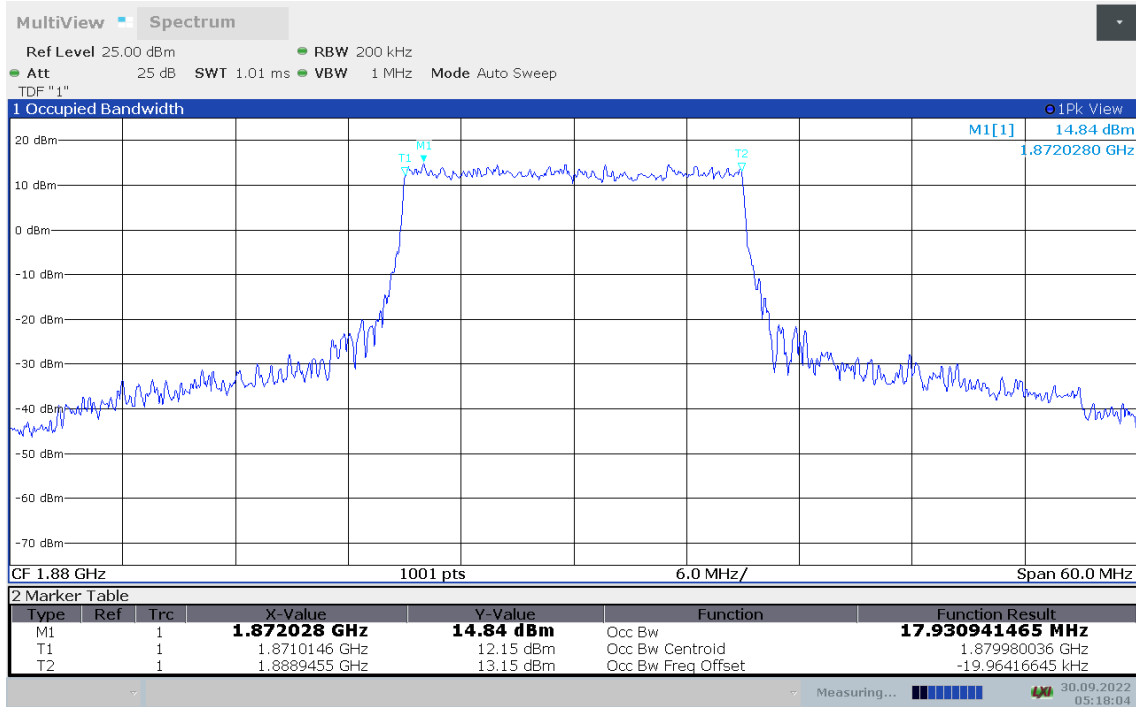




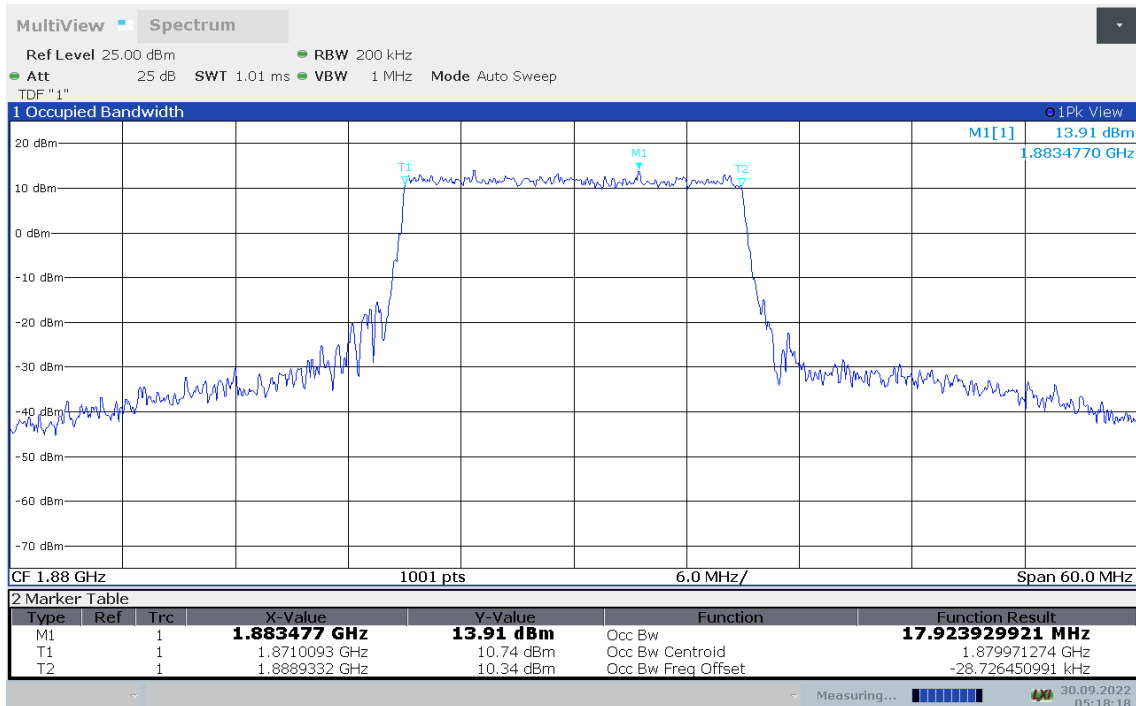
**LTE band 2, 20MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)( kHz)		
1880.0	QPSK	16QAM	64QAM
	17.930	17.924	17.926

**LTE band 2, 20MHz Bandwidth, QPSK (99% BW)**

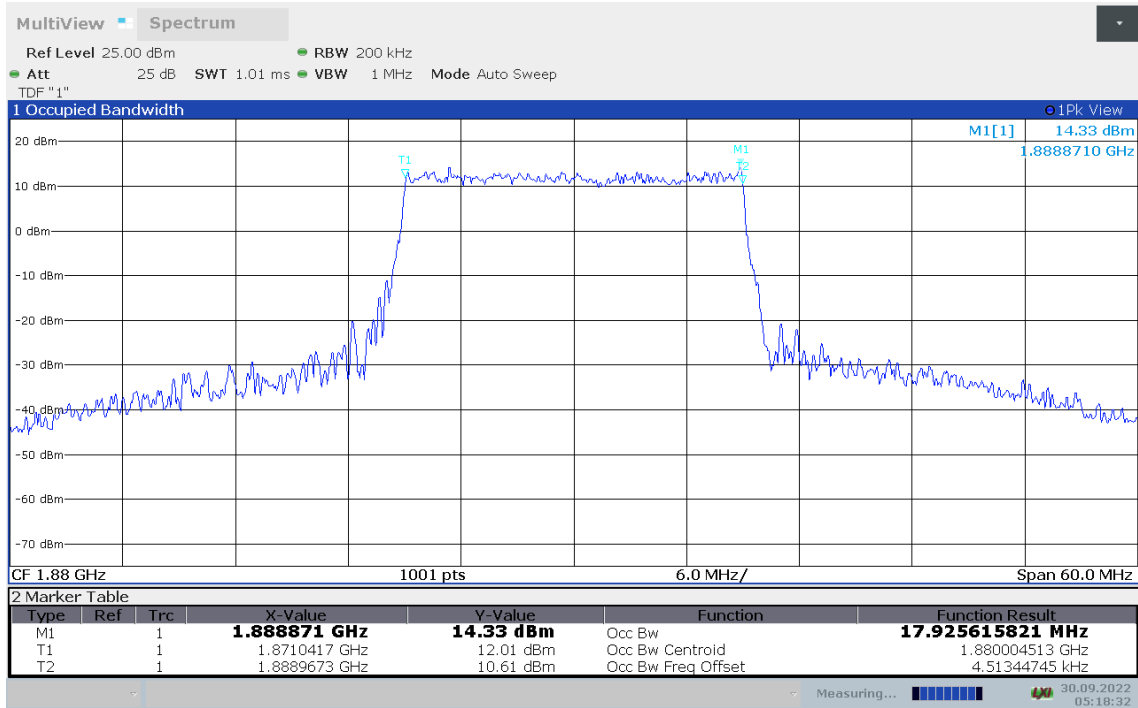


**LTE band 2, 20MHz Bandwidth, 16QAM (99% BW)**





LTE Band 2, 20MHz Bandwidth, 64QAM (99% BW)

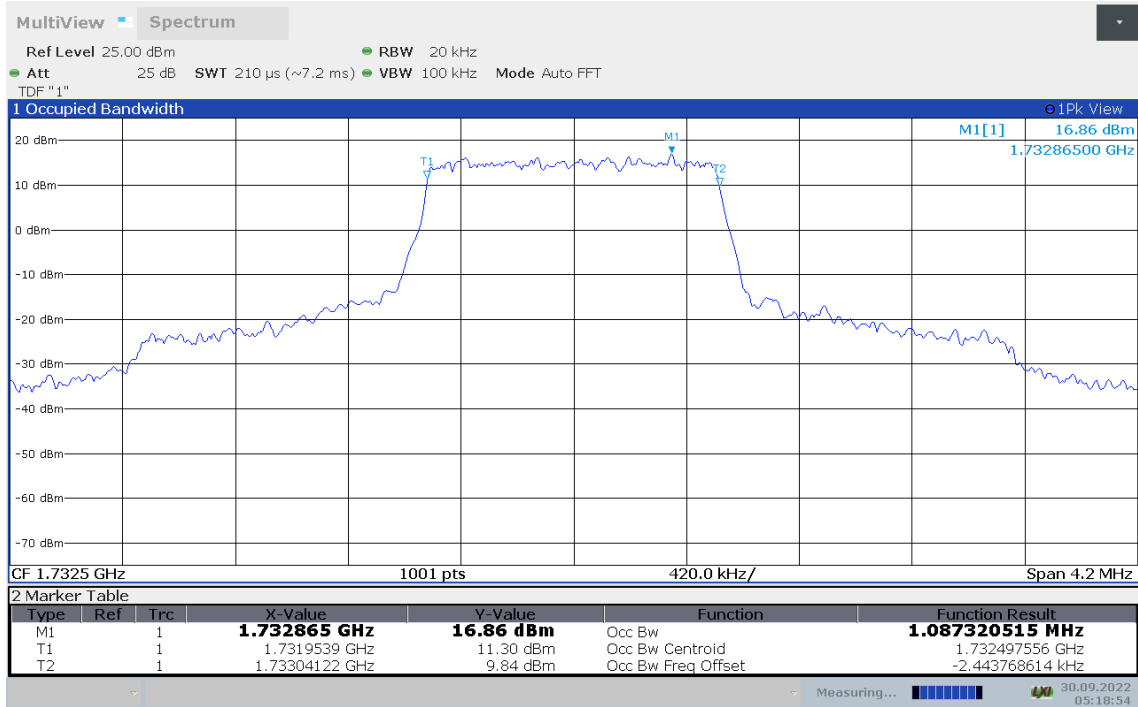




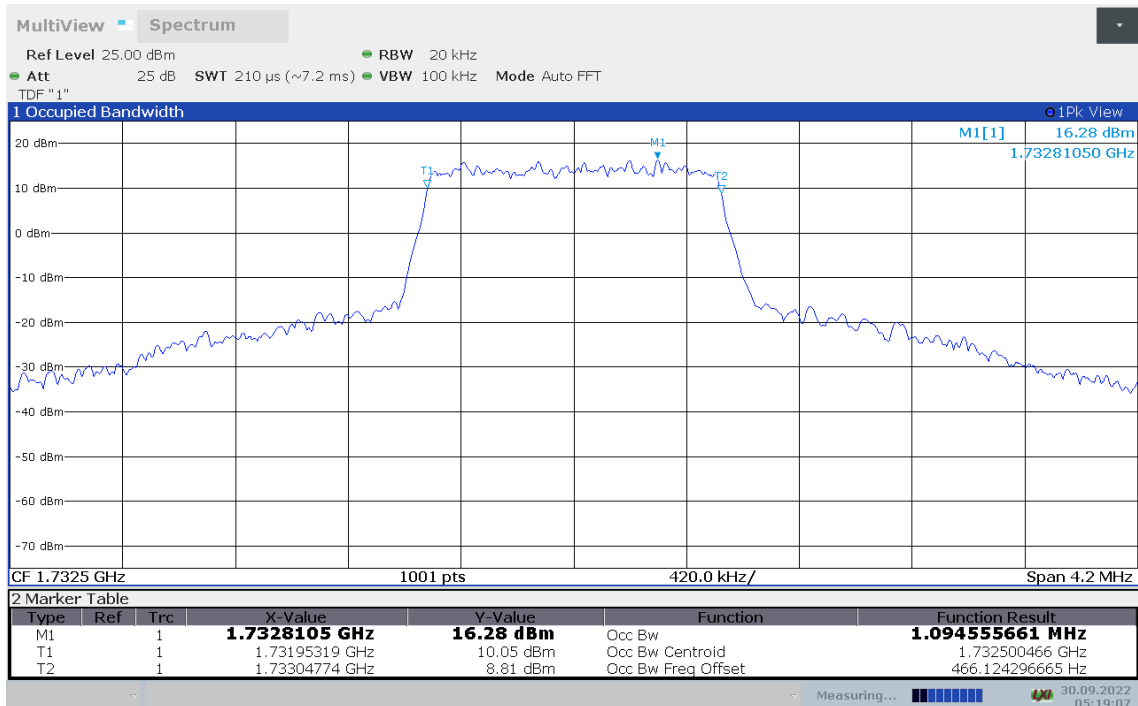
**LTE band 4, 1.4MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1732.5	QPSK	16QAM	64QAM
	1.087	1.095	1.093

**LTE band 4, 1.4MHz Bandwidth, QPSK (99% BW)**

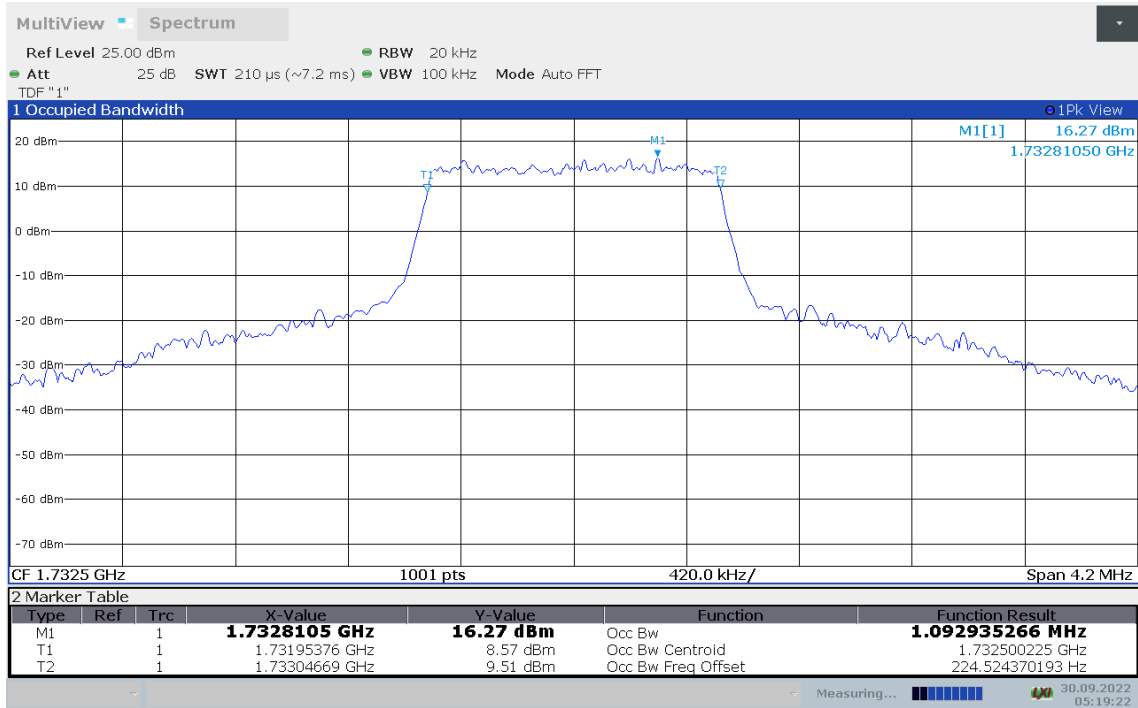


**LTE band 4, 1.4MHz Bandwidth, 16QAM (99% BW)**





LTE band 4, 1.4MHz Bandwidth, 64QAM (99% BW)



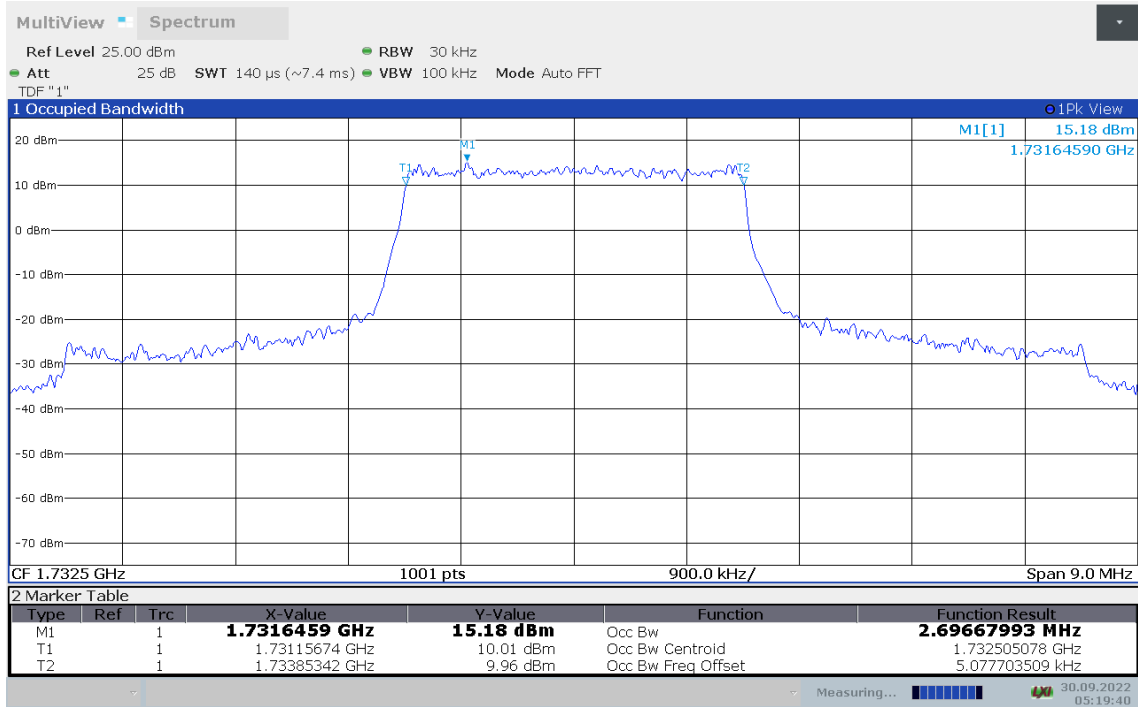




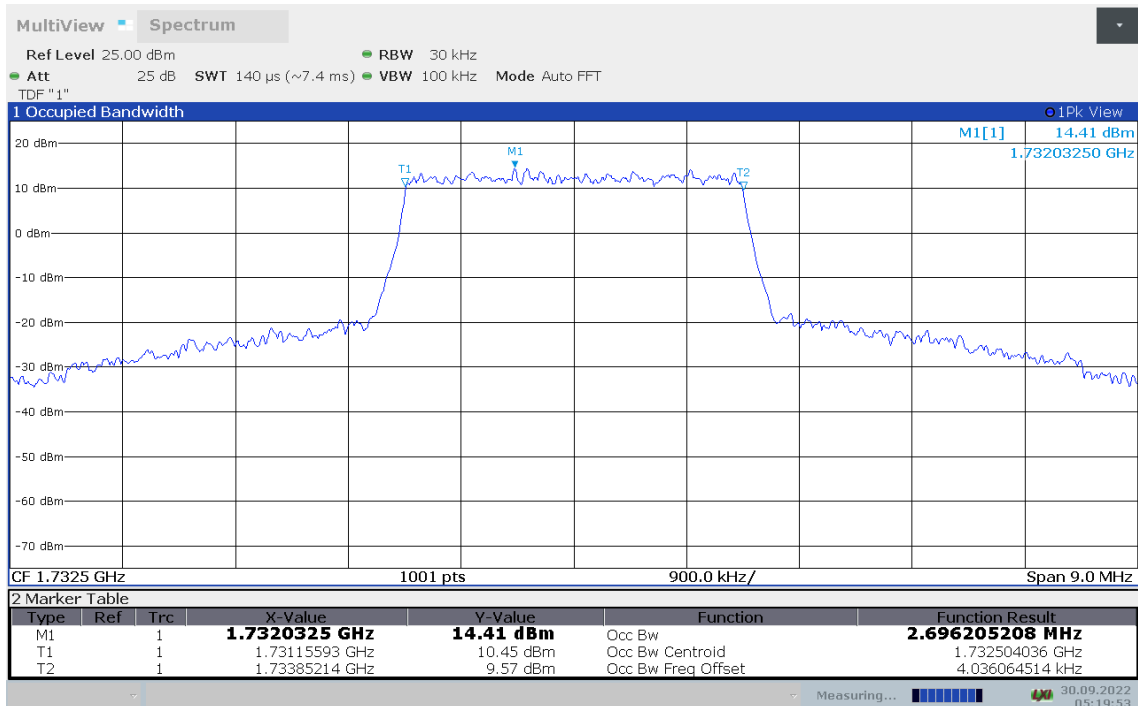
**LTE band 4, 3MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1732.5	QPSK	16QAM	64QAM
	2.697	2.696	2.687

**LTE band 4, 3MHz Bandwidth, QPSK (99% BW)**

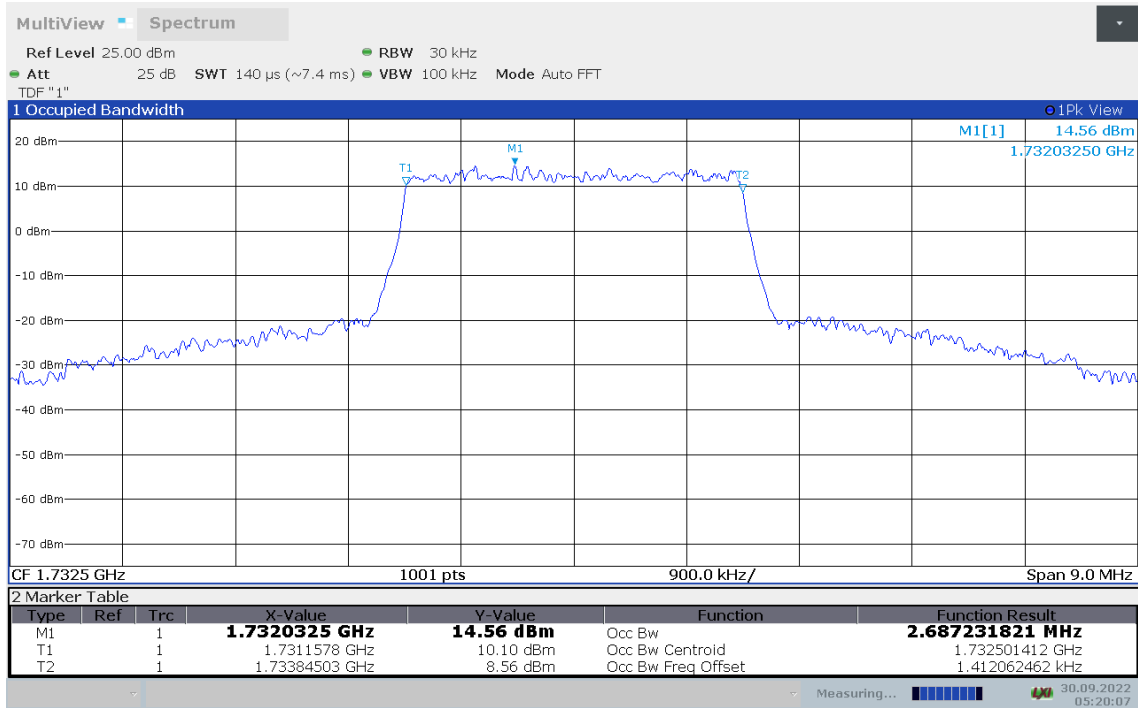


**LTE band 4, 3MHz Bandwidth, 16QAM (99% BW)**





LTE band 4, 3MHz Bandwidth, 64QAM (99% BW)

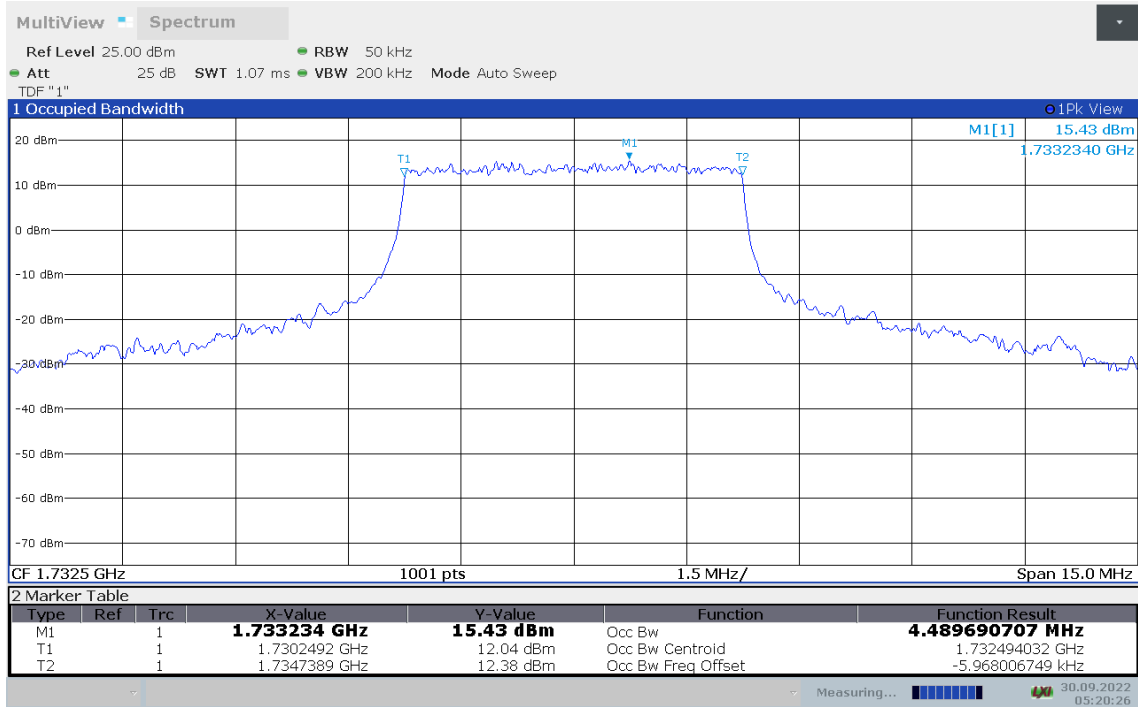




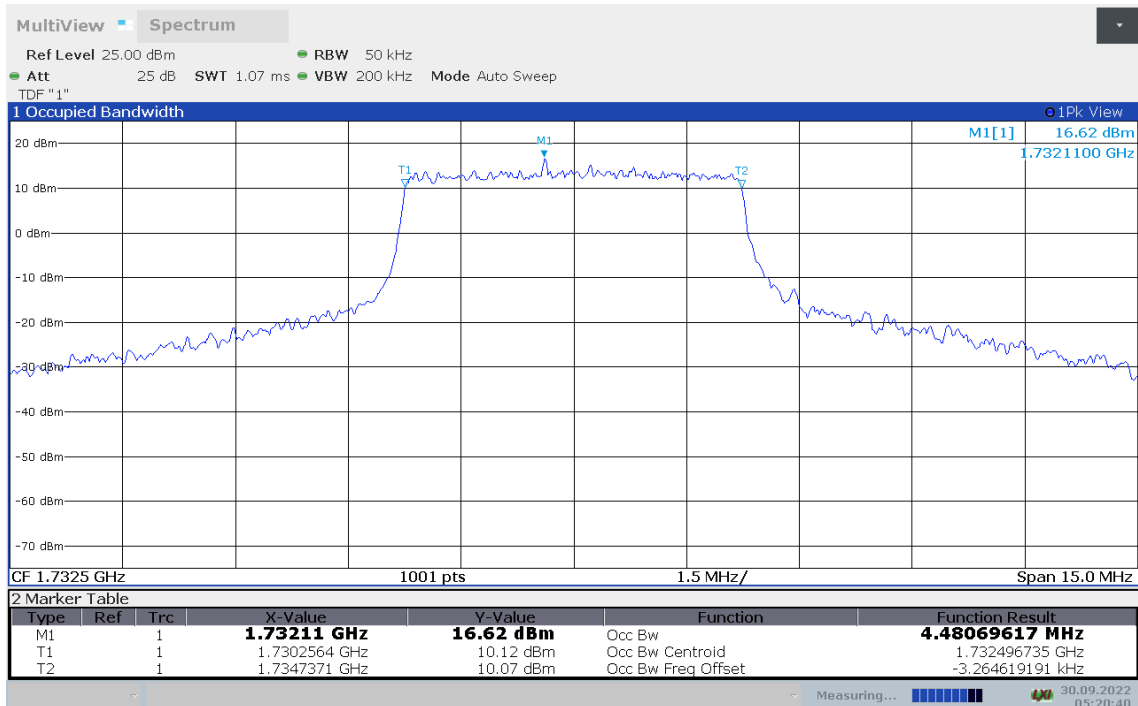
**LTE band 4, 5MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
	1732.5	QPSK	16QAM
4.490		4.481	4.484

**LTE band 4, 5MHz Bandwidth, QPSK (99% BW)**

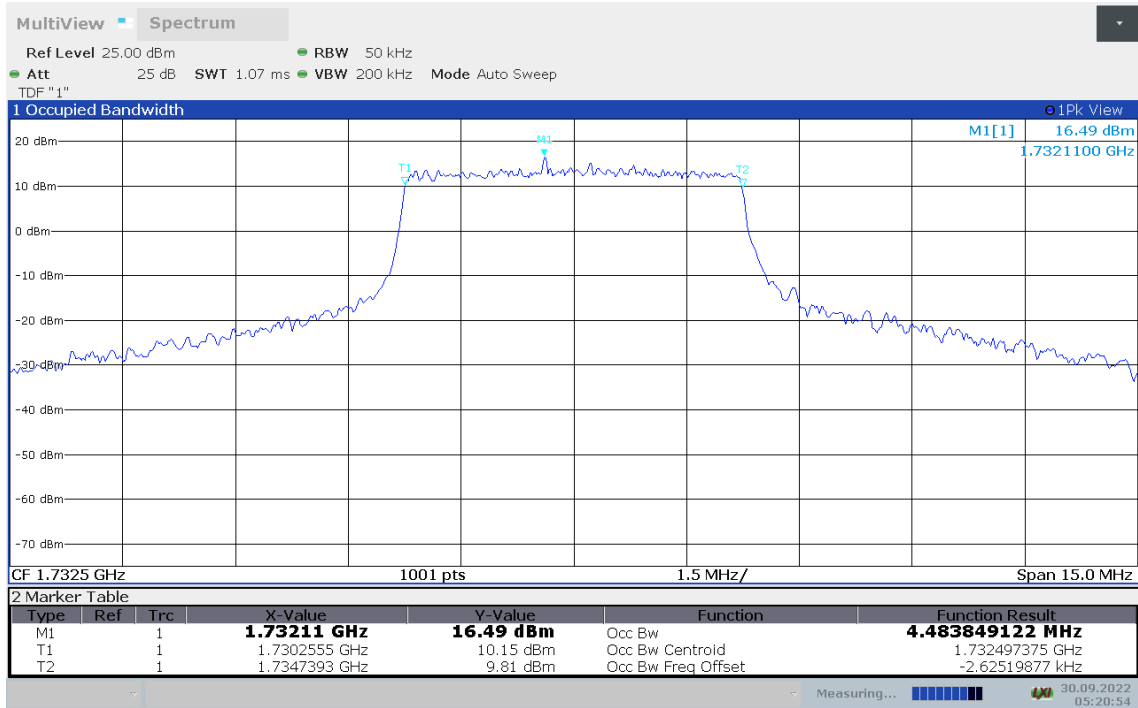


**LTE band 4, 5MHz Bandwidth, 16QAM (99% BW)**





LTE band 4, 5MHz Bandwidth,64QAM (99% BW)

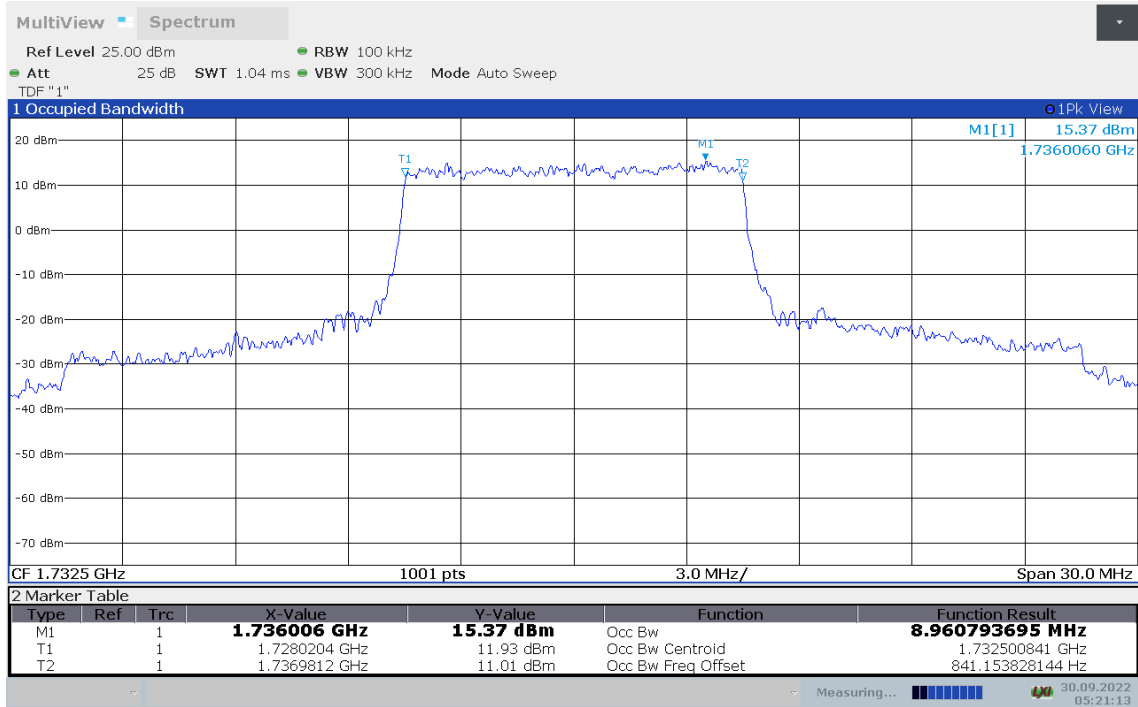




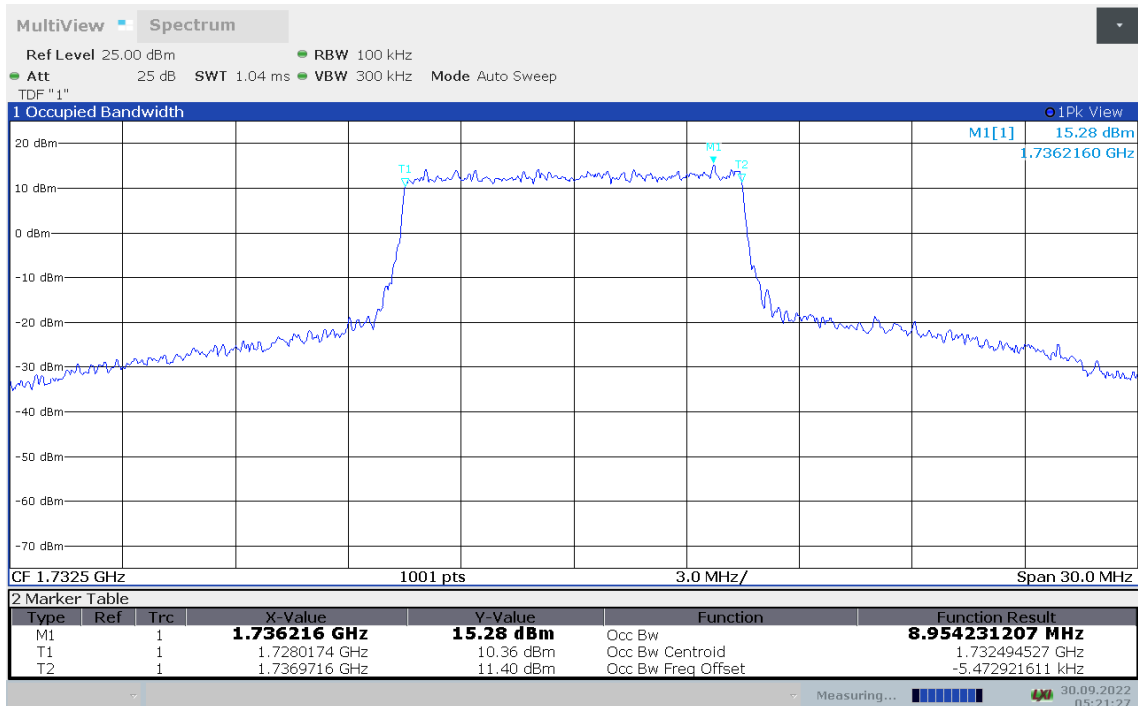
**LTE band 4, 10MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1732.5	QPSK	16QAM	64QAM
	8.961	8.954	8.952

**LTE band 4, 10MHz Bandwidth, QPSK (99% BW)**

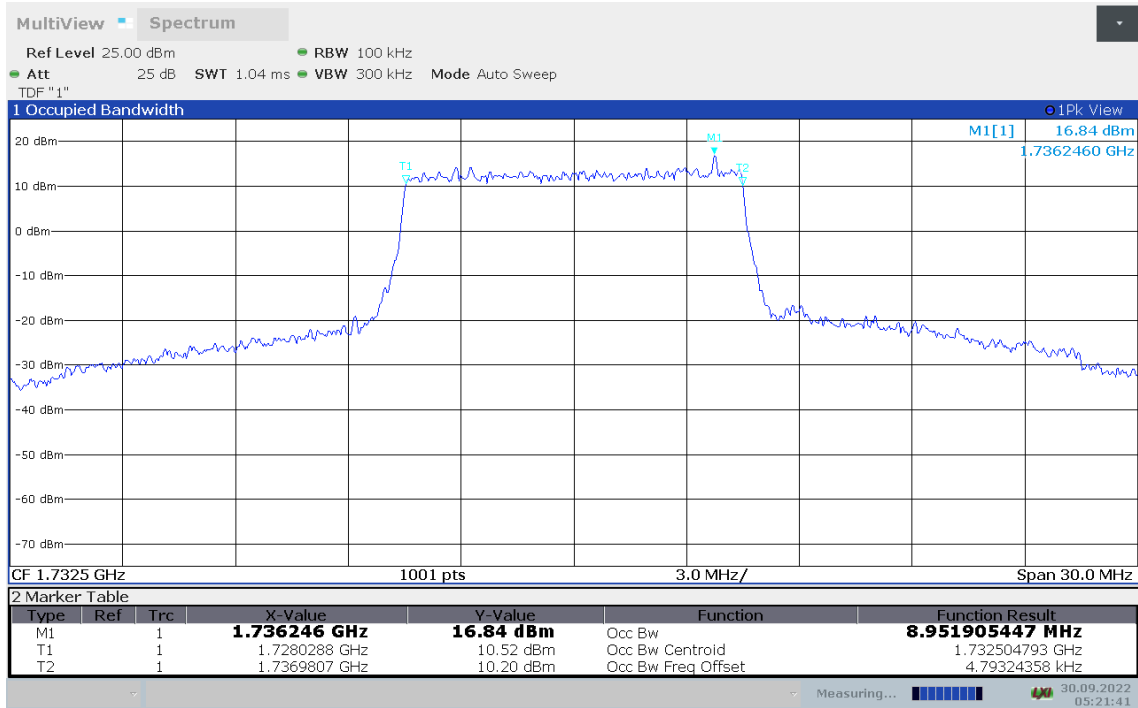


**LTE band 4, 10MHz Bandwidth, 16QAM (99% BW)**





LTE band 4, 10MHz Bandwidth, 64QAM (99% BW)

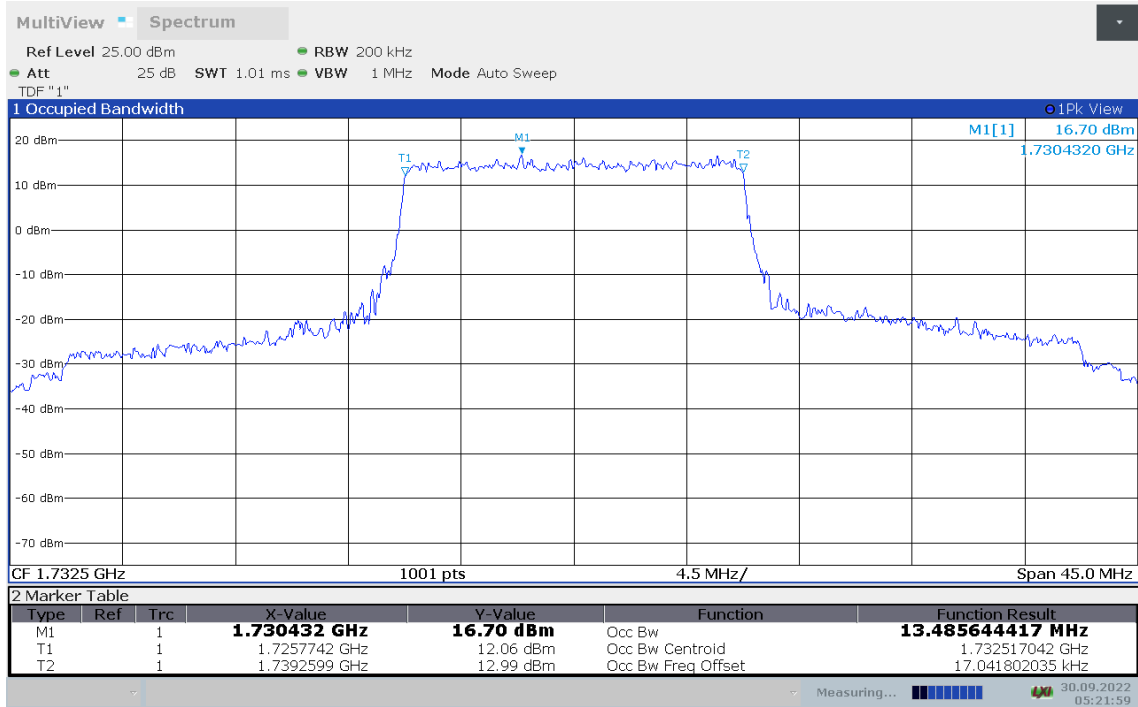




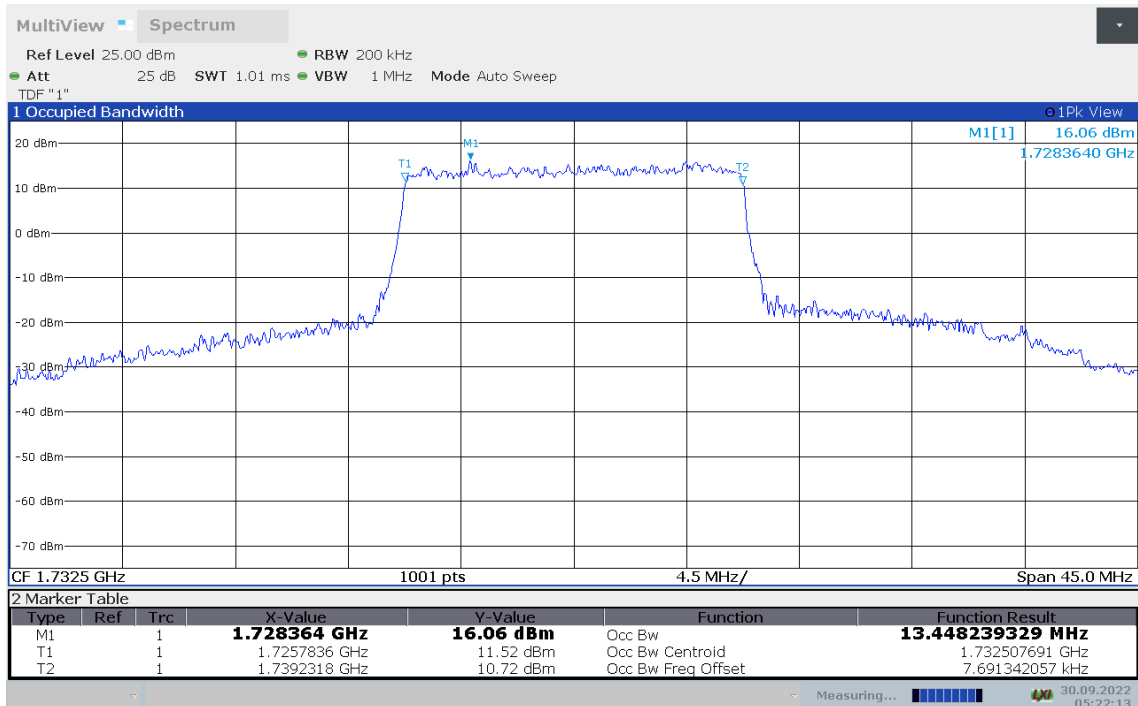
**LTE band 4, 15MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1732.5	QPSK	16QAM	64QAM
	13.486	13.448	13.438

**LTE band 4, 15MHz Bandwidth, QPSK (99% BW)**

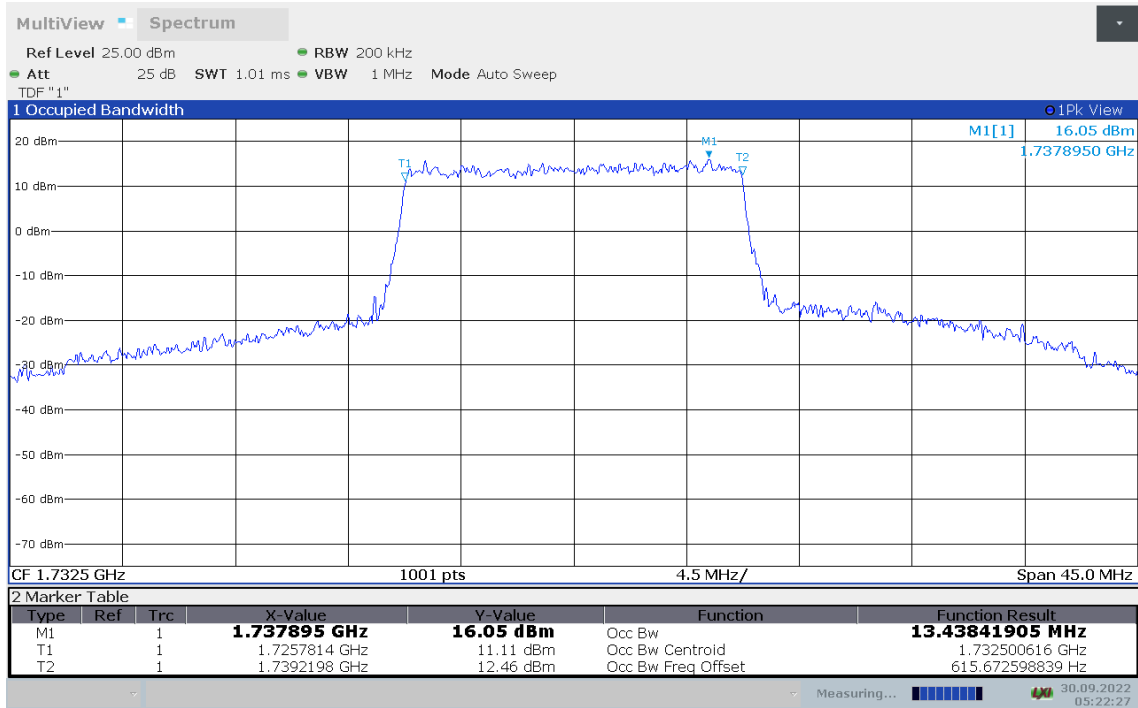


**LTE band 4, 15MHz Bandwidth, 16QAM (99% BW)**





LTE band 4, 15MHz Bandwidth, 64QAM (99% BW)



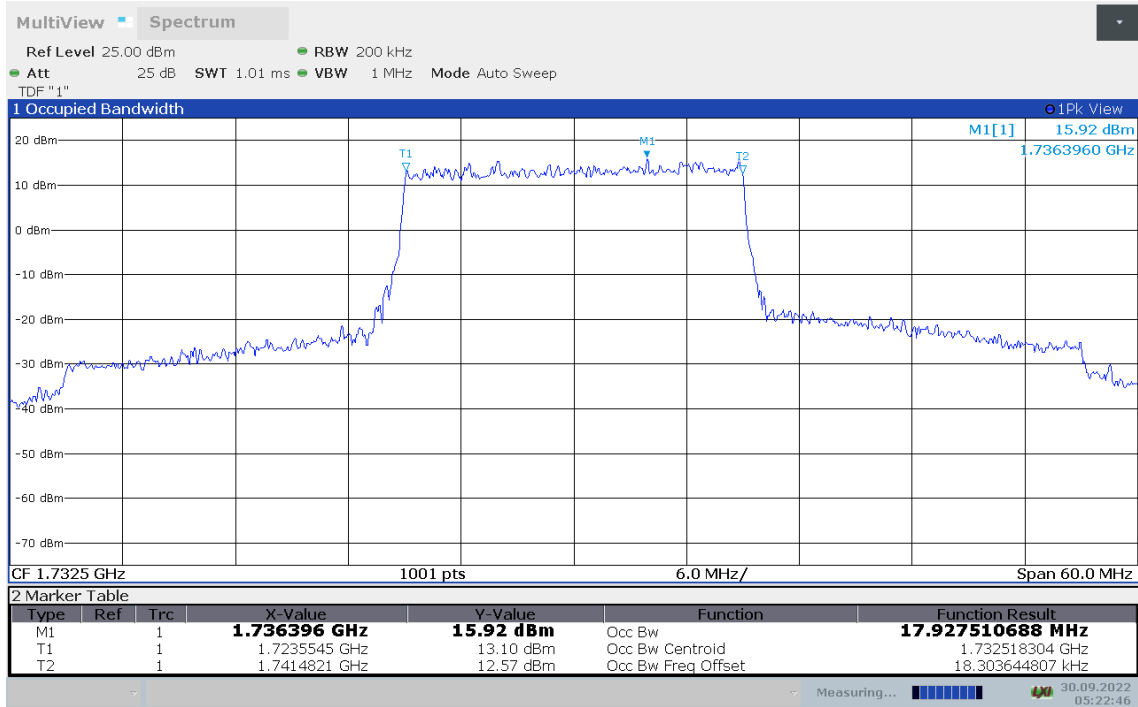




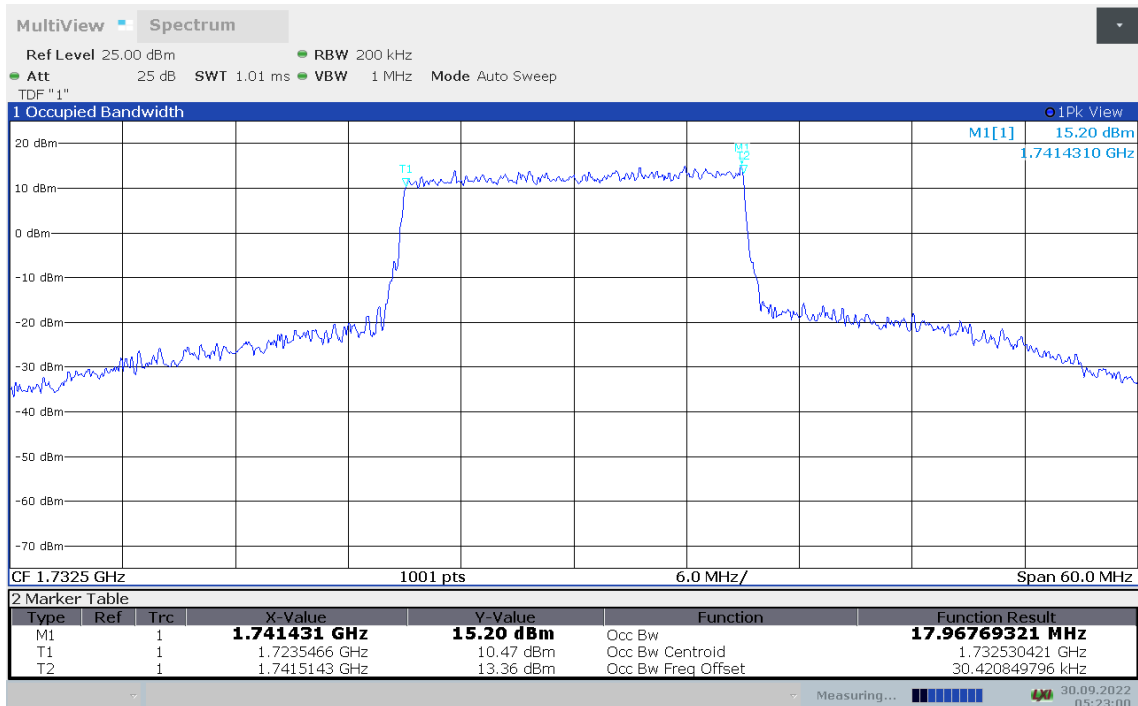
**LTE band 4, 20MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1732.5	QPSK	16QAM	64QAM
	17.927	17.968	17.967

**LTE band 4, 20MHz Bandwidth, QPSK (99% BW)**

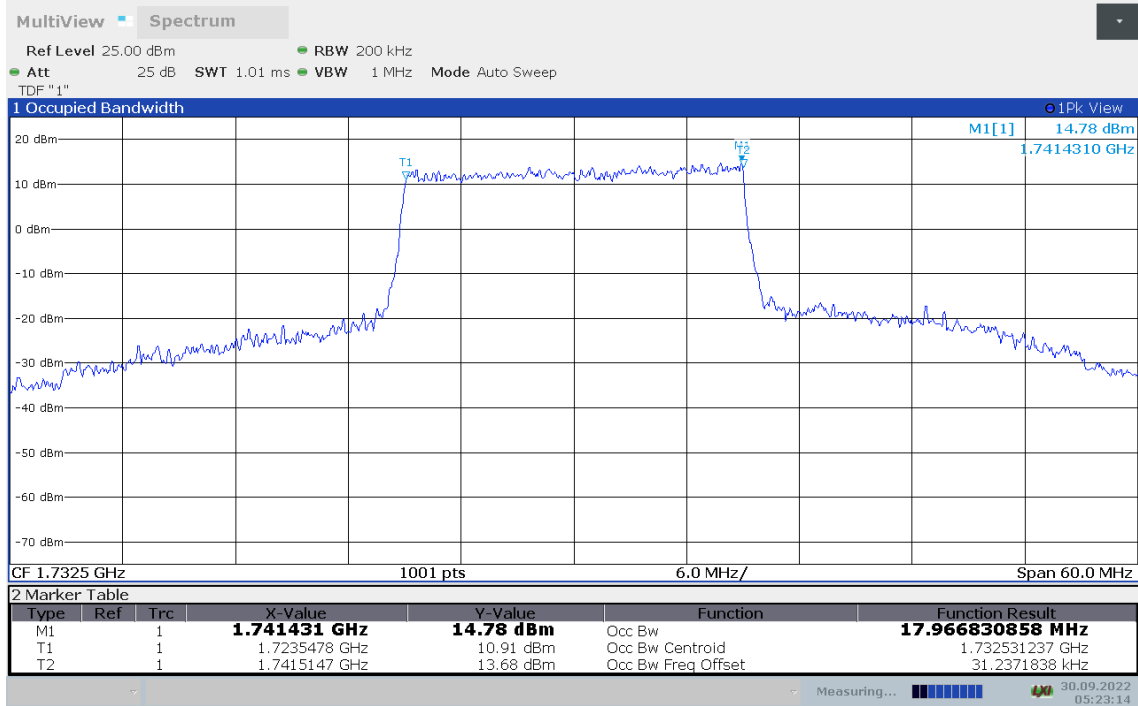


**LTE band 4, 20MHz Bandwidth, 16QAM (99% BW)**





LTE band 4, 20MHz Bandwidth, 64QAM (99% BW)

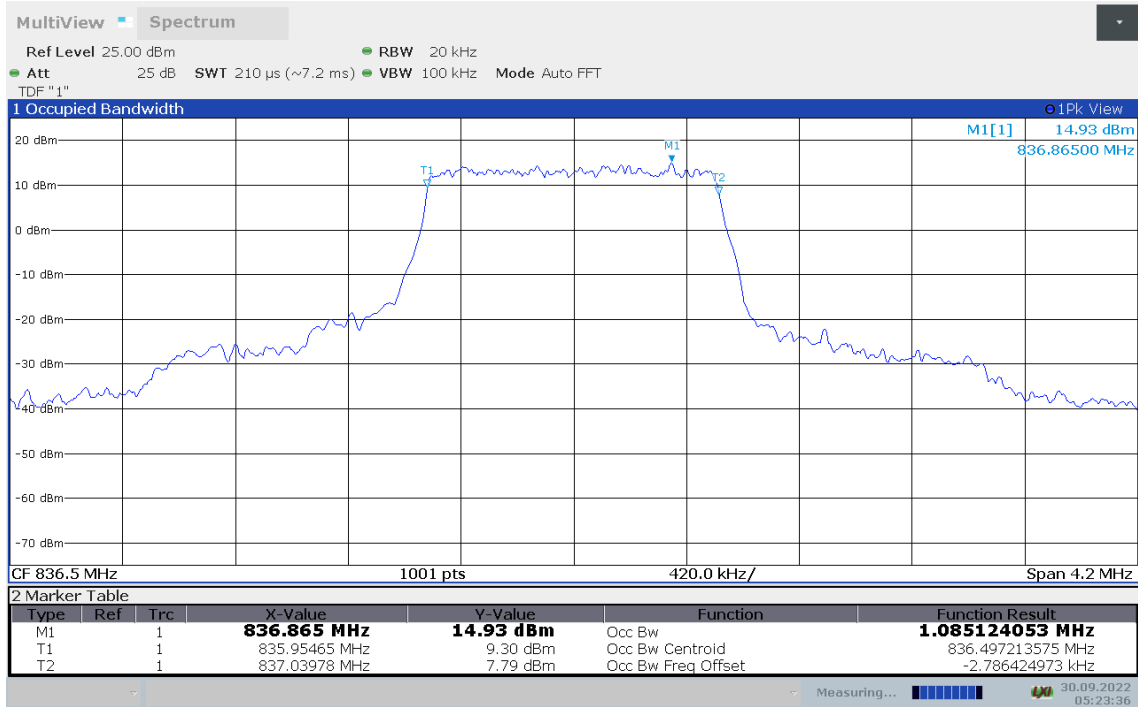




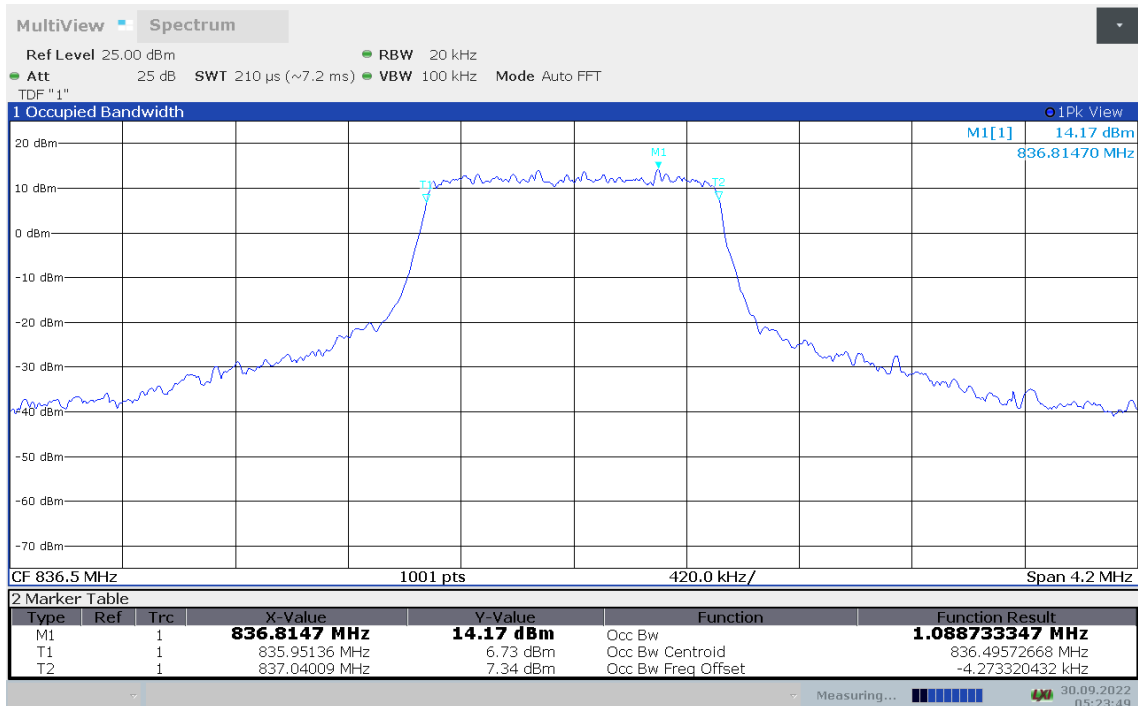
**LTE band 5, 1.4MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
	836.5	QPSK	16QAM
1.085		1.089	1.084

**LTE band 5, 1.4MHz Bandwidth, QPSK (99% BW)**

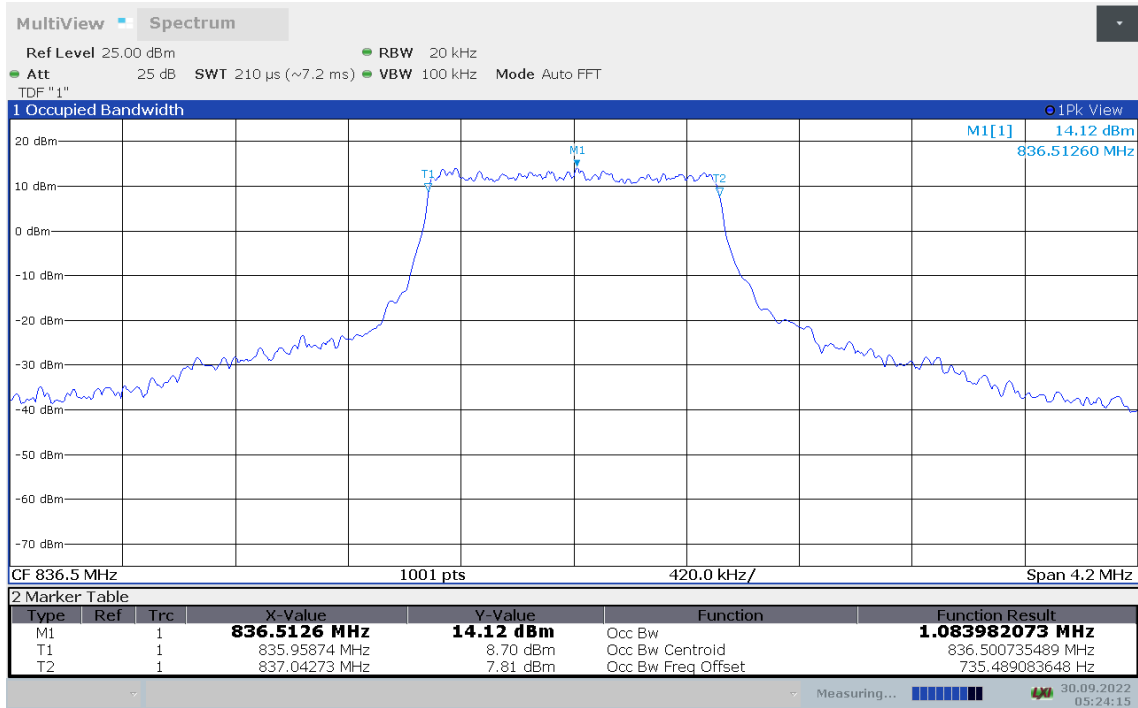


**LTE band 5, 1.4MHz Bandwidth,16QAM (99% BW)**





LTE band 5, 1.4MHz Bandwidth,64QAM (99% BW)

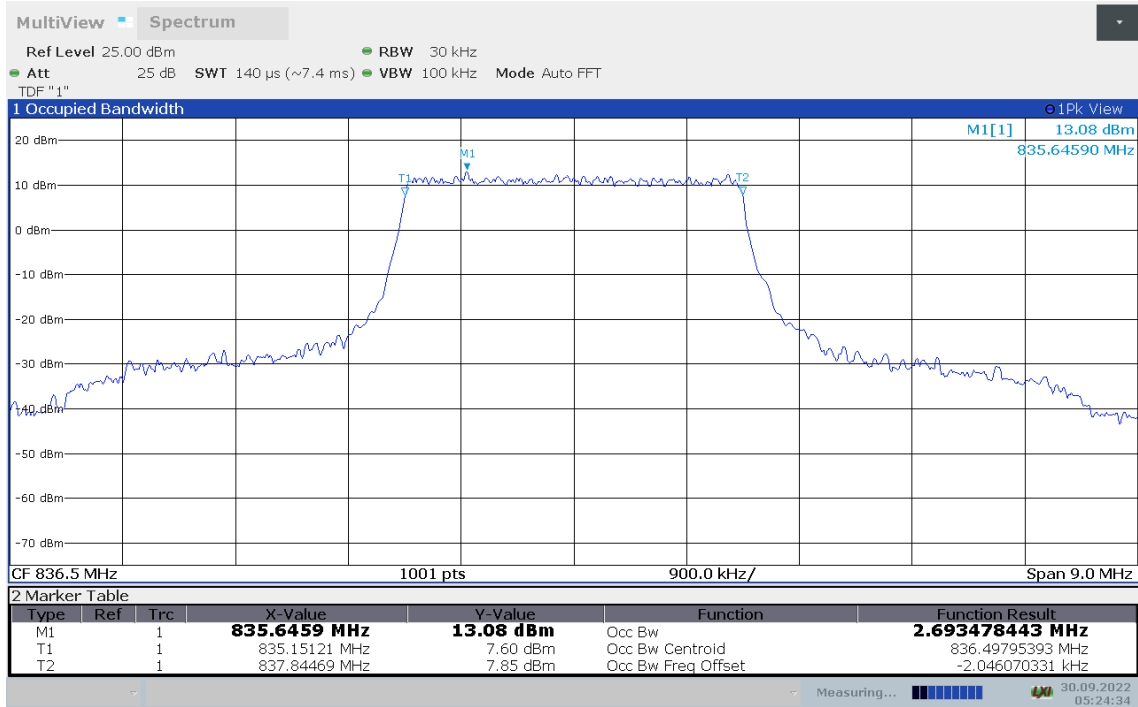




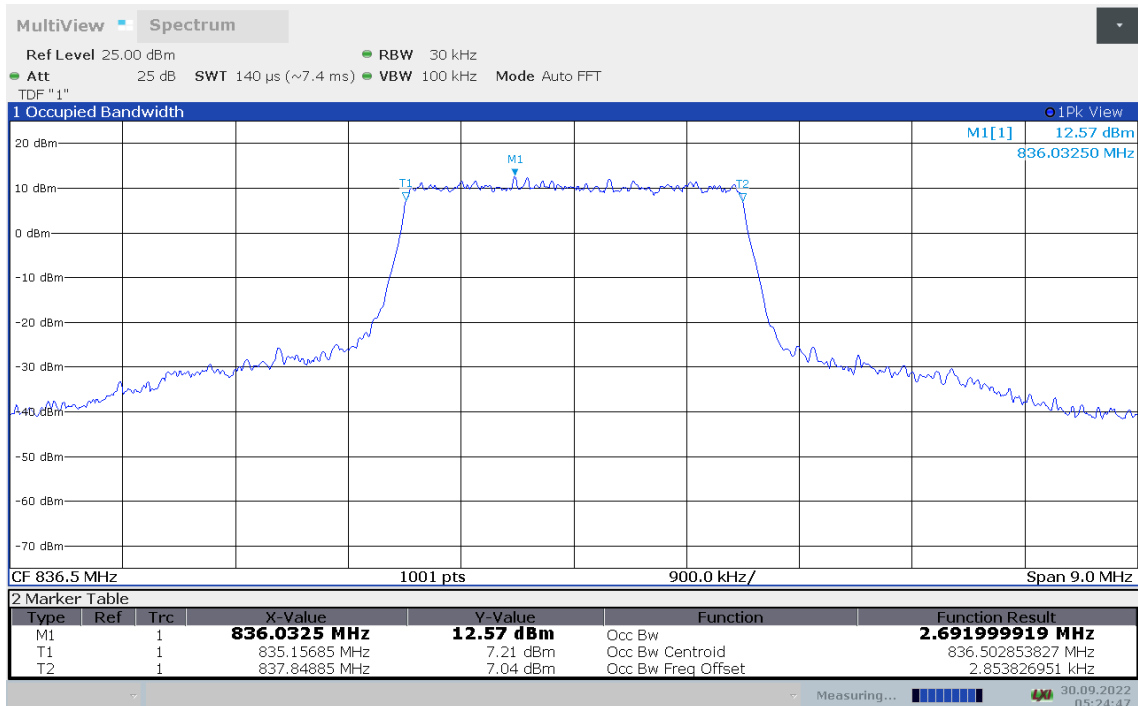
**LTE band 5, 3MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
836.5	QPSK	16QAM	64QAM
	2.693	2.962	2.694

**LTE band 5, 3MHz Bandwidth, QPSK (99% BW)**

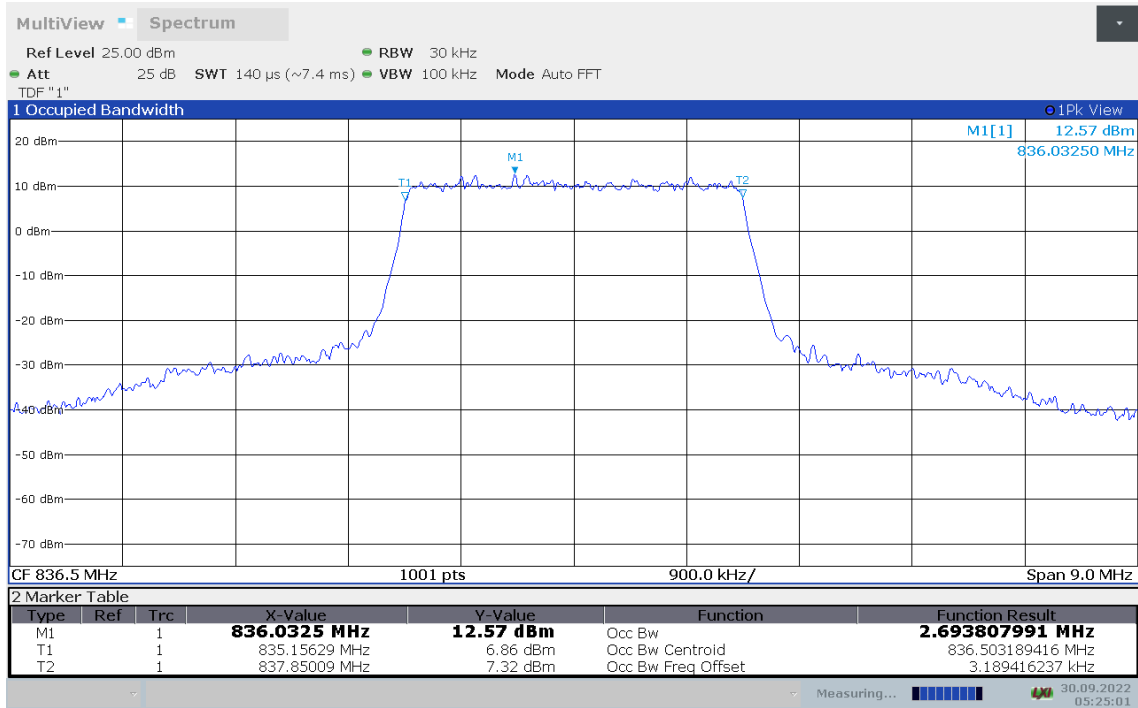


**LTE band 5, 3MHz Bandwidth, 16QAM (99% BW)**





LTE band 5, 3MHz Bandwidth, 64QAM (99% BW)

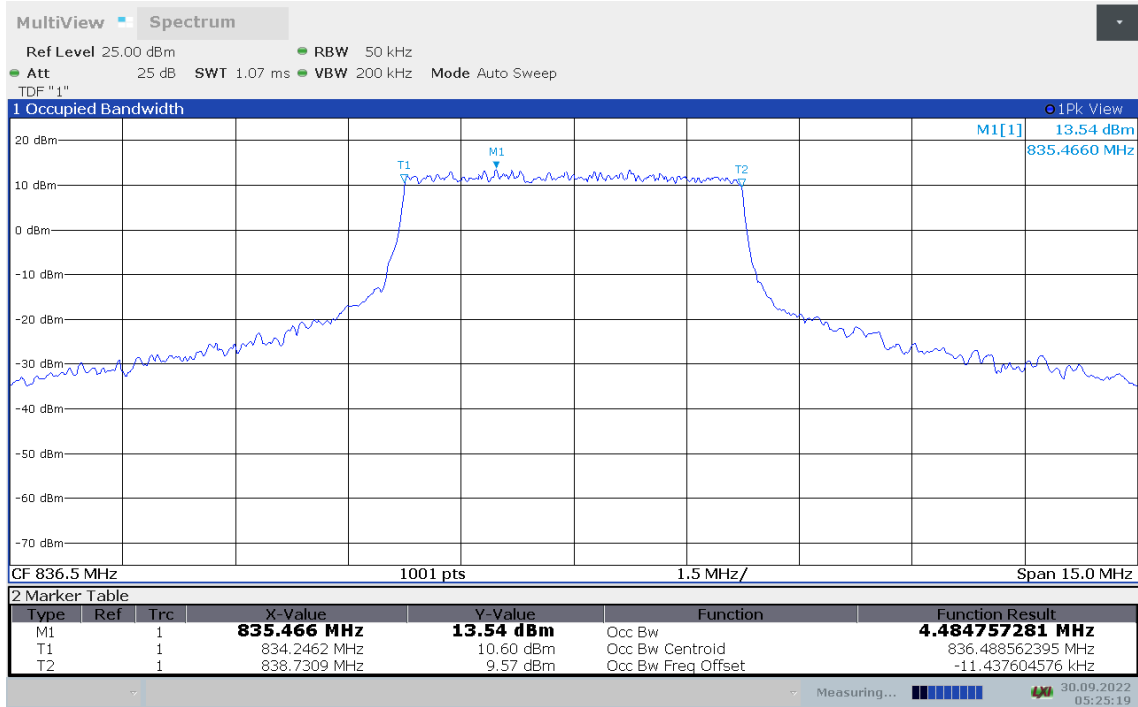




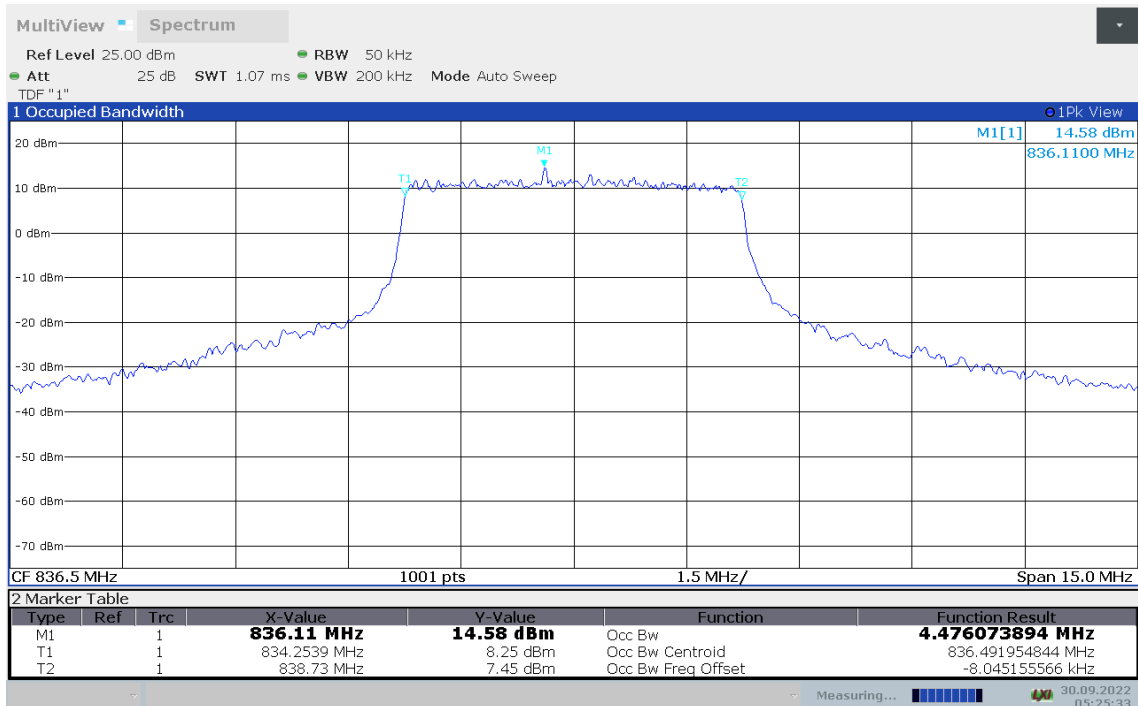
**LTE band 5, 5MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
836.5	QPSK	16QAM	64QAM
	4.485	4.476	4.476

**LTE band 5, 5MHz Bandwidth, QPSK (99% BW)**

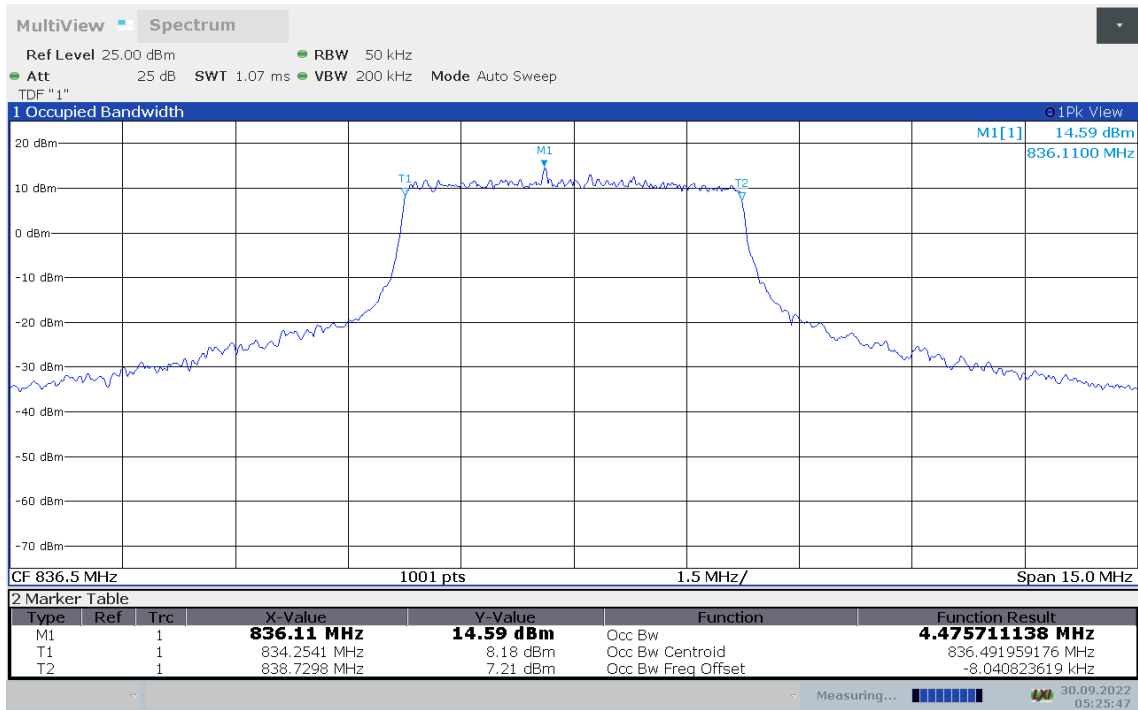


**LTE band 5, 5MHz Bandwidth, 16QAM (99% BW)**





### LTE band 5, 5MHz Bandwidth, 64QAM (99% BW)



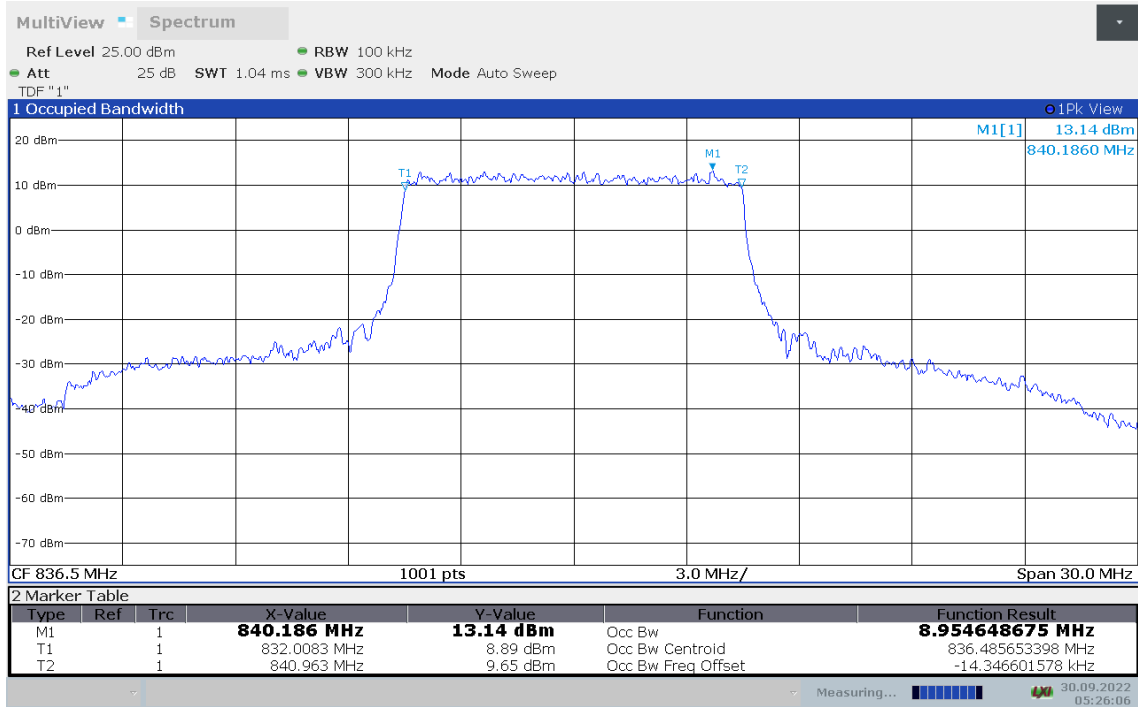




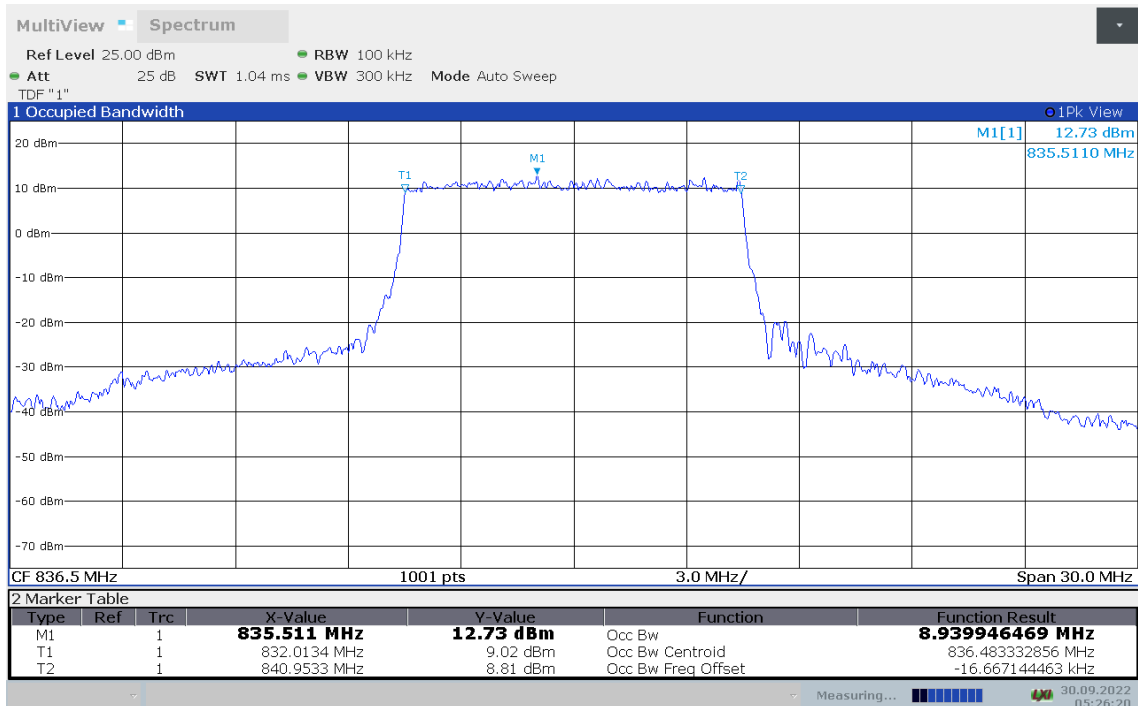
**LTE band 5, 10MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
836.5	QPSK	16QAM	64QAM
	8.955	8.940	8.932

**LTE band 5, 10MHz Bandwidth, QPSK (99% BW)**

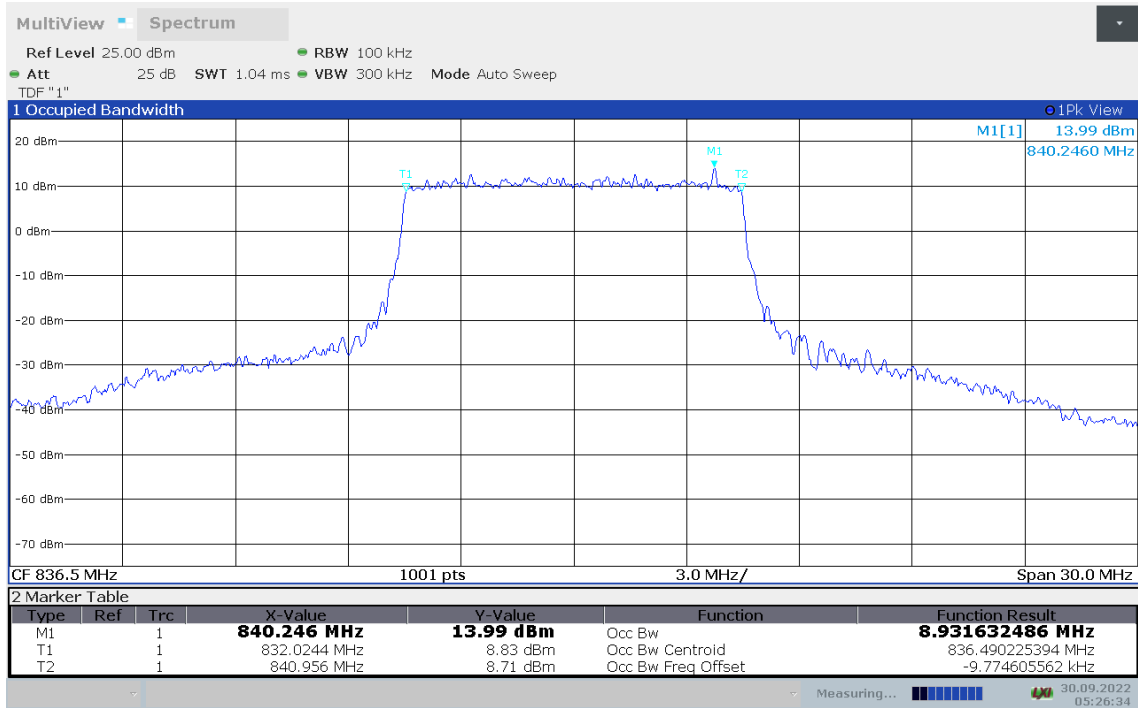


**LTE band 5, 10MHz Bandwidth, 16QAM (99% BW)**





LTE band 5, 10MHz Bandwidth, 64QAM (99% BW)

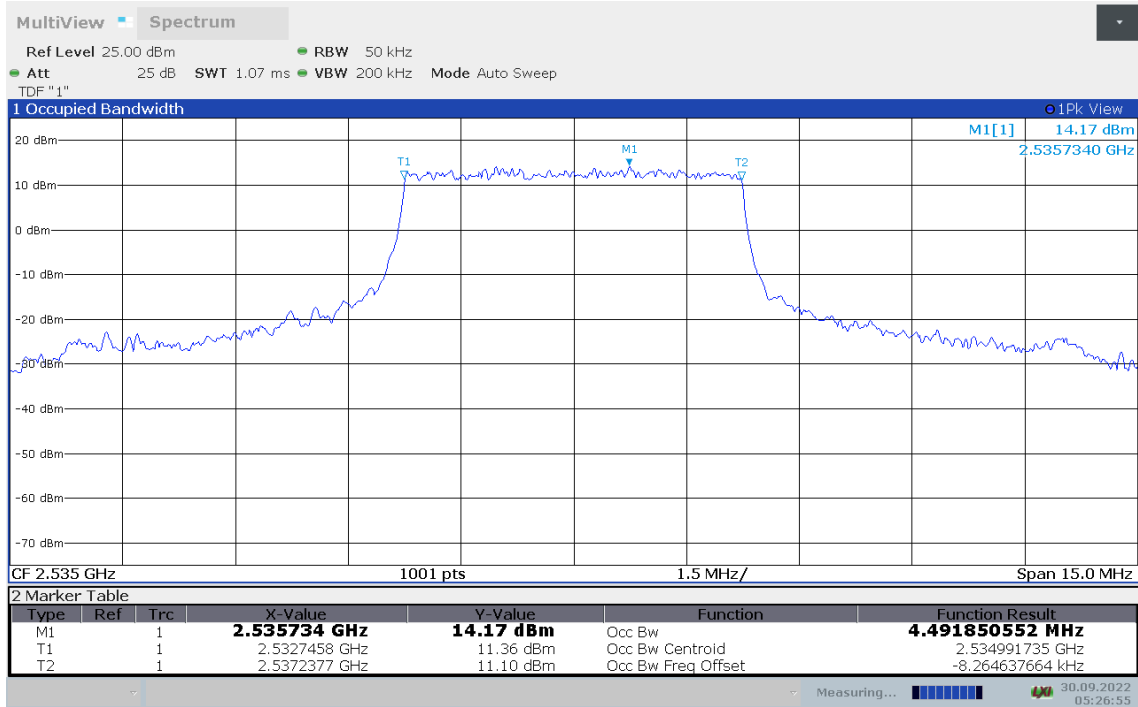




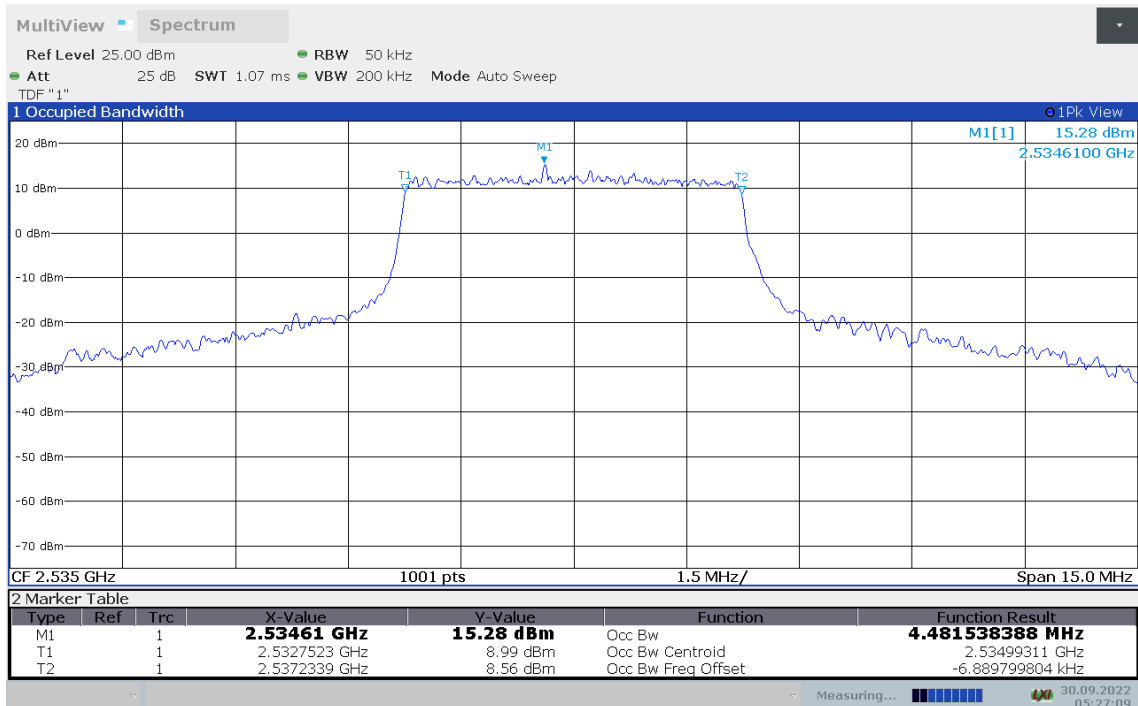
**LTE band 7, 5MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
2535.0	QPSK	16QAM	64QAM
	4.492	4.482	4.484

**LTE band 7, 5MHz Bandwidth, QPSK (99% BW)**

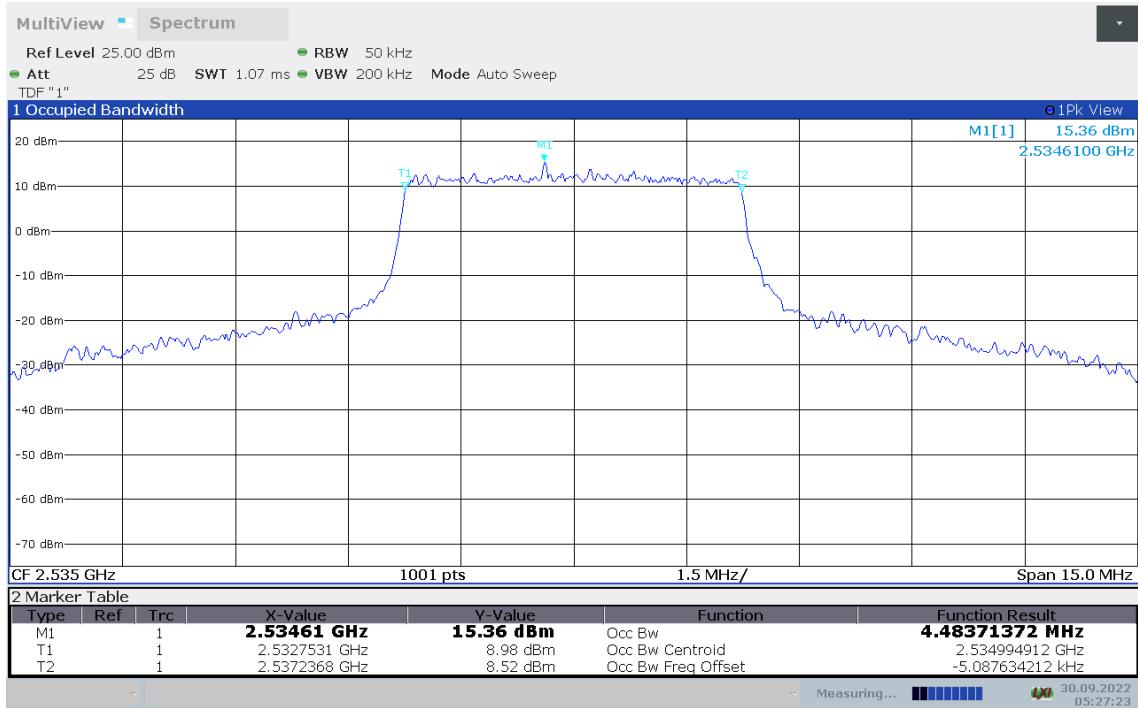


**LTE band 7, 5MHz Bandwidth, 16QAM (99% BW)**





LTE Band 7, 5MHz Bandwidth,64QAM (99% BW)

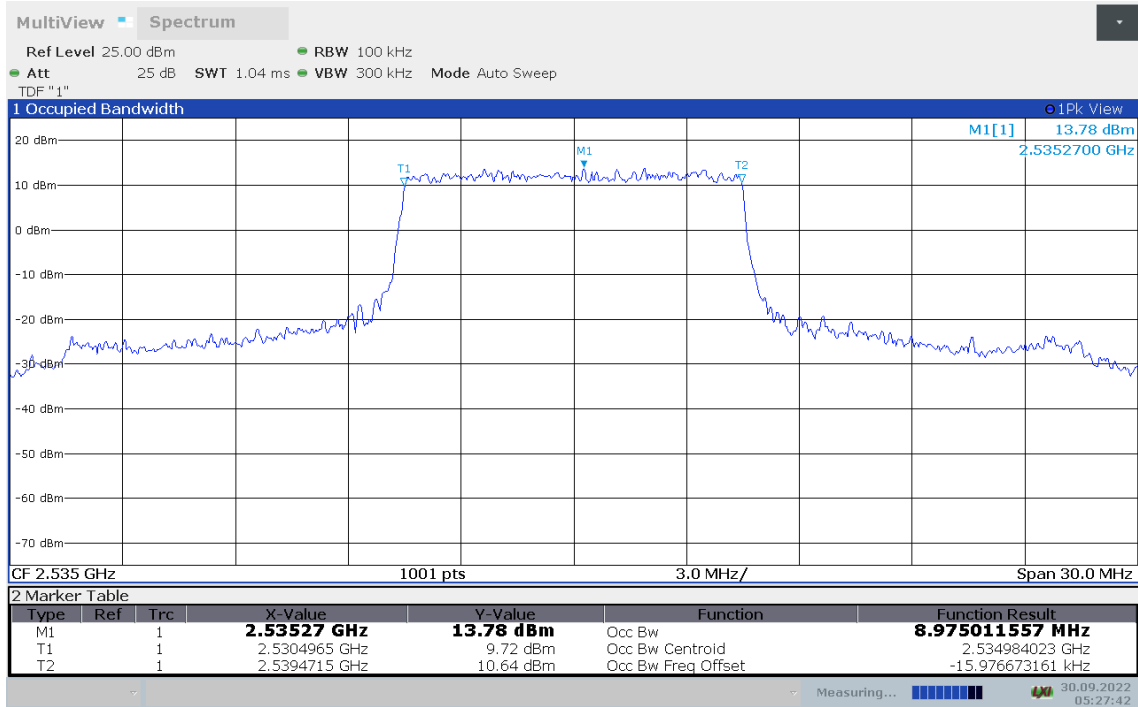




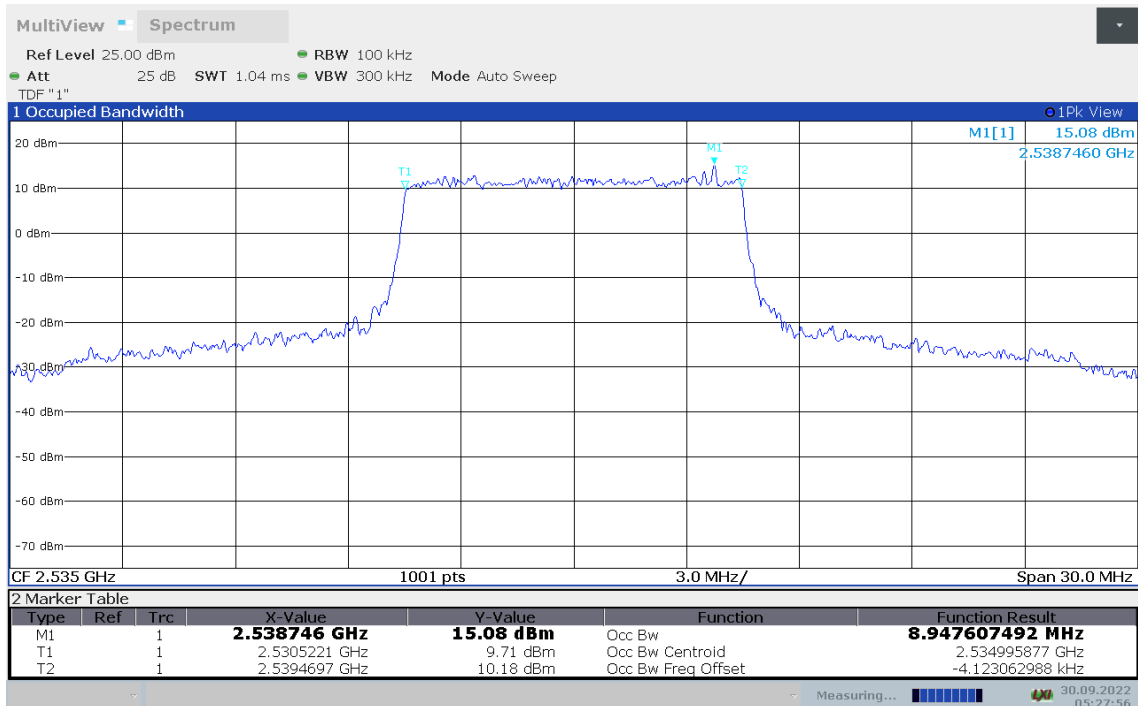
**LTE band 7, 10MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
2535.0	QPSK	16QAM	64QAM
	8.975	8.948	8.959

**LTE band 7, 10MHz Bandwidth, QPSK (99% BW)**

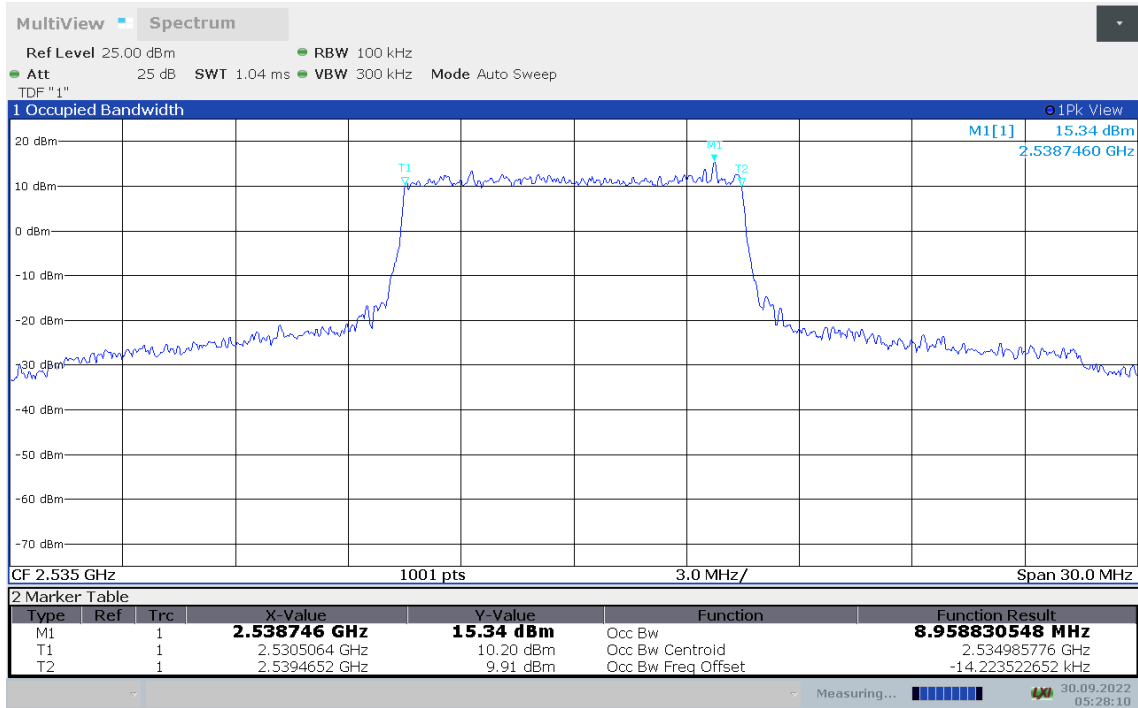


**LTE band 7, 10MHz Bandwidth, 16QAM (99% BW)**





LTE Band 7, 10MHz Bandwidth, 64QAM (99% BW)

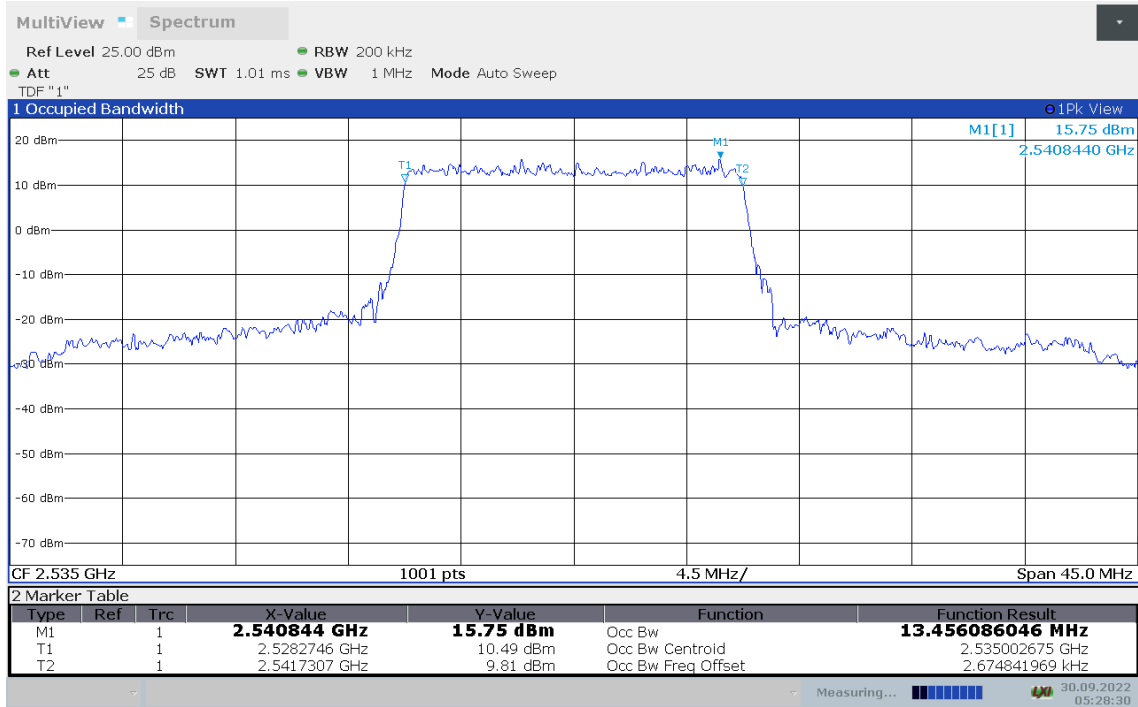




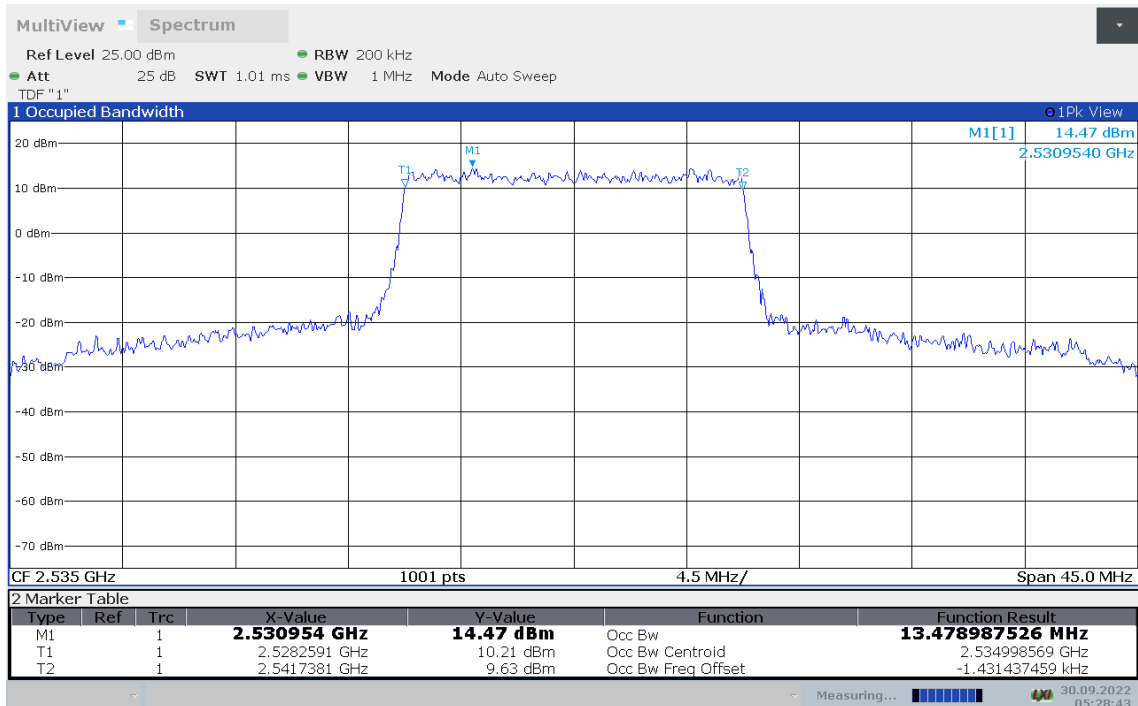
**LTE band 7, 15MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
2535.0	QPSK	16QAM	64QAM
	13.456	13.479	13.448

**LTE band 7, 15MHz Bandwidth, QPSK (99% BW)**

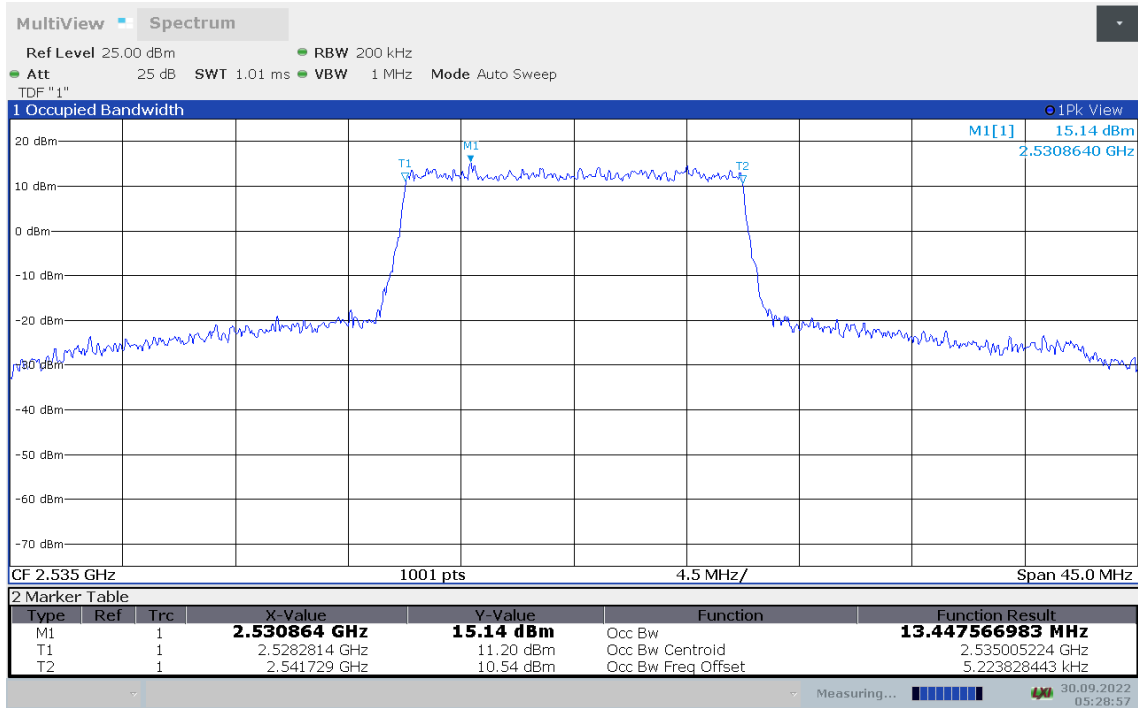


**LTE band 7, 15MHz Bandwidth, 16QAM (99% BW)**





LTE Band 7, 15MHz Bandwidth, 64QAM (99% BW)



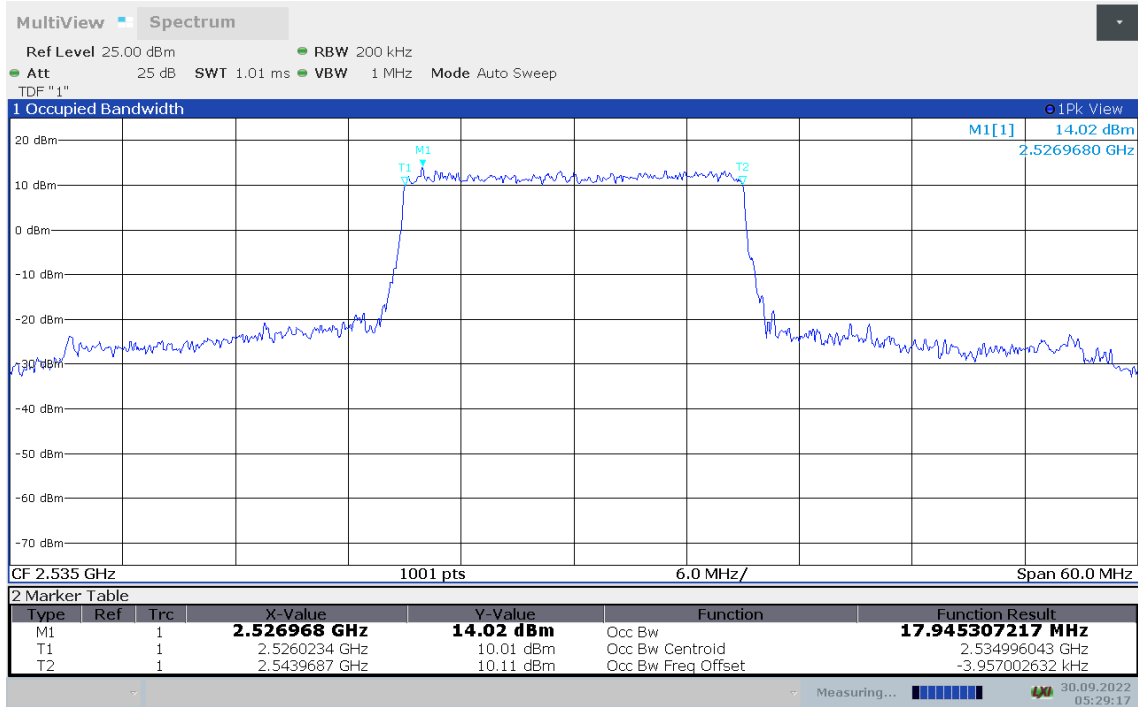




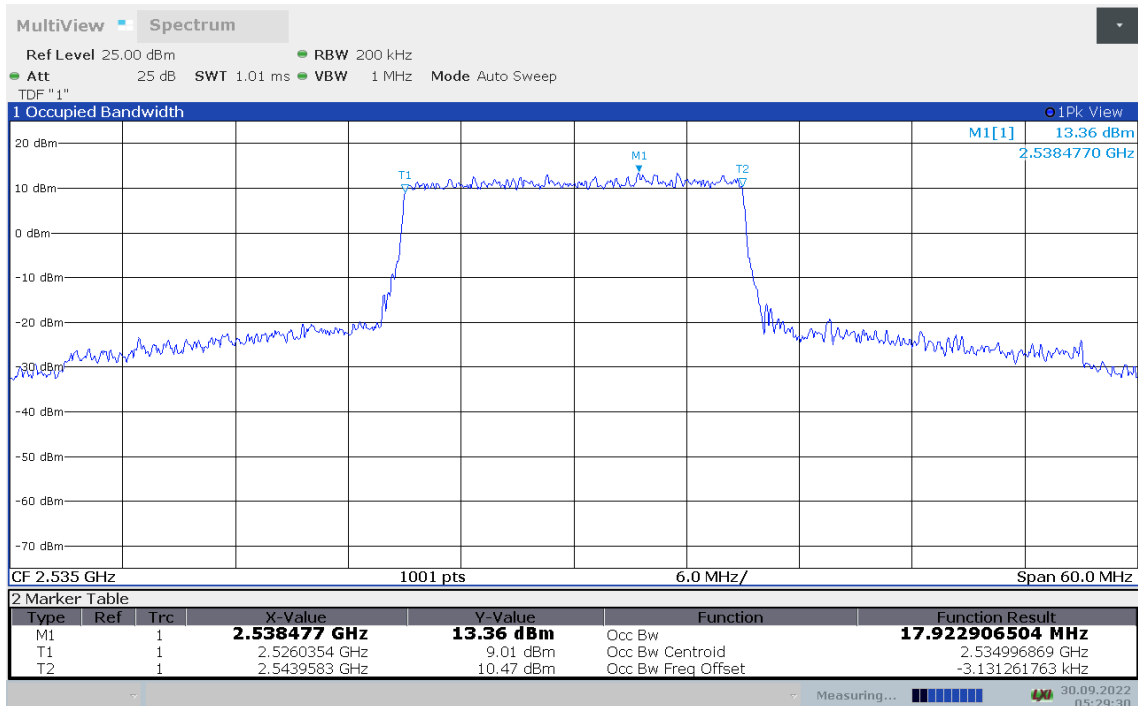
**LTE band 7, 20MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
2535.0	QPSK	16QAM	64QAM
	17.945	17.923	17.905

**LTE band 7, 20MHz Bandwidth, QPSK (99% BW)**

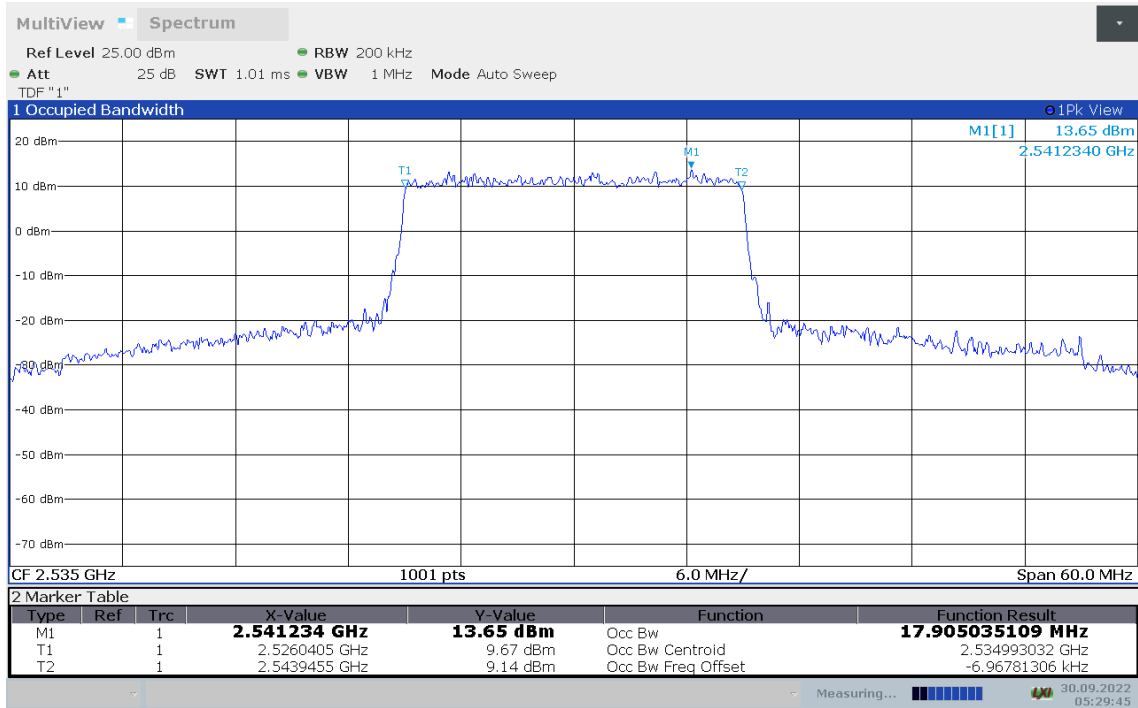


**LTE band 7, 20MHz Bandwidth, 16QAM (99% BW)**





LTE Band 7, 20MHz Bandwidth, 64QAM (99% BW)

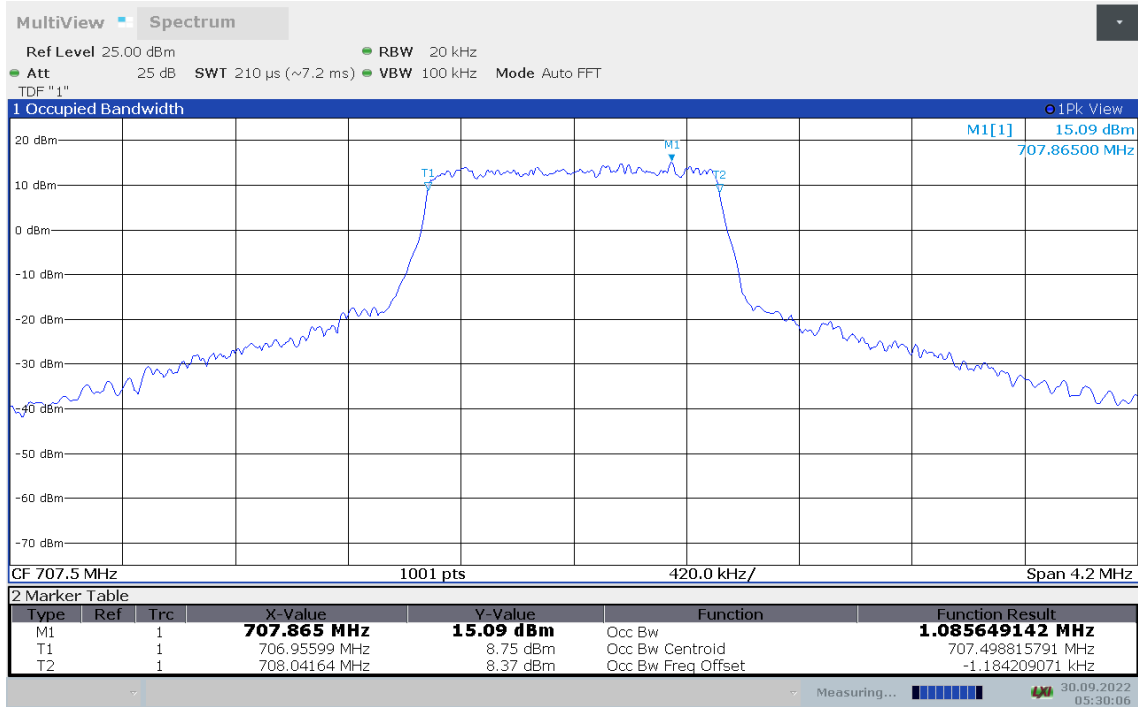




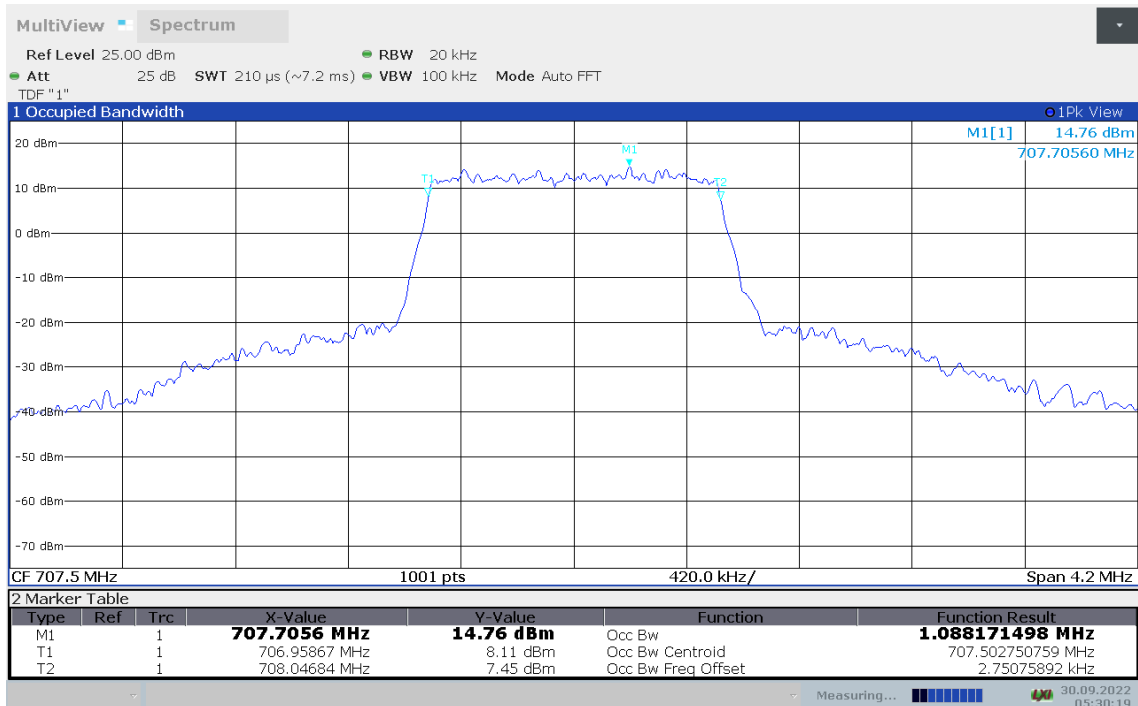
**LTE band 12, 1.4MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
707.5	QPSK	16QAM	64QAM
	1.086	1.088	1.094

**LTE band 12, 1.4MHz Bandwidth, QPSK (99% BW)**

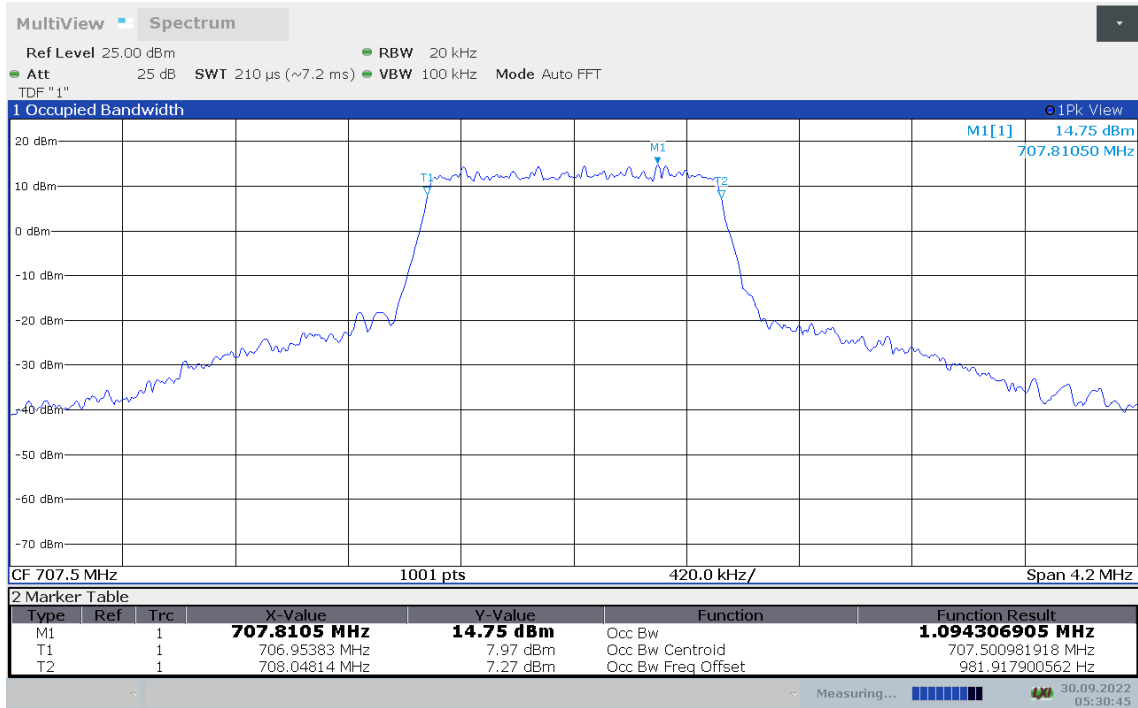


**LTE band 12, 1.4MHz Bandwidth, 16QAM (99% BW)**





LTE Band 12, 1.4MHz Bandwidth, 64QAM (99% BW)

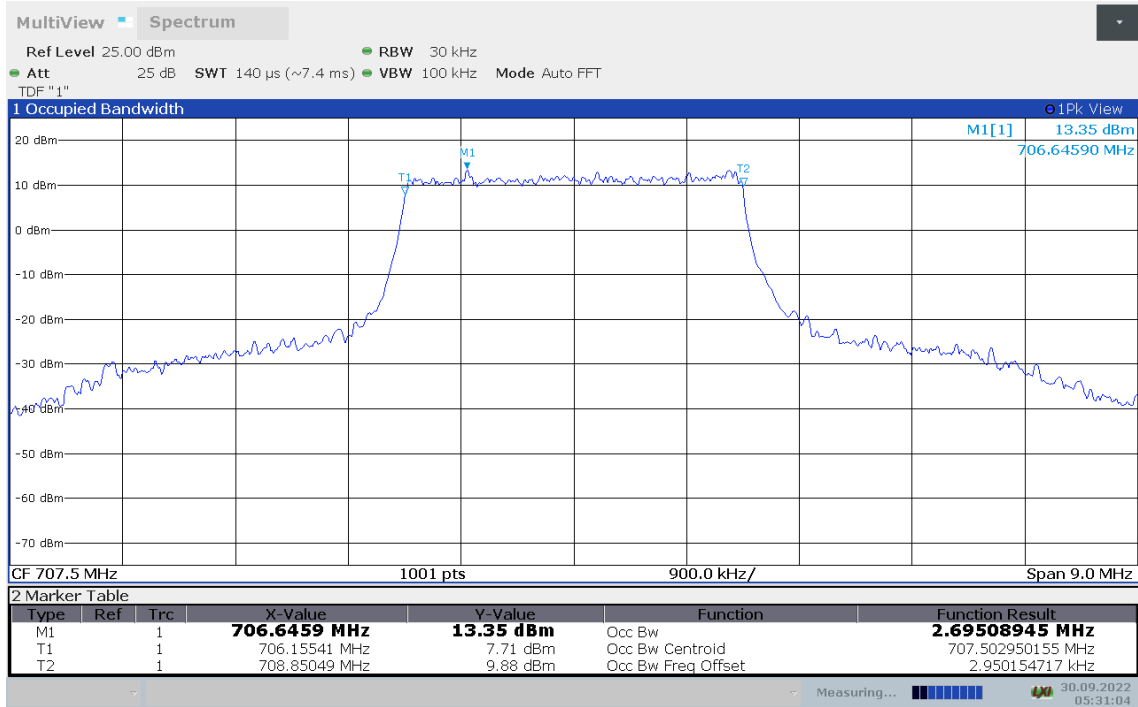




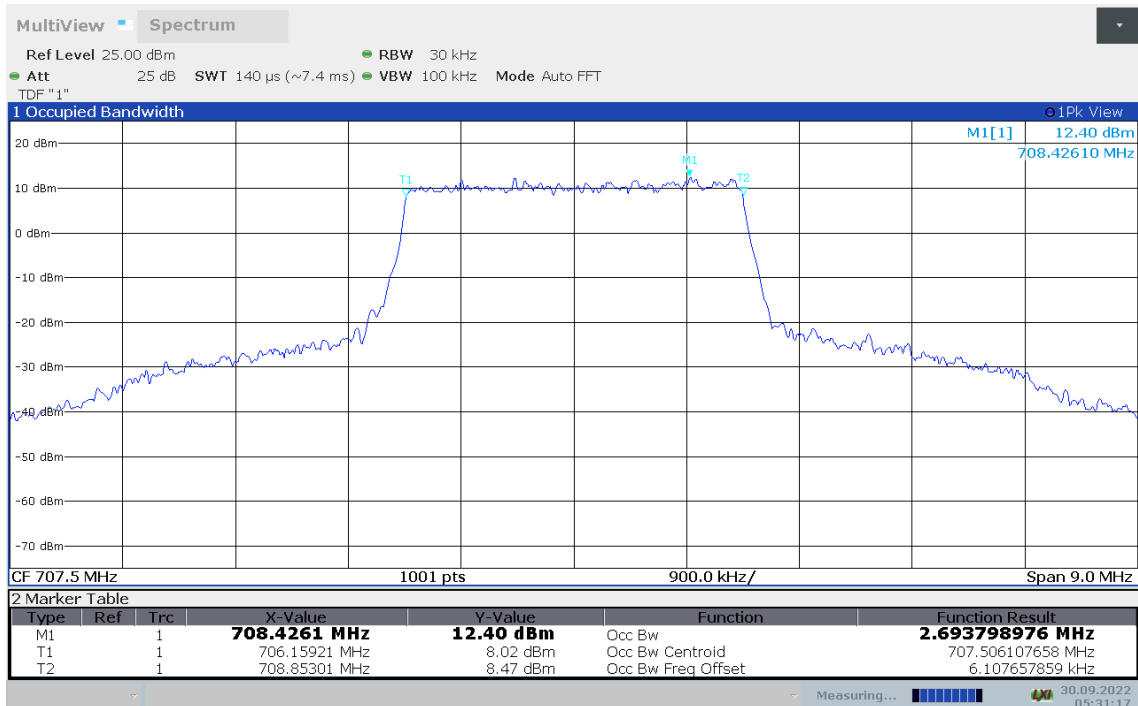
**LTE band 12, 3MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
707.5	QPSK	16QAM	64QAM
	5.695	2.694	2.697

**LTE band 12, 3MHz Bandwidth, QPSK (99% BW)**

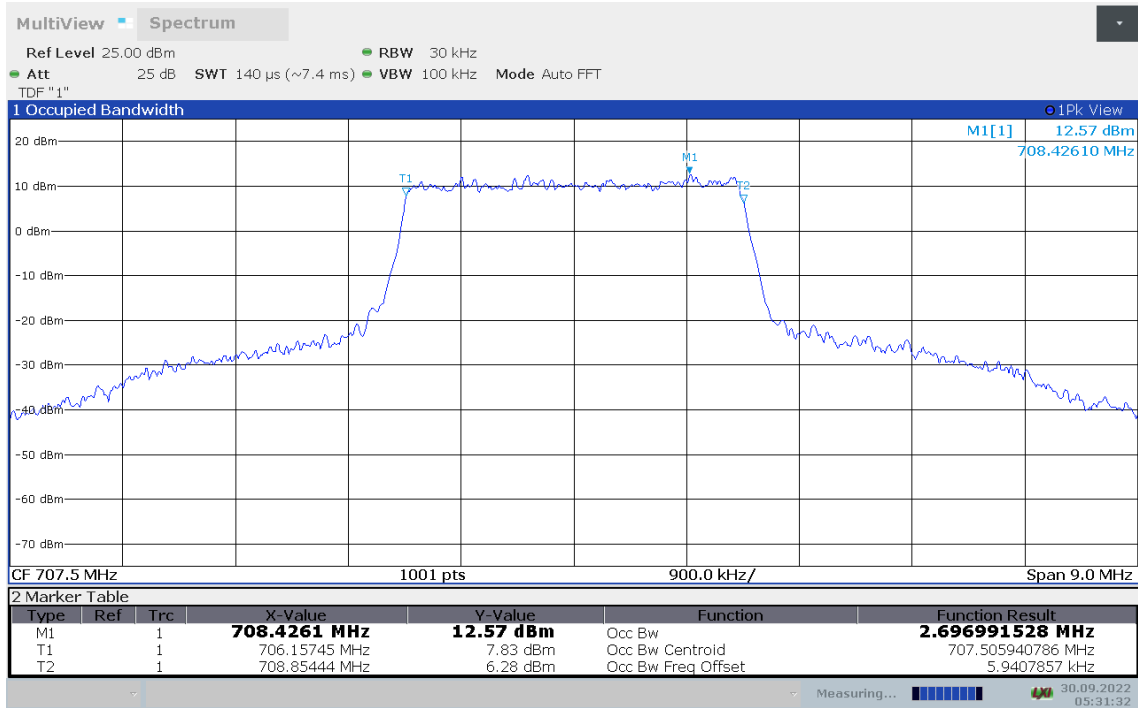


**LTE band 12, 3MHz Bandwidth, 16QAM (99% BW)**





LTE Band 12, 3MHz Bandwidth, 64QAM (99% BW)

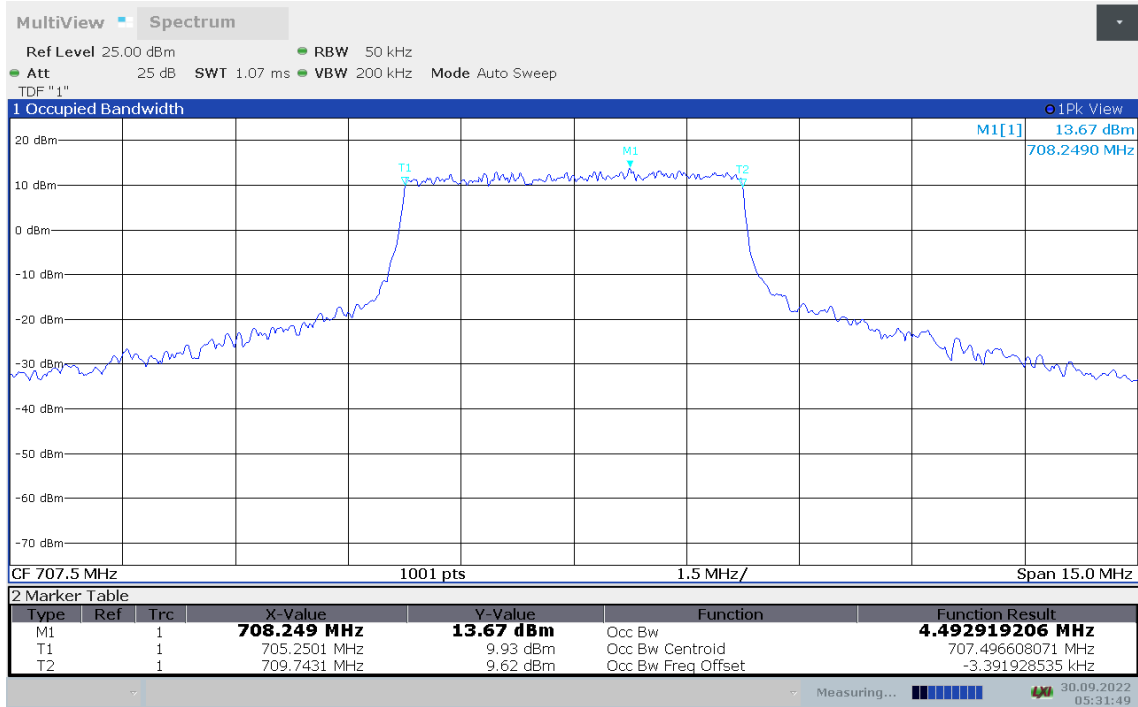




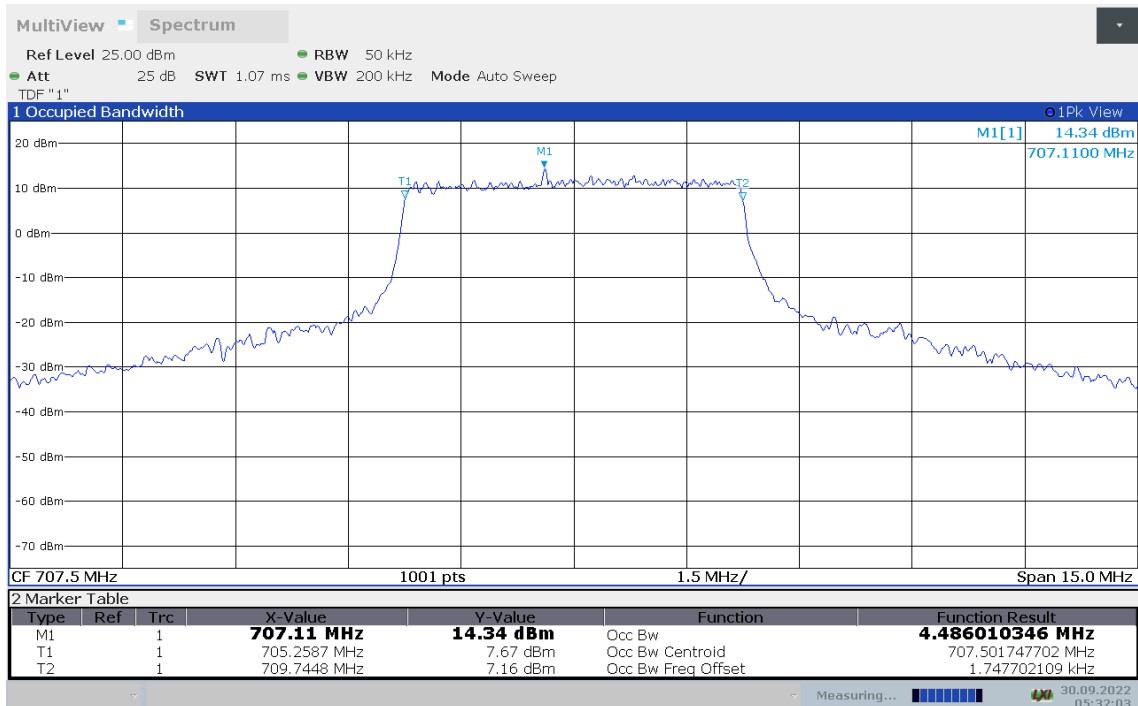
**LTE band 12, 5MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
707.5	QPSK	16QAM	64QAM
	4.493	4.486	4.486

**LTE band 12, 5MHz Bandwidth, QPSK (99% BW)**

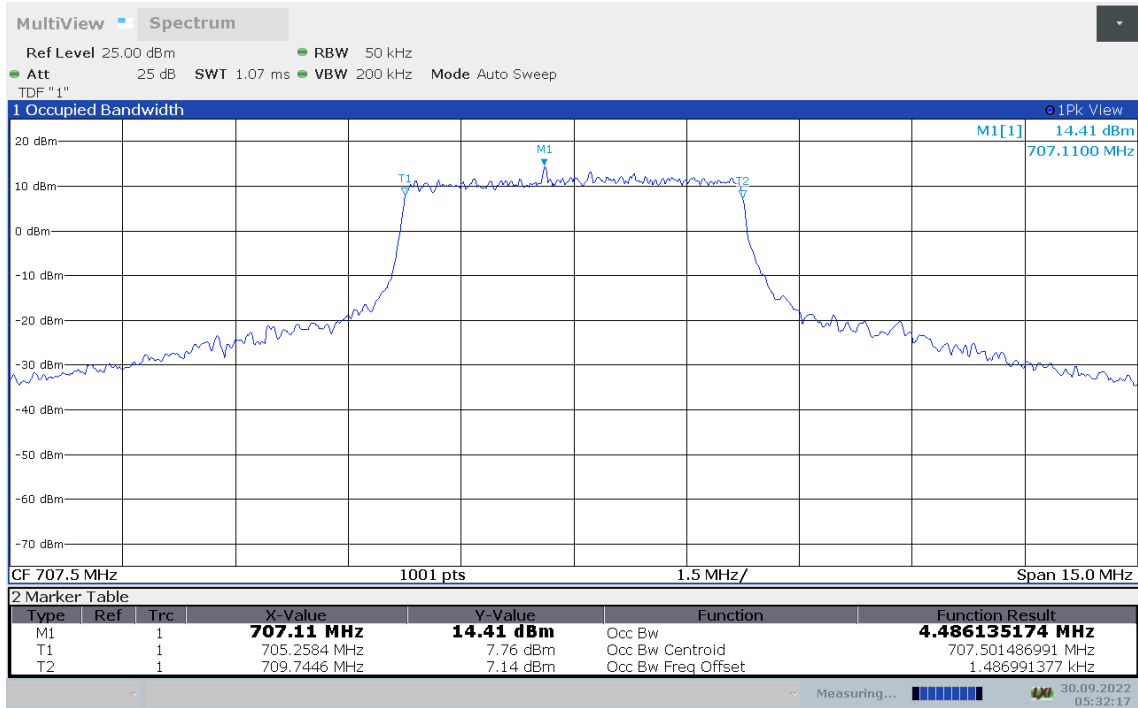


**LTE band 12, 5MHz Bandwidth, 16QAM (99% BW)**





LTE Band 12, 5MHz Bandwidth, 64QAM (99% BW)



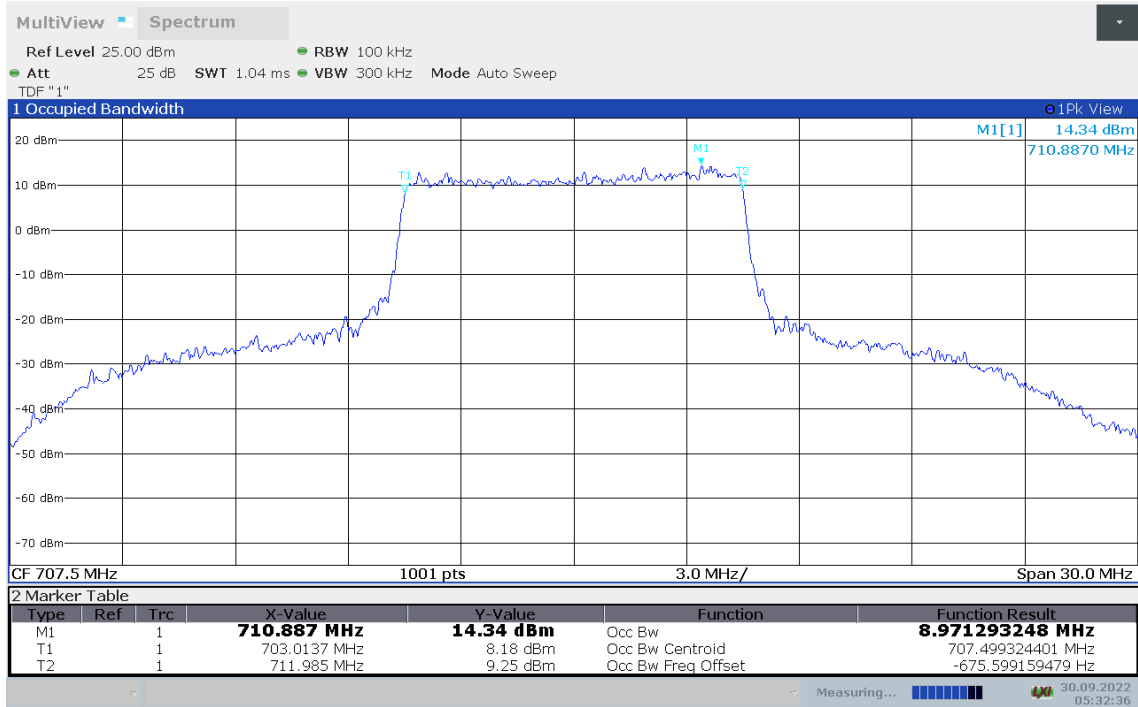




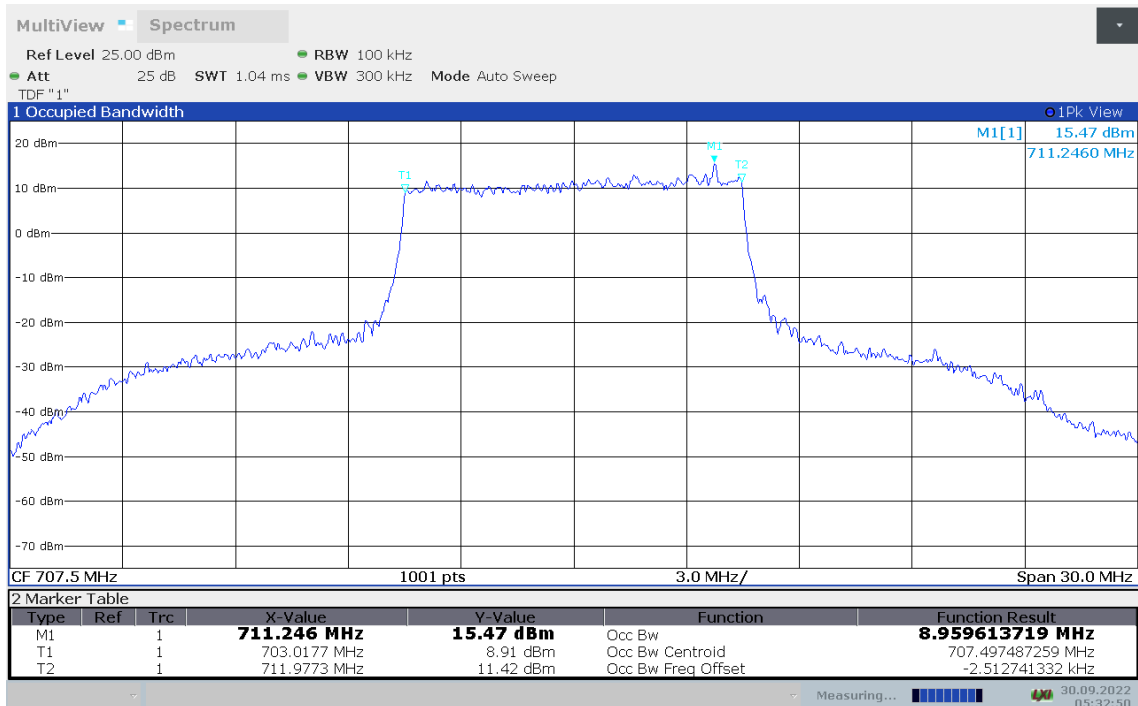
**LTE band 12, 10MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
707.5	QPSK	16QAM	64QAM
	8.971	8.960	8.951

**LTE band 12, 10MHz Bandwidth, QPSK (99% BW)**

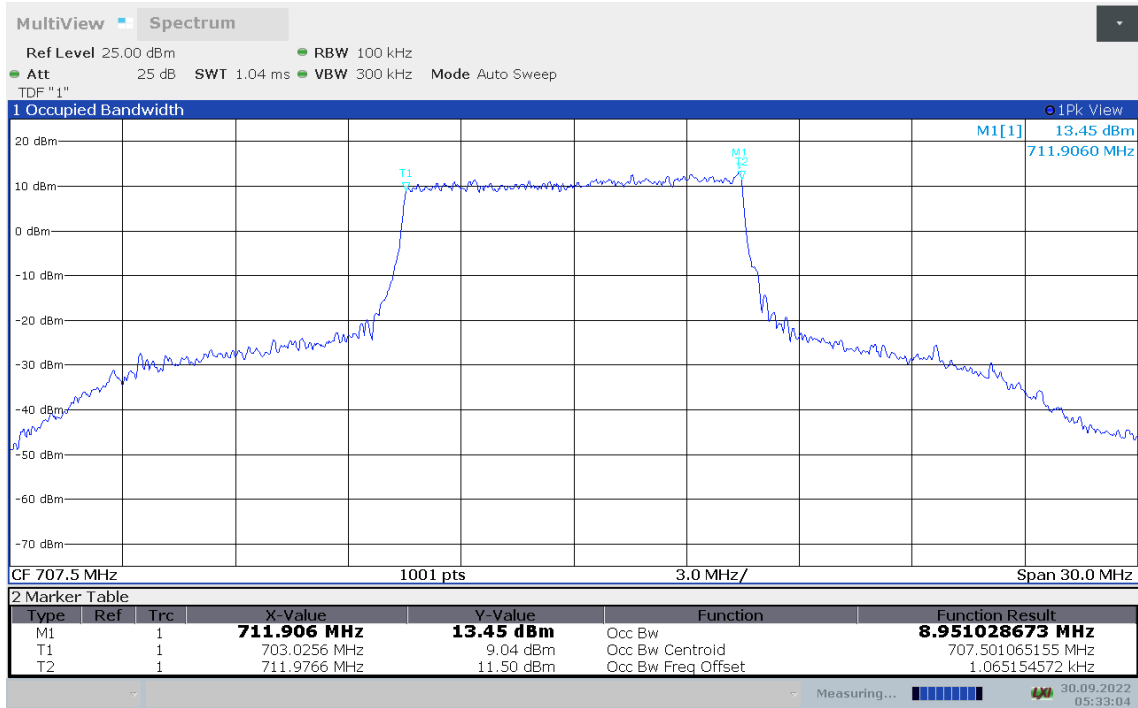


**LTE band 12, 10MHz Bandwidth, 16QAM (99% BW)**





### LTE Band 12, 10MHz Bandwidth, 64QAM (99% BW)

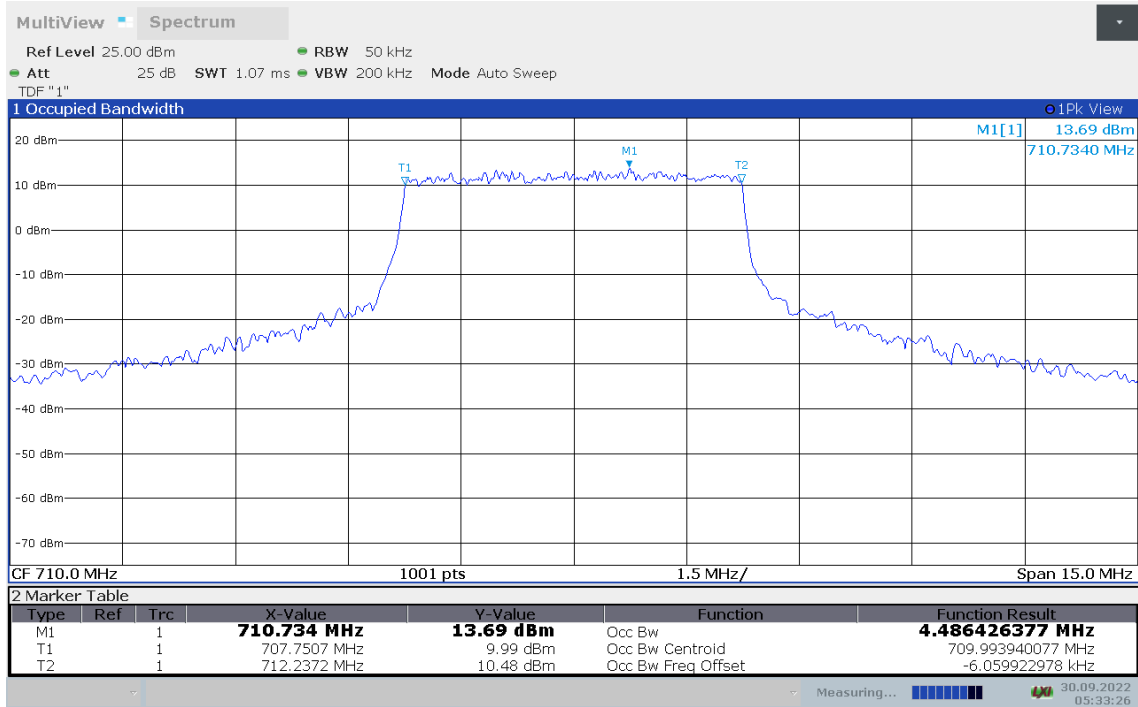




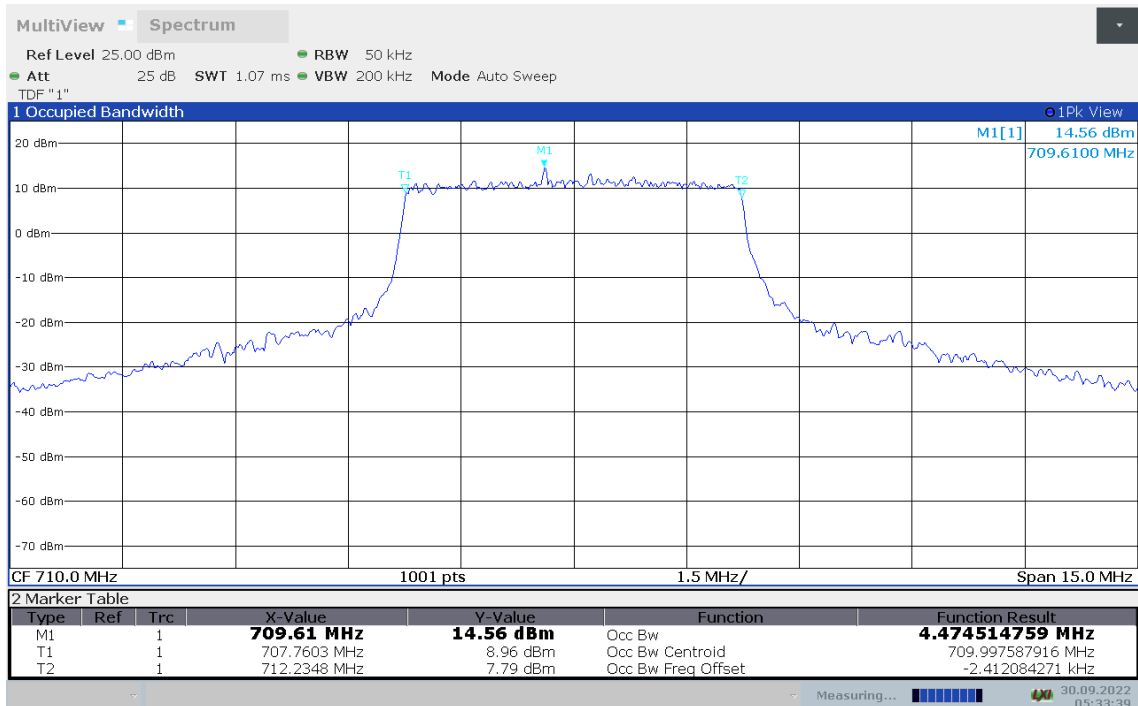
**LTE band 17,5MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
710	QPSK	16QAM	64QAM
	4.486	4.475	4.476

**LTE band 17,5MHz Bandwidth, QPSK (99% BW)**

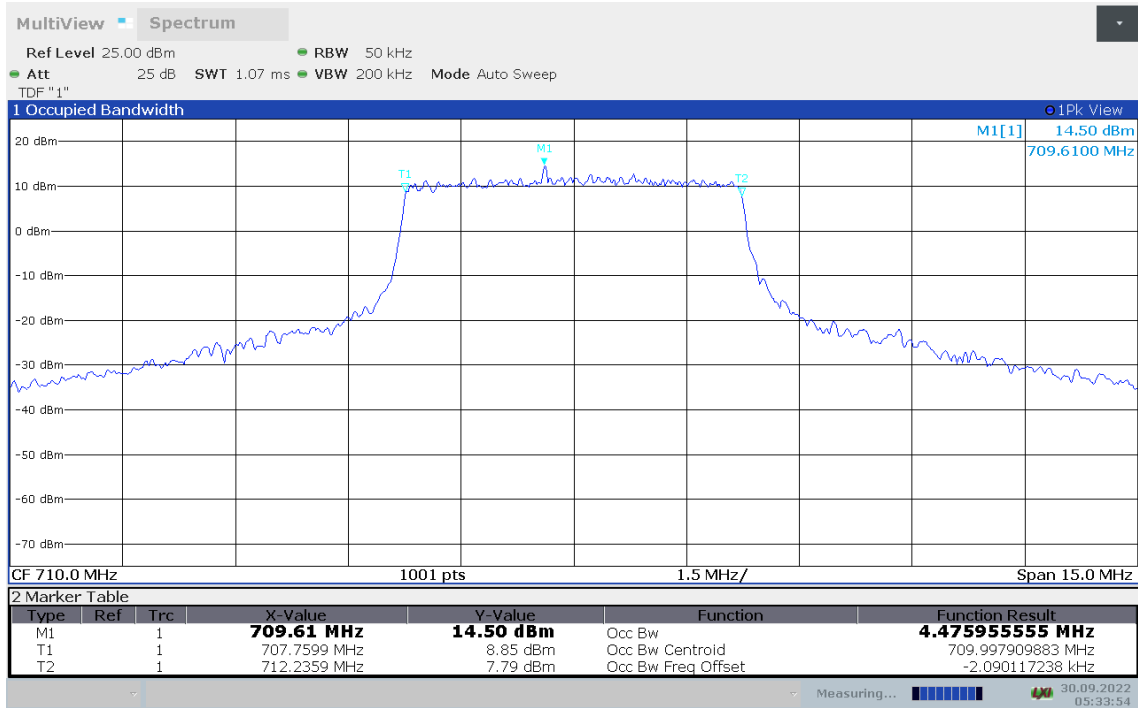


**LTE band 17,5MHz Bandwidth,16QAM (99% BW)**





LTE band 17,5MHz Bandwidth,64QAM (99% BW)

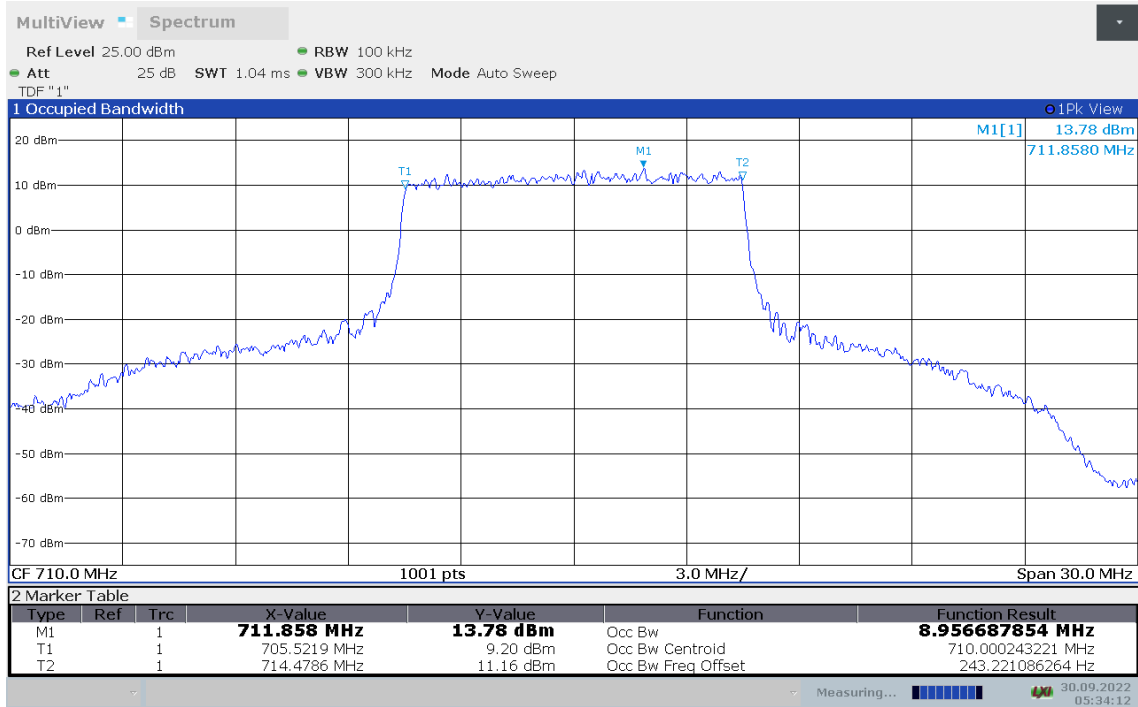




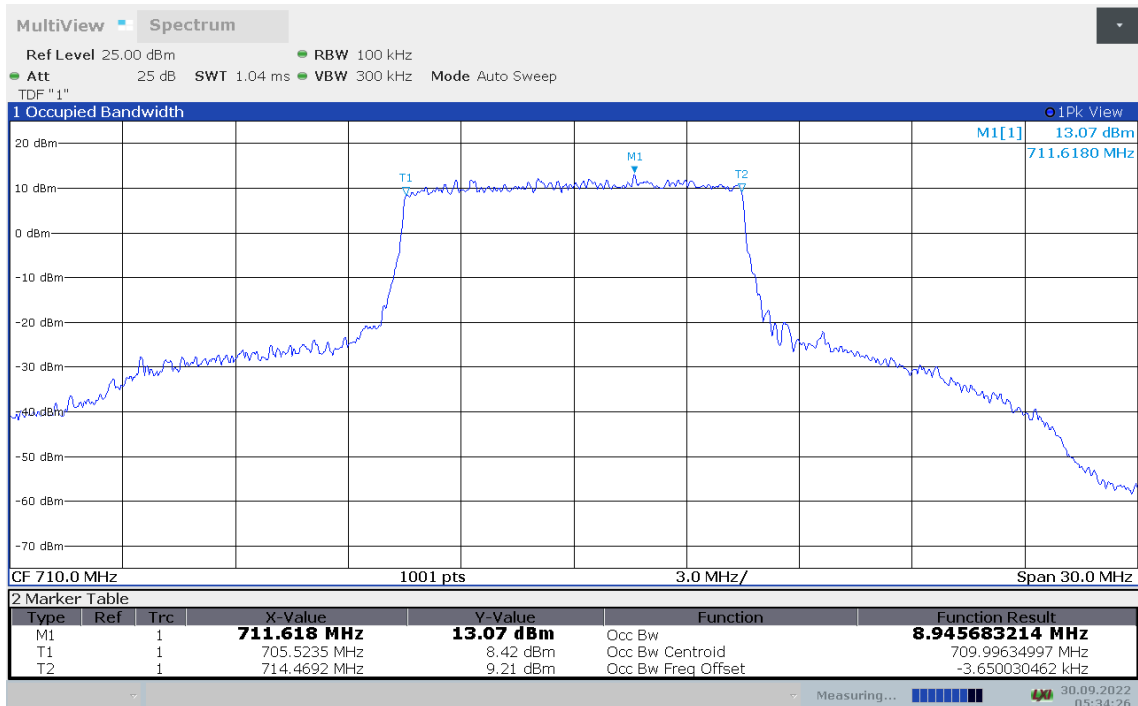
**LTE band 17,10MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
710	QPSK	16QAM	64QAM
	8.957	8.946	8.926

**LTE band 17,10MHz Bandwidth, QPSK (99% BW)**

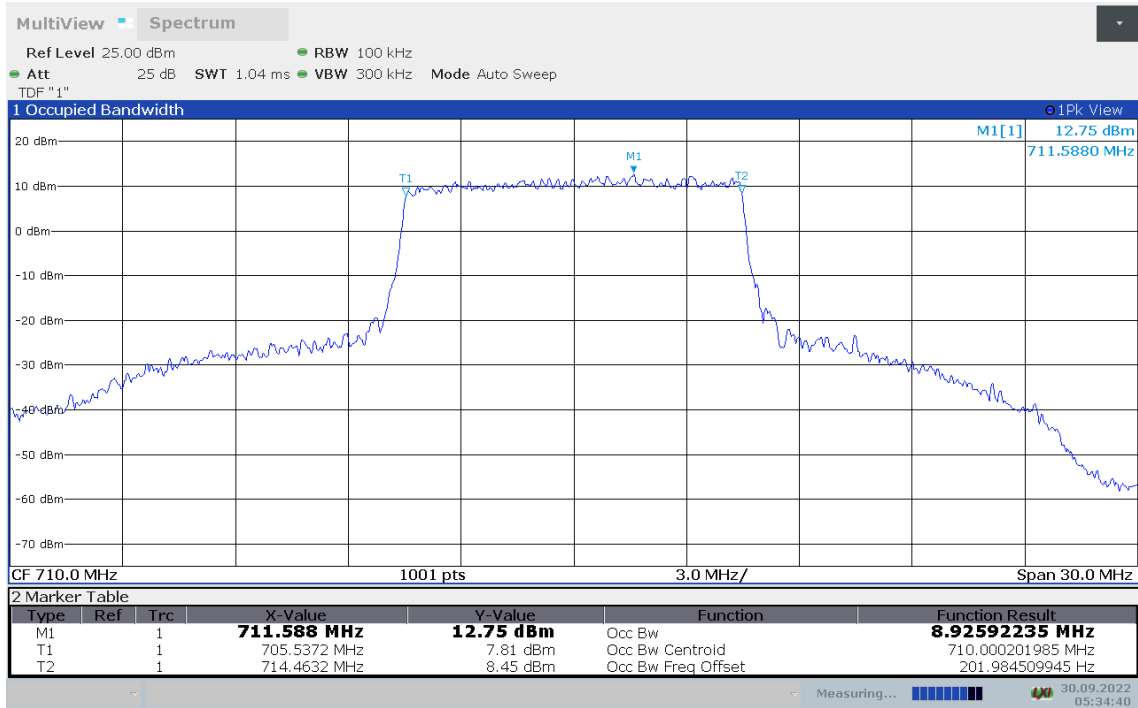


**LTE band 17,10MHz Bandwidth, 16QAM (99% BW)**





LTE band 17,10MHz Bandwidth, 64QAM (99% BW)

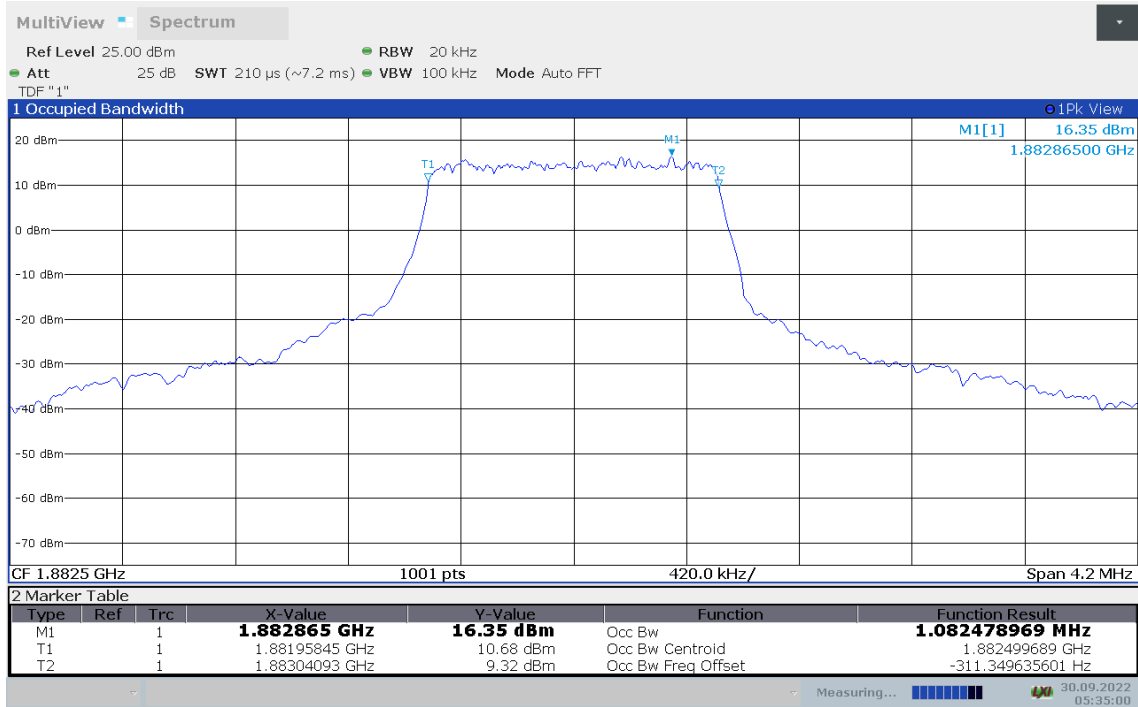




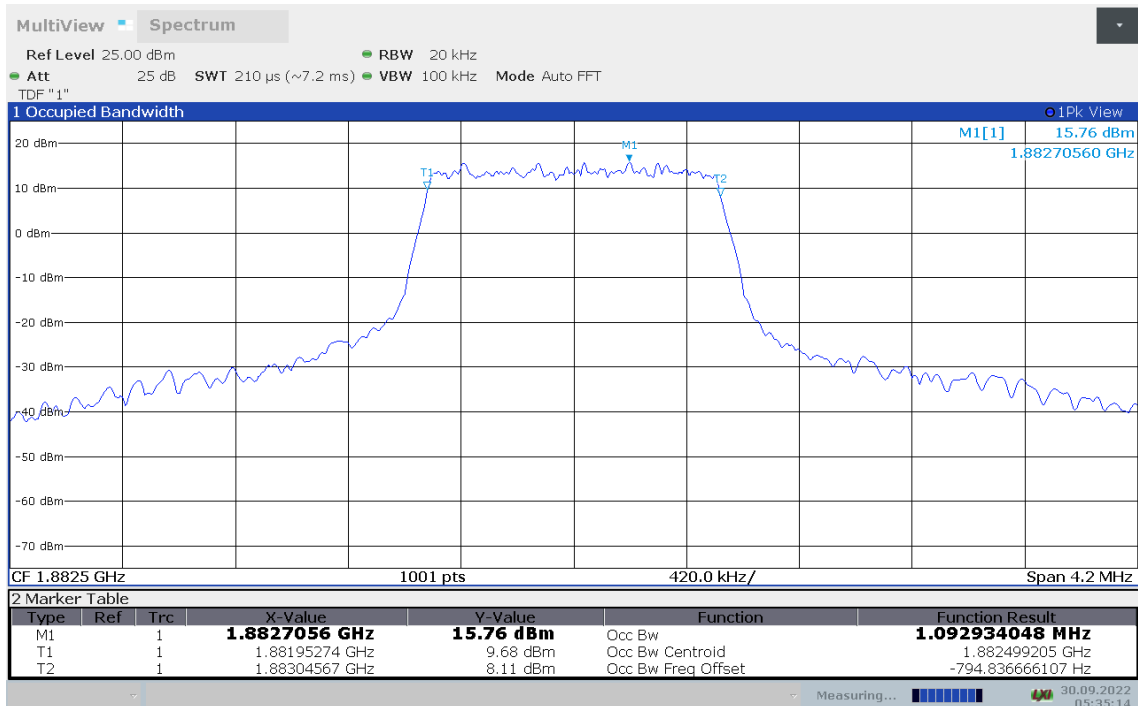
**LTE band 25,1.4MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1882.5	QPSK	16QAM	64QAM
	1.082	1.093	1.093

**LTE band 25,1.4MHz Bandwidth, QPSK (99% BW)**

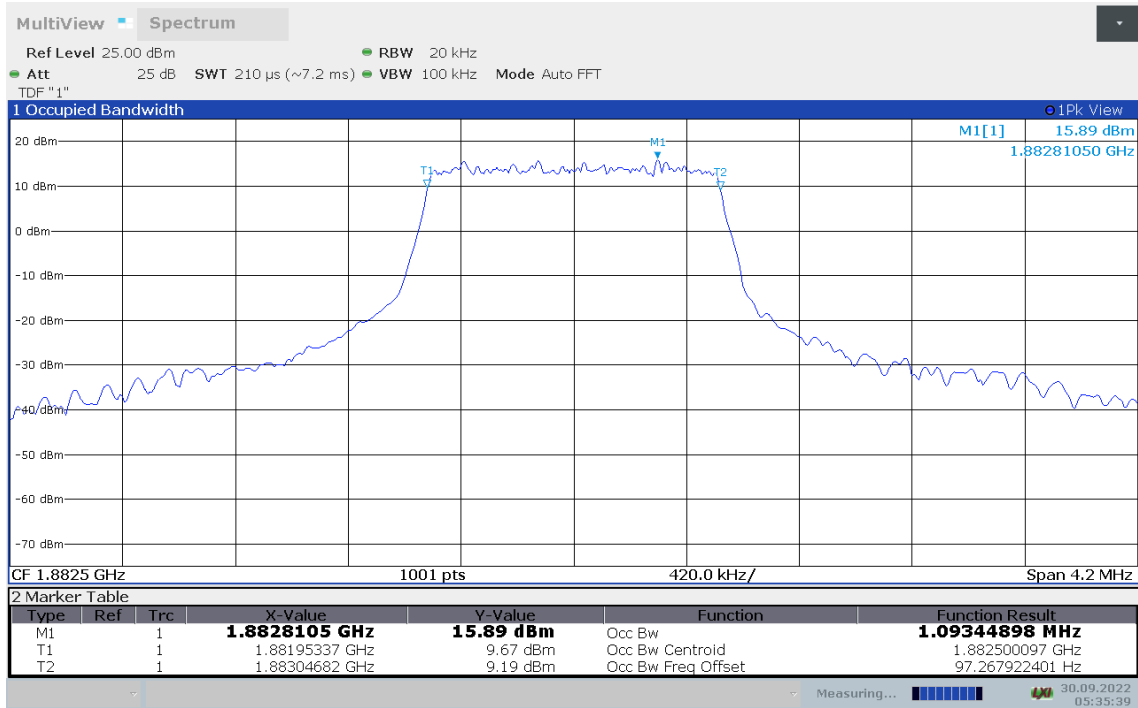


**LTE band 25,1.4MHz Bandwidth, 16QAM (99% BW)**





LTE band 25,1.4MHz Bandwidth, 64QAM (99% BW)



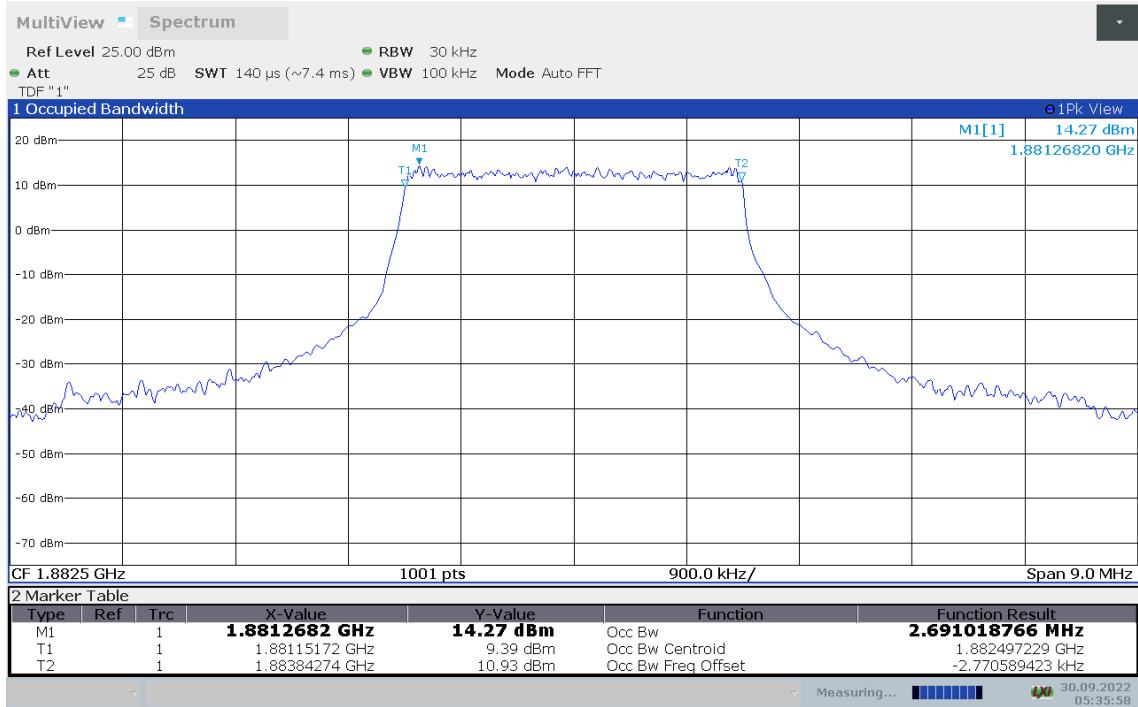




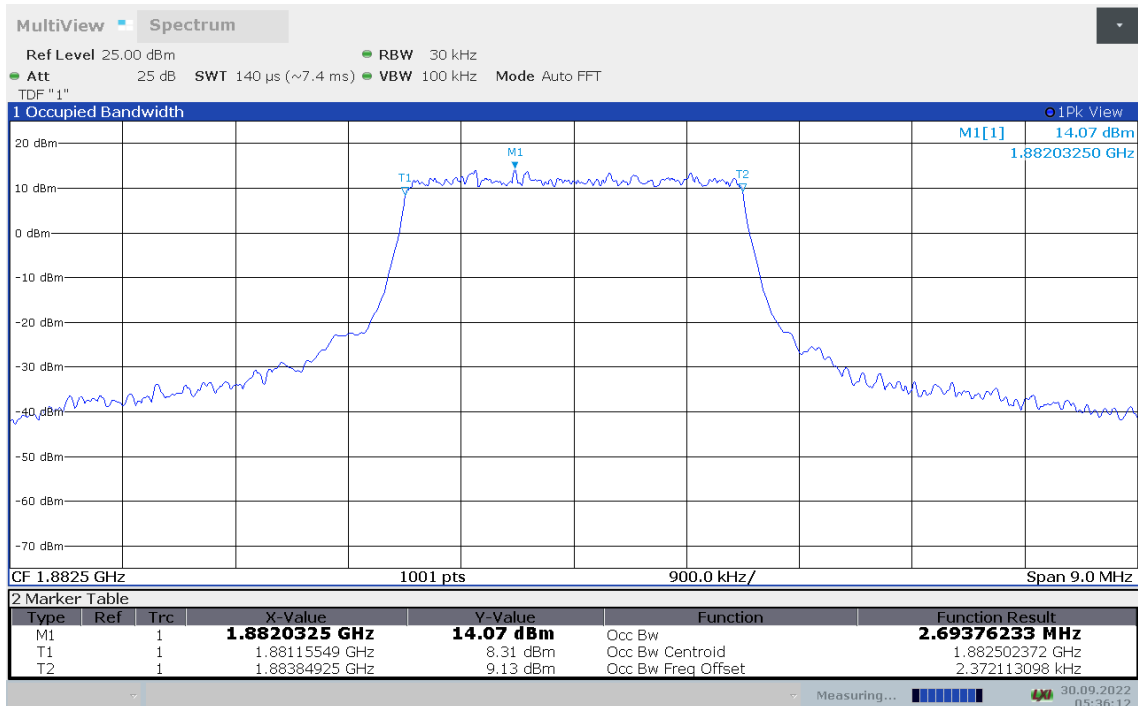
**LTE band 25,3MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1882.5	QPSK	16QAM	64QAM
	2.691	2.694	2.695

**LTE band 25,3MHz Bandwidth, QPSK (99% BW)**

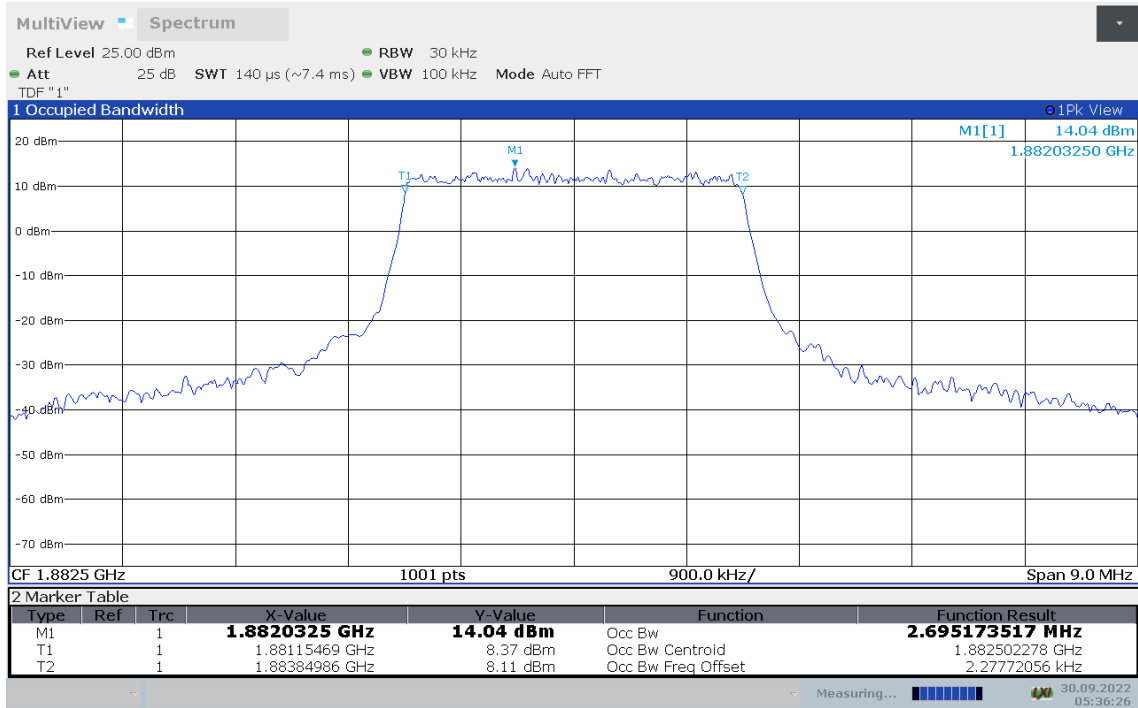


**LTE band 25,3MHz Bandwidth, 16QAM (99% BW)**





LTE band 25,3MHz Bandwidth, 64QAM (99% BW)

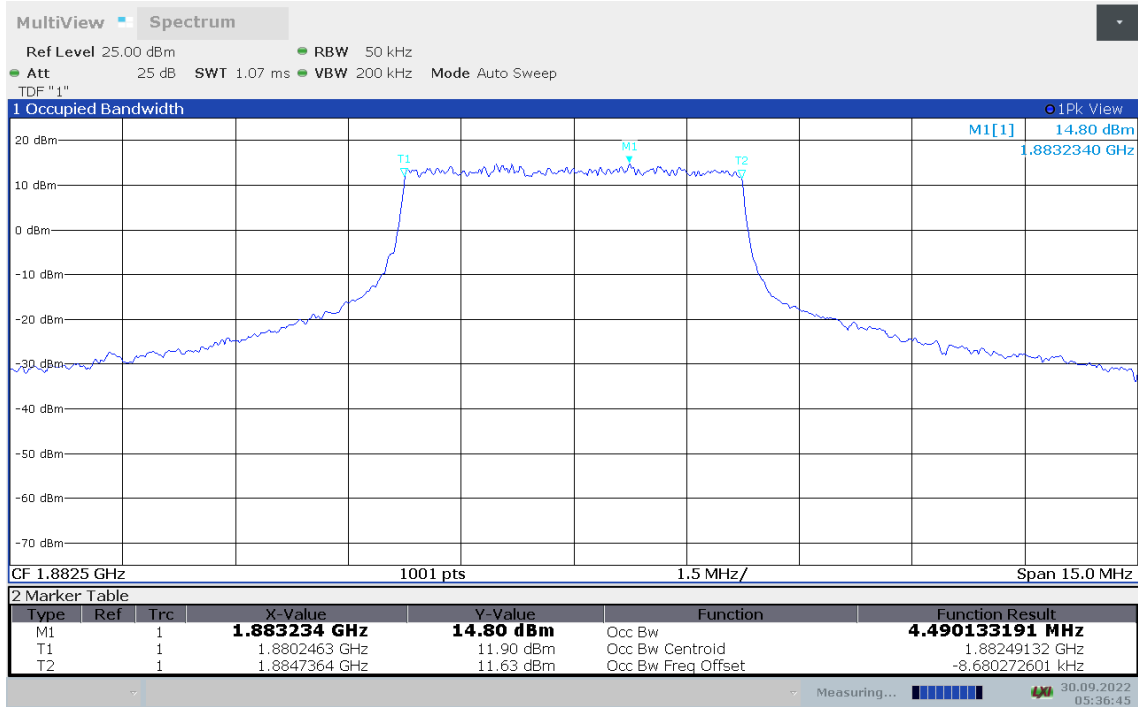




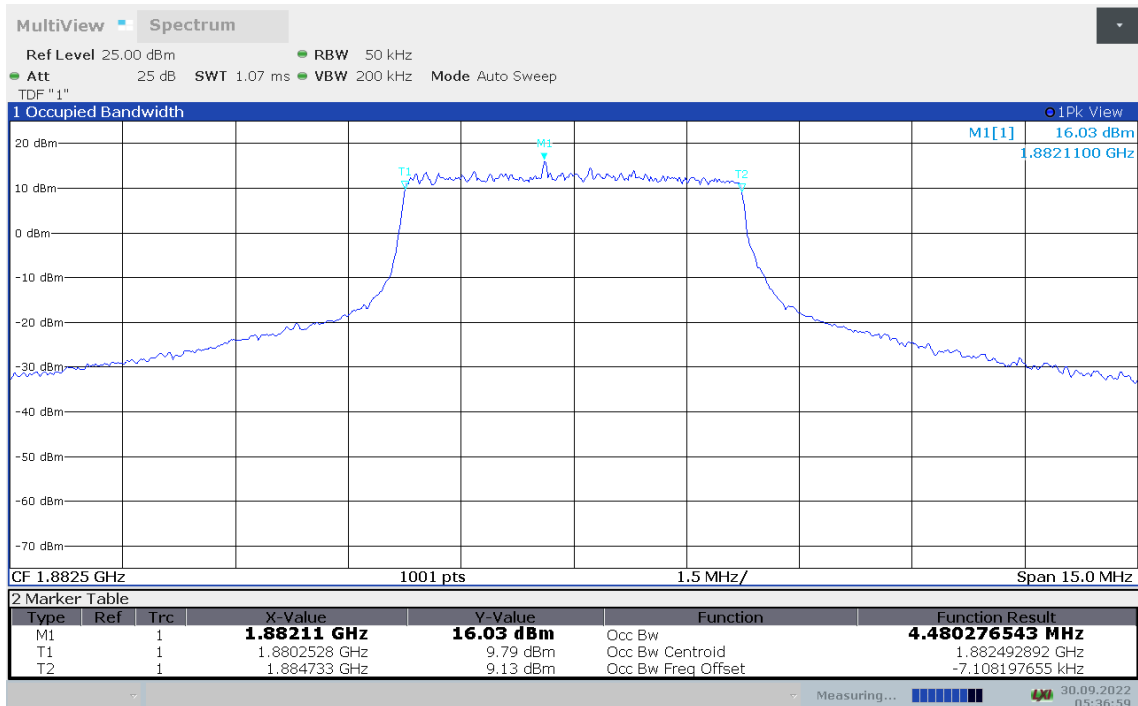
**LTE band 25,5MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1882.5	QPSK	16QAM	64QAM
	4.490	4.480	4.481

**LTE band 25,5MHz Bandwidth, QPSK (99% BW)**

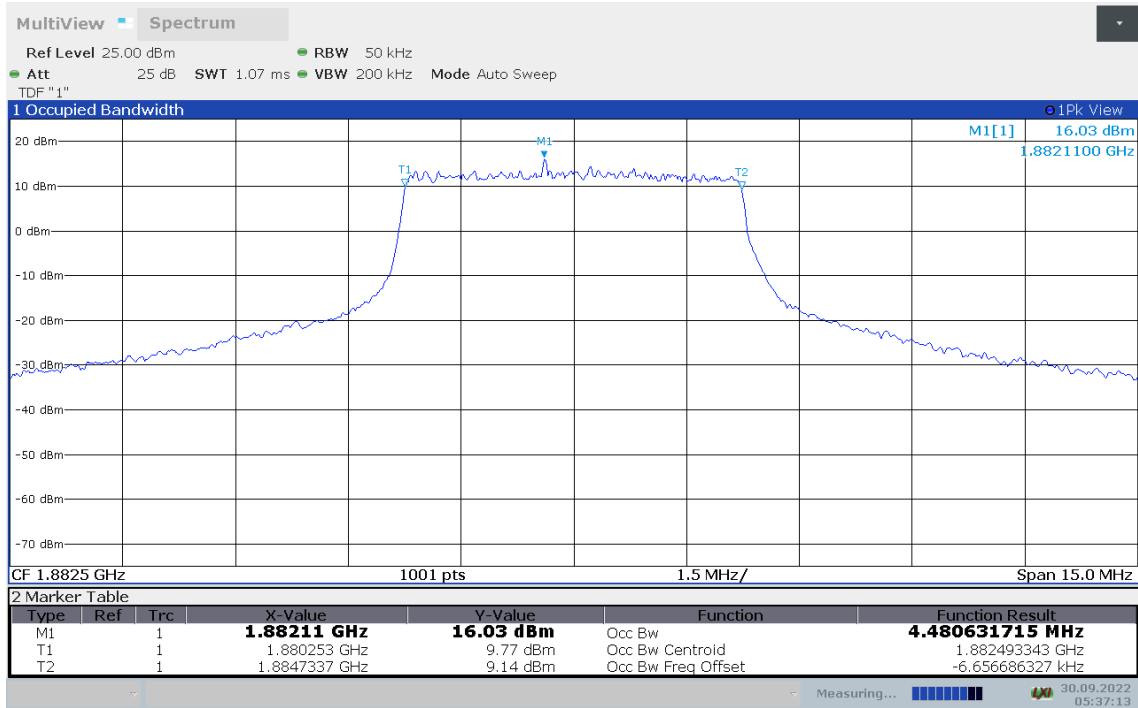


**LTE band 25,5MHz Bandwidth, 16QAM (99% BW)**





LTE band 25,5MHz Bandwidth, 64QAM (99% BW)

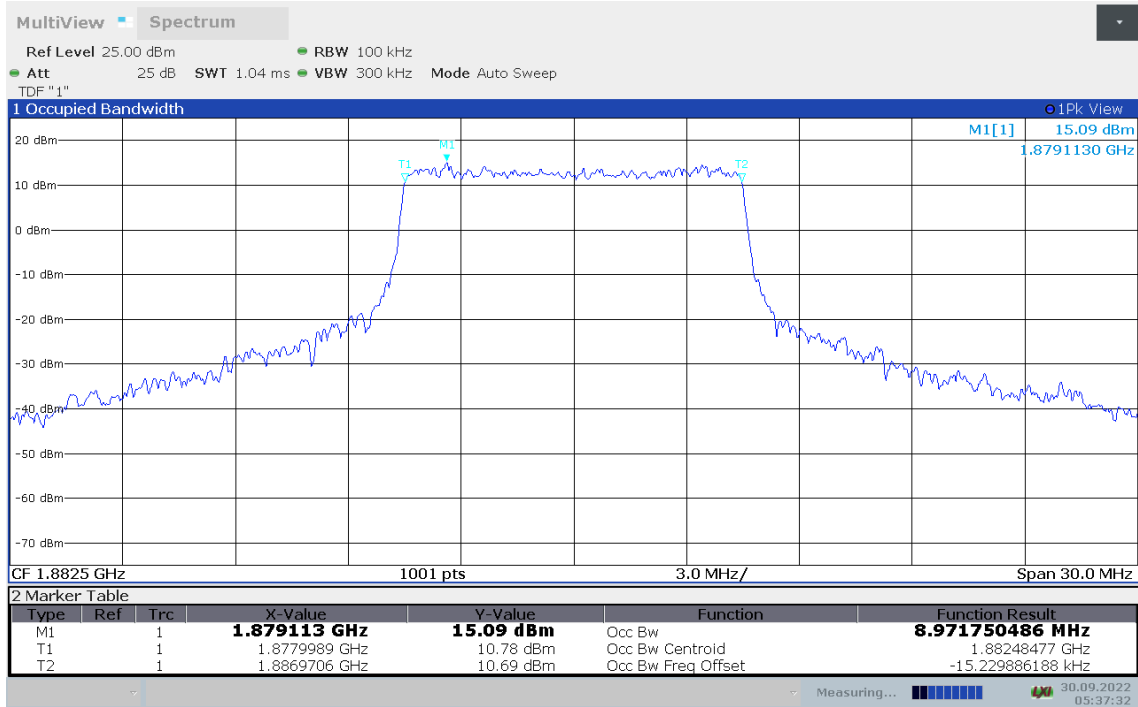




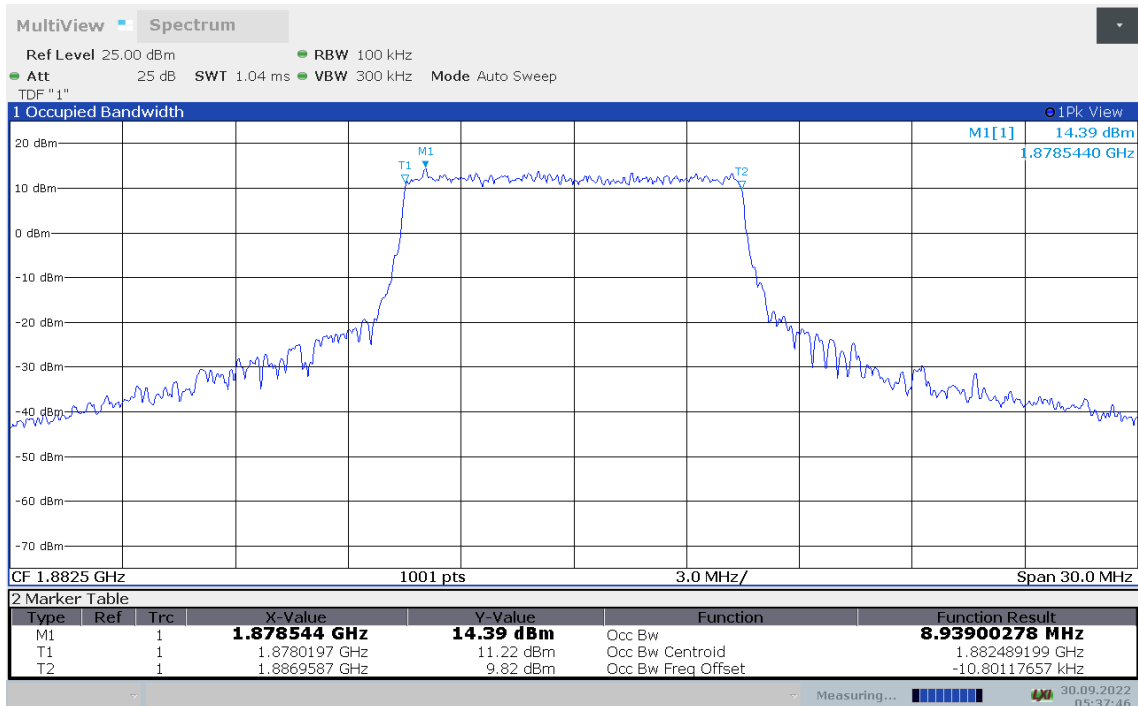
**LTE band 25,10MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1882.5	QPSK	16QAM	64QAM
	8.972	8.939	8.950

**LTE band 25,10MHz Bandwidth, QPSK (99% BW)**

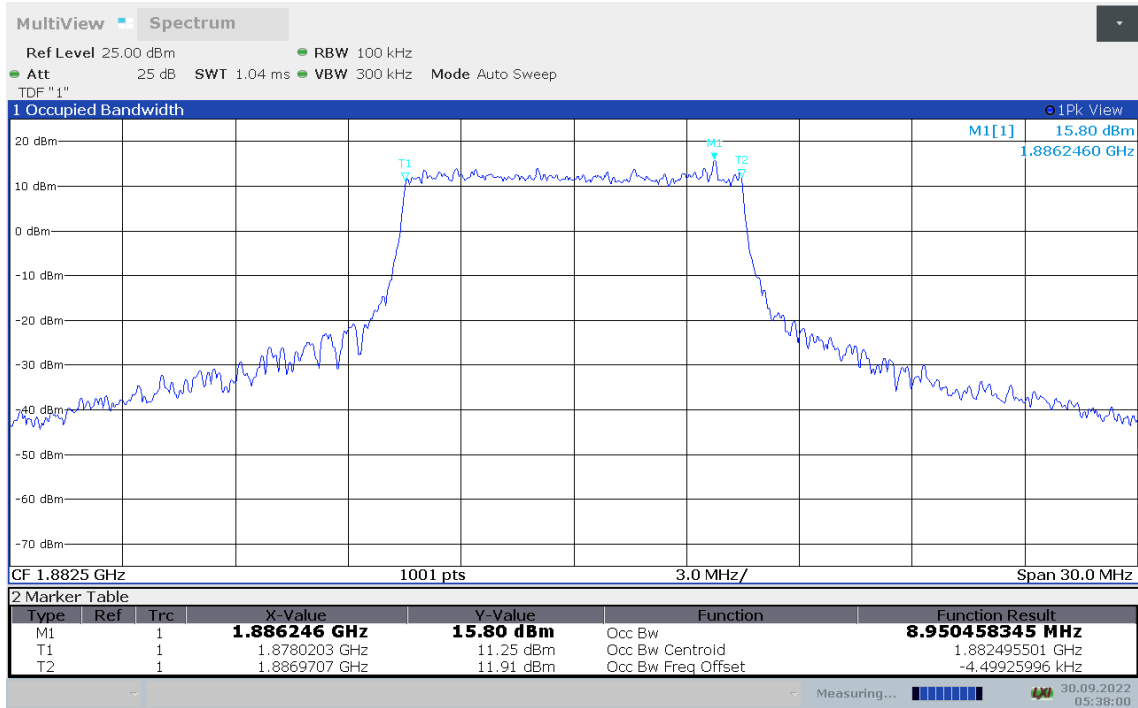


**LTE band 25,10MHz Bandwidth, 16QAM (99% BW)**





### LTE band 25,10MHz Bandwidth, 64QAM (99% BW)

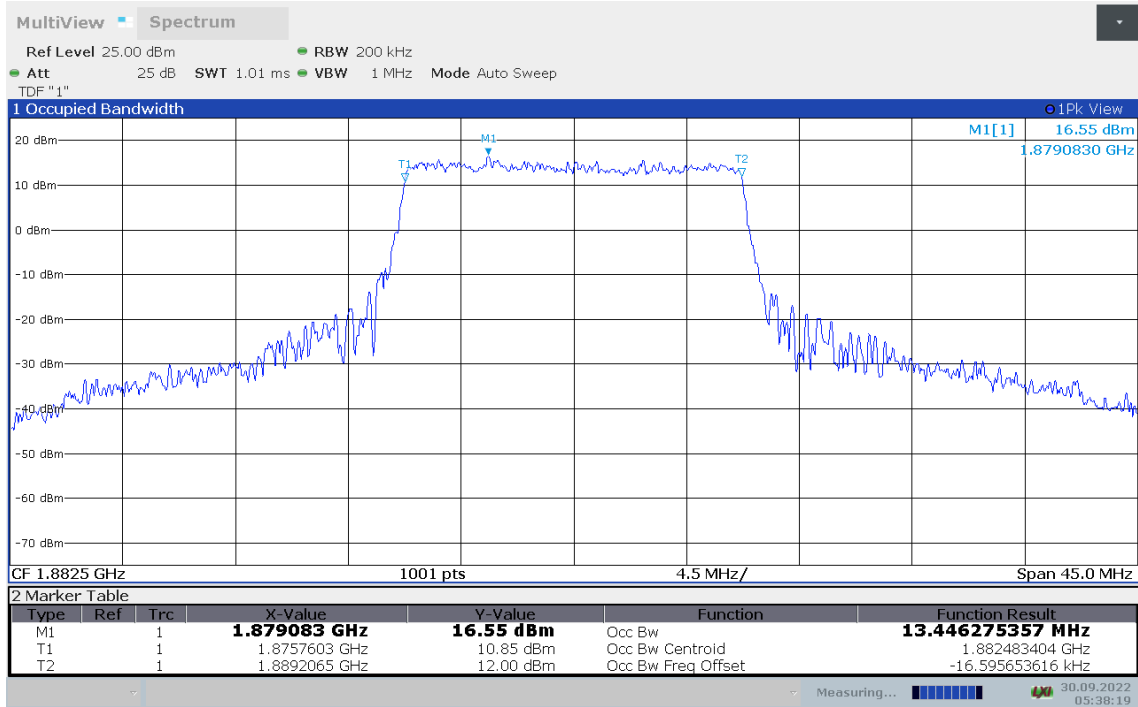




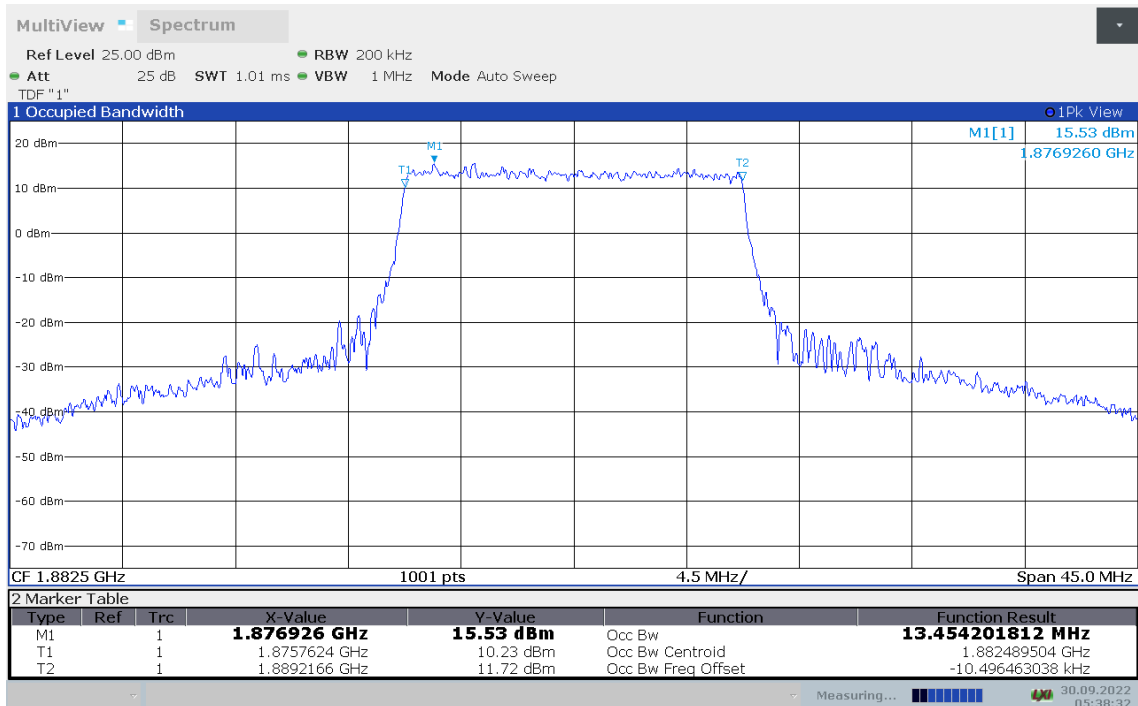
**LTE band 25,15MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1882.5	QPSK	16QAM	64QAM
	13.446	13.454	13.450

**LTE band 25,15MHz Bandwidth, QPSK (99% BW)**

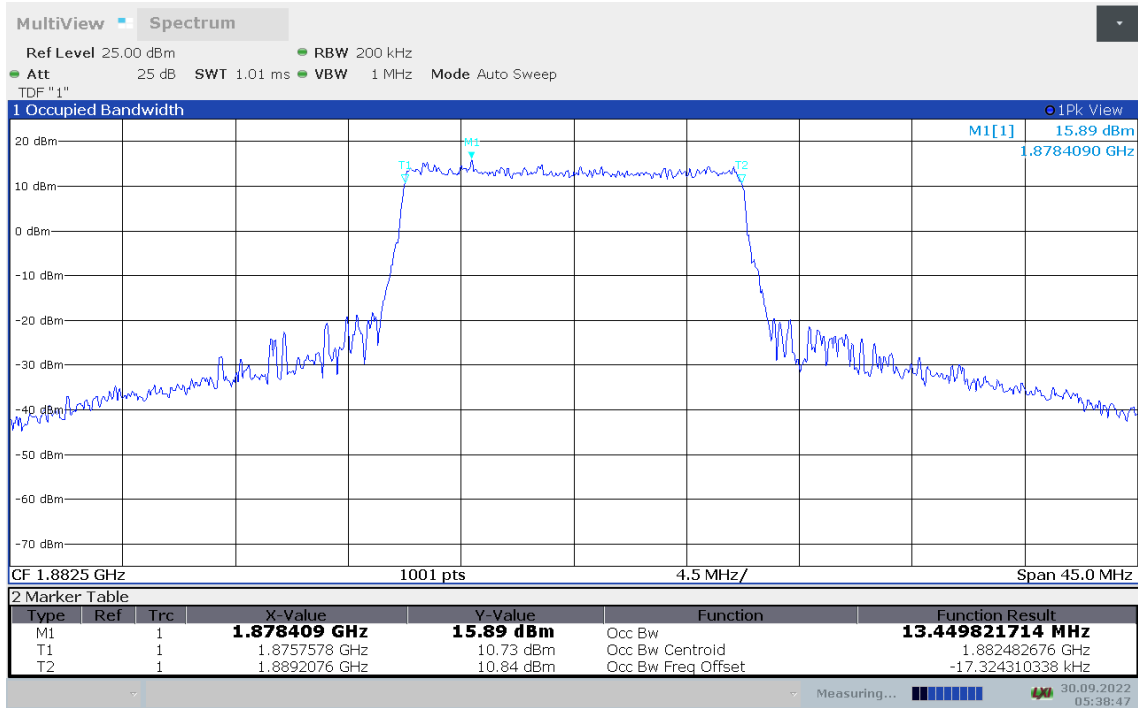


**LTE band 25,15MHz Bandwidth, 16QAM (99% BW)**





LTE band 25,15MHz Bandwidth, 64QAM (99% BW)



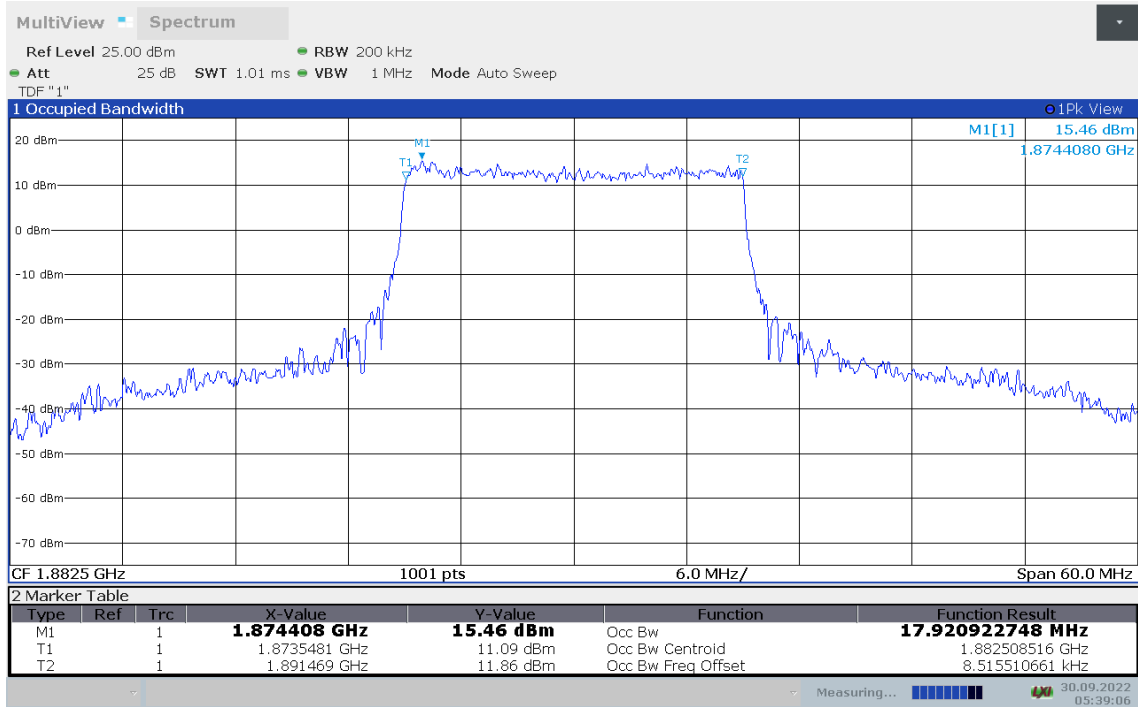




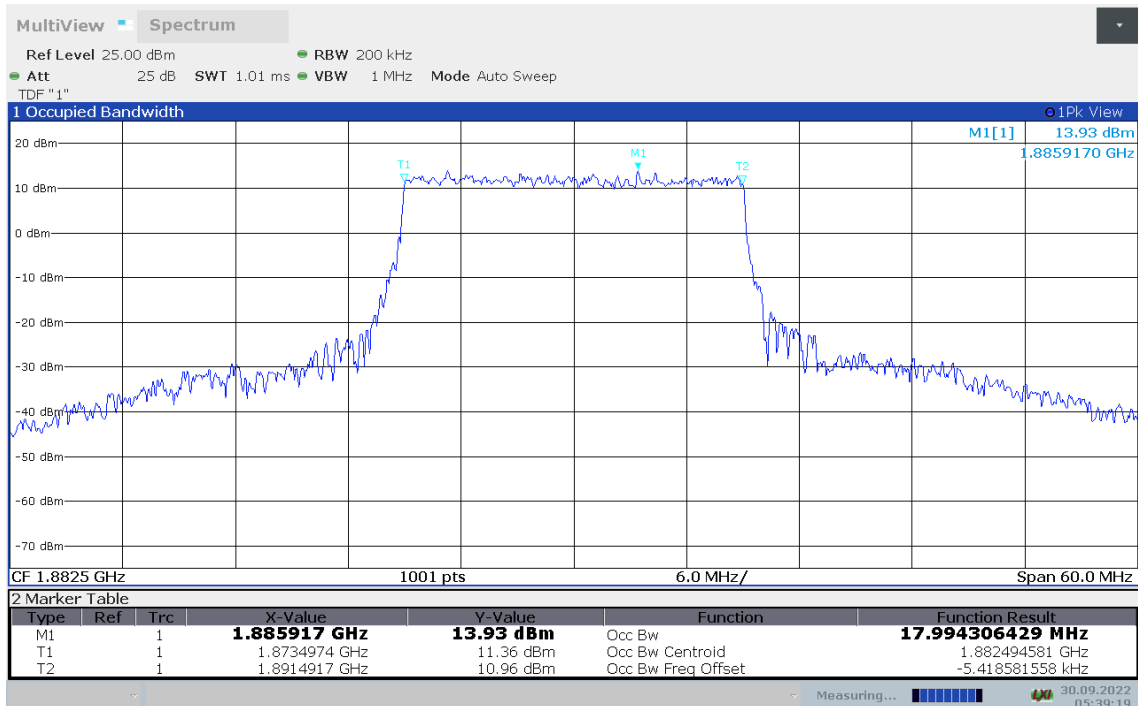
**LTE band 25,20MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1882.5	QPSK	16QAM	64QAM
	17.921	17.994	13.929

**LTE band 25,20MHz Bandwidth, QPSK (99% BW)**

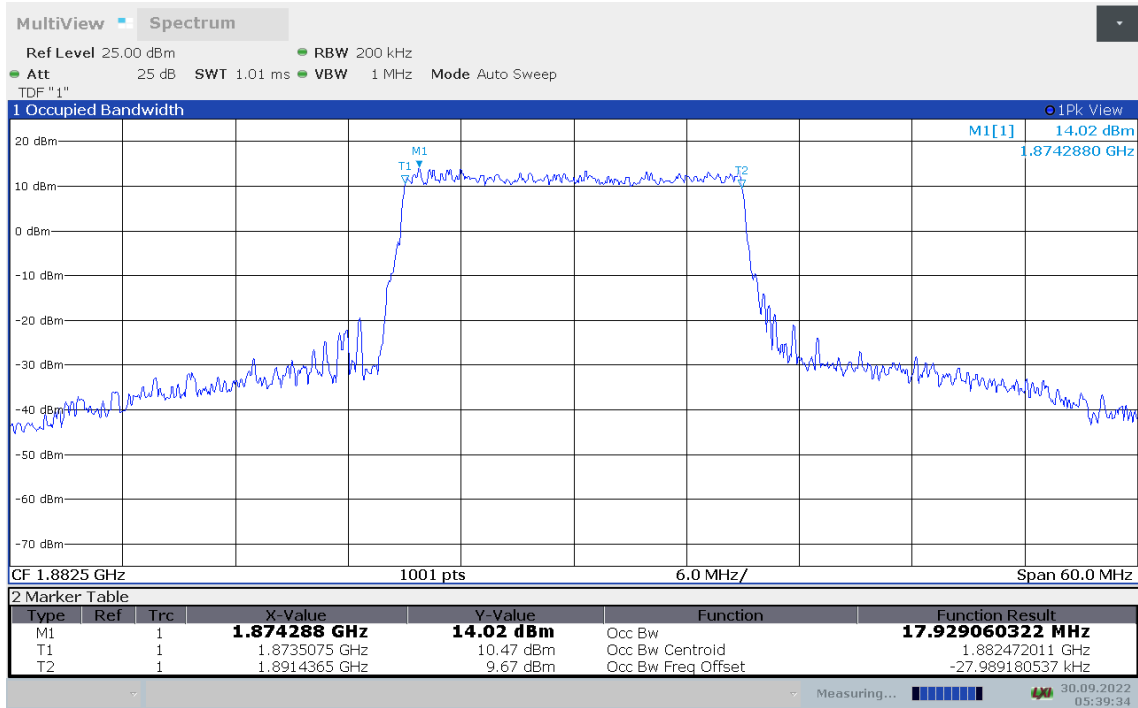


**LTE band 25,20MHz Bandwidth, 16QAM (99% BW)**





LTE band 25,20MHz Bandwidth, 64QAM (99% BW)

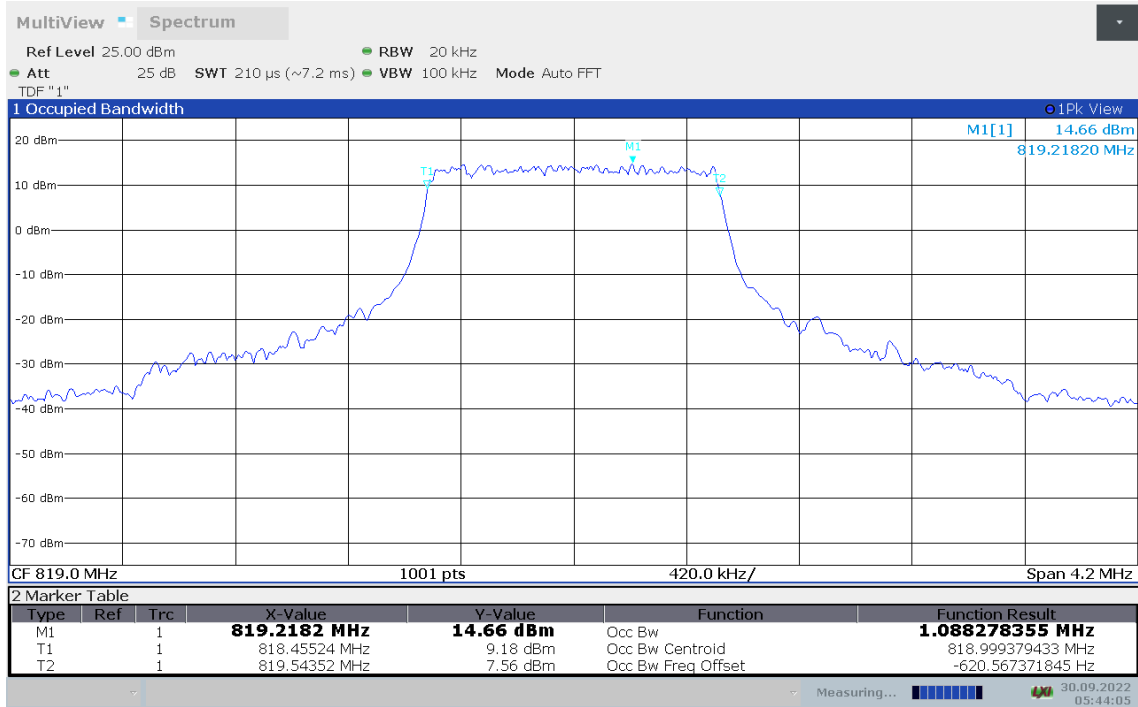




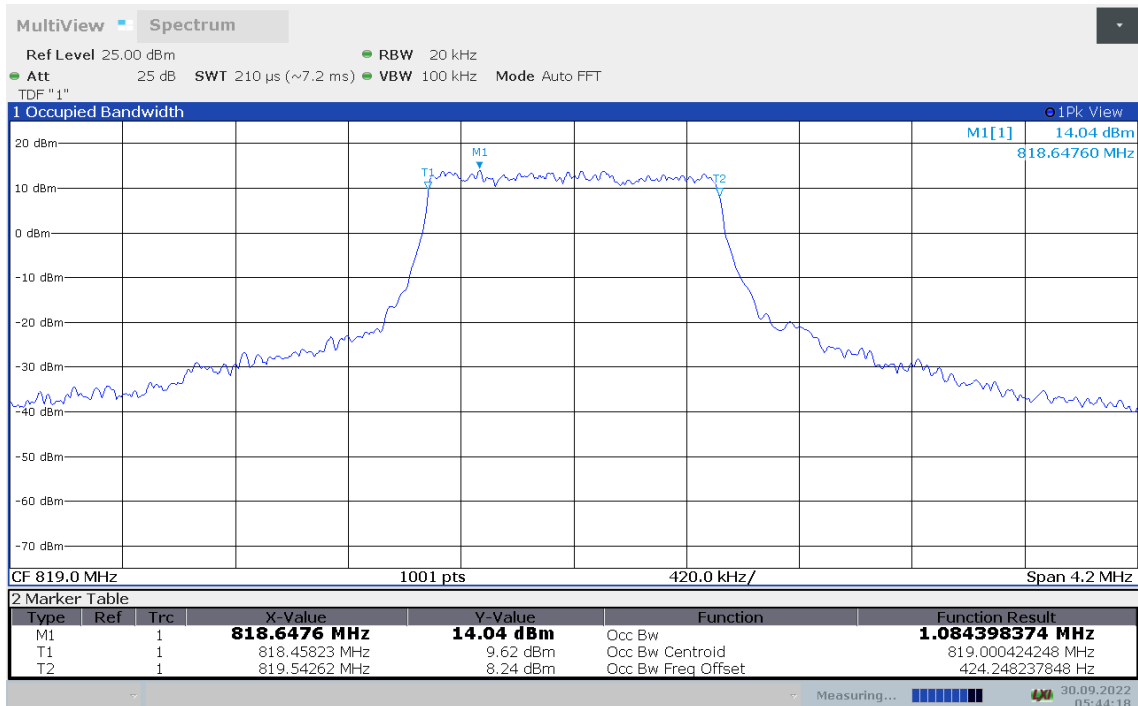
**LTE band 26(814MHz-824MHz ), 1.4MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
819.0	QPSK	16QAM	64QAM
	1.088	1.084	1.084

**LTE band 26(814MHz-824MHz), 1.4MHz Bandwidth, QPSK (99% BW)**

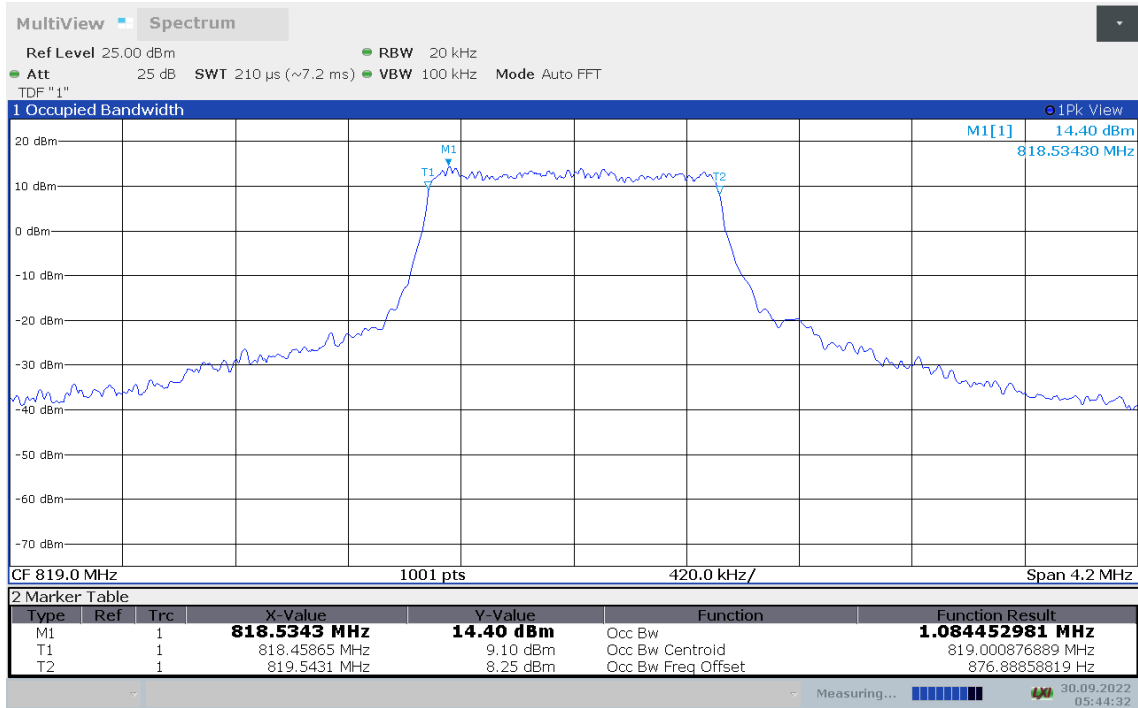


**LTE band 26(814MHz-824MHz), 1.4MHz Bandwidth, 16QAM (99% BW)**





**LTE Band 26(814MHz-824MHz), 1.4MHz Bandwidth, 64QAM (99% BW)**

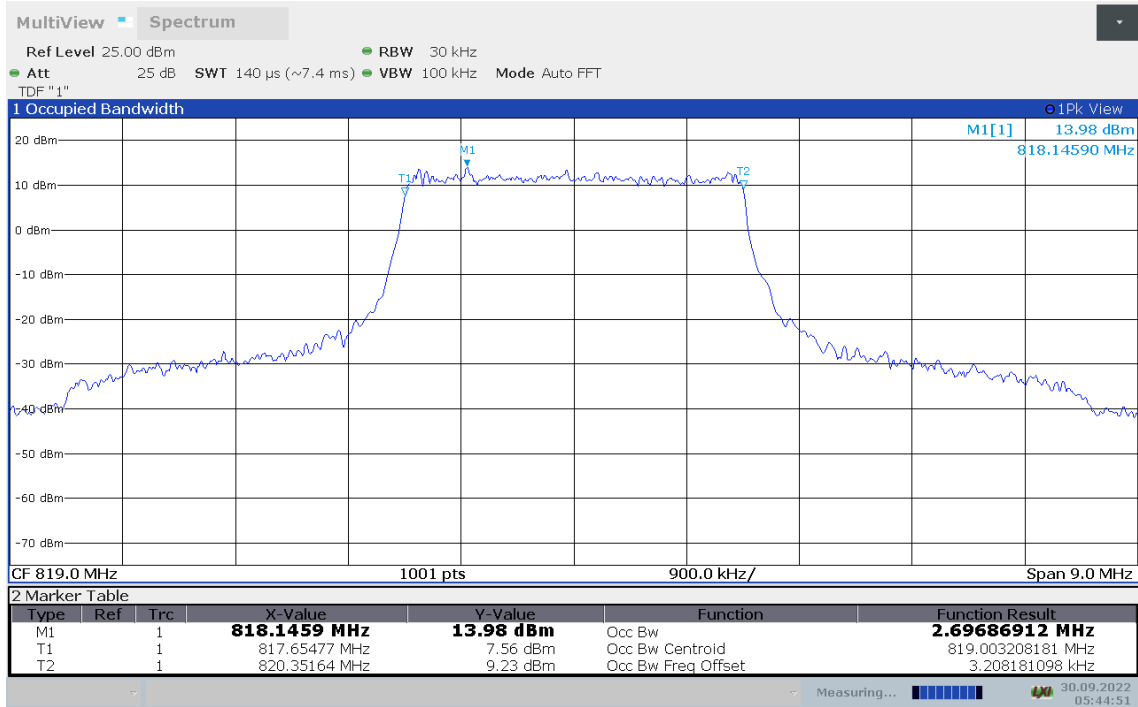




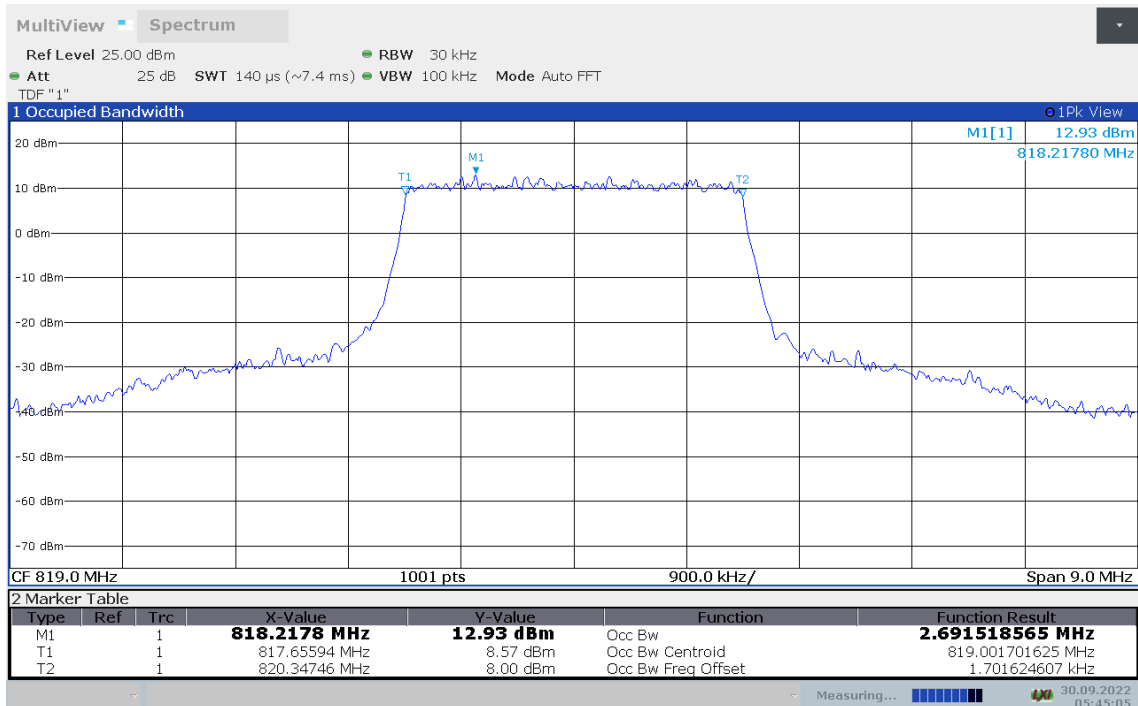
**LTE band 26(814MHz-824MHz), 3MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
819.0	QPSK	16QAM	64QAM
	2.697	2.692	2.688

**LTE band 26(814MHz-824MHz), 3MHz Bandwidth, QPSK (99% BW)**

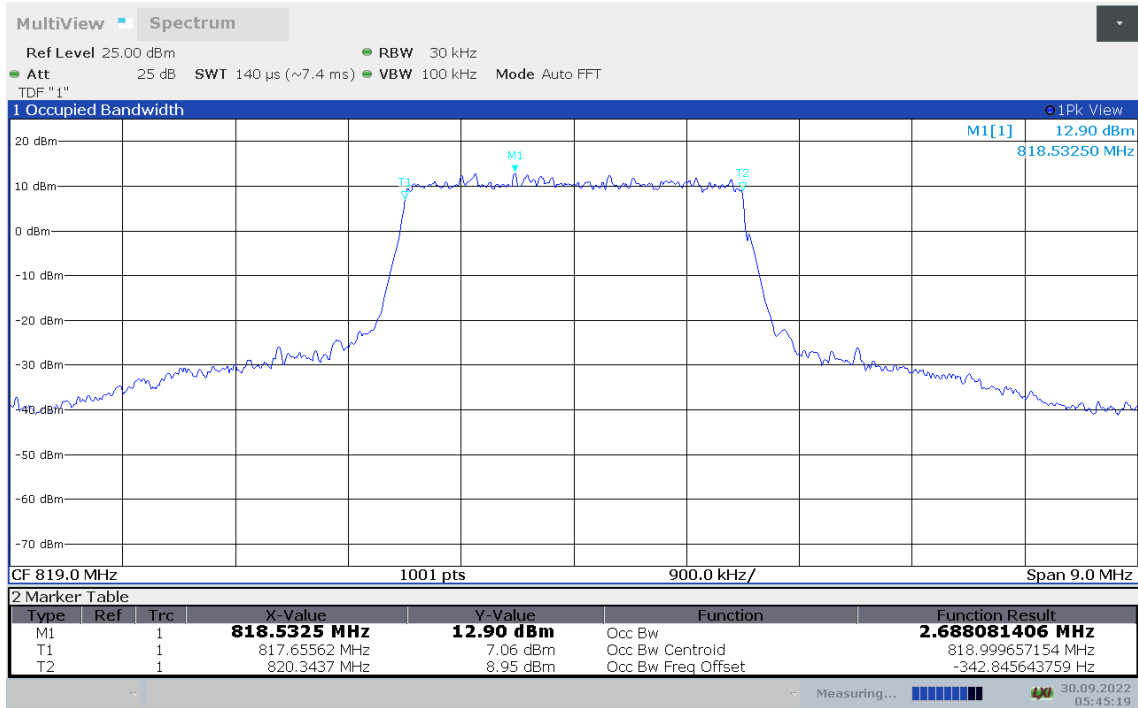


**LTE band 26(814MHz-824MHz), 3MHz Bandwidth, 16QAM (99% BW)**





### LTE Band 26(814MHz-824MHz), 3MHz Bandwidth, 64QAM (99% BW)

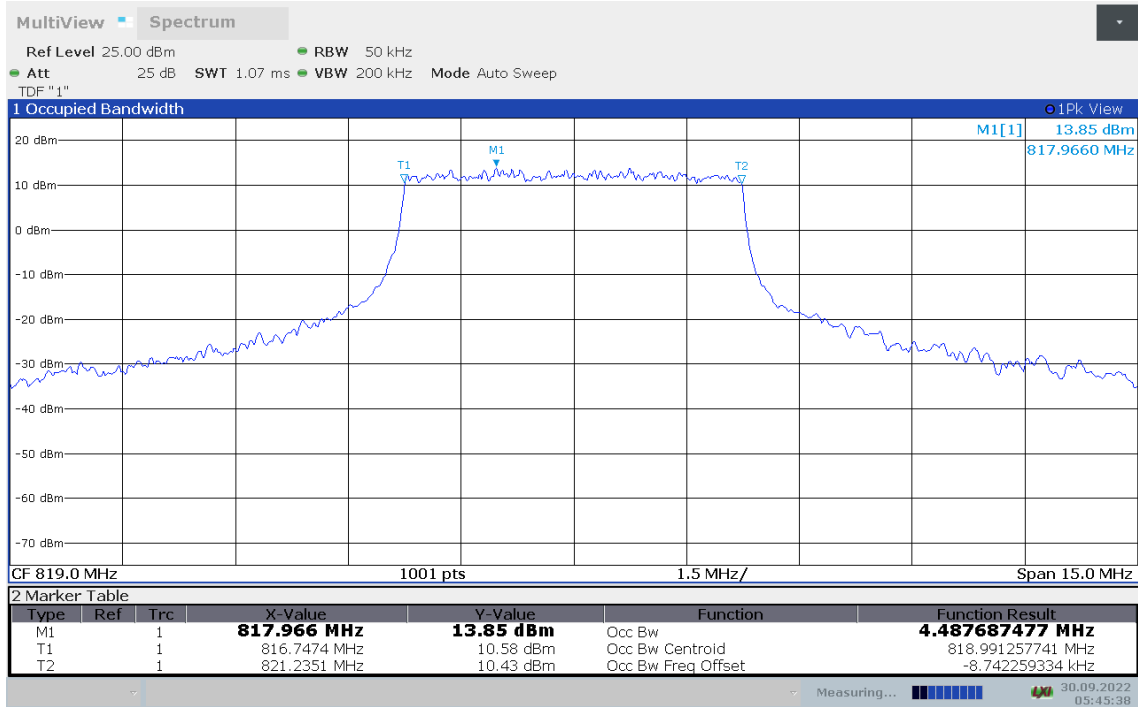




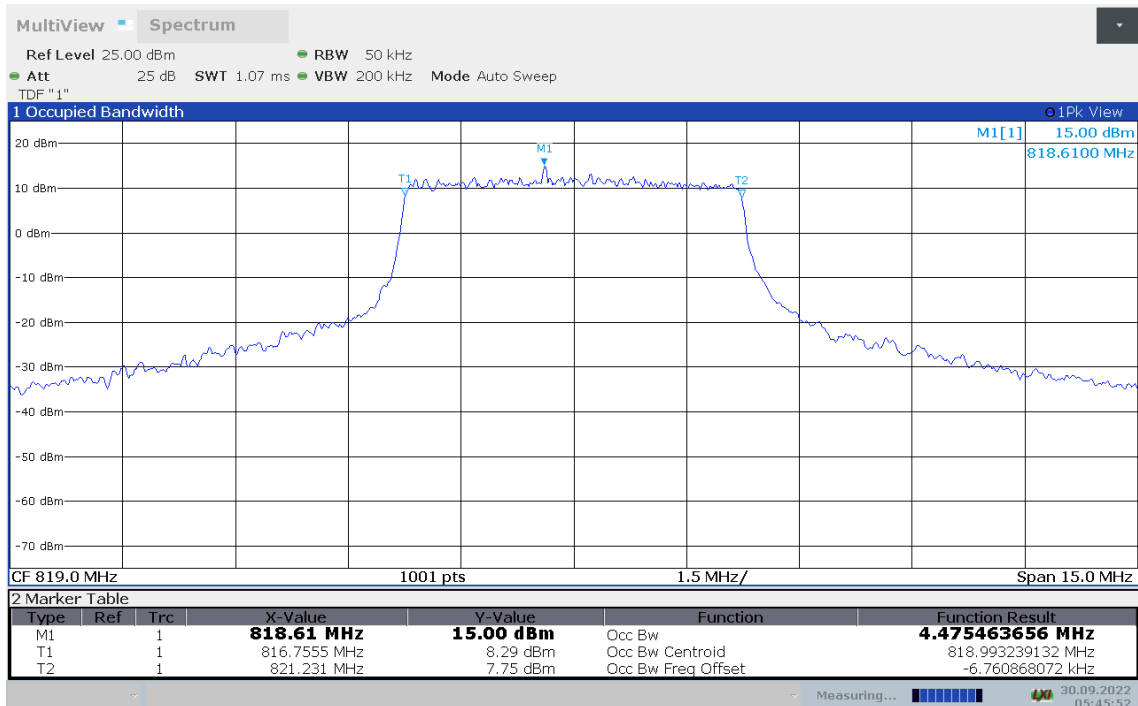
LTE band 26(814MHz-824MHz), 5MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
819.0	QPSK	16QAM	64QAM
	4.488	4.475	4.476

LTE band 26(814MHz-824MHz), 5MHz Bandwidth, QPSK (99% BW)



LTE band 26(814MHz-824MHz), 5MHz Bandwidth,16QAM (99% BW)





LTE Band 26(814MHz-824MHz), 5MHz Bandwidth,64QAM (99% BW)

