TEST REPORT

No.I22N01500-RF-LTE

for

BLU Products,Inc.

Smart Phone

Model Name: B1550VL

FCC ID: YHLBLUB1550VL

with

Hardware Version: V1.0

Software Version: BLU_B1550VL_V12.0.02.05.02.17_Fsec

Issued Date: 2022-10-06

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.

Test Laboratory:

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I22N01500-RF-LTE	Rev.0	1st edition	2022-10-06

CONTENTS

1. SUMMARY OF TEST REPORT

1.1. Test Items

Description	Smart Phone
Model Name	B1550VL
Brand Name	BLU
Applicant's name	BLU Products,Inc.
Manufacturer's Name	BLU Products,Inc.

1.2. Test Standards

FCC Part 2/22/24/27	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: 2022-07-08 Testing End Date: 2022-10-05

1.6. Signature

Wang Ping	**Huang Qiuqin**
(Prepared this test report)	**(Reviewed this test report)**

Zhang Hao

(Approved this test report)

2. CLIENT INFORMATION

2.1. Applicant Information

Company Name: BLU Products,Inc.
Address /Post: 10814 NW 33rd St # 100 Doral, FL 33172,USA
Contact： Zeng wei
Email： zwei@ctasiasz.com
Telephone: 305.715.7171
Fax: 305.436.8819

2.2. Manufacturer Information

Company Name: BLU Products,Inc.
Address /Post: 10814 NW 33rd St # 100 Doral, FL 33172,USA
Contact： Zeng wei
Email： zwei@ctasiasz.com
Telephone: 305.715.7171
Fax: 305.436.8819

3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT (AE)

3.1. About EUT

Description	Smart Phone
Model Name	B1550VL
FCC ID	YHLBLUB1550VL
Frequency Bands	LTE Bands 2,4,5,12,13,66, CA_5B,CA_66B,CA_66C, CA_2A-5A,CA_2A-13A,CA_4A-13A,CA_5A-66A,CA_13A-66A
Antenna	Integrated
Extreme vol. Limits	3.6V to 4.4V (nominal: 3.85V)
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

EUT ID*	SN or IMEI	HW Version	SW Version	Date of receipt
UT05aa	350547790004119	V1.0	BLU_B1550VL_V12.0.02.05.02.17_Fsec	2022-07-07
UT07aa	350547790010215	V1.0	BLU_B1550VL_V12.0.02.05.02.17_Fsec	2022-08-26

*EUT ID: is used to identify the test sample in the lab internally.

UT05aa are used for conduction test, UT07aa is used for radiation test.

3.3. Internal Identification of AE used during the test

AE ID*	Description
AE1	Battery

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

3.4. General Description

The Equipment Under Test (EUT) is a model Mobile Phone 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.

Reference	Title	Version
FCC Part 2	FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS	10-1-20 Edition
FCC Part 22	PUBLIC MOBILE SERVICES	10-1-20 Edition
FCC Part 24	PERSONAL COMMUNICATIONS SERVICES	10-1-20 Edition
FCC Part 27	MISCELLANEOUS WIRELESS COMMUNICATIONS 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 ℃, Max. = 35 ℃
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 ℃, Max. = 35 ℃
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	Frequency Stability	2.1055/24.235	A.2	P
3	Occupied Bandwidth	2.1049/24.238	A.3	P
4	Emission Bandwidth	2.1049/24.238	A.4	P
5	Band Edge Compliance	2.1051/24.238	A.5	P
6	Conducted Spurious Emission	2.1051/24.238	A.6	P
7	Peak-to-Average Power Ratio	24.232/ KDB971168 D01	A.7	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	Frequency Stability	2.1055/27.54	A.2	P
3	Occupied Bandwidth	2.1049/27.53(g)	A.3	P
4	Emission Bandwidth	2.1049/27.53(g)	A.4	P
5	Band Edge Compliance	2.1051/27.53(h)	A.5	P
6	Conducted Spurious Emission	2.1051/27.53(h)	A.6	P
7	Peak-to-Average Power Ratio	27.50(d)/ KDB971168 D01	A.7	P

LTE band 5(CA_5B)

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/22.913	A.1	P
2	Frequency Stability	2.1055/22.355	A.2	P
3	Occupied Bandwidth	2.1049/22.917	A.3	P
4	Emission Bandwidth	2.1049/22.917	A.4	P
5	Band Edge Compliance	2.1051/22.917	A.5	P
6	Conducted Spurious Emission	2.1051/22.917	A.6	P
7	Peak-to-Average Power Ratio	KDB971168 D01	A.7	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	Frequency Stability	2.1055/27.54	A.2	P
3	Occupied Bandwidth	2.1049/27.53(g)	A.3	P
4	Emission Bandwidth	2.1049/27.53(g)	A.4	P
5	Band Edge Compliance	2.1051/27.53(g)	A.5	P
6	Conducted Spurious Emission	2.1051/27.53(g)	A.6	P
7	Peak-to-Average Power Ratio	27.50(a)/ KDB971168 D01	A.7	P

LTE Band 13

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

LTE Band 66(CA_66B,CA_66C)

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

8. TEST EQUIPMENTS UTILIZED

NO.	Description	TYPE	Manufacture	series number	CAL DUE DATE
1	Spectrum Analyzer	FSW26	R&S	101967	2023-05-07
2	Universal Radio Communication Tester	CMW500	R&S	129146	2023-04-23
3	Temperature Chamber	SH-241	ESPEC	92007516	2022-10-15
4	DC Power Supply	U3606A	Agilent Technologies	MY50450012	2022-11-13
5	Test Receiver	ESR7	R&S	101676	2022-11-24
6	BiLog Antenna	3142E	ETS-Lindgren	0224831	2024-05-27
7	Horn Antenna	3117	ETS-Lindgren	00066577	2025-04-17
8	Horn Antenna	QSH-SL-18-26-S-20	Q-par	17013	2023-01-06
9	Antenna	BBHA 9120D	Schwarzbeck	1593	2022-12-05
10	Antenna	VUBA 9117	Schwarzbeck	207	2023-07-15
11	Antenna	QWH-SL-18-40-K-SG	Q-par	15979	2023-01-06
12	preamplifier	83017A	Agilent	MY39501110	/
13	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	Software	EMC32	R&S	V10.50.40	/

ANNEX A: MEASUREMENT RESULTS

A.1 OUTPUT POWER

Reference

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

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	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1909.3 (19193)	22.97	22.23	21.11
		1880 (18900)	22.98	22.18	20.99
		1850.7 (18607)	22.99	22.20	21.04
	1RB-Middle (3)	1909.3 (19193)	22.99	22.27	21.08
		1880 (18900)	23.02	22.22	21.06
		1850.7 (18607)	22.99	22.26	21.07
	1RB-Low (0)	1909.3 (19193)	22.98	22.23	21.10
		1880 (18900)	23.02	22.20	21.06
		1850.7 (18607)	23.00	22.29	21.07
	3RB-High (3)	1909.3 (19193)	23.05	22.05	20.95
		1880 (18900)	23.03	22.04	20.97
		1850.7 (18607)	23.02	21.96	21.01
	3RB-Middle (1)	1909.3 (19193)	23.06	22.09	21.01
		1880 (18900)	23.06	22.07	21.05
		1850.7 (18607)	22.99	21.98	21.03
	3RB-Low (0)	1909.3 (19193)	23.05	22.06	20.94
		1880 (18900)	23.10	22.04	21.03
		1850.7 (18607)	23.01	21.98	21.01
	6RB (0)	1909.3 (19193)	22.05	21.14	20.07
		1880 (18900)	22.02	21.11	20.11
		1850.7 (18607)	22.04	21.05	20.03
3MHz	1RB-High (14)	1908.5 (19185)	23.05	22.18	21.03
		1880 (18900)	23.04	22.16	21.05

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
		1851.5 (18615)	22.99	22.15	21.04
	1RB-Middle (7)	1908.5 (19185)	23.09	22.19	21.09
		1880 (18900)	23.05	22.20	21.12
		1851.5 (18615)	23.02	22.23	21.10
	1RB-Low (0)	1908.5 (19185)	23.13	22.19	21.09
		1880 (18900)	23.02	22.10	21.08
		1851.5 (18615)	22.98	22.20	21.08
	8RB-High (7)	1908.5 (19185)	21.99	21.06	20.08
		1880 (18900)	21.97	21.01	20.05
		1851.5 (18615)	21.98	21.00	20.09
	8RB-Middle (4)	1908.5 (19185)	21.98	21.11	20.10
		1880 (18900)	21.98	21.02	20.03
		1851.5 (18615)	21.98	21.02	20.17
	8RB-Low (0)	1908.5 (19185)	22.03	21.12	20.11
		1880 (18900)	22.02	21.07	20.09
		1851.5 (18615)	21.98	21.02	20.11
	15RB (0)	1908.5 (19185)	22.00	21.02	20.11
		1880 (18900)	21.95	20.95	20.02
		1851.5 (18615)	21.98	21.01	20.05
5MHz	1RB-High (24)	1907.5 (19175)	23.00	22.29	20.97
		1880 (18900)	23.00	22.23	21.07
		1852.5 (18625)	23.00	22.18	21.14
	1RB-Middle (12)	1907.5 (19175)	23.14	22.38	21.14
		1880 (18900)	23.09	22.28	21.17
		1852.5 (18625)	23.06	22.24	21.23
	1RB-Low (0)	1907.5 (19175)	23.11	22.38	21.12
		1880 (18900)	23.02	22.25	21.10
		1852.5 (18625)	23.05	22.26	21.15
	12RB-High (13)	1907.5 (19175)	21.96	20.92	20.06
		1880 (18900)	21.99	20.95	20.11
		1852.5 (18625)	21.99	20.96	20.12
	12RB-Middle (6)	1907.5 (19175)	22.04	21.01	20.18
		1880 (18900)	22.01	21.02	20.20
		1852.5 (18625)	22.04	20.99	20.18
	12RB-Low (0)	1907.5 (19175)	22.13	21.08	20.24
		1880 (18900)	22.05	21.04	20.19
		1852.5 (18625)	22.03	20.98	20.21
	25RB (0)	1907.5 (19175)	22.02	21.05	20.10
		1880 (18900)	22.02	21.02	20.10
		1852.5 (18625)	21.99	21.02	20.10

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
10MHz	1RB-High (49)	1905 (19150)	23.00	22.16	21.13
		1880 (18900)	22.97	22.20	21.14
		1855 (18650)	22.99	22.18	21.05
	1RB-Middle (24)	1905 (19150)	23.08	22.26	21.23
		1880 (18900)	22.98	22.24	21.14
		1855 (18650)	23.04	22.21	21.09
	1RB-Low (0)	1905 (19150)	23.01	22.24	21.20
		1880 (18900)	22.99	22.20	21.11
		1855 (18650)	23.02	22.19	20.97
	25RB-High (25)	1905 (19150)	21.97	20.96	20.03
		1880 (18900)	21.99	20.98	20.03
		1855 (18650)	22.00	20.97	20.09
	25RB-Middle (12)	1905 (19150)	22.03	21.02	20.10
		1880 (18900)	22.00	21.02	20.07
		1855 (18650)	22.03	21.01	20.11
	25RB-Low (0)	1905 (19150)	22.02	21.04	20.11
		1880 (18900)	22.07	21.06	20.15
		1855 (18650)	21.97	20.99	20.09
	50RB (0)	1905 (19150)	21.98	20.99	20.07
		1880 (18900)	22.00	20.97	20.07
		1855 (18650)	22.02	20.97	20.06
15MHz	1RB-High (74)	1902.5 (19125)	22.98	22.21	21.00
		1880 (18900)	23.02	22.19	21.12
		1857.5 (18675)	22.99	22.06	21.07
	1RB-Middle (37)	1902.5 (19125)	23.02	22.24	21.04
		1880 (18900)	23.12	22.23	21.17
		1857.5 (18675)	23.07	22.22	21.17
	1RB-Low (0)	1902.5 (19125)	22.93	22.19	21.01
		1880 (18900)	23.09	22.18	21.11
		1857.5 (18675)	23.04	22.14	21.11
	36RB-High (38)	1902.5 (19125)	21.92	20.96	20.05
		1880 (18900)	21.91	20.95	20.02
		1857.5 (18675)	21.94	20.94	20.08
	36RB-Middle (19)	1902.5 (19125)	21.96	21.00	20.12
		1880 (18900)	22.01	21.03	20.08
		1857.5 (18675)	21.98	20.98	20.10
	36RB-Low (0)	1902.5 (19125)	22.00	20.99	20.10
		1880 (18900)	22.04	21.01	20.07
		1857.5 (18675)	21.92	20.93	20.04
	75RB (0)	1902.5 (19125)	21.99	20.96	20.06

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
		1880 (18900)	21.98	20.96	20.08
		1857.5 (18675)	22.02	20.97	20.05
20MHz	1RB-High (99)	1900 (19100)	22.99	22.11	21.02
		1880 (18900)	22.97	22.20	20.96
		1860 (18700)	23.01	22.11	20.84
	1RB-Middle (50)	1900 (19100)	23.07	22.29	21.14
		1880 (18900)	23.09	22.29	21.04
		1860 (18700)	23.07	22.18	20.93
	1RB-Low (0)	1900 (19100)	22.95	22.20	21.02
		1880 (18900)	22.97	22.20	20.98
		1860 (18700)	23.06	22.14	20.92
	50RB-High (50)	1900 (19100)	21.88	20.92	20.06
		1880 (18900)	21.94	20.91	20.00
		1860 (18700)	21.94	20.93	20.02
	50RB-Middle (25)	1900 (19100)	21.98	21.00	20.13
		1880 (18900)	21.99	20.97	20.13
		1860 (18700)	22.99	20.97	20.11
	50RB-Low (0)	1900 (19100)	21.99	20.95	20.07
		1880 (18900)	22.03	21.00	20.16
		1860 (18700)	22.00	20.95	20.05
	100RB (0)	1900 (19100)	21.98	20.93	20.06
		1880 (18900)	21.96	20.93	20.03
		1860 (18700)	21.99	20.95	20.08

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)	22.94	22.15	21.00
		1732.5 (20175)	22.96	22.22	20.91
		1710.7 (19957)	22.94	22.26	21.00
	1RB-Middle (3)	1754.3 (20393)	22.97	22.18	21.08
		1732.5 (20175)	22.97	22.22	20.93
		1710.7 (19957)	22.94	22.32	21.02
	1RB-Low (0)	1754.3 (20393)	22.94	22.16	21.08
		1732.5 (20175)	22.95	22.28	20.95
		1710.7 (19957)	22.94	22.28	21.02
	3RB-High (3)	1754.3 (20393)	22.99	21.99	20.90
		1732.5 (20175)	22.98	21.94	20.92
		1710.7 (19957)	23.02	21.98	20.97
	3RB-Middle (1)	1754.3 (20393)	22.96	22.01	20.90
		1732.5 (20175)	22.99	21.99	20.92
		1710.7 (19957)	22.99	22.03	21.01
	3RB-Low (0)	1754.3 (20393)	22.96	22.00	20.92
		1732.5 (20175)	23.01	21.97	20.97
		1710.7 (19957)	23.01	22.02	21.00
	6RB (0)	1754.3 (20393)	22.02	21.02	20.01
		1732.5 (20175)	22.01	21.02	20.03
		1710.7 (19957)	22.03	21.05	20.01
3MHz	1RB-High (14)	1753.5 (20385)	22.95	22.14	21.03
		1732.5 (20175)	22.97	22.22	21.00
		1711.5 (19965)	23.03	22.19	21.01
	1RB-Middle (7)	1753.5 (20385)	23.04	22.24	21.09
		1732.5 (20175)	23.01	22.25	21.07
		1711.5 (19965)	23.09	22.23	21.06
	1RB-Low (0)	1753.5 (20385)	22.99	22.14	20.99
		1732.5 (20175)	23.02	22.25	21.00
		1711.5 (19965)	23.05	22.17	21.02
	8RB-High (7)	1753.5 (20385)	21.95	20.97	20.04
		1732.5 (20175)	21.90	20.96	19.95
		1711.5 (19965)	21.96	21.05	20.03
	8RB-Middle (4)	1753.5 (20385)	21.97	21.01	20.03
		1732.5 (20175)	21.93	20.97	19.98
		1711.5 (19965)	21.97	21.04	20.02
	8RB-Low (0)	1753.5 (20385)	21.97	21.00	20.05
		1732.5 (20175)	21.96	21.02	20.02
		1711.5 (19965)	21.97	21.08	20.09

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
	15RB (0)	1753.5 (20385)	21.94	20.98	19.99
		1732.5 (20175)	21.94	20.95	20.01
		1711.5 (19965)	21.96	21.01	20.01
5MHz	1RB-High (24)	1752.5 (20375)	22.93	22.18	20.88
		1732.5 (20175)	22.93	22.14	20.93
		1712.5 (19975)	22.99	22.14	20.93
	1RB-Middle (12)	1752.5 (20375)	22.99	22.17	21.00
		1732.5 (20175)	23.00	22.26	21.06
		1712.5 (19975)	23.06	22.22	21.04
	1RB-Low (0)	1752.5 (20375)	22.94	22.15	20.95
		1732.5 (20175)	22.98	22.18	-41.18
		1712.5 (19975)	23.01	22.22	20.98
	12RB-High (13)	1752.5 (20375)	21.94	20.92	19.98
		1732.5 (20175)	21.95	20.93	19.98
		1712.5 (19975)	21.98	20.98	20.05
	12RB-Middle (6)	1752.5 (20375)	21.97	20.96	20.02
		1732.5 (20175)	22.00	20.98	20.04
		1712.5 (19975)	22.00	21.00	20.03
	12RB-Low (0)	1752.5 (20375)	21.99	20.98	20.04
		1732.5 (20175)	22.02	21.01	20.08
		1712.5 (19975)	22.00	20.97	20.09
	25RB (0)	1752.5 (20375)	22.00	21.00	20.05
		1732.5 (20175)	21.99	20.99	20.00
		1712.5 (19975)	22.02	20.99	20.05
10MHz	1RB-High (49)	1750 (20350)	22.93	22.10	21.01
		1732.5 (20175)	22.99	22.08	21.02
		1715 (20000)	22.95	22.12	20.95
	1RB-Middle (24)	1750 (20350)	23.00	22.13	21.11
		1732.5 (20175)	23.08	22.13	21.05
		1715 (20000)	23.02	22.22	21.03
	1RB-Low (0)	1750 (20350)	23.05	22.08	21.05
		1732.5 (20175)	23.06	22.09	21.07
		1715 (20000)	22.99	22.19	20.98
	25RB-High (25)	1750 (20350)	22.00	20.99	20.06
		1732.5 (20175)	21.96	20.91	20.00
		1715 (20000)	22.01	20.99	20.09
	25RB-Middle (12)	1750 (20350)	21.95	20.96	20.04
		1732.5 (20175)	21.95	20.99	20.06
		1715 (20000)	22.02	21.00	20.12
	25RB-Low (0)	1750 (20350)	21.95	20.96	20.02

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
		1732.5 (20175)	22.03	21.01	20.11
		1715 (20000)	21.99	20.99	20.08
	50RB (0)	1750 (20350)	21.96	20.95	20.02
		1732.5 (20175)	21.97	20.96	20.03
		1715 (20000)	22.02	20.97	20.09
15MHz	1RB-High (74)	1747.5 (20325)	22.97	22.09	20.83
		1732.5 (20175)	22.95	22.16	20.91
		1717.5 (20025)	22.94	22.17	20.96
	1RB-Middle (37)	1747.5 (20325)	23.09	22.18	20.94
		1732.5 (20175)	23.07	22.25	21.03
		1717.5 (20025)	23.06	22.25	21.02
	1RB-Low (0)	1747.5 (20325)	23.06	22.17	20.93
		1732.5 (20175)	23.01	22.22	21.01
		1717.5 (20025)	23.02	22.23	21.01
	36RB-High (38)	1747.5 (20325)	21.93	20.99	20.07
		1732.5 (20175)	21.92	20.91	19.98
		1717.5 (20025)	21.92	20.94	19.99
	36RB-Middle (19)	1747.5 (20325)	21.99	20.98	20.08
		1732.5 (20175)	21.98	20.97	20.07
		1717.5 (20025)	21.99	20.96	20.01
	36RB-Low (0)	1747.5 (20325)	21.96	20.95	20.00
		1732.5 (20175)	21.96	20.98	20.05
		1717.5 (20025)	21.96	20.95	20.04
	75RB (0)	1747.5 (20325)	21.97	20.93	20.07
		1732.5 (20175)	21.96	20.92	20.05
		1717.5 (20025)	21.98	20.94	20.02
20MHz	1RB-High (99)	1745 (20300)	22.92	21.98	20.96
		1732.5 (20175)	22.90	22.08	20.91
		1720 (20050)	22.91	22.10	20.79
	1RB-Middle (50)	1745 (20300)	23.05	22.22	21.10
		1732.5 (20175)	23.01	22.20	21.06
		1720 (20050)	23.03	22.25	20.97
	1RB-Low (0)	1745 (20300)	23.00	22.18	21.06
		1732.5 (20175)	23.01	22.15	21.00
		1720 (20050)	22.97	22.18	20.93
	50RB-High (50)	1745 (20300)	21.98	20.96	20.01
		1732.5 (20175)	21.88	20.91	19.93
		1720 (20050)	21.96	20.91	20.05
	50RB-Middle (25)	1745 (20300)	22.02	20.98	20.00
		1732.5 (20175)	21.98	20.95	20.05

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
		1720 (20050)	22.02	21.00	20.08
	50RB-Low (0)	1745 (20300)	22.01	20.99	20.05
		1732.5 (20175)	21.96	20.98	20.10
		1720 (20050)	21.96	20.93	20.06
	100RB (0)	1745 (20300)	21.98	20.95	19.99
		1732.5 (20175)	21.97	20.94	19.98
		1720 (20050)	21.97	20.93	20.03

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)	23.76	22.97	21.70
		836.5 (20525)	23.82	23.02	21.83
		824.7 (20407)	23.79	23.01	21.86
	1RB-Middle (3)	848.3 (20643)	23.80	22.93	21.72
		836.5 (20525)	23.83	23.04	21.84
		824.7 (20407)	23.76	23.03	21.86
	1RB-Low (0)	848.3 (20643)	23.78	22.90	21.77
		836.5 (20525)	23.81	23.01	21.88
		824.7 (20407)	23.80	23.06	21.91
	3RB-High (3)	848.3 (20643)	23.81	22.83	21.87
		836.5 (20525)	23.85	22.85	21.85
		824.7 (20407)	23.85	22.83	21.80
	3RB-Middle (1)	848.3 (20643)	23.81	22.85	21.88
		836.5 (20525)	23.84	22.81	21.84
		824.7 (20407)	23.88	22.86	21.86
	3RB-Low (0)	848.3 (20643)	23.82	22.86	21.88
		836.5 (20525)	23.85	22.81	21.85
		824.7 (20407)	23.84	22.85	21.86
	6RB (0)	848.3 (20643)	22.80	21.88	20.68
		836.5 (20525)	22.85	21.86	20.74
		824.7 (20407)	22.84	21.89	20.76
3MHz	1RB-High (14)	847.5 (20635)	23.81	22.89	21.88
		836.5 (20525)	23.84	23.02	21.99
		825.5 (20415)	23.85	22.97	21.92
	1RB-Middle (7)	847.5 (20635)	23.78	22.89	21.89
		836.5 (20525)	23.88	23.01	22.05
		825.5 (20415)	23.85	22.92	21.86
	1RB-Low (0)	847.5 (20635)	23.82	22.92	21.89
		836.5 (20525)	23.75	22.98	21.93
		825.5 (20415)	23.81	22.89	21.76
	8RB-High (7)	847.5 (20635)	22.77	21.85	20.78
		836.5 (20525)	22.84	21.88	20.80
		825.5 (20415)	22.81	21.87	20.81
	8RB-Middle (4)	847.5 (20635)	22.77	21.87	20.75
		836.5 (20525)	22.81	21.89	20.81
		825.5 (20415)	22.81	21.90	20.80
	8RB-Low (0)	847.5 (20635)	22.79	21.87	20.74
		836.5 (20525)	22.77	21.82	20.75
		825.5 (20415)	22.81	21.88	20.70

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
	15RB (0)	847.5 (20635)	22.77	21.80	20.77
		836.5 (20525)	22.78	21.82	20.79
		825.5 (20415)	22.80	21.84	20.74
5MHz	1RB-High (24)	846.5 (20625)	23.90	23.03	21.85
		836.5 (20525)	23.96	23.09	21.97
		826.5 (20425)	23.94	23.06	21.89
	1RB-Middle (12)	846.5 (20625)	23.93	23.04	21.84
		836.5 (20525)	23.99	23.13	22.00
		826.5 (20425)	23.93	23.03	21.95
	1RB-Low (0)	846.5 (20625)	23.88	23.00	21.82
		836.5 (20525)	23.91	23.01	21.94
		826.5 (20425)	23.88	23.05	21.86
	12RB-High (13)	846.5 (20625)	22.80	21.79	20.74
		836.5 (20525)	22.81	21.81	20.83
		826.5 (20425)	22.85	21.81	20.84
	12RB-Middle (6)	846.5 (20625)	22.81	21.81	20.76
		836.5 (20525)	22.87	21.84	20.83
		826.5 (20425)	22.86	21.83	20.87
	12RB-Low (0)	846.5 (20625)	22.88	21.85	20.86
		836.5 (20525)	22.84	21.79	20.81
		826.5 (20425)	22.83	21.80	20.86
	25RB (0)	846.5 (20625)	22.80	21.81	20.81
		836.5 (20525)	22.86	21.86	20.80
		826.5 (20425)	22.86	21.84	20.81
10MHz	1RB-High (49)	844 (20600)	23.97	23.02	22.03
		836.5 (20525)	23.97	23.08	22.03
		829 (20450)	23.93	23.08	21.93
	1RB-Middle (24)	844 (20600)	23.97	23.03	22.00
		836.5 (20525)	24.01	23.21	22.06
		829 (20450)	23.97	23.18	22.04
	1RB-Low (0)	844 (20600)	23.93	23.04	22.01
		836.5 (20525)	23.96	23.15	21.95
		829 (20450)	23.92	23.08	21.81
	25RB-High (25)	844 (20600)	22.84	21.82	20.76
		836.5 (20525)	22.84	21.86	20.80
		829 (20450)	22.89	21.91	20.87
	25RB-Middle (12)	844 (20600)	22.88	21.84	20.79
		836.5 (20525)	22.91	21.87	20.80
		829 (20450)	22.90	21.86	20.83
	25RB-Low (0)	844 (20600)	22.87	21.85	20.77

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
		836.5 (20525)	22.83	21.85	20.80
		829 (20450)	22.87	21.86	20.78
	50RB (0)	844 (20600)	22.88	21.83	20.80
		836.5 (20525)	22.86	21.86	20.79
		829 (20450)	22.89	21.84	20.84

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

LTE band 12

BANDWIDTH	Number of RBs	Frequency(MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	715.3	23.74	22.91	21.92
		707.5	23.86	23.00	22.00
		699.7	23.84	23.04	21.84
	1RB-Middle (3)	715.3	23.79	23.03	21.89
		707.5	23.86	23.02	22.02
		699.7	23.85	23.04	21.86
	1RB-Low (0)	715.3	23.77	22.97	21.92
		707.5	23.85	23.01	22.06
		699.7	23.88	23.06	21.87
	3RB-High (3)	715.3	23.84	22.80	21.82
		707.5	23.85	22.83	21.83
		699.7	23.86	22.86	21.83
	3RB-Middle (1)	715.3	23.82	22.84	21.84
		707.5	23.87	22.84	21.84
		699.7	23.88	22.90	21.89
	3RB-Low (0)	715.3	23.75	22.78	21.81
		707.5	23.85	22.86	21.85
		699.7	23.86	22.86	21.92
	6RB (0)	715.3	22.79	21.85	20.72
		707.5	22.80	21.84	20.71
		699.7	22.84	21.84	20.80
3MHz	1RB-High (14)	714.5	23.72	22.93	21.98
		707.5	23.83	23.01	21.97
		700.5	23.79	22.99	21.91
	1RB-Middle (7)	714.5	23.79	22.98	21.98
		707.5	23.82	23.07	22.02
		700.5	23.88	23.03	21.99
	1RB-Low (0)	714.5	23.75	22.90	21.96
		707.5	23.72	22.99	21.86
		700.5	23.83	22.97	21.93
	8RB-High (7)	714.5	22.77	21.82	20.73
		707.5	22.79	21.87	20.80
		700.5	22.82	21.91	20.80
	8RB-Middle (4)	714.5	22.73	21.77	20.73
		707.5	22.84	21.90	20.86
		700.5	22.81	21.89	20.81
	8RB-Low (0)	714.5	22.82	21.84	20.77
		707.5	22.78	21.85	20.80
		700.5	22.75	21.87	20.75

BANDWIDTH	Number of RBs	Frequency(MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
	15RB (0)	714.5	22.78	21.81	20.74
		707.5	22.79	21.86	20.79
		700.5	22.79	21.83	20.77
5MHz	1RB-High (24)	713.5	23.84	22.94	21.90
		707.5	23.88	22.98	21.83
		701.5	23.97	23.05	22.03
	1RB-Middle (12)	713.5	23.86	22.97	21.95
		707.5	23.94	23.01	21.91
		701.5	23.86	23.04	21.95
	1RB-Low (0)	713.5	23.80	22.92	21.88
		707.5	23.87	22.97	21.93
		701.5	23.85	22.93	21.88
	12RB-High (13)	713.5	22.70	21.67	20.65
		707.5	22.86	21.87	20.83
		701.5	22.82	21.82	20.85
	12RB-Middle (6)	713.5	22.82	21.77	20.75
		707.5	22.85	21.82	20.84
		701.5	22.82	21.79	20.83
	12RB-Low (0)	713.5	22.84	21.81	20.80
		707.5	22.83	21.84	20.80
		701.5	22.74	21.73	20.76
	25RB (0)	713.5	22.75	21.74	20.72
		707.5	22.87	21.85	20.82
		701.5	22.79	21.79	20.73
10MHz	1RB-High (49)	711	23.88	23.02	21.96
		707.5	23.95	23.02	21.99
		704	23.97	23.10	21.99
	1RB-Middle (24)	711	23.92	23.06	22.02
		707.5	23.98	23.02	22.07
		704	23.94	23.11	22.02
	1RB-Low (0)	711	23.80	23.00	21.90
		707.5	23.87	23.00	21.95
		704	23.84	23.02	21.88
	25RB-High (25)	711	22.75	21.77	20.73
		707.5	22.93	21.89	20.89
		704	22.78	21.81	20.77
	25RB-Middle (12)	711	22.83	21.83	20.80
		707.5	22.85	21.80	20.83
		704	22.87	21.84	20.83
	25RB-Low (0)	711	22.78	21.78	20.74

BANDWIDTH	Number of RBs	Frequency(MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
		707.5	22.89	21.89	20.89
		704	22.78	21.77	20.73
	50RB (0)	711	22.77	21.76	20.74
		707.5	22.92	21.92	20.89
		704	22.79	21.81	20.77

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

LTE band 13

BANDWIDTH	Number of RBs	Frequency(MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
5MHz	1RB-High (24)	784.5 (23255)	23.87	22.97	21.89
		782 (23230)	23.84	22.98	21.90
		779.5 (23205)	23.89	22.95	21.94
	1RB-Middle (12)	784.5 (23255)	23.87	23.02	21.96
		782 (23230)	23.90	23.05	21.95
		779.5 (23205)	23.91	23.00	22.06
	1RB-Low (0)	784.5 (23255)	23.84	22.99	21.88
		782 (23230)	23.85	22.92	21.87
		779.5 (23205)	23.85	22.98	21.89
	12RB-High (13)	784.5 (23255)	22.75	21.72	20.74
		782 (23230)	22.77	21.73	20.76
		779.5 (23205)	22.85	21.82	20.83
	12RB-Middle (6)	784.5 (23255)	22.79	21.78	20.79
		782 (23230)	22.76	21.76	20.77
		779.5 (23205)	22.74	21.75	20.76
	12RB-Low (0)	784.5 (23255)	22.76	21.74	20.79
		782 (23230)	22.74	21.73	20.70
		779.5 (23205)	22.67	21.66	20.65
	25RB (0)	784.5 (23255)	22.77	21.77	20.74
		782 (23230)	22.73	21.75	20.69
		779.5 (23205)	22.74	21.78	20.70
10MHz	1RB-High (49)	782 (23230)	23.85	23.05	21.94
	1RB-Middle (24)	782 (23230)	23.89	23.12	21.97
	1RB-Low (0)	782 (23230)	23.88	23.01	21.94
	25RB-High (25)	782 (23230)	22.81	21.83	20.81
	25RB-Middle (12)	782 (23230)	22.78	21.78	20.74
	25RB-Low (0)	782 (23230)	22.64	21.65	20.61
	50RB (0)	782 (23230)	22.75	21.74	20.70

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

LTE band 66

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	22.91	22.15	21.04
		1745 (132322)	22.91	22.20	20.89
		1710.7 (131979)	22.95	22.16	20.91
	1RB-Middle (3)	1779.3 (132665)	22.94	22.18	20.98
		1745 (132322)	22.92	22.19	20.97
		1710.7 (131979)	22.95	22.17	20.96
	1RB-Low (0)	1779.3 (132665)	22.93	22.14	20.98
		1745 (132322)	22.93	22.21	20.96
		1710.7 (131979)	22.98	22.16	21.01
	3RB-High (3)	1779.3 (132665)	22.95	21.90	20.96
		1745 (132322)	22.96	21.96	21.00
		1710.7 (131979)	22.97	21.99	20.93
	3RB-Middle (1)	1779.3 (132665)	22.95	21.93	20.95
		1745 (132322)	23.00	21.98	21.05
		1710.7 (131979)	23.00	22.04	20.95
	3RB-Low (0)	1779.3 (132665)	22.95	21.93	20.93
		1745 (132322)	22.99	22.02	20.99
		1710.7 (131979)	22.99	21.96	20.87
	6RB (0)	1779.3 (132665)	21.95	21.00	19.95
		1745 (132322)	21.98	21.03	19.99
		1710.7 (131979)	21.94	21.04	20.03
3MHz	1RB-High (14)	1778.5 (132657)	22.92	22.04	21.01
		1745 (132322)	22.96	22.10	21.03
		1711.5 (131987)	22.97	22.11	21.09
	1RB-Middle (7)	1778.5 (132657)	22.92	22.17	21.08
		1745 (132322)	22.96	22.15	21.10
		1711.5 (131987)	22.98	22.13	21.16
	1RB-Low (0)	1778.5 (132657)	22.95	22.15	20.98
		1745 (132322)	22.98	22.10	21.01
		1711.5 (131987)	22.95	22.08	21.05
	8RB-High (7)	1778.5 (132657)	21.89	20.98	20.01
		1745 (132322)	21.90	21.00	20.01
		1711.5 (131987)	21.95	21.02	20.07
	8RB-Middle (4)	1778.5 (132657)	21.91	20.99	20.03
		1745 (132322)	21.93	21.02	20.02
		1711.5 (131987)	21.93	21.02	20.03
	8RB-Low (0)	1778.5 (132657)	21.95	21.04	20.06
		1745 (132322)	21.97	21.02	20.10
		1711.5 (131987)	21.92	21.00	20.04

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
	15RB (0)	1778.5 (132657)	21.93	20.94	20.01
		1745 (132322)	21.93	20.93	20.04
		1711.5 (131987)	21.95	20.96	20.08
5MHz	1RB-High (24)	1777.5 (132647)	23.01	22.13	21.01
		1745 (132322)	23.01	22.14	20.99
		1712.5 (131997)	23.02	22.20	21.09
	1RB-Middle (12)	1777.5 (132647)	23.07	22.23	20.98
		1745 (132322)	23.08	22.23	21.13
		1712.5 (131997)	23.04	22.23	21.17
	1RB-Low (0)	1777.5 (132647)	22.99	22.20	20.96
		1745 (132322)	23.04	22.19	21.03
		1712.5 (131997)	23.05	22.24	21.10
	12RB-High (13)	1777.5 (132647)	21.88	20.87	20.01
		1745 (132322)	21.91	20.88	20.01
		1712.5 (131997)	21.96	20.92	20.10
	12RB-Middle (6)	1777.5 (132647)	21.98	20.94	20.10
		1745 (132322)	21.96	20.99	20.12
		1712.5 (131997)	21.99	20.97	20.13
	12RB-Low (0)	1777.5 (132647)	21.99	20.97	20.14
		1745 (132322)	22.01	20.98	20.15
		1712.5 (131997)	21.95	20.90	20.10
	25RB (0)	1777.5 (132647)	21.94	20.92	20.06
		1745 (132322)	21.96	20.95	20.03
		1712.5 (131997)	21.99	21.01	20.05
10MHz	1RB-High (49)	1775 (132622)	22.94	22.11	20.98
		1745 (132322)	22.96	22.13	21.00
		1715 (132022)	23.00	22.15	21.05
	1RB-Middle (24)	1775 (132622)	23.04	22.24	21.07
		1745 (132322)	23.03	22.26	21.08
		1715 (132022)	23.07	22.26	21.05
	1RB-Low (0)	1775 (132622)	23.04	22.26	21.06
		1745 (132322)	23.05	22.20	21.05
		1715 (132022)	23.04	22.25	21.03
	25RB-High (25)	1775 (132622)	21.95	20.95	20.01
		1745 (132322)	22.01	21.00	20.05
		1715 (132022)	21.98	20.99	20.08
	25RB-Middle (12)	1775 (132622)	21.95	20.98	20.03
		1745 (132322)	21.95	20.98	20.04
		1715 (132022)	21.97	20.99	20.08
	25RB-Low (0)	1775 (132622)	22.02	21.05	20.10

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
		1745 (132322)	21.98	20.97	20.02
		1715 (132022)	21.94	20.94	20.02
	50RB (0)	1775 (132622)	21.99	20.97	20.03
		1745 (132322)	22.01	21.00	20.07
		1715 (132022)	21.96	20.94	20.07
15MHz	1RB-High (74)	1772.5 (132597)	22.87	22.04	20.99
		1745 (132322)	22.83	22.13	20.98
		1717.5 (132047)	22.83	22.14	20.94
	1RB-Middle (37)	1772.5 (132597)	22.91	22.16	21.12
		1745 (132322)	22.94	22.22	21.08
		1717.5 (132047)	22.92	22.23	21.02
	1RB-Low (0)	1772.5 (132597)	22.91	22.11	21.05
		1745 (132322)	22.90	22.21	21.08
		1717.5 (132047)	22.89	22.24	21.02
	36RB-High (38)	1772.5 (132597)	21.93	20.87	20.03
		1745 (132322)	21.90	20.85	19.97
		1717.5 (132047)	21.92	20.92	20.07
	36RB-Middle (19)	1772.5 (132597)	21.98	20.93	20.04
		1745 (132322)	21.93	20.90	20.04
		1717.5 (132047)	21.95	20.96	20.09
	36RB-Low (0)	1772.5 (132597)	21.97	20.96	20.08
		1745 (132322)	21.87	20.93	20.06
		1717.5 (132047)	21.91	20.90	20.03
	75RB (0)	1772.5 (132597)	21.99	20.94	20.04
		1745 (132322)	21.94	20.91	20.01
		1717.5 (132047)	21.97	20.92	20.00
20MHz	1RB-High (99)	1770 (132572)	22.81	21.96	20.73
		1745 (132322)	22.79	21.97	20.75
		1720 (132072)	22.79	21.96	20.91
	1RB-Middle (50)	1770 (132572)	22.95	22.14	21.02
		1745 (132322)	22.92	22.15	20.95
		1720 (132072)	22.93	22.03	21.00
	1RB-Low (0)	1770 (132572)	22.88	22.04	20.80
		1745 (132322)	22.85	22.08	20.91
		1720 (132072)	22.87	22.03	21.00
	50RB-High (50)	1770 (132572)	21.94	20.94	19.99
		1745 (132322)	21.92	20.86	20.00
		1720 (132072)	21.90	20.87	19.95
	50RB-Middle (25)	1770 (132572)	22.00	20.96	20.09
		1745 (132322)	21.95	20.97	20.05

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
		1720 (132072)	21.96	20.90	20.05
	50RB-Low (0)	1770 (132572)	22.07	21.03	20.16
		1745 (132322)	21.97	20.95	20.08
		1720 (132072)	21.97	20.88	20.01
	100RB (0)	1770 (132572)	21.99	20.98	20.07
		1745 (132322)	21.92	20.89	19.98
		1720 (132072)	21.92	20.90	19.95

LTE CA_5B

Bandwidth	Frequency (MHz)	Frequency (MHz)	Modulation	PCC RB		SCC RB		Power(dBm)
				Size	Offset	Size	Offset	
3MHz/5MHz	834.1	838	QPSK	1	14	1	0	23.09
3MHz/5MHz	834.1	838	QPSK	15	0	25	0	23.25
3MHz/5MHz	834.1	838	16QAM	1	14	1	0	23.14
3MHz/5MHz	834.1	838	16QAM	15	0	25	0	23.26
3MHz/5MHz	834.1	838	64QAM	1	14	1	0	23.13
3MHz/5MHz	834.1	838	64QAM	15	0	25	0	23.25
5MHz/3MHz	835	838.9	QPSK	1	24	1	0	22.84
5MHz/3MHz	835	838.9	QPSK	25	0	15	0	23.11
5MHz/3MHz	835	838.9	16QAM	1	24	1	0	22.84
5MHz/3MHz	835	838.9	16QAM	25	0	15	0	23.07
5MHz/3MHz	835	838.9	64QAM	1	24	1	0	22.85
5MHz/3MHz	835	838.9	64QAM	25	0	15	0	23.12
5MHz/10MHz	831.8	839	QPSK	1	24	1	0	23.06
5MHz/10MHz	831.8	839	QPSK	25	0	50	0	21.15
5MHz/10MHz	831.8	839	16QAM	1	24	1	0	21.82
5MHz/10MHz	831.8	839	16QAM	25	0	50	0	20.15
5MHz/10MHz	831.8	839	64QAM	1	24	1	0	21.77
5MHz/10MHz	831.8	839	64QAM	25	0	50	0	20.10
10MHz/5MHz	834	841.2	QPSK	1	49	1	0	22.88
10MHz/5MHz	834	841.2	QPSK	50	0	25	0	21.06
10MHz/5MHz	834	841.2	16QAM	1	49	1	0	21.91
10MHz/5MHz	834	841.2	16QAM	50	0	25	0	20.07
10MHz/5MHz	834	841.2	64QAM	1	49	1	0	21.87
10MHz/5MHz	834	841.2	64QAM	50	0	25	0	20.10
10MHz/10MHz	831.6	841.5	QPSK	1	49	1	0	22.87
10MHz/10MHz	831.6	841.5	QPSK	50	0	50	0	21.03
10MHz/10MHz	831.6	841.5	16QAM	1	49	1	0	21.64
10MHz/10MHz	831.6	841.5	16QAM	50	0	50	0	20.05
10MHz/10MHz	831.6	841.5	64QAM	1	49	1	0	21.96

Bandwidth	Frequency (MHz)	Frequency (MHz)	Modulation	PCC RB		SCC RB		Power(dBm)
				Size	Offset	Size	Offset	
10MHz/10MHz	831.6	841.5	64QAM	50	0	50	0	20.09

LTE CA_66B

Bandwidth	Frequency (MHz)	Frequency (MHz)	Modulation	PCC RB		SCC RB		Power(dBm)
				Size	Offset	Size	Offset	
5MHz/5MHz	1752.6	1757.4	QPSK	1	24	1	0	23.82
5MHz/5MHz	1752.6	1757.4	QPSK	25	0	25	0	22.07
5MHz/5MHz	1752.6	1757.4	16QAM	1	24	1	0	22.86
5MHz/5MHz	1752.6	1757.4	16QAM	25	0	25	0	21.26
5MHz/5MHz	1752.6	1757.4	64QAM	1	24	1	0	22.87
5MHz/5MHz	1752.6	1757.4	64QAM	25	0	25	0	21.23
5MHz/10MHz	1750.3	1757.5	QPSK	1	24	1	0	23.77
5MHz/10MHz	1750.3	1757.5	QPSK	25	0	50	0	21.87
5MHz/10MHz	1750.3	1757.5	16QAM	1	24	1	0	22.56
5MHz/10MHz	1750.3	1757.5	16QAM	25	0	50	0	21.04
5MHz/10MHz	1750.3	1757.5	64QAM	1	24	1	0	22.56
5MHz/10MHz	1750.3	1757.5	64QAM	25	0	50	0	21.07
5MHz/15MHz	1748.1	1757.4	QPSK	1	24	1	0	23.91
5MHz/15MHz	1748.1	1757.4	QPSK	25	0	75	0	21.97
5MHz/15MHz	1748.1	1757.4	16QAM	1	24	1	0	22.72
5MHz/15MHz	1748.1	1757.4	16QAM	25	0	75	0	21.18
5MHz/15MHz	1748.1	1757.4	64QAM	1	24	1	0	22.73
5MHz/15MHz	1748.1	1757.4	64QAM	25	0	75	0	21.18
10MHz/5MHz	1752.5	1759.7	QPSK	1	49	1	0	23.63
10MHz/5MHz	1752.5	1759.7	QPSK	50	0	25	0	21.87
10MHz/5MHz	1752.5	1759.7	16QAM	1	49	1	0	22.69
10MHz/5MHz	1752.5	1759.7	16QAM	50	0	25	0	21.09
10MHz/5MHz	1752.5	1759.7	64QAM	1	49	1	0	22.69
10MHz/5MHz	1752.5	1759.7	64QAM	50	0	25	0	21.07
10MHz/10MHz	1750.1	1760	QPSK	1	49	1	0	23.79
10MHz/10MHz	1750.1	1760	QPSK	50	0	50	0	21.84
10MHz/10MHz	1750.1	1760	16QAM	1	49	1	0	22.51
10MHz/10MHz	1750.1	1760	16QAM	50	0	50	0	21.10
10MHz/10MHz	1750.1	1760	64QAM	1	49	1	0	22.51
10MHz/10MHz	1750.1	1760	64QAM	50	0	50	0	21.09
10MHz/10MHz	1750.1	1760	256QAM	1	49	1	0	22.52
10MHz/10MHz	1750.1	1760	256QAM	50	0	50	0	21.10
15MHz/5MHz	1752.6	1761.9	QPSK	1	74	1	0	23.78
15MHz/5MHz	1752.6	1761.9	QPSK	75	0	25	0	21.88
15MHz/5MHz	1752.6	1761.9	16QAM	1	74	1	0	22.84

Bandwidth	Frequency (MHz)	Frequency (MHz)	Modulation	PCC RB		SCC RB		Power(dBm)
				Size	Offset	Size	Offset	
15MHz/5MHz	1752.6	1761.9	16QAM	75	0	25	0	21.09
15MHz/5MHz	1752.6	1761.9	64QAM	1	74	1	0	22.84
15MHz/5MHz	1752.6	1761.9	64QAM	75	0	25	0	21.09

LTE CA_66C

Bandwidth	Frequency (MHz)	Frequency (MHz)	Modulation	PCC RB		SCC RB		Power(dBm)
				Size	Offset	Size	Offset	
5MHz/20MHz	1745.8	1757.5	QPSK	1	24	1	0	23.58
5MHz/20MHz	1745.8	1757.5	QPSK	25	0	100	0	21.84
5MHz/20MHz	1745.8	1757.5	16QAM	1	24	1	0	22.66
5MHz/20MHz	1745.8	1757.5	16QAM	25	0	100	0	21.01
5MHz/20MHz	1745.8	1757.5	64QAM	1	24	1	0	22.67
5MHz/20MHz	1745.8	1757.5	64QAM	25	0	100	0	21.02
10MHz/15MHz	1747.9	1759.9	QPSK	1	49	1	0	23.77
10MHz/15MHz	1747.9	1759.9	QPSK	50	0	75	0	21.87
10MHz/15MHz	1747.9	1759.9	16QAM	1	49	1	0	22.79
10MHz/15MHz	1747.9	1759.9	16QAM	50	0	75	0	21.05
10MHz/15MHz	1747.9	1759.9	64QAM	1	49	1	0	22.83
10MHz/15MHz	1747.9	1759.9	64QAM	50	0	75	0	21.08
10MHz/20MHz	1745.6	1760	QPSK	1	49	1	0	23.76
10MHz/20MHz	1745.6	1760	QPSK	50	0	100	0	21.88
10MHz/20MHz	1745.6	1760	16QAM	1	49	1	0	22.49
10MHz/20MHz	1745.6	1760	16QAM	50	0	100	0	20.97
10MHz/20MHz	1745.6	1760	64QAM	1	49	1	0	22.48
10MHz/20MHz	1745.6	1760	64QAM	50	0	100	0	20.99
15MHz/10MHz	1750.1	1762.1	QPSK	1	74	1	0	23.73
15MHz/10MHz	1750.1	1762.1	QPSK	75	0	50	0	21.85
15MHz/10MHz	1750.1	1762.1	16QAM	1	74	1	0	22.75
15MHz/10MHz	1750.1	1762.1	16QAM	75	0	50	0	20.99
15MHz/10MHz	1750.1	1762.1	64QAM	1	74	1	0	22.77
15MHz/10MHz	1750.1	1762.1	64QAM	75	0	50	0	20.98
15MHz/15MHz	1747.5	1762.5	QPSK	1	74	1	0	23.95
15MHz/15MHz	1747.5	1762.5	QPSK	75	0	75	0	21.88
15MHz/15MHz	1747.5	1762.5	16QAM	1	74	1	0	22.95
15MHz/15MHz	1747.5	1762.5	16QAM	75	0	75	0	20.98
15MHz/15MHz	1747.5	1762.5	64QAM	1	74	1	0	22.96
15MHz/15MHz	1747.5	1762.5	64QAM	75	0	75	0	21.02
15MHz/20MHz	1745.3	1762.4	QPSK	1	74	1	0	23.87
15MHz/20MHz	1745.3	1762.4	QPSK	75	0	100	0	21.83

Bandwidth	Frequency (MHz)	Frequency (MHz)	Modulation	PCC RB		SCC RB		Power(dBm)
				Size	Offset	Size	Offset	
15MHz/20MHz	1745.3	1762.4	16QAM	1	74	1	0	22.83
15MHz/20MHz	1745.3	1762.4	16QAM	75	0	100	0	20.93
15MHz/20MHz	1745.3	1762.4	64QAM	1	74	1	0	22.86
15MHz/20MHz	1745.3	1762.4	64QAM	75	0	100	0	20.93
20MHz/5MHz	1752.5	1764.2	QPSK	1	99	1	0	23.56
20MHz/5MHz	1752.5	1764.2	QPSK	100	0	25	0	21.78
20MHz/5MHz	1752.5	1764.2	16QAM	1	99	1	0	22.39
20MHz/5MHz	1752.5	1764.2	16QAM	100	0	25	0	20.97
20MHz/5MHz	1752.5	1764.2	64QAM	1	99	1	0	22.39
20MHz/5MHz	1752.5	1764.2	64QAM	100	0	25	0	20.98
20MHz/10MHz	1750.1	1764.5	QPSK	1	99	1	0	23.55
20MHz/10MHz	1750.1	1764.5	QPSK	100	0	50	0	21.79
20MHz/10MHz	1750.1	1764.5	16QAM	1	99	1	0	22.49
20MHz/10MHz	1750.1	1764.5	16QAM	100	0	50	0	20.98
20MHz/10MHz	1750.1	1764.5	64QAM	1	99	1	0	22.50
20MHz/10MHz	1750.1	1764.5	64QAM	100	0	50	0	20.94
20MHz/15MHz	1747.6	1764.7	QPSK	1	99	1	0	23.73
20MHz/15MHz	1747.6	1764.7	QPSK	100	0	75	0	21.82
20MHz/15MHz	1747.6	1764.7	16QAM	1	99	1	0	22.67
20MHz/15MHz	1747.6	1764.7	16QAM	100	0	75	0	20.96
20MHz/15MHz	1747.6	1764.7	64QAM	1	99	1	0	22.67
20MHz/15MHz	1747.6	1764.7	64QAM	100	0	75	0	20.93
20MHz/20MHz	1745.1	1764.9	QPSK	1	99	1	0	23.69
20MHz/20MHz	1745.1	1764.9	QPSK	100	0	100	0	21.77
20MHz/20MHz	1745.1	1764.9	16QAM	1	99	1	0	22.65
20MHz/20MHz	1745.1	1764.9	16QAM	100	0	100	0	20.90
20MHz/20MHz	1745.1	1764.9	64QAM	1	99	1	0	22.63
20MHz/20MHz	1745.1	1764.9	64QAM	100	0	100	0	20.86

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

LTE CA_2A-5A

PCC Power (dBm)						SCC Power (dBm)					
Band	BW(MHz)	Frequency(MHz)	RB	Modu	Power	Band	BW(MHz)	Frequency(MHz)	RB	Modu	Power
2	5	1880	25@0	QPSK	18.40	5	5	836.5	25@0	QPSK	17.61
2	5	1880	1@24	QPSK	18.52	5	5	836.5	1@24	QPSK	17.61
2	5	1880	25@0	16QAM	18.39	5	5	836.5	25@0	16QAM	17.67
2	5	1880	1@24	16QAM	18.38	5	5	836.5	1@24	16QAM	17.77
2	5	1880	25@0	64QAM	18.42	5	5	836.5	25@0	64QAM	17.67
2	5	1880	1@24	64QAM	18.39	5	5	836.5	1@24	64QAM	17.78
2	5	1880	25@0	QPSK	18.40	5	10	836.5	25@0	QPSK	17.69
2	5	1880	1@24	QPSK	18.42	5	10	836.5	1@24	QPSK	17.85
2	5	1880	25@0	16QAM	18.38	5	10	836.5	25@0	16QAM	17.62
2	5	1880	1@24	16QAM	18.42	5	10	836.5	1@24	16QAM	18.06
2	5	1880	25@0	64QAM	18.38	5	10	836.5	25@0	64QAM	17.63
2	5	1880	1@24	64QAM	18.45	5	10	836.5	1@24	64QAM	18.04
2	10	1880	50@0	QPSK	18.41	5	5	836.5	50@0	QPSK	17.66
2	10	1880	1@49	QPSK	18.30	5	5	836.5	1@49	QPSK	17.83
2	10	1880	50@0	16QAM	18.40	5	5	836.5	50@0	16QAM	17.62
2	10	1880	1@49	16QAM	18.18	5	5	836.5	1@49	16QAM	17.58
2	10	1880	50@0	64QAM	18.42	5	5	836.5	50@0	64QAM	17.60
2	10	1880	1@49	64QAM	18.18	5	5	836.5	1@49	64QAM	17.59
2	10	1880	50@0	QPSK	18.44	5	10	836.5	50@0	QPSK	17.69
2	10	1880	1@49	QPSK	18.31	5	10	836.5	1@49	QPSK	17.92
2	10	1880	50@0	16QAM	18.40	5	10	836.5	50@0	16QAM	17.72
2	10	1880	1@49	16QAM	18.18	5	10	836.5	1@49	16QAM	17.67
2	10	1880	50@0	64QAM	18.41	5	10	836.5	50@0	64QAM	17.70
2	10	1880	1@49	64QAM	18.16	5	10	836.5	1@49	64QAM	17.67
2	15	1880	75@0	QPSK	18.38	5	5	836.5	75@0	QPSK	17.64
2	15	1880	1@74	QPSK	18.07	5	5	836.5	1@74	QPSK	17.84
2	15	1880	75@0	16QAM	18.38	5	5	836.5	75@0	16QAM	17.67
2	15	1880	1@74	16QAM	18.24	5	5	836.5	1@74	16QAM	17.86
2	15	1880	75@0	64QAM	18.39	5	5	836.5	75@0	64QAM	17.64
2	15	1880	1@74	64QAM	18.27	5	5	836.5	1@74	64QAM	17.85
2	15	1880	75@0	QPSK	18.38	5	10	836.5	75@0	QPSK	17.71
2	15	1880	1@74	QPSK	18.07	5	10	836.5	1@74	QPSK	17.88
2	15	1880	75@0	16QAM	18.39	5	10	836.5	75@0	16QAM	17.73
2	15	1880	1@74	16QAM	18.26	5	10	836.5	1@74	16QAM	17.94
2	15	1880	75@0	64QAM	18.40	5	10	836.5	75@0	64QAM	17.74
2	15	1880	1@74	64QAM	18.24	5	10	836.5	1@74	64QAM	17.93
2	20	1880	100@0	QPSK	18.38	5	5	836.5	100@0	QPSK	17.66
2	20	1880	1@99	QPSK	18.19	5	5	836.5	1@99	QPSK	17.78

2	20	1880	100@0	16QAM	18.37	5	5	836.5	100@0	16QAM	17.73
2	20	1880	1@99	16QAM	18.28	5	5	836.5	1@99	16QAM	17.96
2	20	1880	100@0	64QAM	18.38	5	5	836.5	100@0	64QAM	17.69
2	20	1880	1@99	64QAM	18.31	5	5	836.5	1@99	64QAM	17.96
2	20	1880	100@0	QPSK	18.38	5	10	836.5	100@0	QPSK	17.71
2	20	1880	1@99	QPSK	18.21	5	10	836.5	1@99	QPSK	17.83
2	20	1880	100@0	16QAM	18.38	5	10	836.5	100@0	16QAM	17.71
2	20	1880	1@99	16QAM	18.29	5	10	836.5	1@99	16QAM	18.02
2	20	1880	100@0	64QAM	18.38	5	10	836.5	100@0	64QAM	17.75
2	20	1880	1@99	64QAM	18.30	5	10	836.5	1@99	64QAM	18.03

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

LTE CA_2A-13A

PCC Power (dBm)						SCC Power (dBm)					
Band	BW(MHz)	Frequency(MHz)	RB	Modu	Power	Band	BW(MHz)	Frequency(MHz)	RB	Modu	Power
2	5	1880	25@0	QPSK	18.35	13	5	782	25@0	QPSK	17.53
2	5	1880	1@24	QPSK	18.42	13	5	782	1@24	QPSK	17.77
2	5	1880	25@0	16QAM	18.37	13	5	782	25@0	16QAM	17.55
2	5	1880	1@24	16QAM	18.43	13	5	782	1@24	16QAM	17.98
2	5	1880	25@0	64QAM	18.36	13	5	782	25@0	64QAM	17.55
2	5	1880	1@24	64QAM	18.44	13	5	782	1@24	64QAM	17.96
2	5	1880	25@0	QPSK	18.41	13	10	782	25@0	QPSK	17.48
2	5	1880	1@24	QPSK	18.43	13	10	782	1@24	QPSK	17.51
2	5	1880	25@0	16QAM	18.38	13	10	782	25@0	16QAM	17.41
2	5	1880	1@24	16QAM	18.44	13	10	782	1@24	16QAM	17.79
2	5	1880	25@0	64QAM	18.37	13	10	782	25@0	64QAM	17.42
2	5	1880	1@24	64QAM	18.46	13	10	782	1@24	64QAM	17.78
2	10	1880	50@0	QPSK	18.43	13	5	782	50@0	QPSK	17.56
2	10	1880	1@49	QPSK	18.31	13	5	782	1@49	QPSK	17.80
2	10	1880	50@0	16QAM	18.41	13	5	782	50@0	16QAM	17.53
2	10	1880	1@49	16QAM	18.20	13	5	782	1@49	16QAM	17.53
2	10	1880	50@0	64QAM	18.42	13	5	782	50@0	64QAM	17.52
2	10	1880	1@49	64QAM	18.19	13	5	782	1@49	64QAM	17.53
2	10	1880	50@0	QPSK	18.44	13	10	782	50@0	QPSK	17.47
2	10	1880	1@49	QPSK	18.29	13	10	782	1@49	QPSK	17.56
2	10	1880	50@0	16QAM	18.42	13	10	782	50@0	16QAM	17.48
2	10	1880	1@49	16QAM	18.20	13	10	782	1@49	16QAM	17.22
2	10	1880	50@0	64QAM	18.40	13	10	782	50@0	64QAM	17.47
2	10	1880	1@49	64QAM	18.20	13	10	782	1@49	64QAM	17.21
2	15	1880	75@0	QPSK	18.38	13	5	782	75@0	QPSK	17.54
2	15	1880	1@74	QPSK	18.09	13	5	782	1@74	QPSK	17.76

2	15	1880	75@0	16QAM	18.38	13	5	782	75@0	16QAM	17.55
2	15	1880	1@74	16QAM	18.26	13	5	782	1@74	16QAM	17.74
2	15	1880	75@0	64QAM	18.38	13	5	782	75@0	64QAM	17.55
2	15	1880	1@74	64QAM	18.25	13	5	782	1@74	64QAM	17.75
2	15	1880	75@0	QPSK	18.40	13	10	782	75@0	QPSK	17.49
2	15	1880	1@74	QPSK	18.07	13	10	782	1@74	QPSK	17.52
2	15	1880	75@0	16QAM	18.39	13	10	782	75@0	16QAM	17.46
2	15	1880	1@74	16QAM	18.26	13	10	782	1@74	16QAM	17.52
2	15	1880	75@0	64QAM	18.39	13	10	782	75@0	64QAM	17.49
2	15	1880	1@74	64QAM	18.26	13	10	782	1@74	64QAM	17.60
2	20	1880	100@0	QPSK	18.37	13	5	782	100@0	QPSK	17.56
2	20	1880	1@99	QPSK	18.20	13	5	782	1@99	QPSK	17.72
2	20	1880	100@0	16QAM	18.38	13	5	782	100@0	16QAM	17.62
2	20	1880	1@99	16QAM	18.30	13	5	782	1@99	16QAM	17.84
2	20	1880	100@0	64QAM	18.38	13	5	782	100@0	64QAM	17.60
2	20	1880	1@99	64QAM	18.29	13	5	782	1@99	64QAM	17.84
2	20	1880	100@0	QPSK	18.37	13	10	782	100@0	QPSK	17.49
2	20	1880	1@99	QPSK	18.22	13	10	782	1@99	QPSK	17.47
2	20	1880	100@0	16QAM	18.37	13	10	782	100@0	16QAM	17.49
2	20	1880	1@99	16QAM	18.30	13	10	782	1@99	16QAM	17.55
2	20	1880	100@0	64QAM	18.38	13	10	782	100@0	64QAM	17.49
2	20	1880	1@99	64QAM	18.30	13	10	782	1@99	64QAM	17.55

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

LTE CA_4A-13A

PCC Power (dBm)						SCC Power (dBm)					
Band	BW(MHz)	Frequency(MHz)	RB	Modu	Power	Band	BW(MHz)	Frequency(MHz)	RB	Modu	Power
4	5	1732.5	25@0	QPSK	17.80	13	10	782	25@0	QPSK	17.18
4	5	1732.5	1@24	QPSK	17.58	13	10	782	1@24	QPSK	17.51
4	5	1732.5	25@0	16QAM	17.58	13	10	782	25@0	16QAM	17.43
4	5	1732.5	1@24	16QAM	17.62	13	10	782	1@24	16QAM	17.82
4	5	1732.5	25@0	64QAM	17.57	13	10	782	25@0	64QAM	17.42
4	5	1732.5	1@24	64QAM	17.63	13	10	782	1@24	64QAM	17.81
4	10	1732.5	50@0	QPSK	17.57	13	10	782	50@0	QPSK	17.46
4	10	1732.5	1@49	QPSK	17.54	13	10	782	1@49	QPSK	17.53
4	10	1732.5	50@0	16QAM	17.56	13	10	782	50@0	16QAM	17.46
4	10	1732.5	1@49	16QAM	17.42	13	10	782	1@49	16QAM	17.30
4	10	1732.5	50@0	64QAM	17.57	13	10	782	50@0	64QAM	17.48
4	10	1732.5	1@49	64QAM	17.43	13	10	782	1@49	64QAM	17.23
4	15	1732.5	75@0	QPSK	17.50	13	10	782	75@0	QPSK	17.47
4	15	1732.5	1@74	QPSK	17.33	13	10	782	1@74	QPSK	17.52

4	15	1732.5	75@0	16QAM	17.54	13	10	782	75@0	16QAM	17.49
4	15	1732.5	1@74	16QAM	17.53	13	10	782	1@74	16QAM	17.51
4	15	1732.5	75@0	64QAM	17.58	13	10	782	75@0	64QAM	17.50
4	15	1732.5	1@74	64QAM	17.50	13	10	782	1@74	64QAM	17.53
4	20	1732.5	100@0	QPSK	17.51	13	10	782	100@0	QPSK	17.47
4	20	1732.5	1@99	QPSK	17.47	13	10	782	1@99	QPSK	17.45
4	20	1732.5	100@0	16QAM	17.56	13	10	782	100@0	16QAM	17.48
4	20	1732.5	1@99	16QAM	17.57	13	10	782	1@99	16QAM	17.57
4	20	1732.5	100@0	64QAM	17.52	13	10	782	100@0	64QAM	17.49
4	20	1732.5	1@99	64QAM	17.56	13	10	782	1@99	64QAM	17.54

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

LTE CA_5A-66A

PCC Power (dBm)						SCC Power (dBm)					
Band	BW(MHz)	Frequency(MHz)	RB	Modu	Power	Band	BW(MHz)	Frequency(MHz)	RB	Modu	Power
5	5	836.5	25@0	QPSK	16.95	66	5	1745	25@0	QPSK	18.34
5	5	836.5	1@24	QPSK	16.97	66	5	1745	1@24	QPSK	18.46
5	5	836.5	25@0	16QAM	16.92	66	5	1745	25@0	16QAM	18.35
5	5	836.5	1@24	16QAM	17.01	66	5	1745	1@24	16QAM	18.64
5	5	836.5	25@0	64QAM	16.92	66	5	1745	25@0	64QAM	18.37
5	5	836.5	1@24	64QAM	16.99	66	5	1745	1@24	64QAM	18.64
5	5	836.5	25@0	QPSK	16.96	66	10	1745	25@0	QPSK	18.44
5	5	836.5	1@24	QPSK	16.95	66	10	1745	1@24	QPSK	18.48
5	5	836.5	25@0	16QAM	16.92	66	10	1745	25@0	16QAM	18.39
5	5	836.5	1@24	16QAM	16.99	66	10	1745	1@24	16QAM	18.69
5	5	836.5	25@0	64QAM	16.91	66	10	1745	25@0	64QAM	18.38
5	5	836.5	1@24	64QAM	16.99	66	10	1745	1@24	64QAM	18.68
5	5	836.5	25@0	QPSK	16.97	66	15	1745	25@0	QPSK	18.41
5	5	836.5	1@24	QPSK	16.96	66	15	1745	1@24	QPSK	18.45
5	5	836.5	25@0	16QAM	16.92	66	15	1745	25@0	16QAM	18.35
5	5	836.5	1@24	16QAM	17.00	66	15	1745	1@24	16QAM	18.66
5	5	836.5	25@0	64QAM	16.92	66	15	1745	25@0	64QAM	18.37
5	5	836.5	1@24	64QAM	16.96	66	15	1745	1@24	64QAM	18.63
5	5	836.5	25@0	QPSK	16.95	66	20	1745	25@0	QPSK	18.45
5	5	836.5	1@24	QPSK	16.97	66	20	1745	1@24	QPSK	18.45
5	5	836.5	25@0	16QAM	16.92	66	20	1745	25@0	16QAM	18.39
5	5	836.5	1@24	16QAM	16.98	66	20	1745	1@24	16QAM	18.67
5	5	836.5	25@0	64QAM	16.91	66	20	1745	25@0	64QAM	18.42
5	5	836.5	1@24	64QAM	16.97	66	20	1745	1@24	64QAM	18.64
5	10	836.5	50@0	QPSK	16.98	66	5	1745	50@0	QPSK	18.37
5	10	836.5	1@49	QPSK	16.96	66	5	1745	1@49	QPSK	18.47

5	10	836.5	50@0	16QAM	16.97	66	5	1745	50@0	16QAM	18.31
5	10	836.5	1@49	16QAM	16.83	66	5	1745	1@49	16QAM	18.23
5	10	836.5	50@0	64QAM	16.97	66	5	1745	50@0	64QAM	18.31
5	10	836.5	1@49	64QAM	16.83	66	5	1745	1@49	64QAM	18.22
5	10	836.5	50@0	QPSK	17.00	66	10	1745	50@0	QPSK	18.43
5	10	836.5	1@49	QPSK	16.93	66	10	1745	1@49	QPSK	18.46
5	10	836.5	50@0	16QAM	16.97	66	10	1745	50@0	16QAM	18.46
5	10	836.5	1@49	16QAM	16.80	66	10	1745	1@49	16QAM	18.29
5	10	836.5	50@0	64QAM	16.91	66	10	1745	50@0	64QAM	18.48
5	10	836.5	1@49	64QAM	16.79	66	10	1745	1@49	64QAM	18.29
5	10	836.5	50@0	QPSK	16.96	66	15	1745	50@0	QPSK	18.31
5	10	836.5	1@49	QPSK	16.95	66	15	1745	1@49	QPSK	18.40
5	10	836.5	50@0	16QAM	16.97	66	15	1745	50@0	16QAM	18.33
5	10	836.5	1@49	16QAM	16.83	66	15	1745	1@49	16QAM	18.23
5	10	836.5	50@0	64QAM	16.98	66	15	1745	50@0	64QAM	18.42
5	10	836.5	1@49	64QAM	16.83	66	15	1745	1@49	64QAM	18.21
5	10	836.5	50@0	QPSK	16.99	66	20	1745	50@0	QPSK	18.44
5	10	836.5	1@49	QPSK	16.97	66	20	1745	1@49	QPSK	18.44
5	10	836.5	50@0	16QAM	16.98	66	20	1745	50@0	16QAM	18.43
5	10	836.5	1@49	16QAM	16.83	66	20	1745	1@49	16QAM	18.23
5	10	836.5	50@0	64QAM	16.97	66	20	1745	50@0	64QAM	18.45
5	10	836.5	1@49	64QAM	16.84	66	20	1745	1@49	64QAM	18.22

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

LTE CA_13A-66A

PCC Power (dBm)						SCC Power (dBm)					
Band	BW(MHz)	Frequency(MHz)	RB	Modu	Power	Band	BW(MHz)	Frequency(MHz)	RB	Modu	Power
13	5	782	25@0	QPSK	16.87	66	5	1745	25@0	QPSK	18.33
13	5	782	1@24	QPSK	16.91	66	5	1745	1@24	QPSK	18.46
13	5	782	25@0	16QAM	16.84	66	5	1745	25@0	16QAM	18.34
13	5	782	1@24	16QAM	16.94	66	5	1745	1@24	16QAM	18.61
13	5	782	25@0	64QAM	16.86	66	5	1745	25@0	64QAM	18.32
13	5	782	1@24	64QAM	16.97	66	5	1745	1@24	64QAM	18.63
13	5	782	25@0	QPSK	16.89	66	10	1745	25@0	QPSK	18.42
13	5	782	1@24	QPSK	16.93	66	10	1745	1@24	QPSK	18.46
13	5	782	25@0	16QAM	16.86	66	10	1745	25@0	16QAM	18.34
13	5	782	1@24	16QAM	16.94	66	10	1745	1@24	16QAM	18.64
13	5	782	25@0	64QAM	16.84	66	10	1745	25@0	64QAM	18.32
13	5	782	1@24	64QAM	16.94	66	10	1745	1@24	64QAM	18.66
13	5	782	25@0	QPSK	16.89	66	15	1745	25@0	QPSK	18.39
13	5	782	1@24	QPSK	16.92	66	15	1745	1@24	QPSK	18.45

13	5	782	25@0	16QAM	16.86	66	15	1745	25@0	16QAM	18.32
13	5	782	1@24	16QAM	16.96	66	15	1745	1@24	16QAM	18.65
13	5	782	25@0	64QAM	16.87	66	15	1745	25@0	64QAM	18.38
13	5	782	1@24	64QAM	16.97	66	15	1745	1@24	64QAM	18.65
13	5	782	25@0	QPSK	16.88	66	20	1745	25@0	QPSK	18.41
13	5	782	1@24	QPSK	16.90	66	20	1745	1@24	QPSK	18.46
13	5	782	25@0	16QAM	16.84	66	20	1745	25@0	16QAM	18.43
13	5	782	1@24	16QAM	16.95	66	20	1745	1@24	16QAM	18.64
13	5	782	25@0	64QAM	16.85	66	20	1745	25@0	64QAM	18.39
13	5	782	1@24	64QAM	16.96	66	20	1745	1@24	64QAM	18.65
13	10	782	50@0	QPSK	17.00	66	5	1745	50@0	QPSK	18.35
13	10	782	1@49	QPSK	17.03	66	5	1745	1@49	QPSK	18.45
13	10	782	50@0	16QAM	16.96	66	5	1745	50@0	16QAM	18.31
13	10	782	1@49	16QAM	16.95	66	5	1745	1@49	16QAM	18.21
13	10	782	50@0	64QAM	16.96	66	5	1745	50@0	64QAM	18.30
13	10	782	1@49	64QAM	16.92	66	5	1745	1@49	64QAM	18.22
13	10	782	50@0	QPSK	16.95	66	10	1745	50@0	QPSK	18.40
13	10	782	1@49	QPSK	17.03	66	10	1745	1@49	QPSK	18.45
13	10	782	50@0	16QAM	16.96	66	10	1745	50@0	16QAM	18.43
13	10	782	1@49	16QAM	16.92	66	10	1745	1@49	16QAM	18.24
13	10	782	50@0	64QAM	16.97	66	10	1745	50@0	64QAM	18.43
13	10	782	1@49	64QAM	16.91	66	10	1745	1@49	64QAM	18.25
13	10	782	50@0	QPSK	16.98	66	15	1745	50@0	QPSK	18.38
13	10	782	1@49	QPSK	17.04	66	15	1745	1@49	QPSK	18.44
13	10	782	50@0	16QAM	16.95	66	15	1745	50@0	16QAM	18.43
13	10	782	1@49	16QAM	16.91	66	15	1745	1@49	16QAM	18.21
13	10	782	50@0	64QAM	16.96	66	15	1745	50@0	64QAM	18.39
13	10	782	1@49	64QAM	16.90	66	15	1745	1@49	64QAM	18.26
13	10	782	50@0	QPSK	16.95	66	20	1745	50@0	QPSK	18.41
13	10	782	1@49	QPSK	17.02	66	20	1745	1@49	QPSK	18.45
13	10	782	50@0	16QAM	16.95	66	20	1745	50@0	16QAM	18.45
13	10	782	1@49	16QAM	16.91	66	20	1745	1@49	16QAM	18.24
13	10	782	50@0	64QAM	16.94	66	20	1745	50@0	64QAM	18.43
13	10	782	1@49	64QAM	16.88	66	20	1745	1@49	64QAM	18.22

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

A.1.3 Radiated

A.1.3.1 Description

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

LTE Band 2: Part 24.232(c) specifies "Mobile and portable stations are limited to 2 watts EIRP".

LTE Band 4/66: Part 27.50(d)(4) specifies "Fixed, mobile, and portable(handheld) stations operating in the 1710–1755 MHz band and mobile and portable stations operating in the 1695–1710 MHz and 1755–1780 MHz bands are limited to 1 watt EIRP".

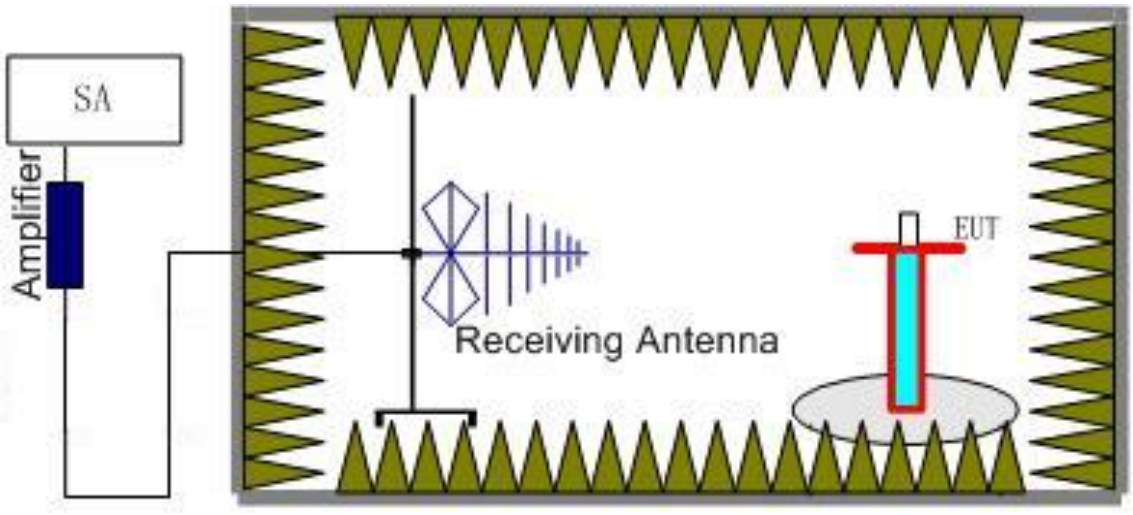
LTE Band 5: Part 22.913(a) specifies "The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts".

LTE Band 12: Part 27.50(c)(10) specifies "Portable stations(hand-held devices) in the 600 MHz uplink band and the 698–746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP"..

LTE Band 13: Part 27.50(b) specifies "Portable stations(hand-held devices) transmitting in the 746–757 MHz, 776–788 MHz, and 805–806 MHz bands are limited to 3 watts ERP".

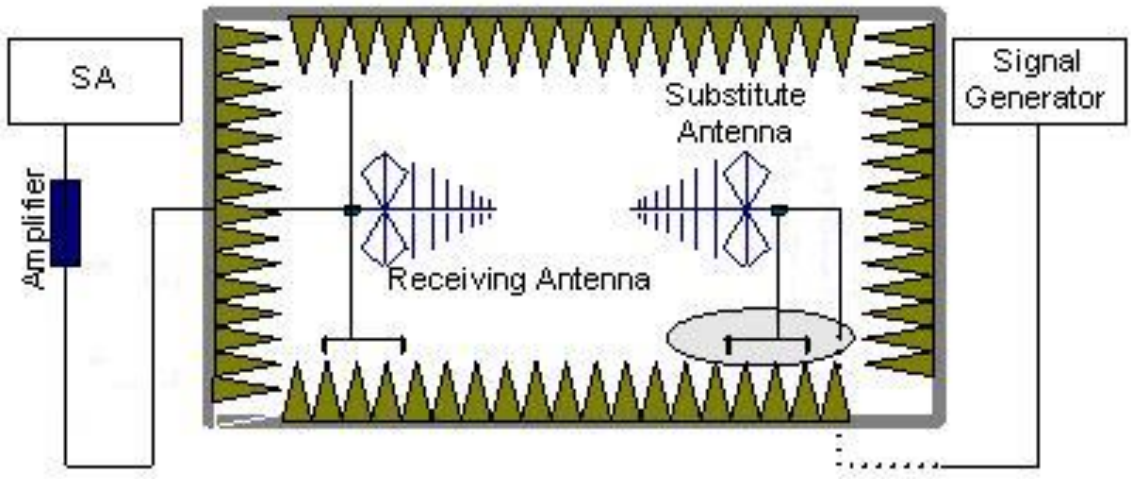
A.1.3.2 Method of Measurement

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 (Pr).

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:
   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 27.50(b)(10)

Limits: ≤33.00dBm (2W)

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	P_{Mea}(dBm)	P_{cl}(dB)+ P_{Ag}(dB)	Ga Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Polarization
QPSK	1.4	1850.70	-15.50	-29.30	8.10	21.91	33.00	H
		1880.00	-16.16	-29.40	8.10	21.35	33.00	H
		1909.30	-16.34	-29.30	8.10	21.06	33.00	H
	3	1851.50	-15.58	-29.30	8.10	21.82	33.00	H
		1880.00	-16.27	-29.40	8.10	21.23	33.00	H
		1908.50	-16.37	-29.30	8.10	21.03	33.00	H
	5	1852.50	-15.72	-29.30	8.10	21.68	33.00	H
		1880.00	-16.30	-29.40	8.10	21.20	33.00	H
		1907.50	-16.37	-29.30	8.10	21.03	33.00	H
	10	1855.00	-15.74	-29.30	8.10	21.66	33.00	H
		1880.00	-16.42	-29.40	8.10	21.08	33.00	H
		1905.00	-16.54	-29.30	8.10	20.86	33.00	H
	15	1857.50	-15.84	-29.30	8.10	21.56	33.00	H
		1880.00	-16.47	-29.40	8.10	21.03	33.00	H
		1902.50	-16.55	-29.30	8.10	20.85	33.00	H
	20	1860.00	-15.91	-29.30	8.10	21.49	33.00	H
		1880.00	-16.53	-29.40	8.10	20.97	33.00	H
		1900.00	-16.64	-29.30	8.10	20.76	33.00	H

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	P_{Mea}(dBm)	P_{cl}(dB)+ P_{Ag}(dB)	Ga Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Polarization
16QAM	1.4	1850.70	-15.62	-29.30	8.10	21.78	33.00	H
		1880.00	-16.27	-29.40	8.10	21.23	33.00	H
		1909.30	-16.42	-29.30	8.10	20.98	33.00	H
	3	1851.50	-15.67	-29.30	8.10	21.73	33.00	H
		1880.00	-16.34	-29.40	8.10	21.16	33.00	H
		1908.50	-16.47	-29.30	8.10	20.93	33.00	H
	5	1852.50	-15.68	-29.30	8.10	21.72	33.00	H
		1880.00	-16.38	-29.40	8.10	21.12	33.00	H
		1907.50	-16.55	-29.30	8.10	20.85	33.00	H
	10	1855.00	-15.84	-29.30	8.10	21.56	33.00	H
		1880.00	-16.47	-29.40	8.10	21.03	33.00	H
		1905.00	-16.62	-29.30	8.10	20.78	33.00	H
	15	1857.50	-15.94	-29.30	8.10	21.46	33.00	H
		1880.00	-16.54	-29.40	8.10	20.96	33.00	H
		1902.50	-16.64	-29.30	8.10	20.76	33.00	H
	20	1860.00	-15.95	-29.30	8.10	21.45	33.00	H
		1880.00	-16.58	-29.40	8.10	20.92	33.00	H
		1900.00	-16.68	-29.30	8.10	20.73	33.00	H

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	P_{Mea}(dBm)	P_{cl}(dB)+ P_{Ag}(dB)	Ga Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Polarization
64QAM	1.4	1850.70	-15.64	-29.30	8.10	21.76	33.00	H
		1880.00	-16.34	-29.40	8.10	21.16	33.00	H
		1909.30	-16.43	-29.30	8.10	20.97	33.00	H
	3	1851.50	-15.72	-29.30	8.10	21.68	33.00	H
		1880.00	-16.41	-29.40	8.10	21.09	33.00	H
		1908.50	-16.48	-29.30	8.10	20.92	33.00	H
	5	1852.50	-15.84	-29.30	8.10	21.56	33.00	H
		1880.00	-16.48	-29.40	8.10	21.02	33.00	H
		1907.50	-16.55	-29.30	8.10	20.85	33.00	H
	10	1855.00	-15.92	-29.30	8.10	21.48	33.00	H
		1880.00	-16.54	-29.40	8.10	20.96	33.00	H
		1905.00	-16.58	-29.30	8.10	20.82	33.00	H
	15	1857.50	-15.95	-29.30	8.10	21.45	33.00	H
		1880.00	-16.65	-29.40	8.10	20.85	33.00	H
		1902.50	-16.72	-29.30	8.10	20.68	33.00	H
	20	1860.00	-16.06	-29.30	8.10	21.34	33.00	H
		1880.00	-16.68	-29.40	8.10	20.82	33.00	H
		1900.00	-16.73	-29.30	8.10	20.67	33.00	H

LTE Band 4- EIRP Part 27.50(d)(10)

Limits: ≤30dBm (1W)

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	P_{Mea}(dBm)	P_{cl}(dB)+ P_{Ag}(dB)	Ga Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Polarization
QPSK	1.4	1710.70	-14.32	-29.60	8.10	23.38	30.00	H
		1732.50	-14.70	-29.60	8.10	23.00	30.00	H
		1754.30	-14.82	-29.50	8.10	22.78	30.00	H
	3	1711.50	-14.43	-29.60	8.10	23.27	30.00	H
		1732.50	-14.74	-29.60	8.10	22.96	30.00	H
		1753.50	-14.87	-29.50	8.10	22.73	30.00	H
	5	1712.50	-14.51	-29.60	8.10	23.19	30.00	H
		1732.50	-14.76	-29.60	8.10	22.94	30.00	H
		1752.50	-14.94	-29.50	8.10	22.66	30.00	H
	10	1715.00	-14.54	-29.60	8.10	23.16	30.00	H
		1732.50	-14.85	-29.60	8.10	22.85	30.00	H
		1750.00	-14.95	-29.50	8.10	22.65	30.00	H
	15	1717.50	-14.61	-29.60	8.10	23.09	30.00	H
		1732.50	-14.96	-29.60	8.10	22.74	30.00	H
		1747.50	-15.02	-29.50	8.10	22.58	30.00	H
	20	1720.00	-14.66	-29.60	8.10	23.04	30.00	H
		1732.50	-14.96	-29.60	8.10	22.74	30.00	H
		1745.00	-15.05	-29.50	8.10	22.55	30.00	H

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	P_{Mea}(dBm)	P_{cl}(dB)+ P_{Ag}(dB)	Ga Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Polarization
16QAM	1.4	1710.70	-14.41	-29.60	8.10	23.29	30.00	H
		1732.50	-14.73	-29.60	8.10	22.97	30.00	H
		1754.30	-14.85	-29.50	8.10	22.75	30.00	H
	3	1711.50	-14.51	-29.60	8.10	23.19	30.00	H
		1732.50	-14.76	-29.60	8.10	22.94	30.00	H
		1753.50	-14.87	-29.50	8.10	22.73	30.00	H
	5	1712.50	-14.58	-29.60	8.10	23.12	30.00	H
		1732.50	-14.83	-29.60	8.10	22.87	30.00	H
		1752.50	-14.90	-29.50	8.10	22.71	30.00	H
	10	1715.00	-14.66	-29.60	8.10	23.04	30.00	H
		1732.50	-14.92	-29.60	8.10	22.78	30.00	H
		1750.00	-14.95	-29.50	8.10	22.65	30.00	H
	15	1717.50	-14.74	-29.60	8.10	22.96	30.00	H
		1732.50	-14.96	-29.60	8.10	22.74	30.00	H
		1747.50	-14.97	-29.50	8.10	22.63	30.00	H
	20	1720.00	-14.82	-29.60	8.10	22.88	30.00	H
		1732.50	-15.05	-29.60	8.10	22.65	30.00	H
		1745.00	-15.04	-29.50	8.10	22.56	30.00	H

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	P_{Mea}(dBm)	P_{cl}(dB)+ P_{Ag}(dB)	Ga Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Polarization
64QAM	1.4	1710.70	-14.46	-29.60	8.10	23.24	30.00	H
		1732.50	-14.75	-29.60	8.10	22.95	30.00	H
		1754.30	-14.86	-29.50	8.10	22.74	30.00	H
	3	1711.50	-14.52	-29.60	8.10	23.18	30.00	H
		1732.50	-14.81	-29.60	8.10	22.89	30.00	H
		1753.50	-14.93	-29.50	8.10	22.67	30.00	H
	5	1712.50	-14.64	-29.60	8.10	23.06	30.00	H
		1732.50	-14.85	-29.60	8.10	22.85	30.00	H
		1752.50	-14.98	-29.50	8.10	22.62	30.00	H
	10	1715.00	-14.70	-29.60	8.10	23.00	30.00	H
		1732.50	-14.92	-29.60	8.10	22.78	30.00	H
		1750.00	-15.03	-29.50	8.10	22.57	30.00	H
	15	1717.50	-14.77	-29.60	8.10	22.93	30.00	H
		1732.50	-14.98	-29.60	8.10	22.72	30.00	H
		1747.50	-15.05	-29.50	8.10	22.55	30.00	H
	20	1720.00	-14.82	-29.60	8.10	22.88	30.00	H
		1732.50	-15.05	-29.60	8.10	22.65	30.00	H
		1745.00	-15.10	-29.50	8.10	22.50	30.00	H

LTE Band 5- ERP Part 22.913(a)(5)

Limits: ≤38.45dBm (7W)

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	PMea(dBm)	Pcl(dB)+ PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
QPSK	1.4	824.70	-9.08	-33.60	-0.79	2.15	21.57	38.45	V
		836.50	-8.55	-33.50	-0.74	2.15	22.06	38.45	V
		848.30	-9.30	-33.50	-0.73	2.15	21.32	38.45	V
	3	825.50	-9.23	-33.60	-0.84	2.15	21.38	38.45	V
		836.50	-8.78	-33.50	-0.74	2.15	21.83	38.45	V
		847.50	-9.42	-33.50	-0.73	2.15	21.20	38.45	V
	5	826.50	-9.35	-33.60	-0.84	2.15	21.26	38.45	V
		836.50	-8.81	-33.50	-0.74	2.15	21.80	38.45	V
		846.50	-9.48	-33.50	-0.73	2.15	21.13	38.45	V
	10	829.00	-9.48	-33.60	-0.84	2.15	21.13	38.45	V
		836.50	-8.84	-33.50	-0.74	2.15	21.77	38.45	V
		844.00	-9.52	-33.50	-0.78	2.15	21.05	38.45	V

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	PMea(dBm)	Pcl(dB)+ PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
16QAM	1.4	824.70	-9.17	-33.60	-0.79	2.15	21.48	38.45	V
		836.50	-8.73	-33.50	-0.74	2.15	21.89	38.45	V
		848.30	-9.38	-33.50	-0.73	2.15	21.24	38.45	V
	3	825.50	-9.24	-33.60	-0.84	2.15	21.37	38.45	V
		836.50	-8.87	-33.50	-0.74	2.15	21.74	38.45	V
		847.50	-9.42	-33.50	-0.73	2.15	21.20	38.45	V
	5	826.50	-9.40	-33.60	-0.84	2.15	21.21	38.45	V
		836.50	-8.95	-33.50	-0.74	2.15	21.66	38.45	V
		846.50	-9.46	-33.50	-0.73	2.15	21.16	38.45	V
	10	829.00	-9.41	-33.60	-0.84	2.15	21.20	38.45	V
		836.50	-9.01	-33.50	-0.74	2.15	21.61	38.45	V
		844.00	-9.47	-33.50	-0.78	2.15	21.10	38.45	V

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	PMea(dBm)	Pcl(dB)+ PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
64QAM	1.4	824.70	-9.23	-33.60	-0.79	2.15	21.43	38.45	V
		836.50	-8.81	-33.50	-0.74	2.15	21.81	38.45	V
		848.30	-9.41	-33.50	-0.73	2.15	21.21	38.45	V
	3	825.50	-9.28	-33.60	-0.84	2.15	21.33	38.45	V
		836.50	-8.87	-33.50	-0.74	2.15	21.74	38.45	V
		847.50	-9.51	-33.50	-0.73	2.15	21.11	38.45	V
	5	826.50	-9.30	-33.60	-0.84	2.15	21.31	38.45	V
		836.50	-8.92	-33.50	-0.74	2.15	21.69	38.45	V
		846.50	-9.54	-33.50	-0.73	2.15	21.08	38.45	V
	10	829.00	-9.41	-33.60	-0.84	2.15	21.20	38.45	V
		836.50	-9.03	-33.50	-0.74	2.15	21.58	38.45	V
		844.00	-9.56	-33.50	-0.78	2.15	21.01	38.45	V

LTE Band 12 - ERP Part 27.50(c)(10)

Limits: ≤34.77dBm (3W)

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	PMea(dBm)	Pcl(dB)+ PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
QPSK	1.4	699.70	-12.16	-34.80	-0.93	2.15	19.56	34.77	V
		707.50	-12.77	-34.70	-0.91	2.15	18.88	34.77	V
		715.30	-13.27	-34.70	-0.68	2.15	18.59	34.77	V
	3	700.50	-12.20	-34.80	-0.97	2.15	19.48	34.77	V
		707.50	-12.87	-34.70	-0.91	2.15	18.78	34.77	V
		714.50	-13.39	-34.70	-0.64	2.15	18.51	34.77	V
	5	701.50	-12.25	-34.80	-0.97	2.15	19.43	34.77	V
		707.50	-12.94	-34.70	-0.91	2.15	18.70	34.77	V
		713.50	-13.43	-34.70	-0.64	2.15	18.48	34.77	V
	10	704.00	-12.29	-34.80	-0.97	2.15	19.39	34.77	V
		707.50	-12.99	-34.70	-0.91	2.15	18.66	34.77	V
		711.00	-13.48	-34.70	-0.64	2.15	18.42	34.77	V

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	PMea(dBm)	Pcl(dB)+ PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
16QAM	1.4	699.70	-12.31	-34.80	-0.93	2.15	19.41	34.77	V
		707.50	-13.03	-34.70	-0.91	2.15	18.61	34.77	V
		715.30	-13.40	-34.70	-0.68	2.15	18.47	34.77	V
	3	700.50	-12.38	-34.80	-0.97	2.15	19.30	34.77	V
		707.50	-13.10	-34.70	-0.91	2.15	18.55	34.77	V
		714.50	-13.60	-34.70	-0.64	2.15	18.31	34.77	V
	5	701.50	-12.47	-34.80	-0.97	2.15	19.21	34.77	V
		707.50	-13.20	-34.70	-0.91	2.15	18.44	34.77	V
		713.50	-13.61	-34.70	-0.64	2.15	18.29	34.77	V
	10	704.00	-12.49	-34.80	-0.97	2.15	19.19	34.77	V
		707.50	-13.30	-34.70	-0.91	2.15	18.34	34.77	V
		711.00	-13.70	-34.70	-0.64	2.15	18.21	34.77	V

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	PMea(dBm)	Pcl(dB)+ PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
64QAM	1.4	699.70	-12.34	-34.80	-0.93	2.15	19.38	34.77	V
		707.50	-13.07	-34.70	-0.91	2.15	18.57	34.77	V
		715.30	-13.46	-34.70	-0.68	2.15	18.40	34.77	V
	3	700.50	-12.36	-34.80	-0.97	2.15	19.32	34.77	V
		707.50	-13.21	-34.70	-0.91	2.15	18.43	34.77	V
		714.50	-13.53	-34.70	-0.64	2.15	18.37	34.77	V
	5	701.50	-12.40	-34.80	-0.97	2.15	19.28	34.77	V
		707.50	-13.30	-34.70	-0.91	2.15	18.34	34.77	V
		713.50	-13.70	-34.70	-0.64	2.15	18.21	34.77	V
	10	704.00	-12.55	-34.80	-0.97	2.15	19.13	34.77	V
		707.50	-13.43	-34.70	-0.91	2.15	18.21	34.77	V
		711.00	-13.80	-34.70	-0.64	2.15	18.11	34.77	V

LTE Band 13- ERP Part 27.50(b)(10)

Limits: ≤34.77dBm (3W)

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	PMea(dBm)	Pcl(dB)+ PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
QPSK	5	779.50	-10.46	-34.00	-0.08	2.15	21.31	34.77	V
		782.00	-10.77	-34.00	-0.13	2.15	20.95	34.77	V
		784.50	-10.42	-34.00	-0.13	2.15	21.30	34.77	V
	10	782.00	-10.88	-34.00	-0.13	2.15	20.84	34.77	V

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	PMea(dBm)	Pcl(dB)+ PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
16QAM	5	779.50	-10.55	-34.00	-0.08	2.15	21.21	34.77	V
		782.00	-10.95	-34.00	-0.13	2.15	20.78	34.77	V
		784.50	-10.53	-34.00	-0.13	2.15	21.19	34.77	V
	10	782.00	-11.02	-34.00	-0.13	2.15	20.71	34.77	V

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	PMea(dBm)	Pcl(dB)+ PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
64QAM	5	779.50	-10.66	-34.00	-0.08	2.15	21.10	34.77	V
		782.00	-11.09	-34.00	-0.13	2.15	20.63	34.77	V
		784.50	-10.63	-34.00	-0.13	2.15	21.09	34.77	V
	10	782.00	-10.63	-34.00	-0.13	2.15	21.09	34.77	V

LTE Band 66- EIRP Part 27.50(d)(10)

Limits: ≤30dBm (1W)

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	P_{Mea}(dBm)	P_{cl}(dB)+ P_{Ag}(dB)	Ga Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Polarization
QPSK	1.4	1710.70	-14.61	-29.60	8.10	23.09	30.00	H
		1745.00	-14.32	-29.50	8.10	23.28	30.00	H
		1779.30	-14.65	-29.50	8.10	22.95	30.00	H
	3	1711.50	-14.72	-29.60	8.10	22.98	30.00	H
		1745.00	-14.42	-29.50	8.10	23.18	30.00	H
		1778.50	-14.67	-29.50	8.10	22.93	30.00	H
	5	1712.50	-14.78	-29.60	8.10	22.92	30.00	H
		1745.00	-14.47	-29.50	8.10	23.13	30.00	H
		1777.50	-14.76	-29.50	8.10	22.84	30.00	H
	10	1715.00	-14.82	-29.60	8.10	22.88	30.00	H
		1745.00	-14.53	-29.50	8.10	23.07	30.00	H
		1775.00	-14.79	-29.50	8.10	22.81	30.00	H
	15	1717.50	-14.88	-29.60	8.10	22.82	30.00	H
		1745.00	-14.58	-29.50	8.10	23.02	30.00	H
		1772.53	-14.85	-29.50	8.10	22.75	30.00	H
	20	1720.00	-14.92	-29.60	8.10	22.78	30.00	H
		1745.00	-14.67	-29.50	8.10	22.93	30.00	H
		1770.00	-14.92	-29.50	8.10	22.68	30.00	H

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	P_{Mea}(dBm)	P_{cl}(dB)+ P_{Ag}(dB)	Ga Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Polarization
16QAM	1.4	1710.70	-14.65	-29.60	8.10	23.05	30.00	H
		1745.00	-14.35	-29.50	8.10	23.25	30.00	H
		1779.30	-14.81	-29.50	8.10	22.79	30.00	H
	3	1711.50	-14.72	-29.60	8.10	22.98	30.00	H
		1745.00	-14.45	-29.50	8.10	23.15	30.00	H
		1778.50	-14.85	-29.50	8.10	22.75	30.00	H
	5	1712.50	-14.76	-29.60	8.10	22.94	30.00	H
		1745.00	-14.52	-29.50	8.10	23.08	30.00	H
		1777.50	-14.87	-29.50	8.10	22.73	30.00	H
	10	1715.00	-14.82	-29.60	8.10	22.88	30.00	H
		1745.00	-14.62	-29.50	8.10	22.98	30.00	H
		1775.00	-14.93	-29.50	8.10	22.67	30.00	H
	15	1717.50	-14.82	-29.60	8.10	22.88	30.00	H
		1745.00	-14.63	-29.50	8.10	22.97	30.00	H
		1772.53	-14.96	-29.50	8.10	22.64	30.00	H
	20	1720.00	-14.92	-29.60	8.10	22.78	30.00	H
		1745.00	-14.65	-29.50	8.10	22.95	30.00	H
		1770.00	-15.03	-29.50	8.10	22.57	30.00	H

Uplink modulation	Bandwidth (MHz)	Frequency (MHz)	P_{Mea}(dBm)	P_{cl}(dB)+ P_{Ag}(dB)	Ga Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Polarization
16QAM	1.4	1710.70	-14.68	-29.60	8.10	23.02	30.00	H
		1745.00	-14.44	-29.50	8.10	23.16	30.00	H
		1779.30	-14.83	-29.50	8.10	22.77	30.00	H
	3	1711.50	-14.72	-29.60	8.10	22.98	30.00	H
		1745.00	-14.52	-29.50	8.10	23.08	30.00	H
		1778.50	-14.86	-29.50	8.10	22.74	30.00	H
	5	1712.50	-14.79	-29.60	8.10	22.91	30.00	H
		1745.00	-14.60	-29.50	8.10	23.00	30.00	H
		1777.50	-14.94	-29.50	8.10	22.66	30.00	H
	10	1715.00	-14.85	-29.60	8.10	22.85	30.00	H
		1745.00	-14.65	-29.50	8.10	22.95	30.00	H
		1775.00	-14.97	-29.50	8.10	22.63	30.00	H
	15	1717.50	-14.88	-29.60	8.10	22.82	30.00	H
		1745.00	-14.71	-29.50	8.10	22.89	30.00	H
		1772.53	-15.02	-29.50	8.10	22.58	30.00	H
	20	1720.00	-14.94	-29.60	8.10	22.76	30.00	H
		1745.00	-14.74	-29.50	8.10	22.86	30.00	H
		1770.00	-15.05	-29.50	8.10	22.55	30.00	H

LTE Band CA_5B- ERP Part 22.913(a)(5)

Limits: ≤38.45dBm (7W)

Uplink modulation	Bandwidth (MHz)	PCC Frequency (MHz)	SCC Frequency (MHz)	PMea (dBm)	Pcl(dB)+ PAg(dB)	Ga Antenna Gain(dBi)	ERP(dBm)	Limit (dBm)	Polarization
QPSK	3+5	825.60	829.50	-11.15	-33.60	-0.3	22.15	38.45	V
		834.10	838.00	-11.01	-33.50	-0.3	22.19	38.45	V
		842.60	846.50	-11.22	-33.50	-0.3	21.98	38.45	V
	5+10	826.8	834	-11.17	-33.60	-0.3	22.13	38.45	V
		831.8	838	-10.96	-33.50	-0.3	22.24	38.45	V
		836.8	846.5	-11.13	-33.50	-0.3	22.07	38.45	V
	10+5	829	836.2	-11.44	-33.60	-0.3	21.86	38.45	V
		834	841.2	-11.26	-33.50	-0.3	21.94	38.45	V
		839	846.2	-11.42	-33.50	-0.3	21.78	38.45	V
	10+10	829	838.9	-11.52	-33.60	-0.3	21.78	38.45	V
		831.6	841.5	-11.36	-33.50	-0.3	21.84	38.45	V
		834.1	844	-11.34	-33.50	-0.3	21.86	38.45	V
	5+3	826.50	834.00	-11.29	-33.60	-0.3	22.01	38.45	V
		835.00	838.90	-11.12	-33.50	-0.3	22.08	38.45	V
		843.50	847.40	-11.16	-33.50	-0.3	22.04	38.45	V

Uplink modulation	Bandwidth (MHz)	PCC Frequency (MHz)	SCC Frequency (MHz)	PMea (dBm)	Pcl(dB)+ PAg(dB)	Ga Antenna Gain(dBi)	ERP(dBm)	Limit (dBm)	Polarization
16QAM	3+5	825.60	829.50	-11.17	-33.60	-0.3	22.13	38.45	V
		834.10	838.00	-11.05	-33.50	-0.3	22.15	38.45	V
		842.60	846.50	-11.26	-33.50	-0.3	21.94	38.45	V
	5+10	826.8	834	-11.20	-33.60	-0.3	22.10	38.45	V
		831.8	838	-10.97	-33.50	-0.3	22.23	38.45	V
		836.8	846.5	-11.18	-33.50	-0.3	22.02	38.45	V
	10+5	829	836.2	-11.45	-33.60	-0.3	21.85	38.45	V
		834	841.2	-11.29	-33.50	-0.3	21.91	38.45	V
		839	846.2	-11.45	-33.50	-0.3	21.75	38.45	V
	10+10	829	838.9	-11.56	-33.60	-0.3	21.74	38.45	V
		831.6	841.5	-11.38	-33.50	-0.3	21.82	38.45	V
		834.1	844	-11.40	-33.50	-0.3	21.80	38.45	V
	5+3	826.50	834.00	-11.27	-33.60	-0.3	22.03	38.45	V
		835.00	838.90	-11.18	-33.50	-0.3	22.02	38.45	V
		843.50	847.40	-11.20	-33.50	-0.3	22.00	38.45	V

Uplink modulation	Bandwidth (MHz)	PCC Frequency (MHz)	SCC Frequency (MHz)	PMea (dBm)	Pcl(dB)+ PAg(dB)	Ga Antenna Gain(dBi)	ERP(dBm)	Limit (dBm)	Polarization
64QAM	3+5	825.60	829.50	-11.27	-33.60	-0.3	22.03	38.45	V
		834.10	838.00	-11.09	-33.50	-0.3	22.11	38.45	V
		842.60	846.50	-11.30	-33.50	-0.3	21.90	38.45	V
	5+10	826.8	834	-11.26	-33.60	-0.3	22.04	38.45	V
		831.8	838	-10.99	-33.50	-0.3	22.21	38.45	V
		836.8	846.5	-11.20	-33.50	-0.3	22.00	38.45	V
	10+5	829	836.2	-11.49	-33.60	-0.3	21.81	38.45	V
		834	841.2	-11.32	-33.50	-0.3	21.88	38.45	V
		839	846.2	-11.48	-33.50	-0.3	21.72	38.45	V
	10+10	829	838.9	-11.59	-33.60	-0.3	21.71	38.45	V
		831.6	841.5	-11.41	-33.50	-0.3	21.79	38.45	V
		834.1	844	-11.47	-33.50	-0.3	21.73	38.45	V
	5+3	826.50	834.00	-11.29	-33.60	-0.3	22.01	38.45	V
		835.00	838.90	-11.17	-33.50	-0.3	22.03	38.45	V
		843.50	847.40	-11.31	-33.50	-0.3	21.89	38.45	V

LTE Band CA_66B - EIRP Part 27.50(d)(10)

Limits: ≤30dBm (1W)

Uplink modulation	Bandwidth (MHz)	PCC Frequency (MHz)	SCC Frequency (MHz)	P_{Mea} (dBm)	P_{cl}(dB)+ P_{Ag}(dB)	Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarization
QPSK	5+5	1712.50	1717.30	-14.21	-29.60	8.10	23.49	30.00	H
		1752.60	1757.40	-13.94	-29.50	8.10	23.66	30.00	H
		1772.70	1777.50	-14.03	-29.50	8.10	23.57	30.00	H
	5+10	1712.80	1720.00	-14.30	-29.60	8.10	23.40	30.00	H
		1750.50	1757.50	-14.07	-29.50	8.10	23.53	30.00	H
		1767.80	1775.00	-14.18	-29.50	8.10	23.42	30.00	H
	5+15	1713.00	1722.30	-14.34	-29.60	8.10	23.36	30.00	H
		1748.10	1757.40	-14.15	-29.50	8.10	23.45	30.00	H
		1763.20	1772.50	-14.27	-29.50	8.10	23.33	30.00	H
	10+10	1715.00	1724.90	-14.66	-29.60	8.10	23.04	30.00	H
		1750.10	1760.00	-14.54	-29.50	8.10	23.06	30.00	H
		1765.10	1775.00	-14.81	-29.50	8.10	22.79	30.00	H
	10+5	1715.00	1722.20	-14.78	-29.60	8.10	22.92	30.00	H
		1752.50	1759.70	-14.63	-29.50	8.10	22.97	30.00	H
		1770.00	1777.20	-14.72	-29.50	8.10	22.88	30.00	H
	15+5	1717.50	1726.80	-14.76	-29.60	8.10	22.94	30.00	H
		1752.60	1761.90	-14.63	-29.50	8.10	22.97	30.00	H
		1767.70	1777.00	-14.65	-29.50	8.10	22.95	30.00	H

Uplink modulation	Bandwidth (MHz)	PCC Frequency (MHz)	SCC Frequency (MHz)	P_{Mea} (dBm)	P_{cl}(dB)+ P_{Ag}(dB)	Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarization
16QAM	5+5	1712.50	1717.30	-14.21	-29.60	8.10	23.49	30.00	H
		1752.60	1757.40	-13.94	-29.50	8.10	23.66	30.00	H
		1772.70	1777.50	-14.03	-29.50	8.10	23.57	30.00	H
	5+10	1712.80	1720.00	-14.33	-29.60	8.10	23.37	30.00	H
		1750.50	1757.50	-14.08	-29.50	8.10	23.52	30.00	H
		1767.80	1775.00	-14.20	-29.50	8.10	23.40	30.00	H
	5+15	1713.00	1722.30	-14.37	-29.60	8.10	23.33	30.00	H
		1748.10	1757.40	-14.20	-29.50	8.10	23.40	30.00	H
		1763.20	1772.50	-14.33	-29.50	8.10	23.27	30.00	H
	10+10	1715.00	1724.90	-14.70	-29.60	8.10	23.00	30.00	H
		1750.10	1760.00	-14.55	-29.50	8.10	23.05	30.00	H
		1765.10	1775.00	-14.84	-29.50	8.10	22.76	30.00	H
	10+5	1715.00	1722.20	-14.81	-29.60	8.10	22.89	30.00	H
		1752.50	1759.70	-14.67	-29.50	8.10	22.93	30.00	H
		1770.00	1777.20	-14.74	-29.50	8.10	22.86	30.00	H
	15+5	1717.50	1726.80	-14.78	-29.60	8.10	22.92	30.00	H
		1752.60	1761.90	-14.62	-29.50	8.10	22.98	30.00	H
		1767.70	1777.00	-14.66	-29.50	8.10	22.94	30.00	H

Uplink modulation	Bandwidth (MHz)	PCC Frequency (MHz)	SCC Frequency (MHz)	P_{Mea} (dBm)	P_{cl}(dB)+ P_{Ag}(dB)	Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarization
64QAM	5+5	1712.50	1717.30	-14.27	-29.60	8.10	23.43	30.00	H
		1752.60	1757.40	-13.99	-29.50	8.10	23.61	30.00	H
		1772.70	1777.50	-14.08	-29.50	8.10	23.52	30.00	H
	5+10	1712.80	1720.00	-14.35	-29.60	8.10	23.35	30.00	H
		1750.50	1757.50	-14.11	-29.50	8.10	23.49	30.00	H
		1767.80	1775.00	-14.23	-29.50	8.10	23.37	30.00	H
	5+15	1713.00	1722.30	-14.39	-29.60	8.10	23.31	30.00	H
		1748.10	1757.40	-14.23	-29.50	8.10	23.37	30.00	H
		1763.20	1772.50	-14.34	-29.50	8.10	23.26	30.00	H
	10+10	1715.00	1724.90	-14.71	-29.60	8.10	22.99	30.00	H
		1750.10	1760.00	-14.60	-29.50	8.10	23.00	30.00	H
		1765.10	1775.00	-14.85	-29.50	8.10	22.75	30.00	H
	10+5	1715.00	1722.20	-14.83	-29.60	8.10	22.87	30.00	H
		1752.50	1759.70	-14.70	-29.50	8.10	22.90	30.00	H
		1770.00	1777.20	-14.75	-29.50	8.10	22.85	30.00	H
	15+5	1717.50	1726.80	-14.80	-29.60	8.10	22.90	30.00	H
		1752.60	1761.90	-14.64	-29.50	8.10	22.96	30.00	H
		1767.70	1777.00	-14.71	-29.50	8.10	22.89	30.00	H

LTE Band CA_66C - EIRP Part 27.50(d)(10)

Limits: ≤30dBm (1W)

Uplink modulation	Bandwidth (MHz)	PCC Frequency (MHz)	SCC Frequency (MHz)	P_{Mea} (dBm)	P_{cl}(dB)+ P_{Ag}(dB)	Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarization
QPSK	10+15	1715.30	1727.30	-14.80	-29.60	8.10	22.90	30.00	H
		1747.90	1759.90	-14.54	-29.50	8.10	23.06	30.00	H
		1760.50	1772.50	-14.64	-29.50	8.10	22.96	30.00	H
	15-10	1717.50	1729.50	-14.91	-29.60	8.10	22.79	30.00	H
		1750.10	1762.10	-14.67	-29.50	8.10	22.93	30.00	H
		1762.70	1774.70	-14.68	-29.50	8.10	22.92	30.00	H
	10+20	1715.50	1729.90	-14.84	-29.60	8.10	22.86	30.00	H
		1745.60	1760.00	-14.67	-29.50	8.10	22.93	30.00	H
		1755.60	1770.00	-14.77	-29.50	8.10	22.83	30.00	H
	20+10	1720.00	1734.40	-14.77	-29.60	8.10	22.93	30.00	H
		1750.10	1764.50	-14.64	-29.50	8.10	22.96	30.00	H
		1760.10	1774.50	-14.76	-29.50	8.10	22.84	30.00	H
	15+15	1717.50	1732.50	-14.61	-29.60	8.10	23.09	30.00	H
		1747.50	1762.50	-14.50	-29.50	8.10	23.10	30.00	H
		1757.50	1772.50	-14.55	-29.50	8.10	23.05	30.00	H
	15+20	1717.80	1734.90	-14.78	-29.60	8.10	22.92	30.00	H
		1745.30	1762.40	-14.61	-29.50	8.10	22.99	30.00	H
		1752.90	1770.00	-14.64	-29.50	8.10	22.96	30.00	H
	20+15	1720.00	1737.10	-14.77	-29.60	8.10	22.93	30.00	H
		1747.60	1764.70	-14.60	-29.50	8.10	23.00	30.00	H
		1755.10	1772.20	-14.65	-29.50	8.10	22.95	30.00	H
	20+5	1720.00	1731.70	-14.78	-29.60	8.10	22.92	30.00	H
		1752.50	1764.20	-14.52	-29.50	8.10	23.08	30.00	H
		1765.00	1776.70	-14.60	-29.50	8.10	23.00	30.00	H
	5+20	1713.30	1725.00	-14.81	-29.60	8.10	22.89	30.00	H
		1745.80	1757.50	-14.54	-29.50	8.10	23.06	30.00	H
		1758.30	1770.00	-14.70	-29.50	8.10	22.90	30.00	H
	20+20	1720.00	1739.80	-14.78	-29.60	8.10	22.92	30.00	H
		1745.10	1764.90	-14.52	-29.50	8.10	23.08	30.00	H
		1750.20	1770.00	-14.71	-29.50	8.10	22.89	30.00	H

Uplink modulation	Bandwidth (MHz)	PCC Frequency (MHz)	SCC Frequency (MHz)	P_{Mea} (dBm)	P_{cl}(dB)+ P_{Ag}(dB)	Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarization
16QAM	10+15	1715.30	1727.30	-14.78	-29.60	8.10	22.92	30.00	H
		1747.90	1759.90	-14.55	-29.50	8.10	23.05	30.00	H
		1760.50	1772.50	-14.67	-29.50	8.10	22.93	30.00	H
	15-10	1717.50	1729.50	-14.94	-29.60	8.10	22.76	30.00	H
		1750.10	1762.10	-14.69	-29.50	8.10	22.91	30.00	H
		1762.70	1774.70	-14.73	-29.50	8.10	22.87	30.00	H
	10+20	1715.50	1729.90	-14.86	-29.60	8.10	22.84	30.00	H
		1745.60	1760.00	-14.70	-29.50	8.10	22.90	30.00	H
		1755.60	1770.00	-14.82	-29.50	8.10	22.78	30.00	H
	20+10	1720.00	1734.40	-14.80	-29.60	8.10	22.90	30.00	H
		1750.10	1764.50	-14.66	-29.50	8.10	22.94	30.00	H
		1760.10	1774.50	-14.78	-29.50	8.10	22.82	30.00	H
	15+15	1717.50	1732.50	-14.64	-29.60	8.10	23.06	30.00	H
		1747.50	1762.50	-14.52	-29.50	8.10	23.08	30.00	H
		1757.50	1772.50	-14.63	-29.50	8.10	22.97	30.00	H
	15+20	1717.80	1734.90	-14.80	-29.60	8.10	22.90	30.00	H
		1745.30	1762.40	-14.63	-29.50	8.10	22.97	30.00	H
		1752.90	1770.00	-14.67	-29.50	8.10	22.93	30.00	H
	20+15	1720.00	1737.10	-14.81	-29.60	8.10	22.89	30.00	H
		1747.60	1764.70	-14.62	-29.50	8.10	22.98	30.00	H
		1755.10	1772.20	-14.68	-29.50	8.10	22.92	30.00	H
	20+5	1720.00	1731.70	-14.82	-29.60	8.10	22.88	30.00	H
		1752.50	1764.20	-14.55	-29.50	8.10	23.05	30.00	H
		1765.00	1776.70	-14.63	-29.50	8.10	22.97	30.00	H
	5+20	1713.30	1725.00	-14.83	-29.60	8.10	22.87	30.00	H
		1745.80	1757.50	-14.55	-29.50	8.10	23.05	30.00	H
		1758.30	1770.00	-14.74	-29.50	8.10	22.86	30.00	H
	20+20	1720.00	1739.80	-14.82	-29.60	8.10	22.88	30.00	H
		1745.10	1764.90	-14.56	-29.50	8.10	23.04	30.00	H
		1750.20	1770.00	-14.74	-29.50	8.10	22.86	30.00	H

Uplink modulation	Bandwidth (MHz)	PCC Frequency (MHz)	SCC Frequency (MHz)	P_{Mea} (dBm)	P_{cl}(dB)+ P_{Ag}(dB)	Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarization
64QAM	10+15	1715.30	1727.30	-14.81	-29.60	8.10	22.89	30.00	H
		1747.90	1759.90	-14.59	-29.50	8.10	23.01	30.00	H
		1760.50	1772.50	-14.70	-29.50	8.10	22.90	30.00	H
	15-10	1717.50	1729.50	-14.95	-29.60	8.10	22.75	30.00	H
		1750.10	1762.10	-14.73	-29.50	8.10	22.87	30.00	H
		1762.70	1774.70	-14.80	-29.50	8.10	22.80	30.00	H
	10+20	1715.50	1729.90	-14.91	-29.60	8.10	22.79	30.00	H
		1745.60	1760.00	-14.72	-29.50	8.10	22.88	30.00	H
		1755.60	1770.00	-14.80	-29.50	8.10	22.80	30.00	H
	20+10	1720.00	1734.40	-14.83	-29.60	8.10	22.87	30.00	H
		1750.10	1764.50	-14.68	-29.50	8.10	22.92	30.00	H
		1760.10	1774.50	-14.84	-29.50	8.10	22.76	30.00	H
	15+15	1717.50	1732.50	-14.68	-29.60	8.10	23.02	30.00	H
		1747.50	1762.50	-14.53	-29.50	8.10	23.07	30.00	H
		1757.50	1772.50	-14.65	-29.50	8.10	22.95	30.00	H
	15+20	1717.80	1734.90	-14.84	-29.60	8.10	22.86	30.00	H
		1745.30	1762.40	-14.67	-29.50	8.10	22.93	30.00	H
		1752.90	1770.00	-14.70	-29.50	8.10	22.90	30.00	H
	20+15	1720.00	1737.10	-14.83	-29.60	8.10	22.87	30.00	H
		1747.60	1764.70	-14.64	-29.50	8.10	22.96	30.00	H
		1755.10	1772.20	-14.71	-29.50	8.10	22.89	30.00	H
	20+5	1720.00	1731.70	-14.86	-29.60	8.10	22.84	30.00	H
		1752.50	1764.20	-14.63	-29.50	8.10	22.97	30.00	H
		1765.00	1776.70	-14.72	-29.50	8.10	22.88	30.00	H
	5+20	1713.30	1725.00	-14.85	-29.60	8.10	22.85	30.00	H
		1745.80	1757.50	-14.60	-29.50	8.10	23.00	30.00	H
		1758.30	1770.00	-14.76	-29.50	8.10	22.84	30.00	H
	20+20	1720.00	1739.80	-14.84	-29.60	8.10	22.86	30.00	H
		1745.10	1764.90	-14.59	-29.50	8.10	23.01	30.00	H
		1750.20	1770.00	-14.78	-29.50	8.10	22.82	30.00	H

A.2 FREQUENCY STABILITY

Reference

FCC: CFR Part 2.1055, 22.355, 24.235, 27.54

A.2.1 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℃.
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℃ increments from -30℃ to +50℃. 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℃.
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℃ increments from -30℃ to +50℃. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
9. At all temperature levels hold the temperature to +/- 0.5℃ 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.2.2 Measurement results

LTE Band 2, 20MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	1850.400	1909.530		
50				1.02	0.0005
40				1.39	0.0007
30				0.20	0.0001
10				3.35	0.0018
0				3.55	0.0019
-10				4.86	0.0026
-20				2.38	0.0013
-30				3.99	0.0021

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	1850.400	1909.530	4.26	0.0023
4.40				3.83	0.0020

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

LTE Band 4, 20MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
50	3.85	1710.360	1754.580		
40				0.80	0.0005
30				0.00	0.0000
20				0.50	0.0003
10				0.26	0.0001
0				0.17	0.0001
-10				0.22	0.0001
-20				-1.57	0.0009
-30				0.54	0.0003

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	1710.360	1754.580	-0.11	0.0001
4.40				-0.70	0.0004

panded measurement uncertainty is 10Hz, *k* = 2

LTE Band 5, 10MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
50	3.85	824.620	848.510		
40				0.04	0.0001
30				-1.55	0.0018
20				-1.60	0.0019
10				-3.09	0.0037
0				-0.43	0.0005
-10				-2.33	0.0028
-20				-0.53	0.0006
-30				-0.29	0.0003

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	824.620	848.510	-1.69	0.0020
4.40				-2.03	0.0024

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

LTE Band 12, 10MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	699.360	715.700		
50				-0.16	0.0002
40				1.07	0.0015
30				-0.07	0.0001
10				0.50	0.0007
0				1.69	0.0024
-10				1.49	0.0021
-20				2.05	0.0029
-30				0.13	0.0002

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	699.360	715.700	0.09	0.0001
4.40				-0.57	0.0008

Expanded measurement uncertainty is 10Hz, k = 2

LTE band 13, 10MHz bandwidth QPSK(worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	777.580	786.659		
50				-0.26	0.0003
40				-0.44	0.0006
30				-1.19	0.0015
10				-0.46	0.0006
0				-0.96	0.0012
-10				-2.16	0.0028
-20				0.39	0.0005
-30				-2.19	0.0028

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	777.580	786.659	-1.32	0.0017
4.40				-1.35	0.0017

Expanded measurement uncertainty is 10Hz, k = 2

LTE Band 66, 20MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	1710.720	1779.630		
50				0.72	-0.53
40				2.73	-1.10
30				-0.07	0.63
10				-2.98	0.36
0				-0.43	0.95
-10				1.29	1.22
-20				1.14	0.34
-30				-0.60	-0.80

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	1710.720	1779.630	-2.02	0.0012
4.40				-1.92	0.0011

Expanded measurement uncertainty is 10Hz, k = 2

LTE CA_5B, 10MHz+10MHz bandwidth QPSK(worst case of all bandwidths)

Frequency Error vs Voltage

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	824.570	848.640		
50				1.80	0.0022
40				0.83	0.0010
30				0.27	0.0003
10				-1.04	0.0012
0				1.42	0.0017
-10				2.27	0.0027
-20				2.32	0.0028
-30				0.81	0.0010

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	824.570	848.640	2.31	0.0028
4.40				0.72	0.0009

LTE CA_66B, 10MHz+10MHz bandwidth QPSK(worst case of all bandwidths)

Frequency Error vs Voltage

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	1710.420	1779.580		
50				0.72	0.0004
40				2.73	0.0016
30				-0.07	0.0000
10				-2.98	0.0017
0				-0.43	0.0002
-10				1.29	0.0007
-20				1.14	0.0007
-30				-0.60	0.0003

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	1710.420	1779.580	-0.09	0.0000
4.40				-0.69	0.0004

LTE CA_66C, 20MHz+20MHz bandwidth QPSK(worst case of all bandwidths)

Frequency Error vs Voltage

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	1710.840	1779.780		
50				1.28	0.0007
40				0.93	0.0005
30				1.13	0.0006
10				0.70	0.0004
0				-0.11	0.0001
-10				0.41	0.0002
-20				2.64	0.0015
-30				1.24	0.0007

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	1710.840	1779.780	2.00	0.0011
4.40				1.95	0.0011

A.3 OCCUPIED BANDWIDTH

Reference

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

A.3.1 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.

a) 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).

b) 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.

c) 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 10log (OBW / RBW) below the reference level.

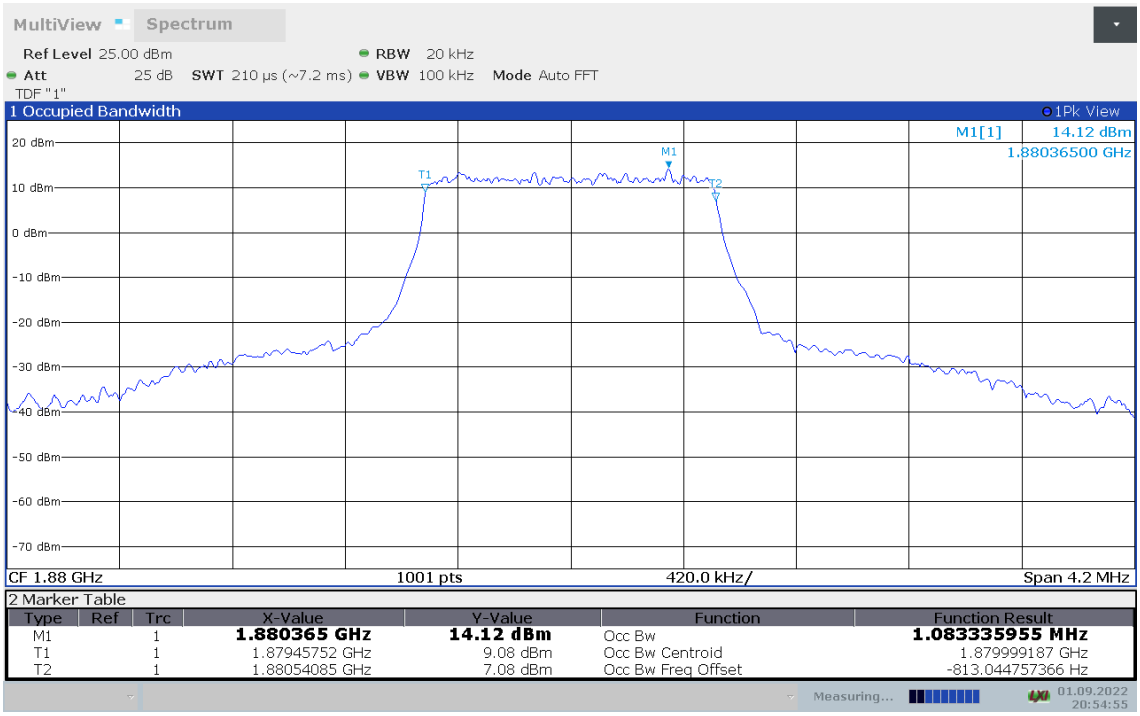
d) Set the detection mode to peak, and the trace mode to max hold.

e) Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

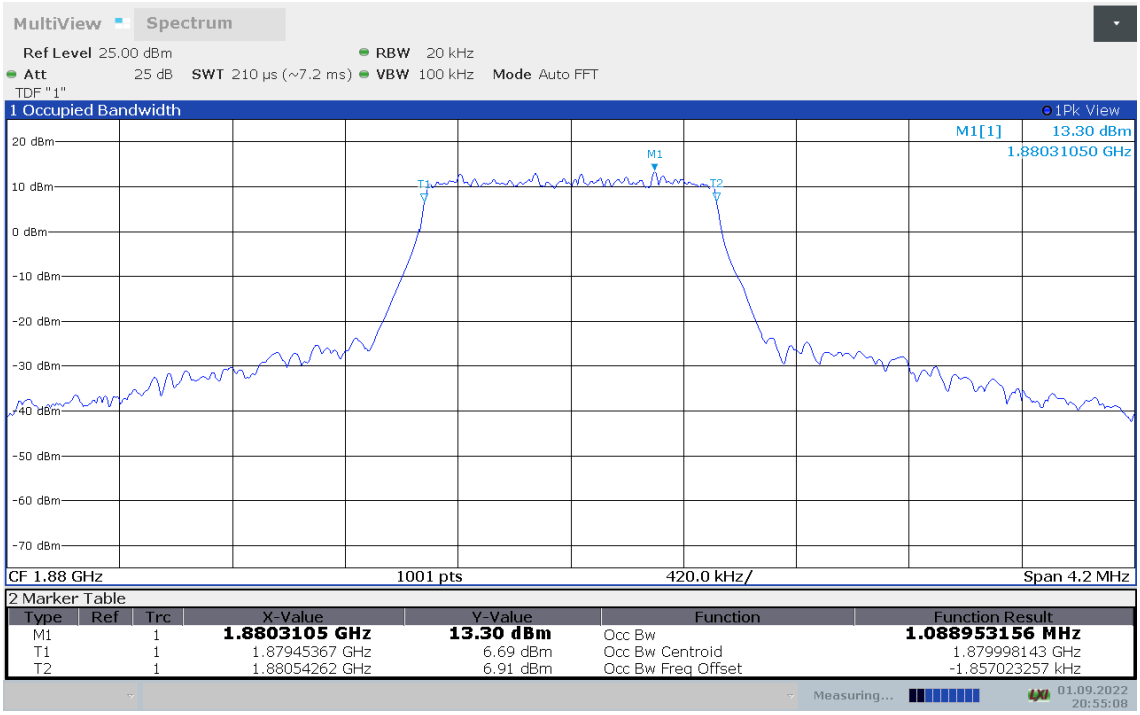
LTE band 2, 1.4MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1880.0	QPSK	16QAM	64QAM
	1.083	1.089	1.088

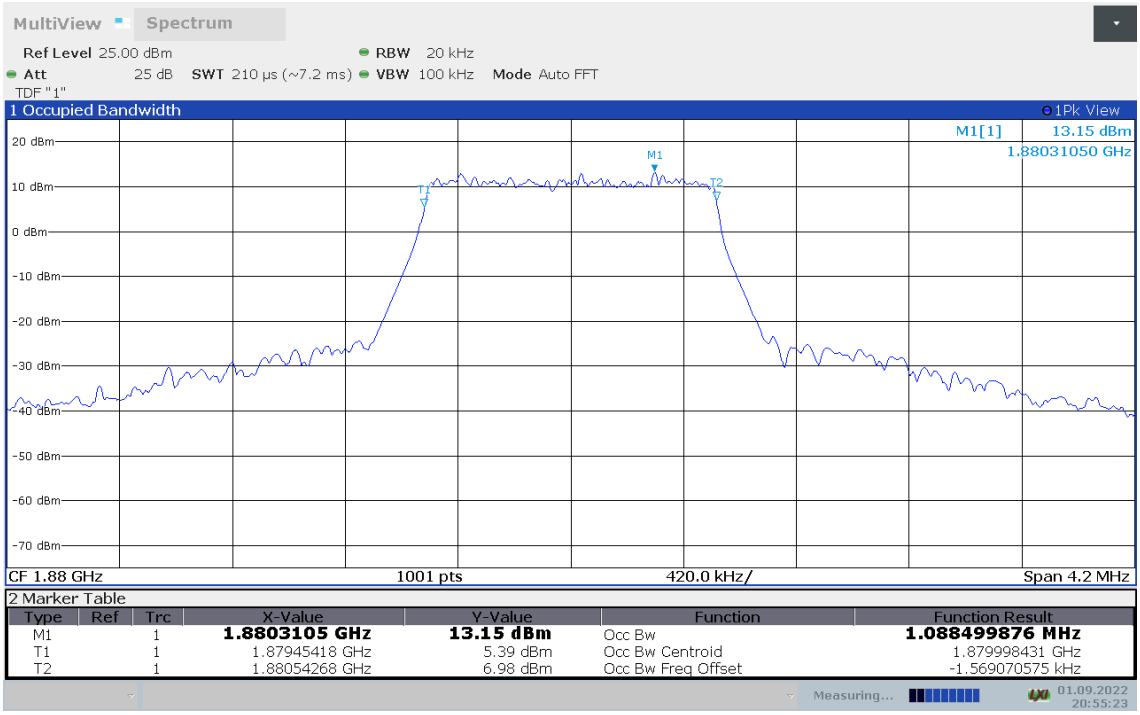
LTE band 2, 1.4MHz Bandwidth, QPSK (99% BW)



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



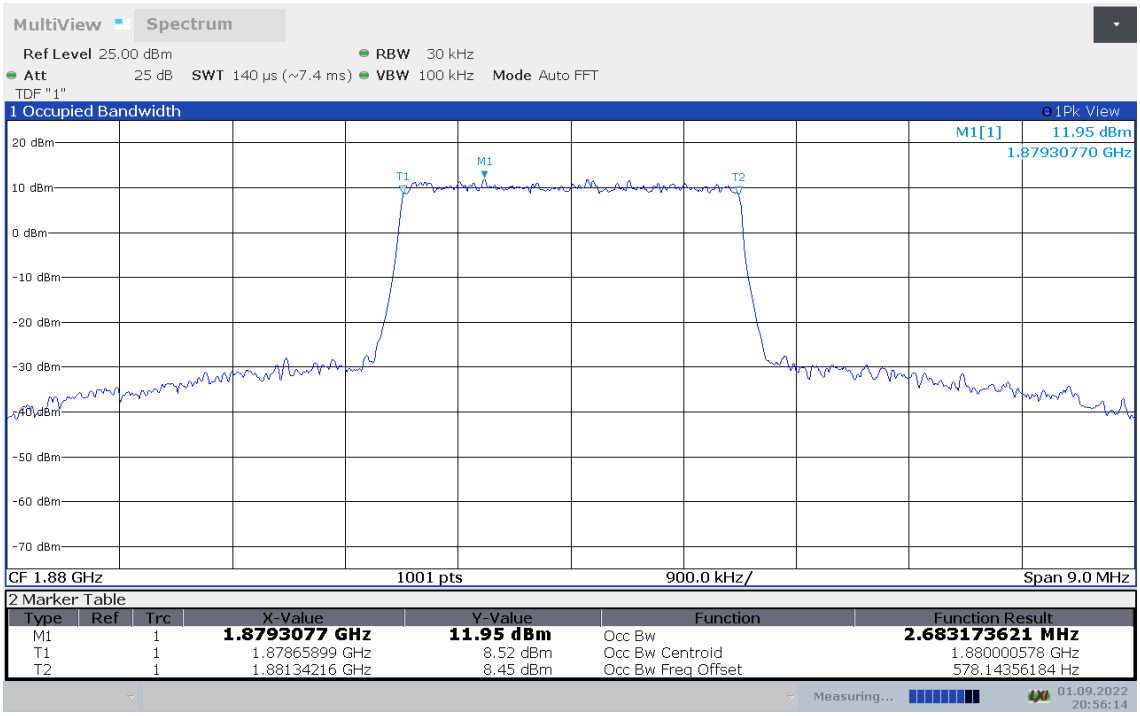
LTE band 2, 1.4MHz Bandwidth, 64QAM (99% BW)



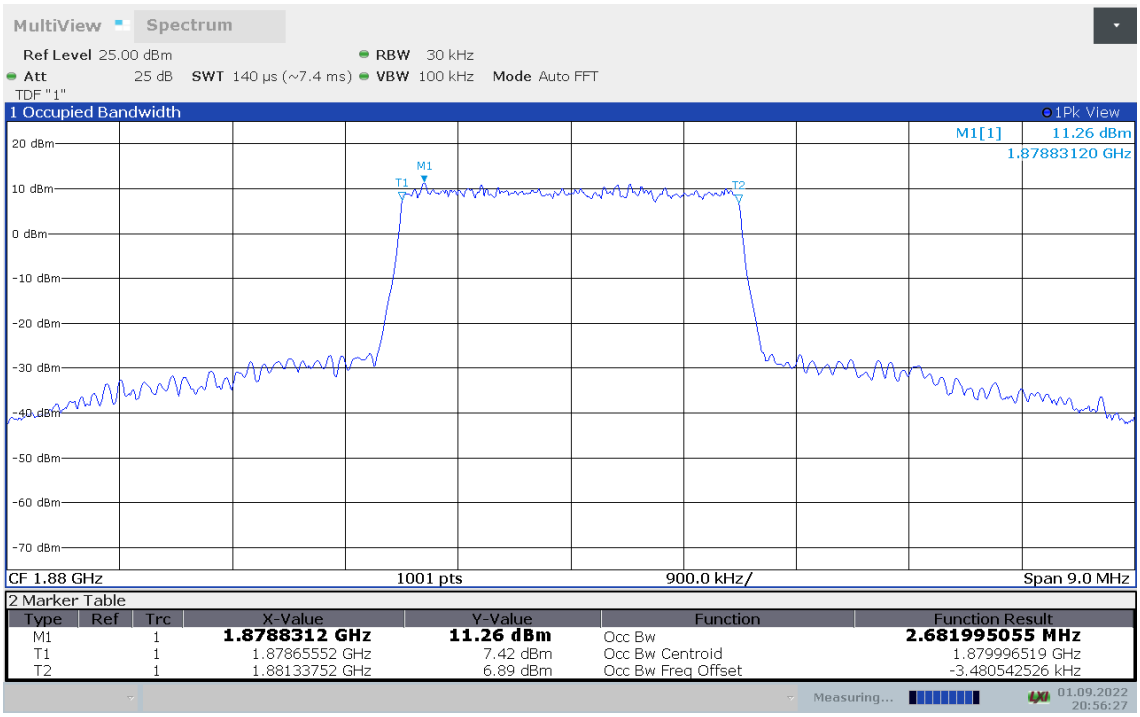
LTE band 2, 3MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1880.0	QPSK	16QAM	64QAM
	2.683	2.682	2.683

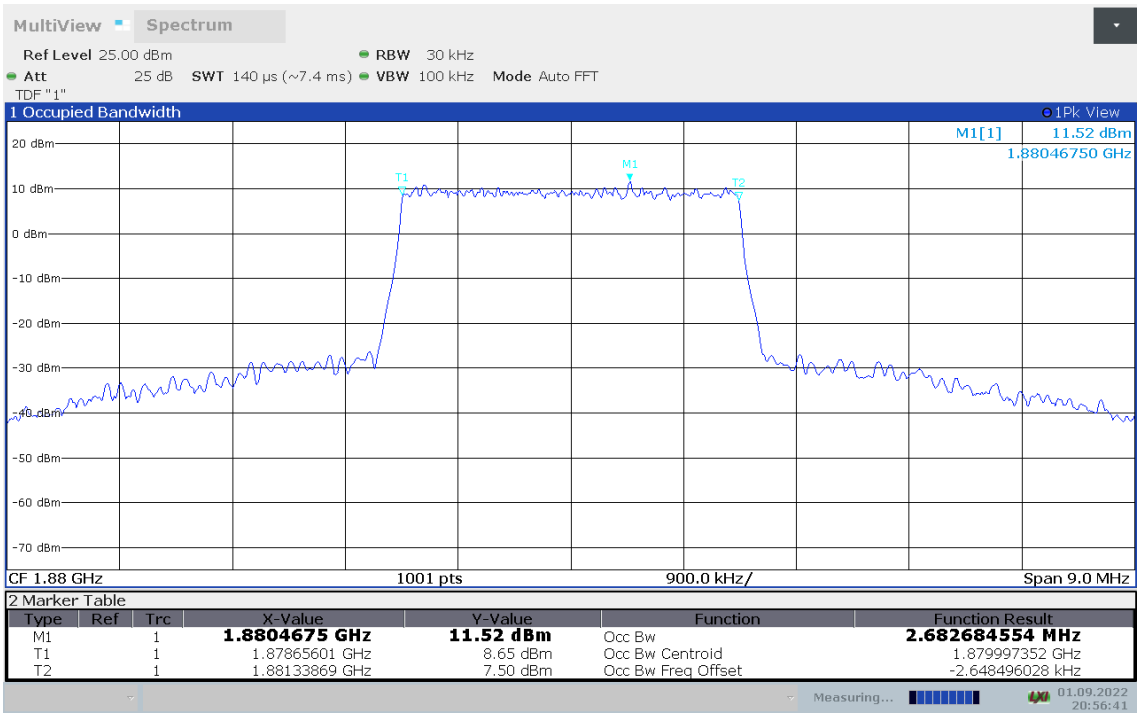
LTE band 2, 3MHz Bandwidth, QPSK (99% BW)



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



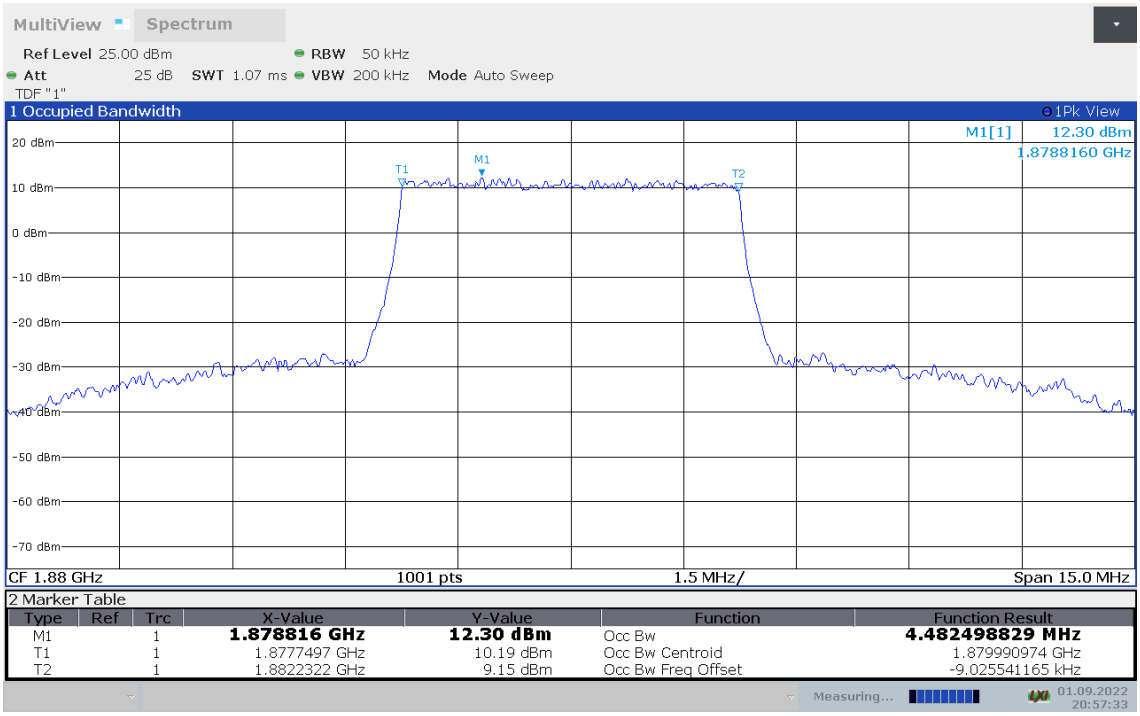
LTE band 2, 3MHz Bandwidth, 64QAM (99% BW)



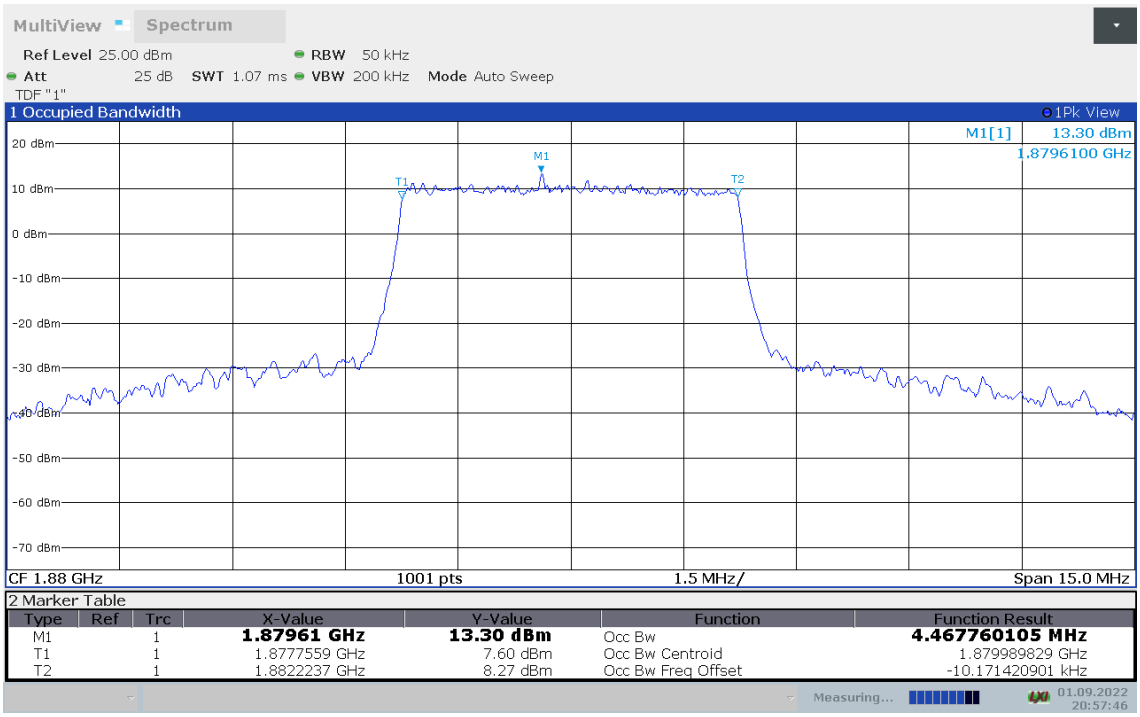
LTE band 2, 5MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1880.0	QPSK	16QAM	64QAM
	4.482	4.468	4.467

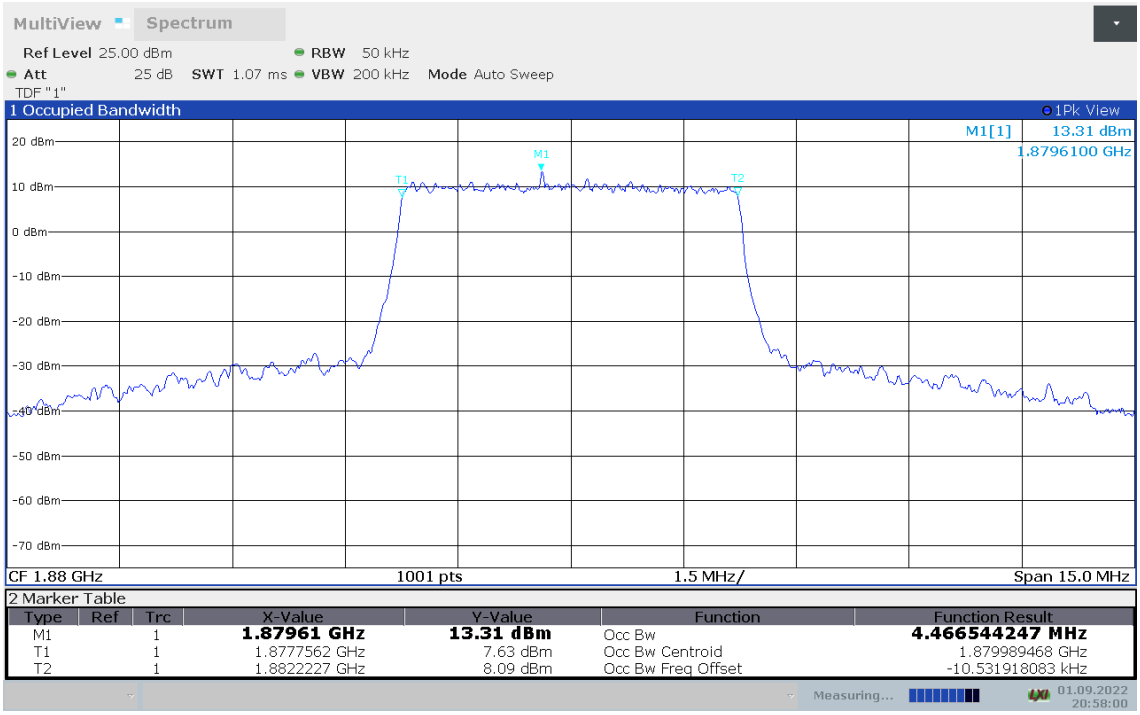
LTE band 2, 5MHz Bandwidth, QPSK (99% BW)



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



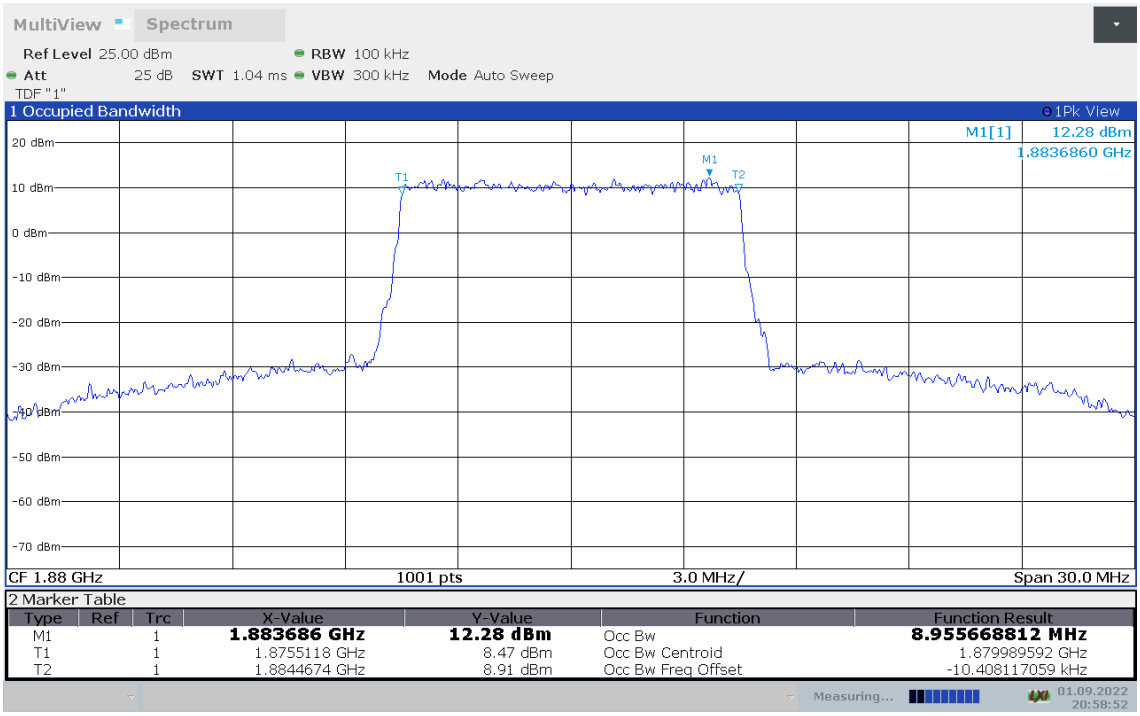
LTE band 2, 5MHz Bandwidth,64QAM (99% BW)



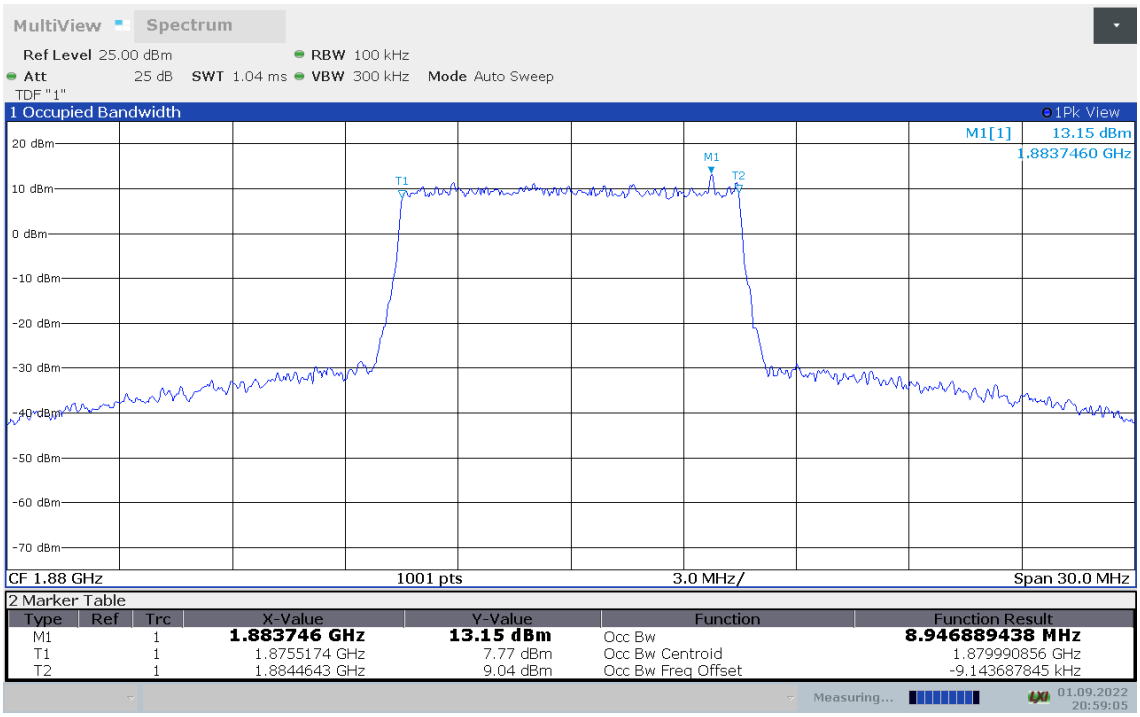
LTE band 2, 10MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1880.0	QPSK	16QAM	64QAM
	8.956	8.947	8.949

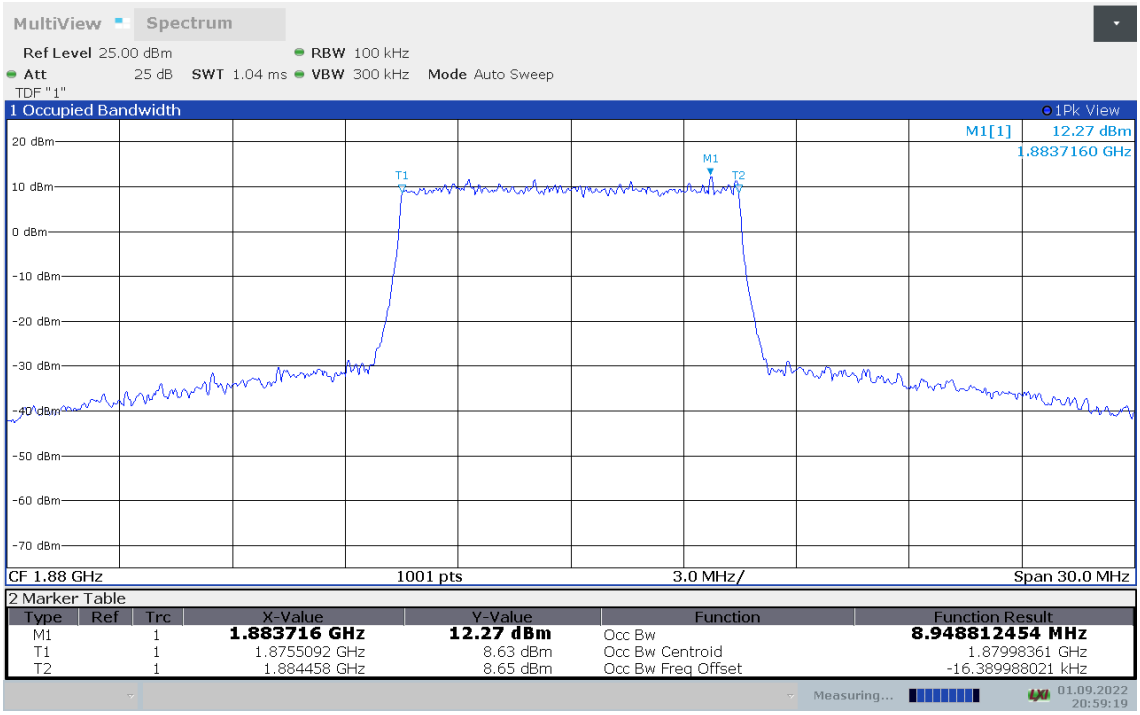
LTE band 2, 10MHz Bandwidth, QPSK (99% BW)



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



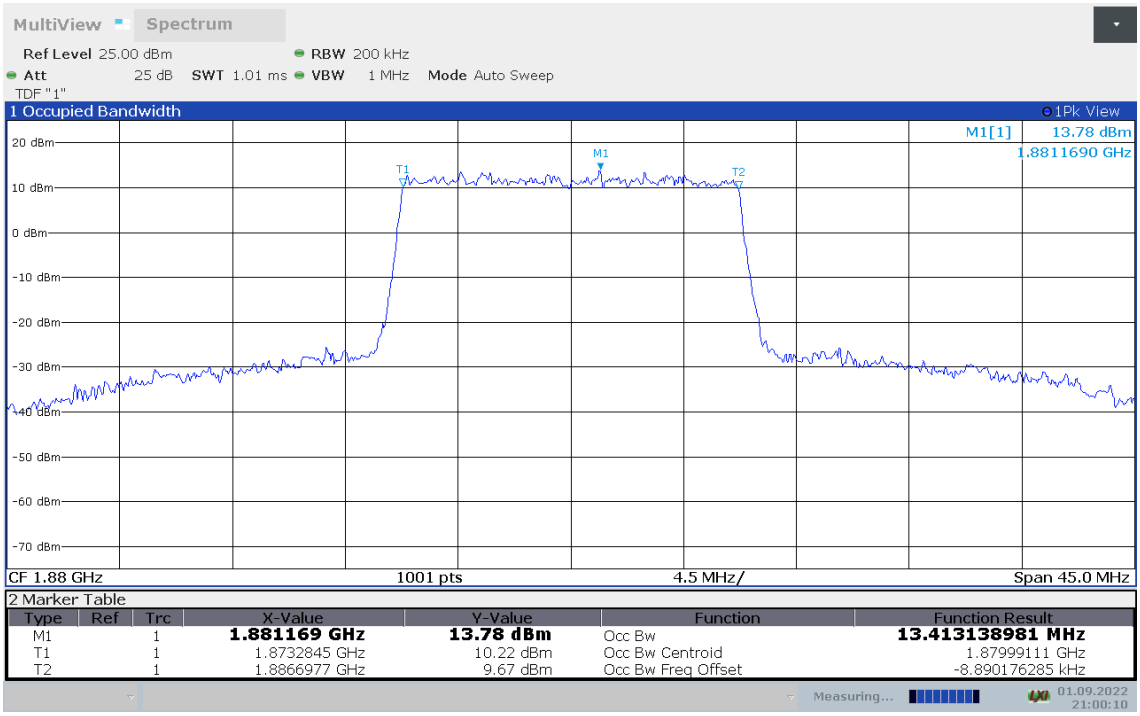
LTE band 2, 10MHz Bandwidth, 64QAM (99% BW)



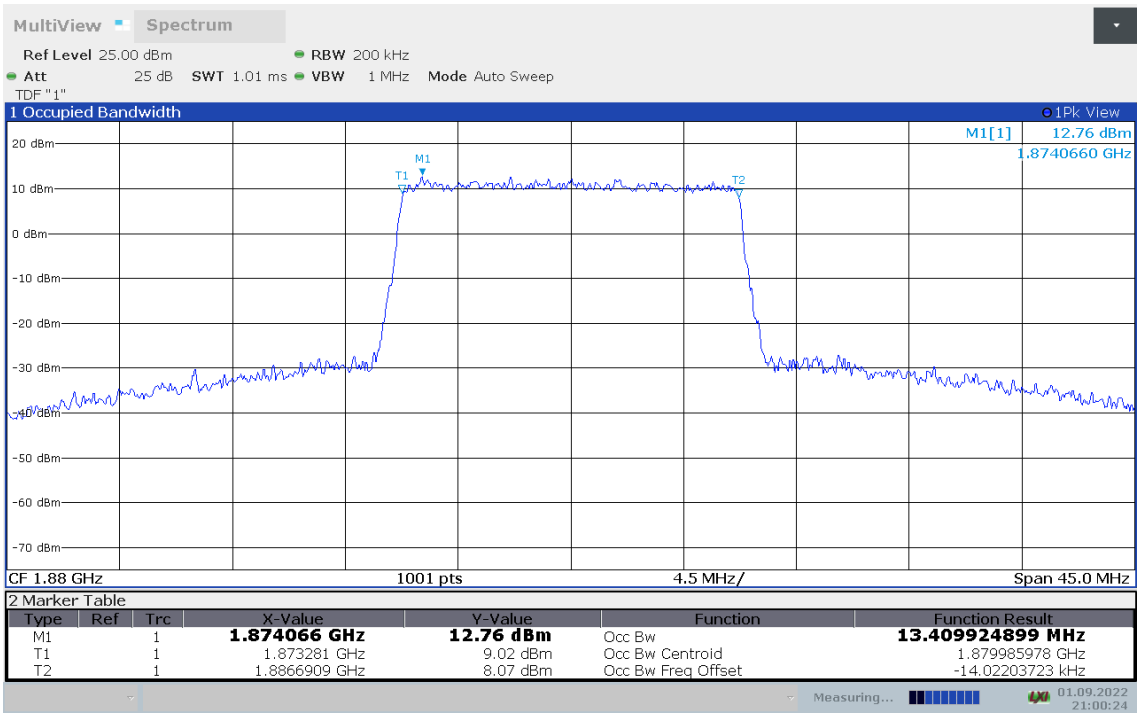
LTE band 2, 15MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1880.0	QPSK	16QAM	64QAM
	13.413	13.410	13.430

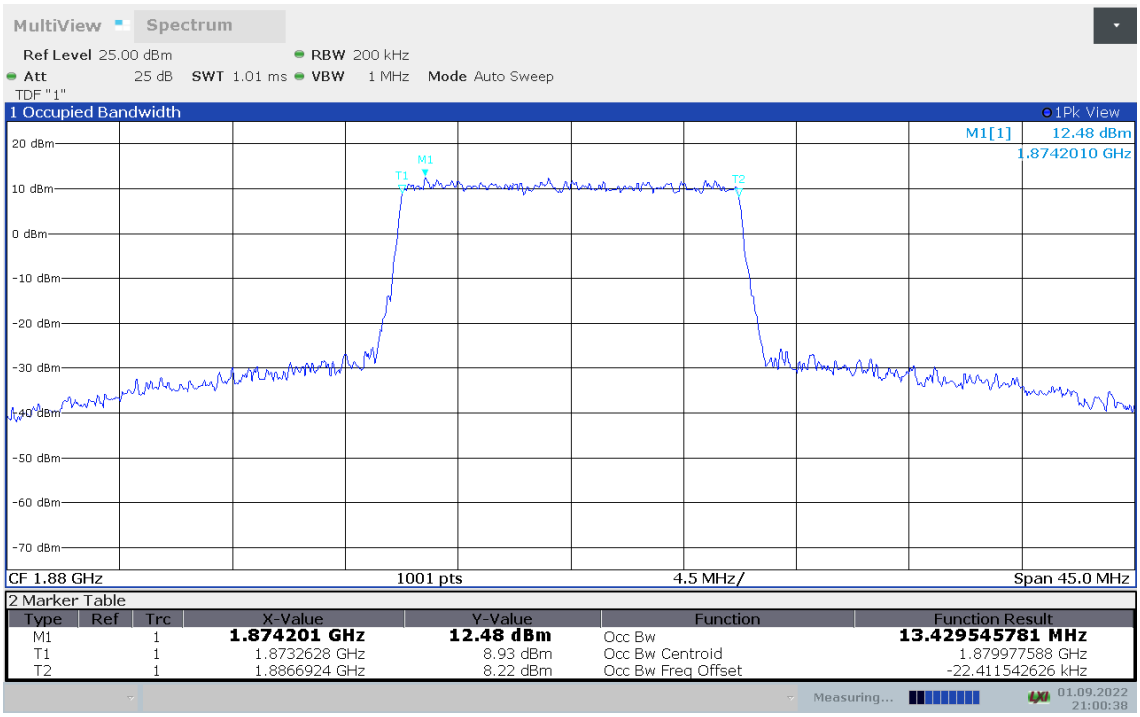
LTE band 2, 15MHz Bandwidth, QPSK (99% BW)



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



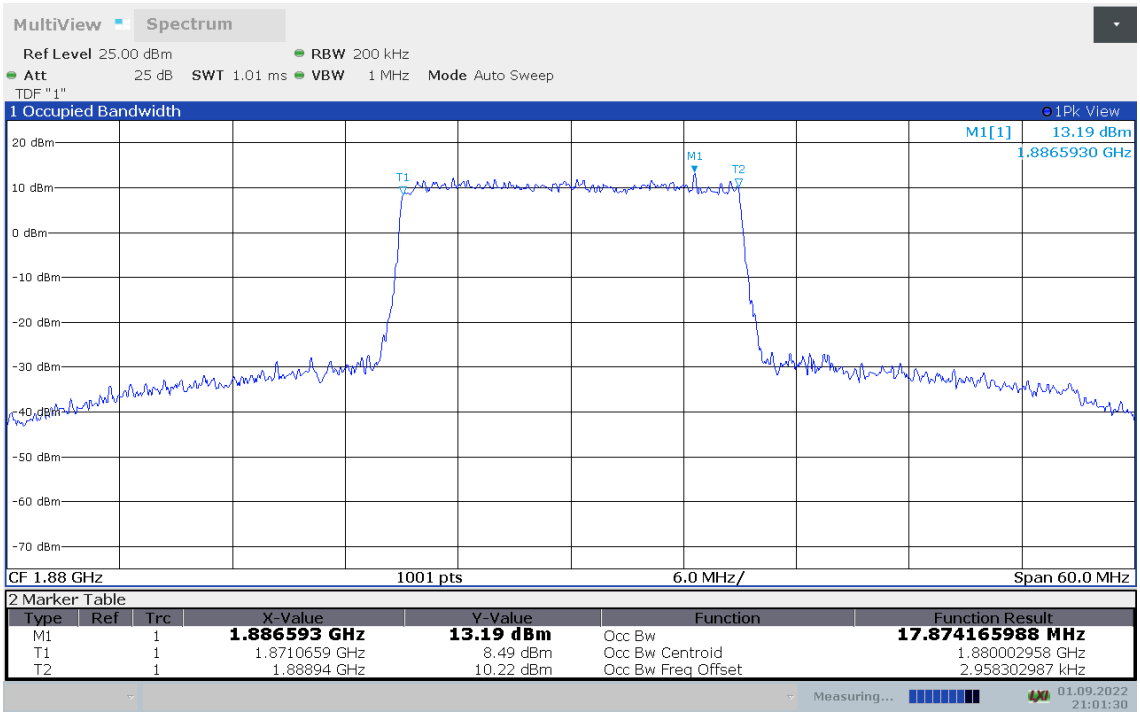
LTE band 2, 15MHz Bandwidth, 64QAM (99% BW)



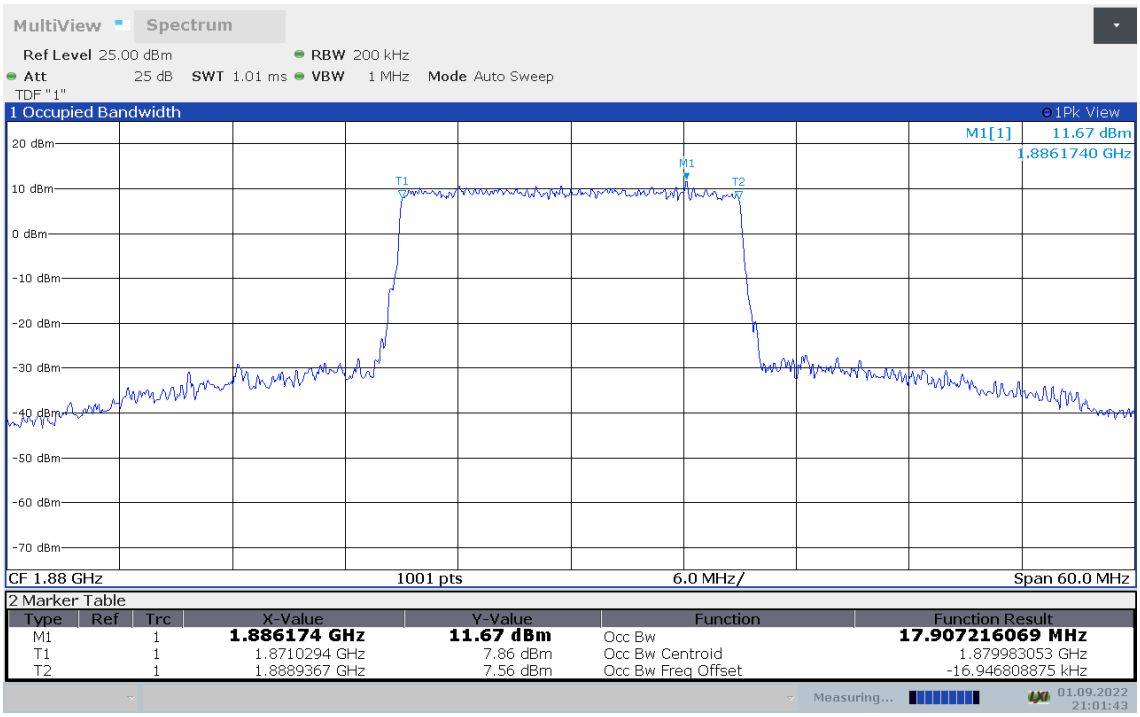
LTE band 2, 20MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1880.0	QPSK	16QAM	64QAM
	17.874	17.907	17.900

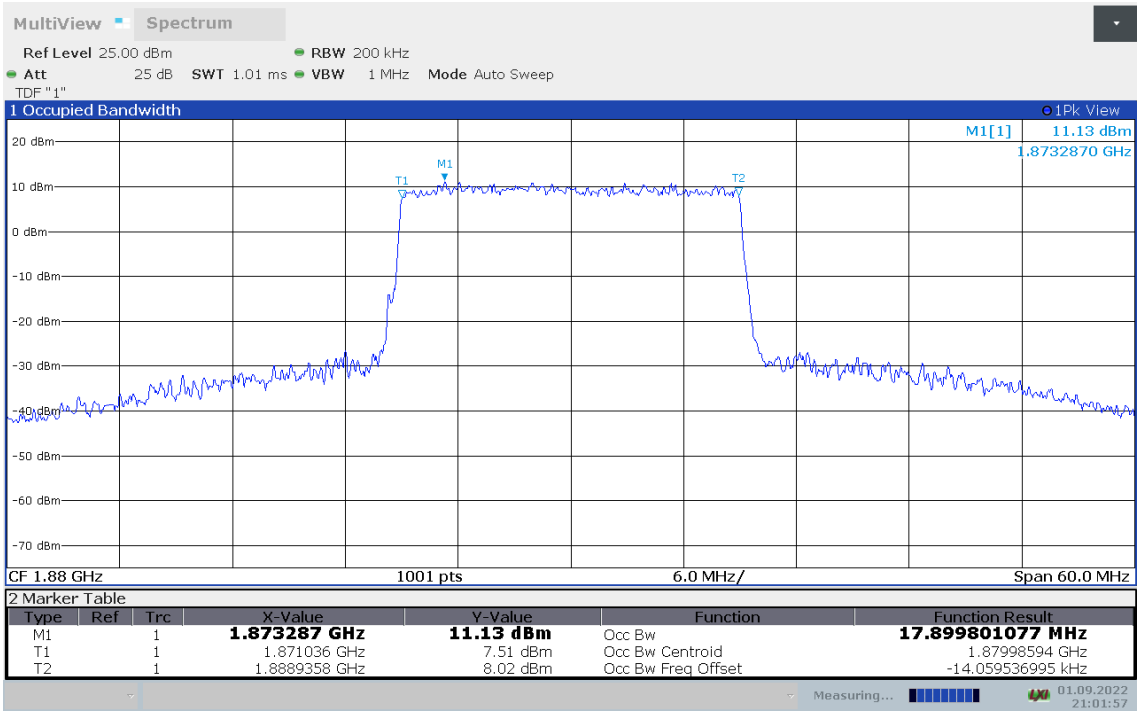
LTE band 2, 20MHz Bandwidth, QPSK (99% BW)



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



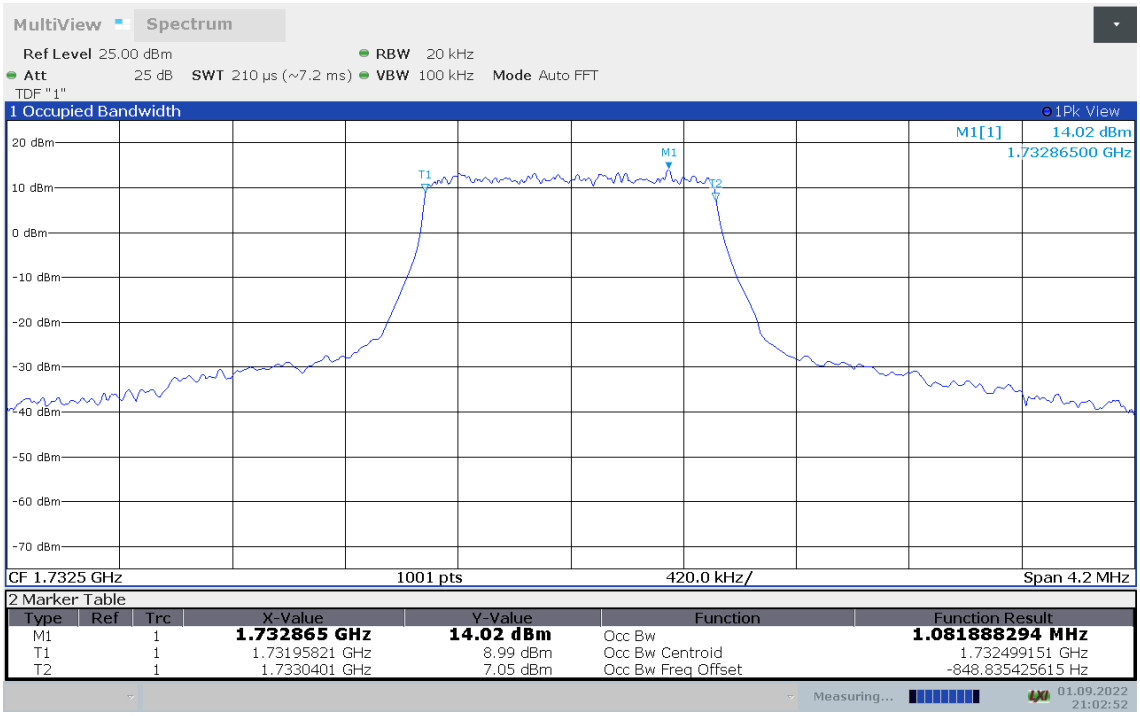
LTE band 2, 20MHz Bandwidth, 64QAM (99% BW)



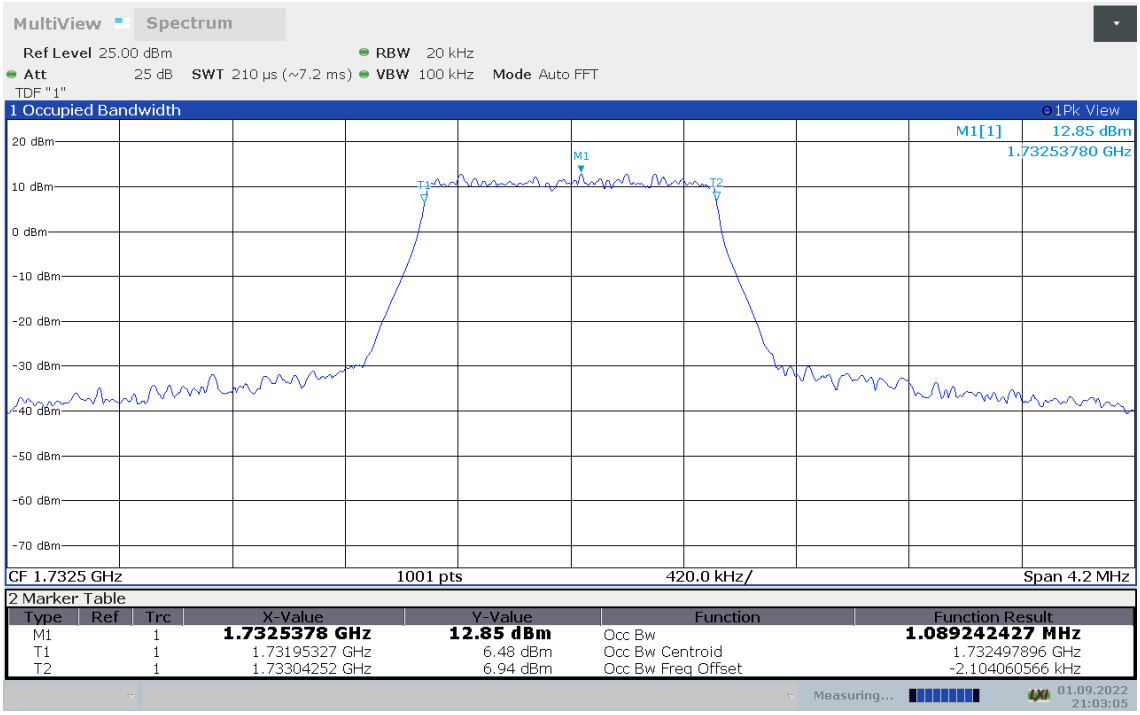
LTE band 4, 1.4MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1732.5	QPSK	16QAM	64QAM
	1.082	1.089	1.088

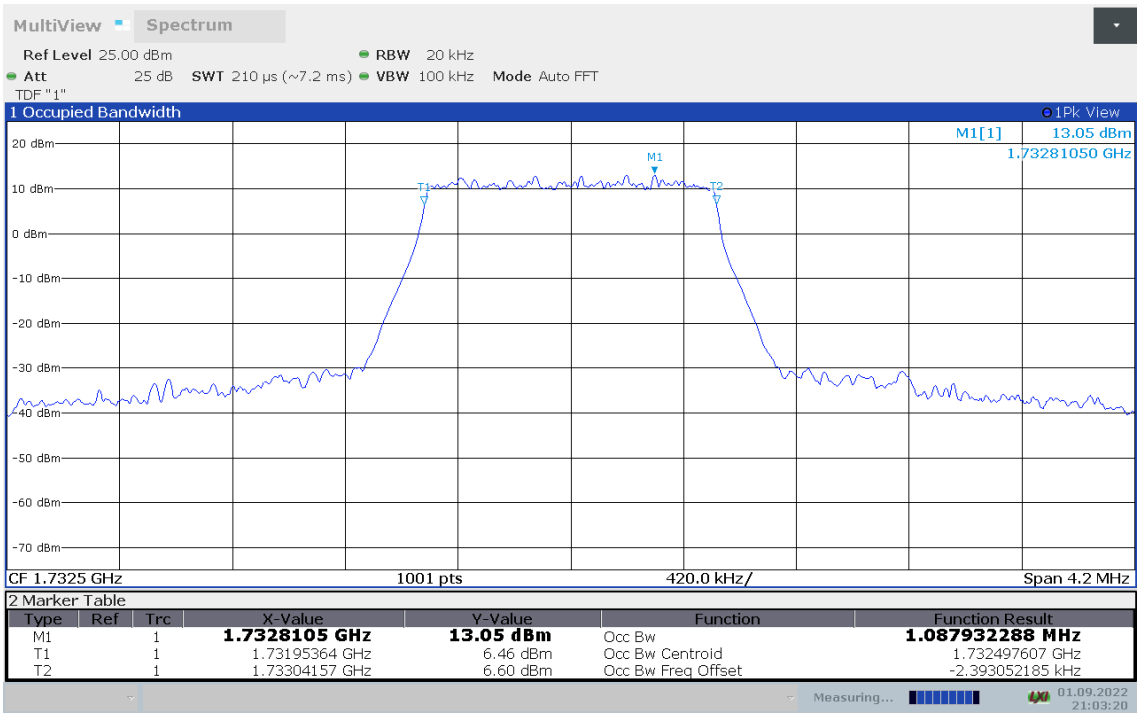
LTE band 4, 1.4MHz Bandwidth, QPSK (99% BW)



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



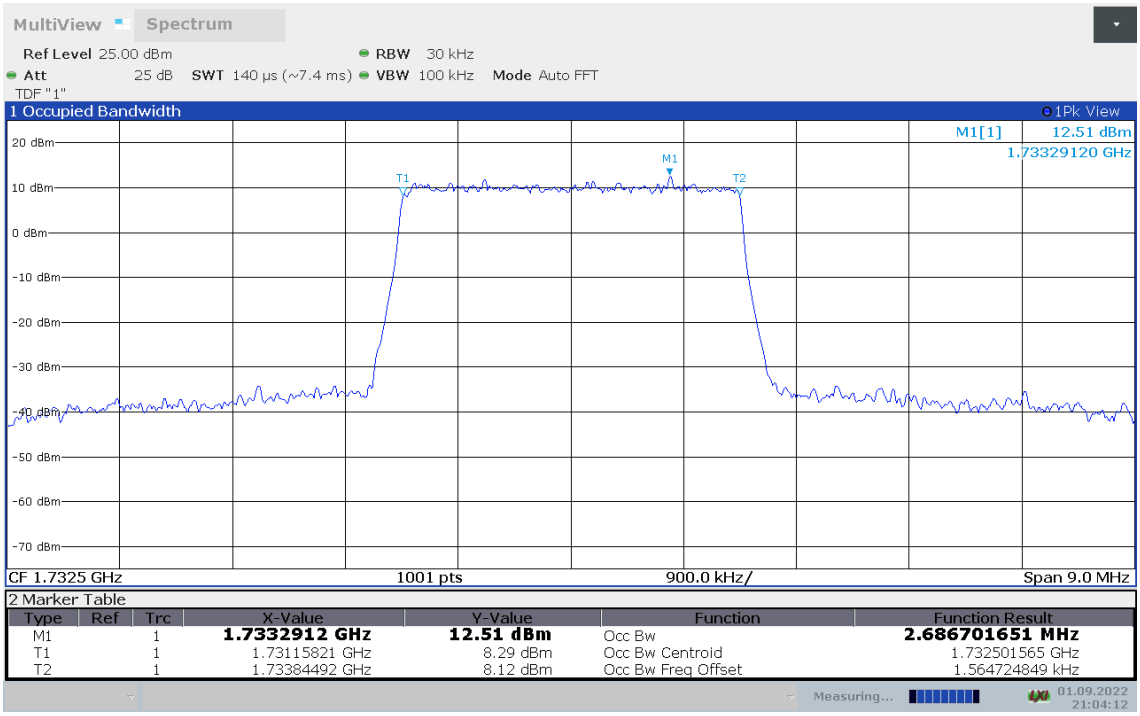
LTE band 4, 1.4MHz Bandwidth, 64QAM (99% BW)



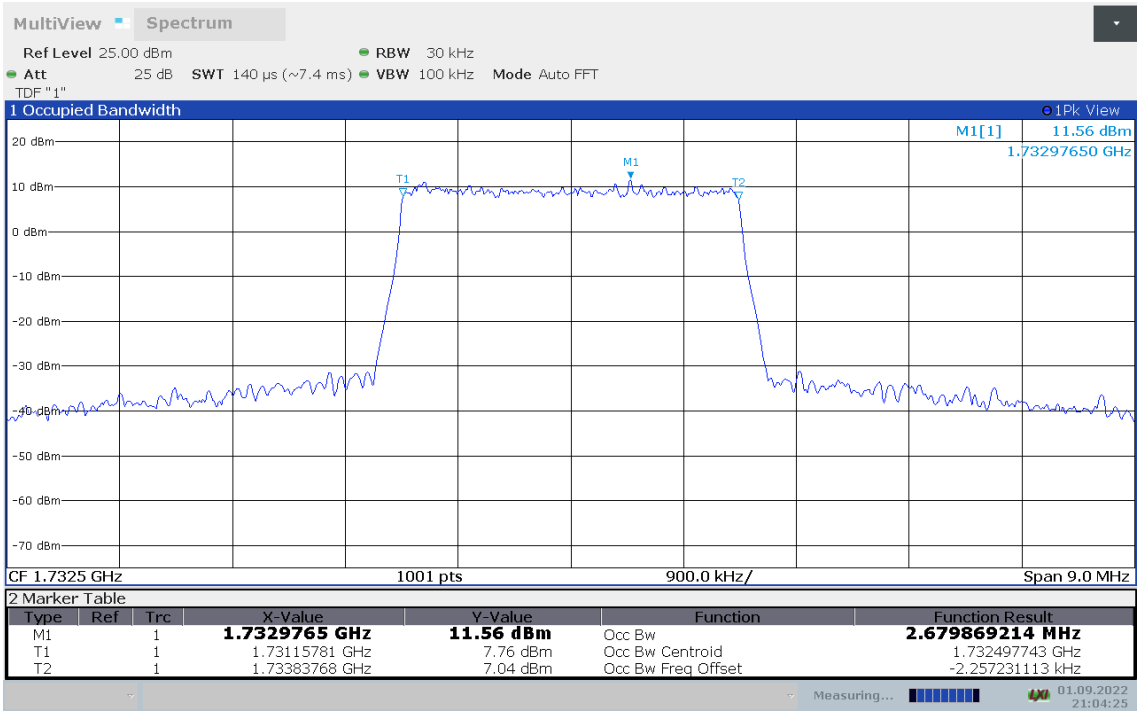
LTE band 4, 3MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1732.5	QPSK	16QAM	64QAM
	2.687	2.680	2.677

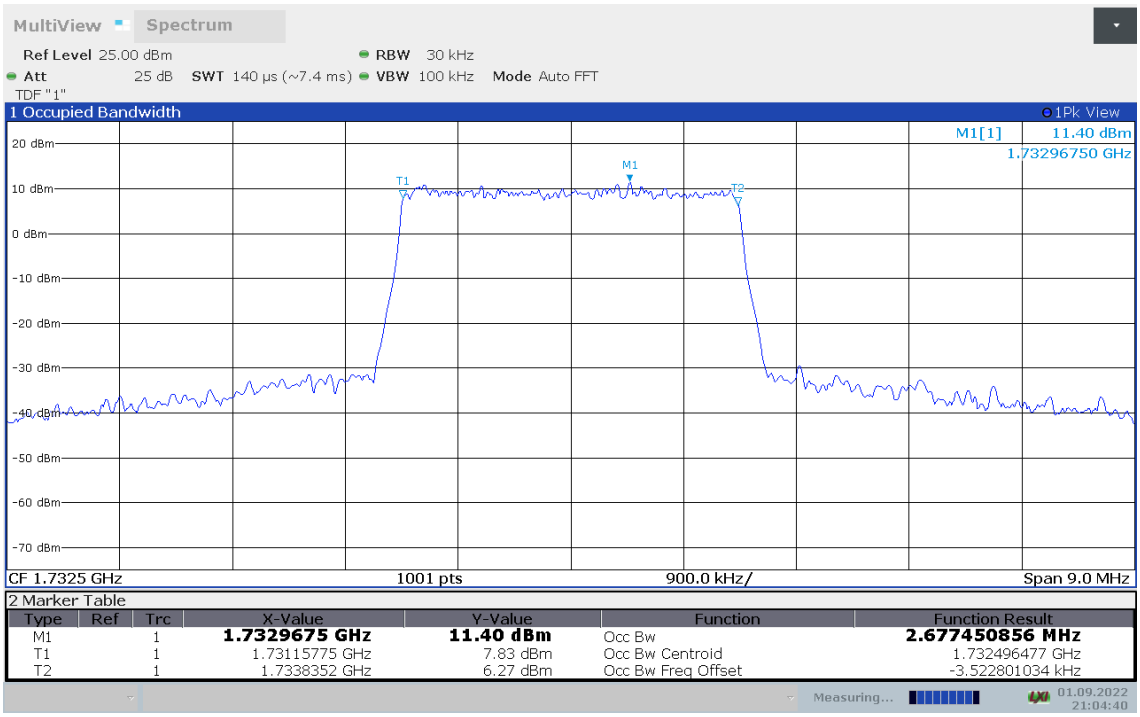
LTE band 4, 3MHz Bandwidth, QPSK (99% BW)



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



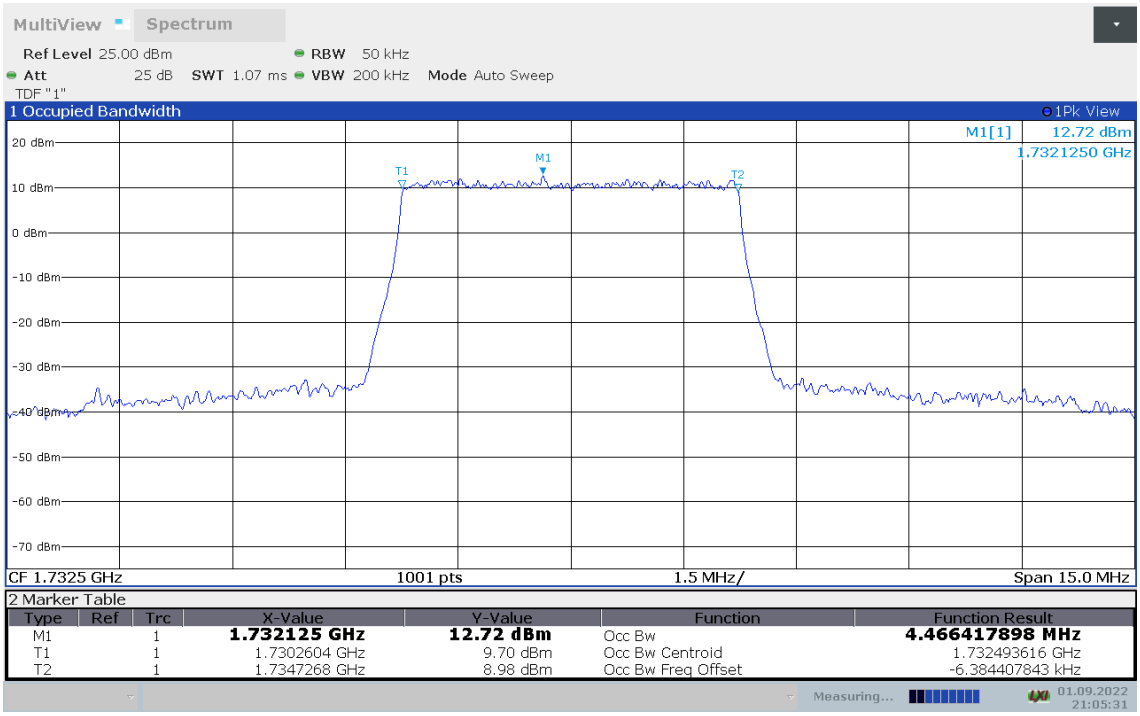
LTE band 4, 3MHz Bandwidth, 64QAM (99% BW)



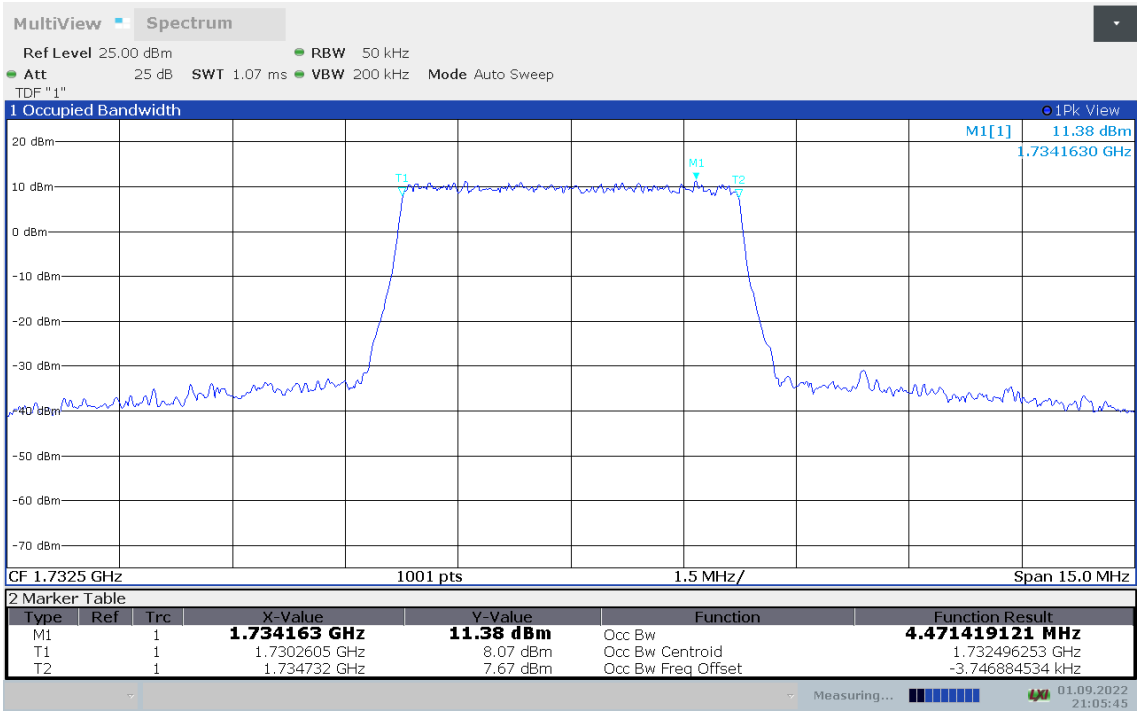
LTE band 4, 5MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1732.5	QPSK	16QAM	64QAM
	4.466	4.471	4.670

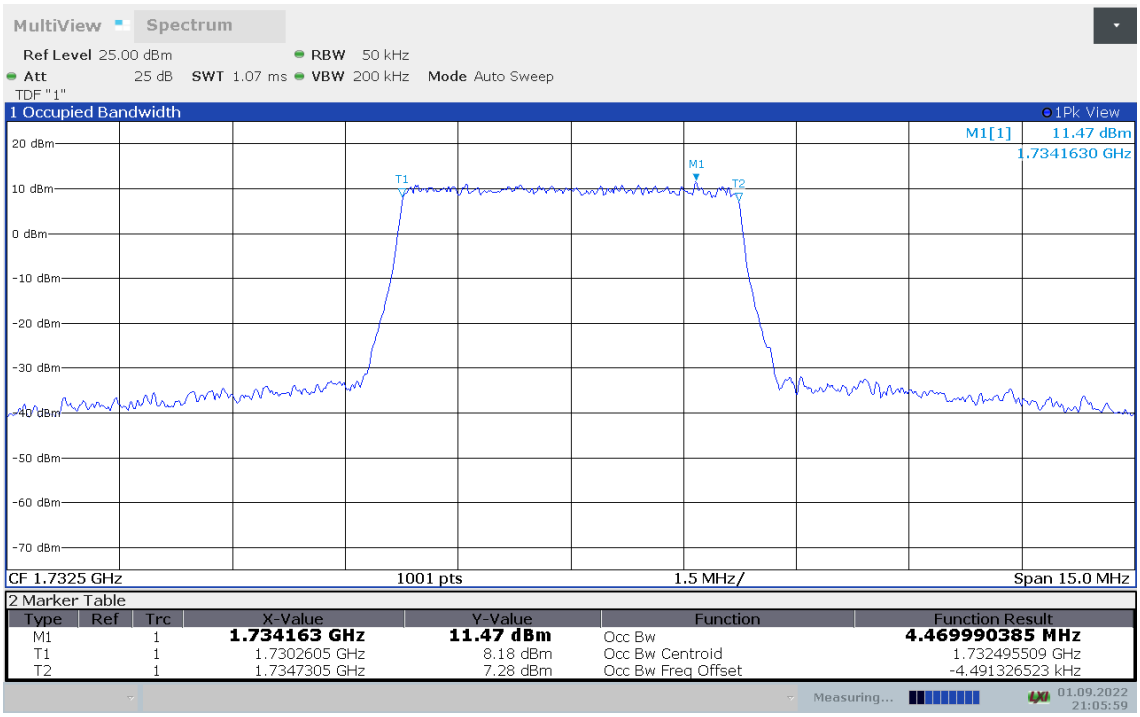
LTE band 4, 5MHz Bandwidth, QPSK (99% BW)



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



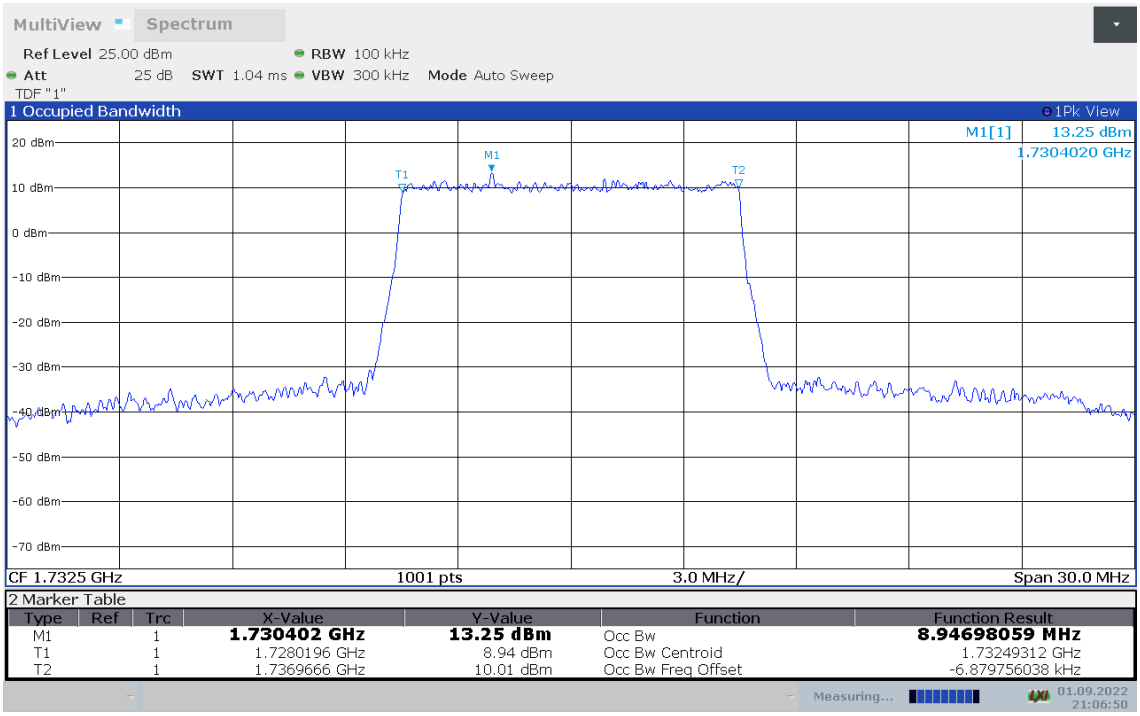
LTE band 4, 5MHz Bandwidth,64QAM (99% BW)



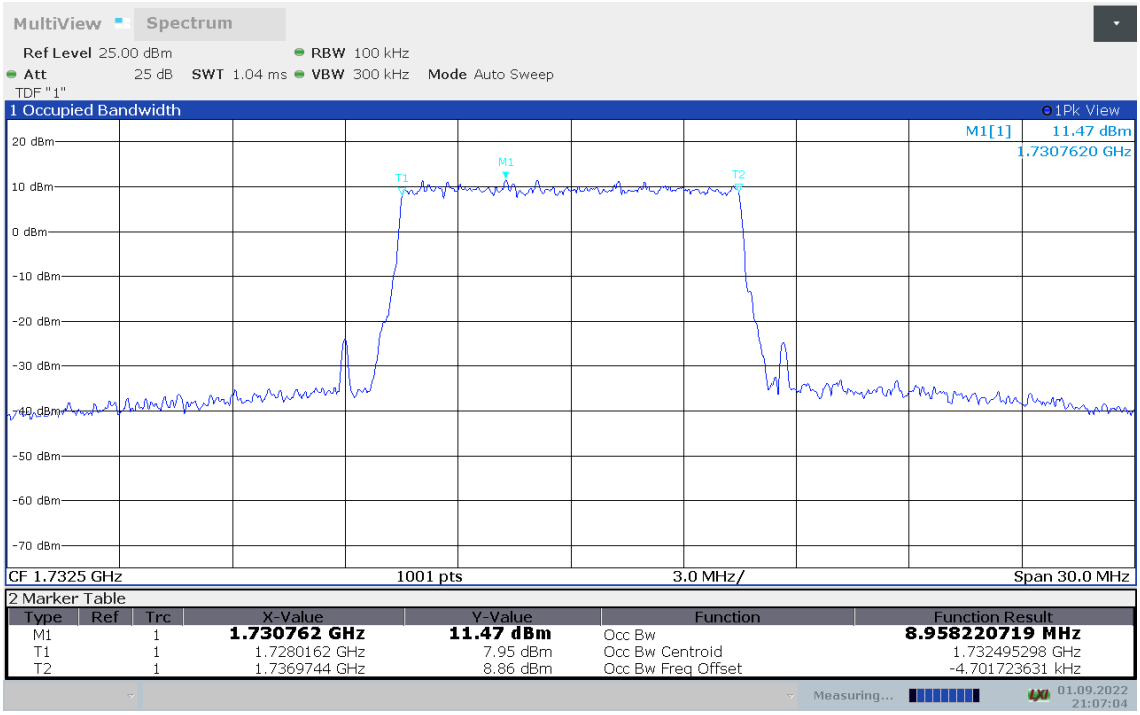
LTE band 4, 10MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1732.5	QPSK	16QAM	64QAM
	8.947	8.958	8.954

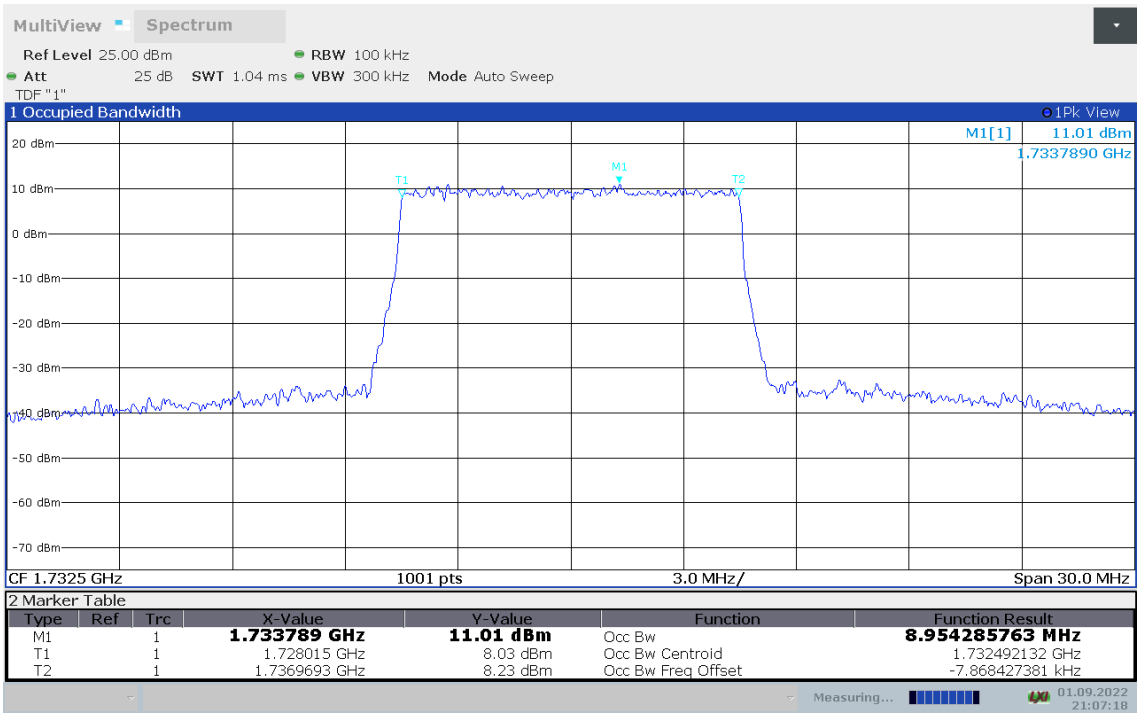
LTE band 4, 10MHz Bandwidth, QPSK (99% BW)



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



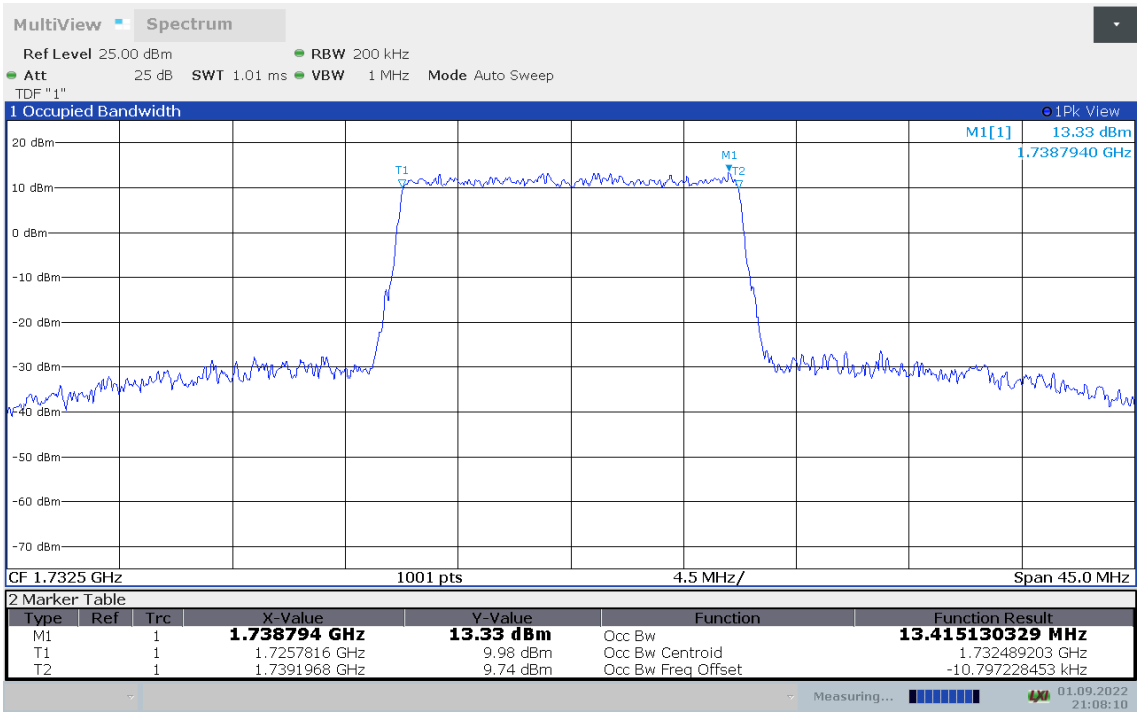
LTE band 4, 10MHz Bandwidth, 64QAM (99% BW)



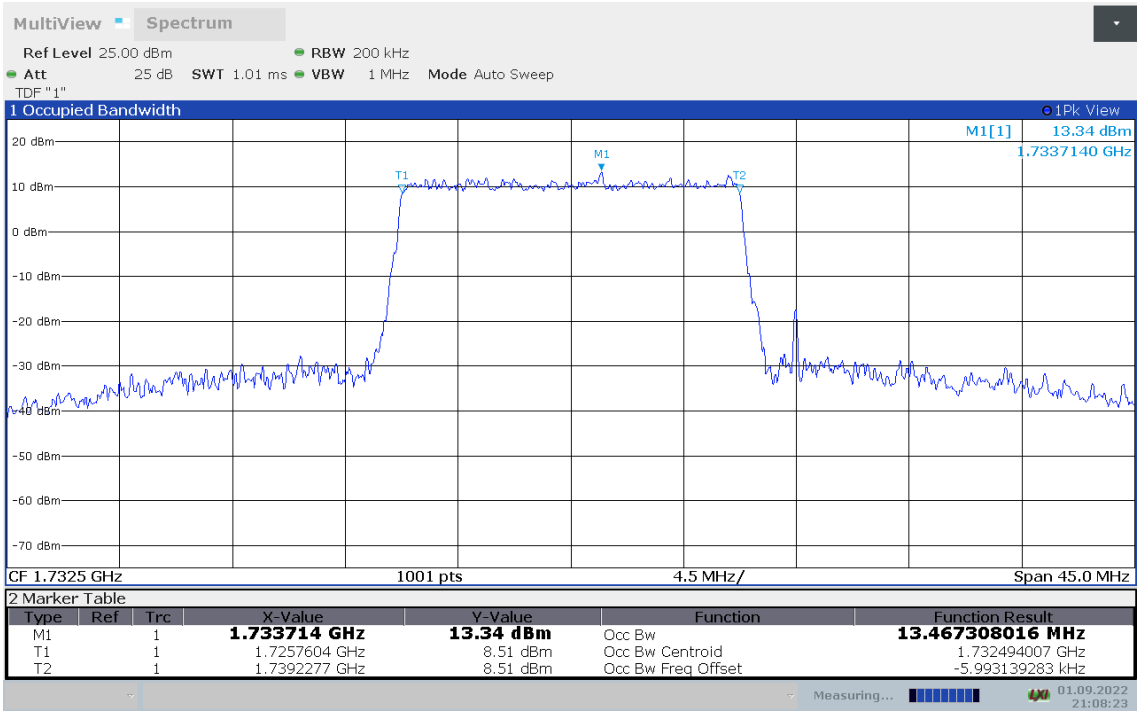
LTE band 4, 15MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1732.5	QPSK	16QAM	64QAM
	13.415	13.467	13.452

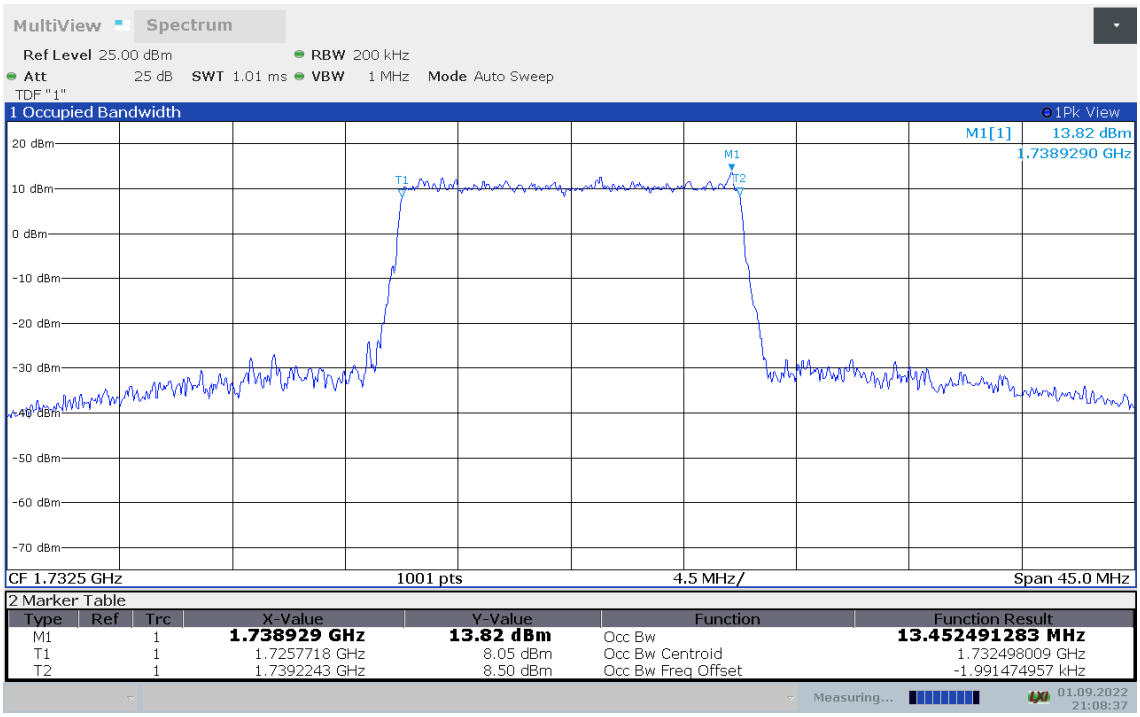
LTE band 4, 15MHz Bandwidth, QPSK (99% BW)



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



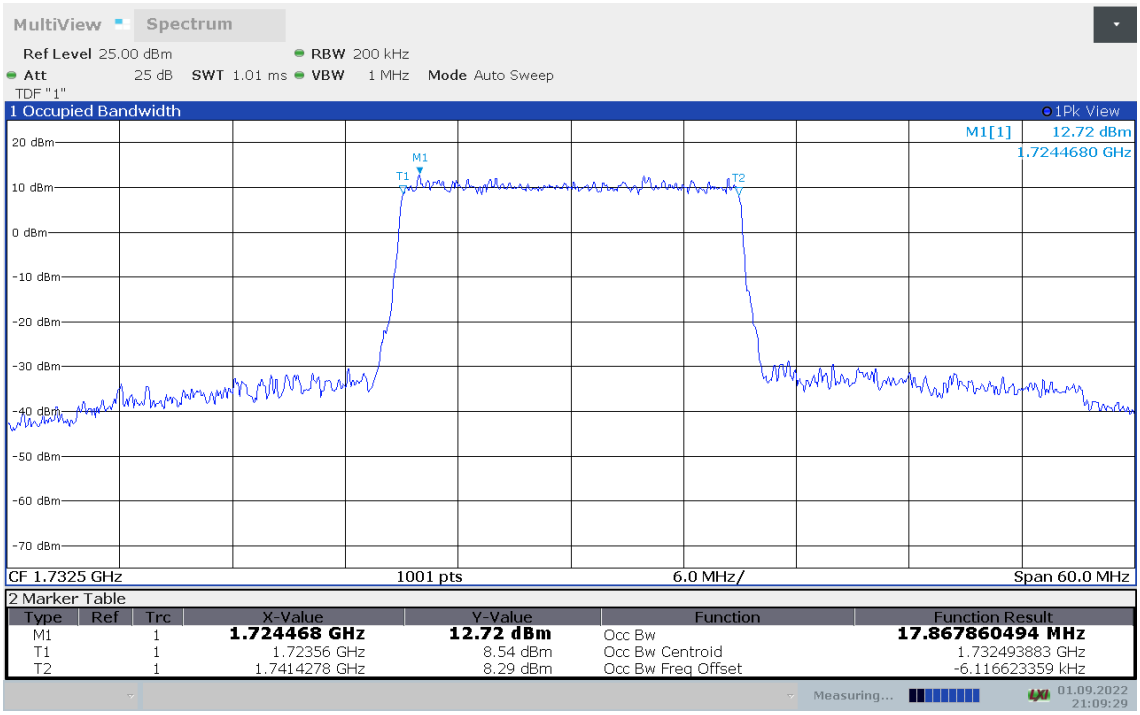
LTE band 4, 15MHz Bandwidth, 64QAM (99% BW)



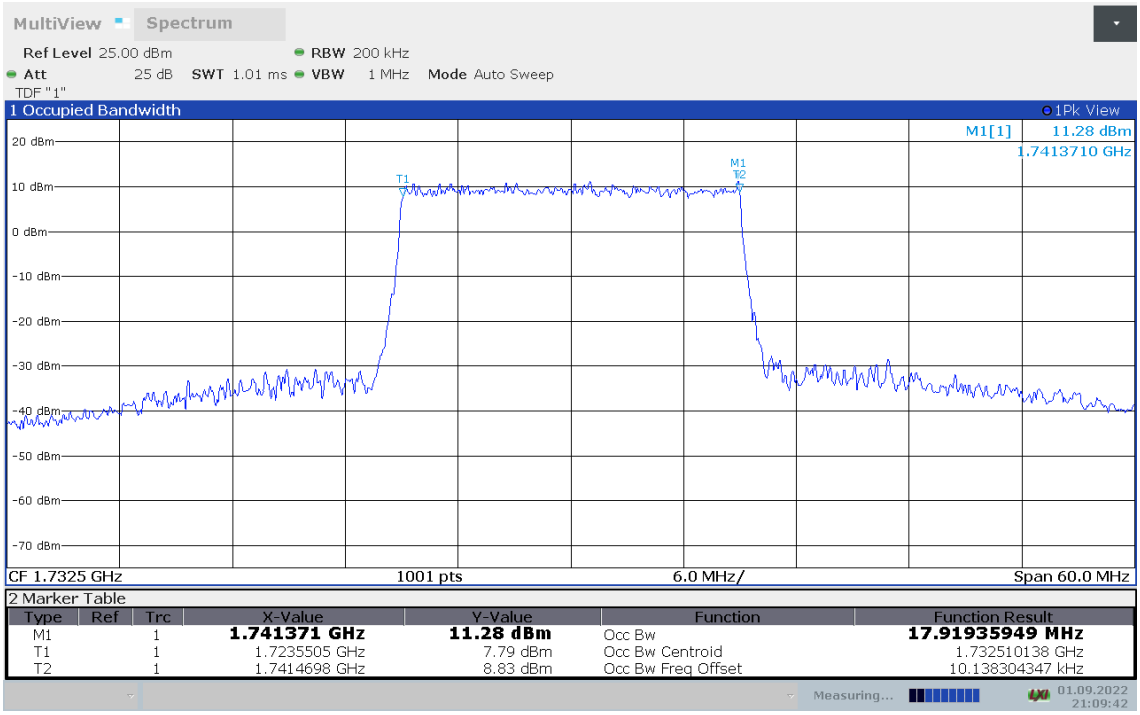
LTE band 4, 20MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1732.5	QPSK	16QAM	64QAM
	17.868	17.919	17.949

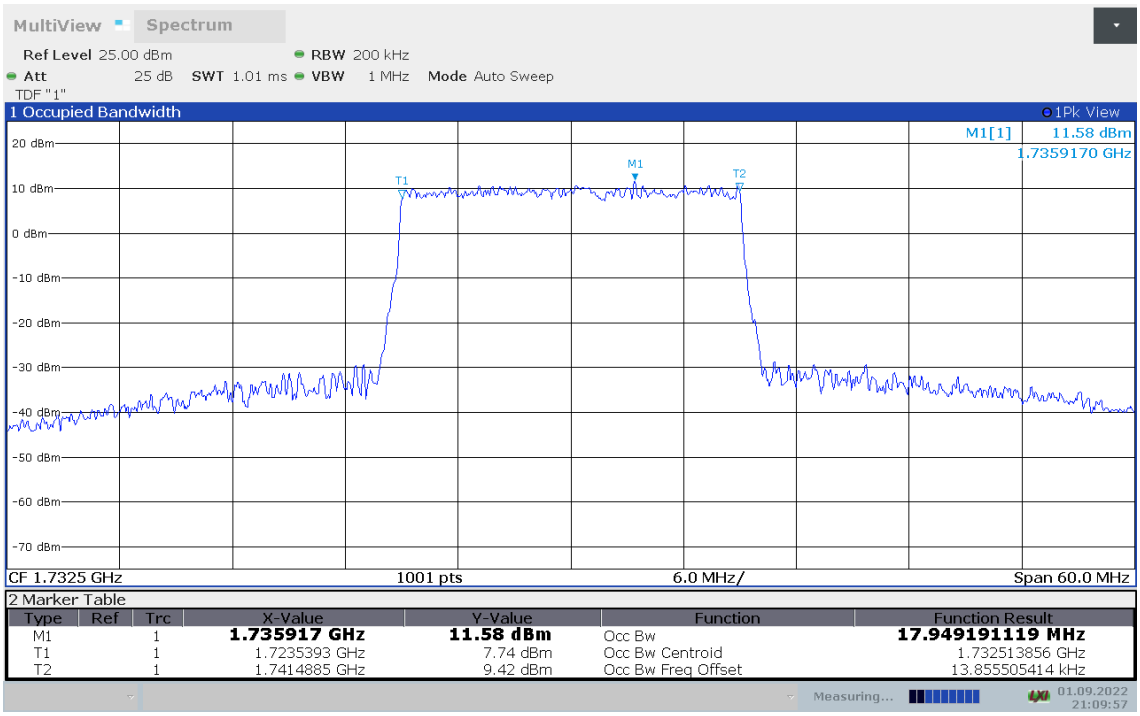
LTE band 4, 20MHz Bandwidth, QPSK (99% BW)



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



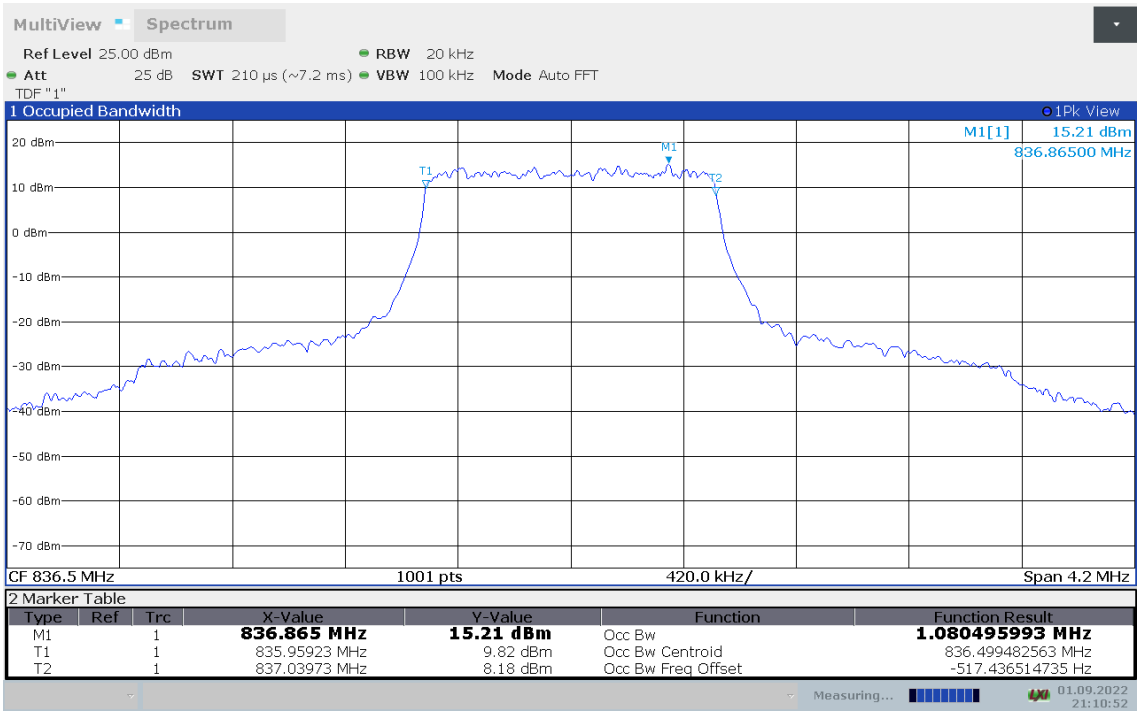
LTE band 4, 20MHz Bandwidth, 64QAM (99% BW)



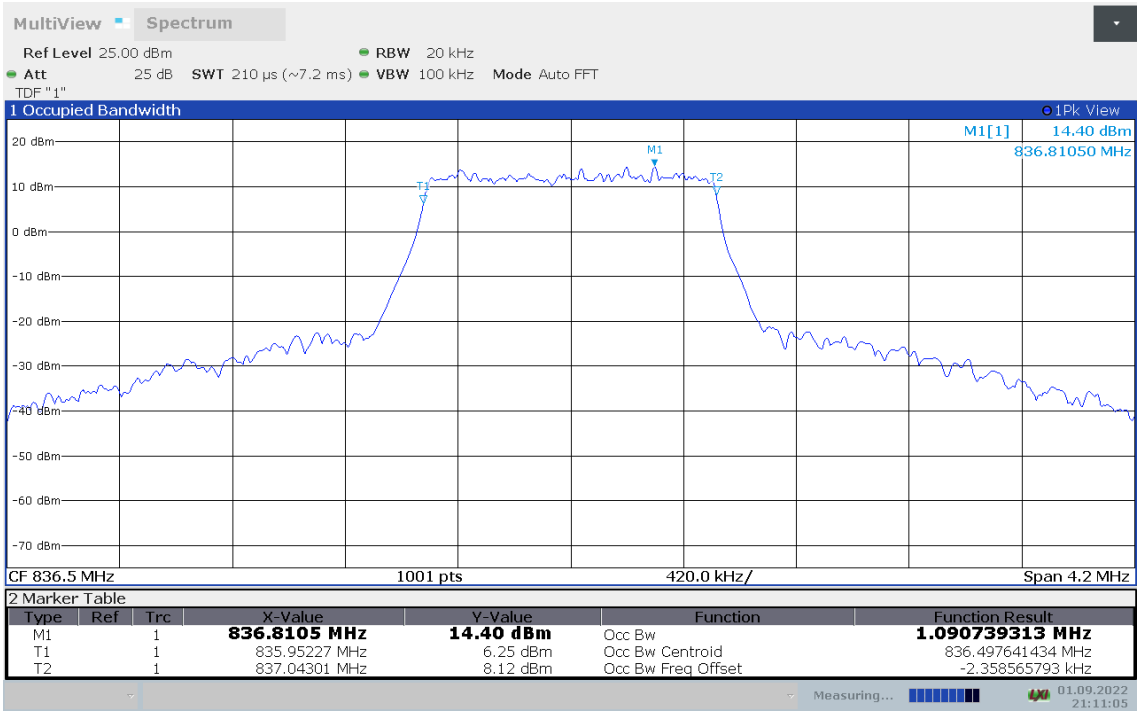
LTE band 5, 1.4MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
836.5	QPSK	16QAM	64QAM
	1.080	1.091	1.090

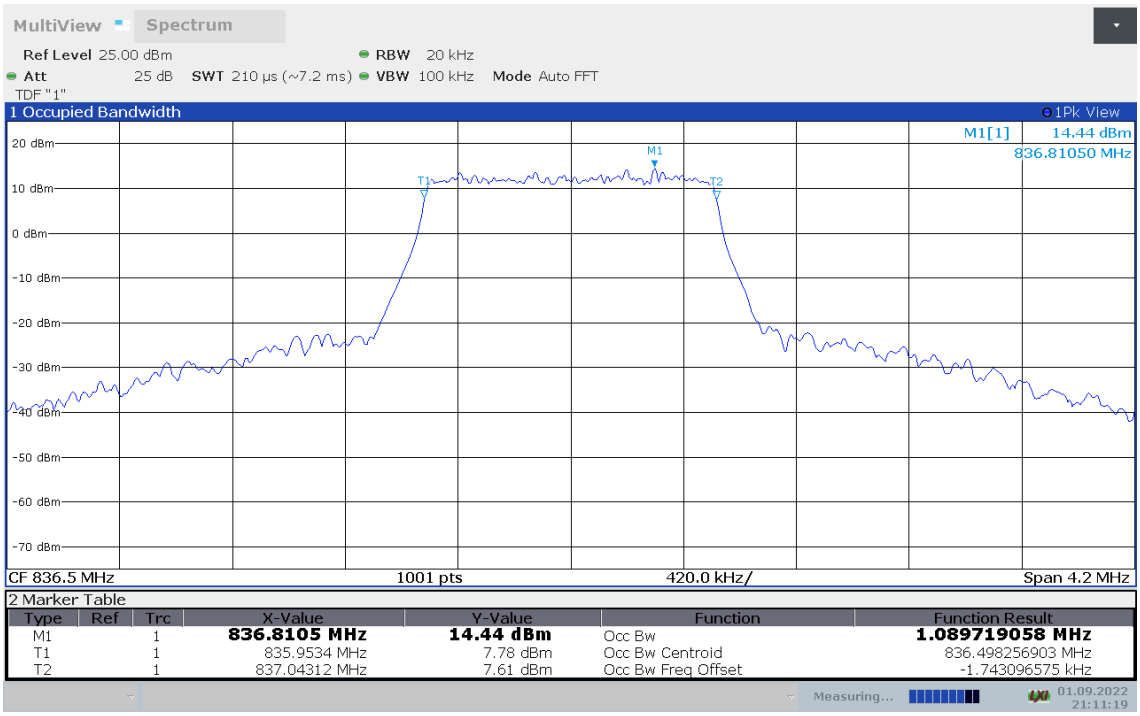
LTE band 5, 1.4MHz Bandwidth, QPSK (99% BW)



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



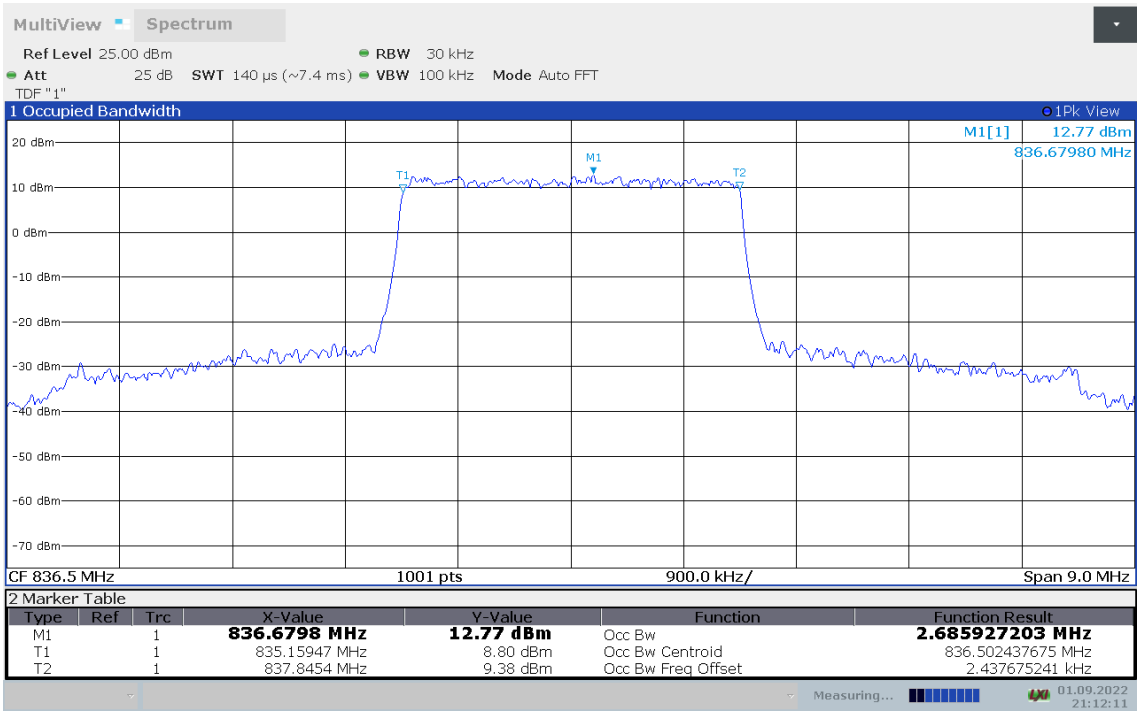
LTE band 5, 1.4MHz Bandwidth,64QAM (99% BW)



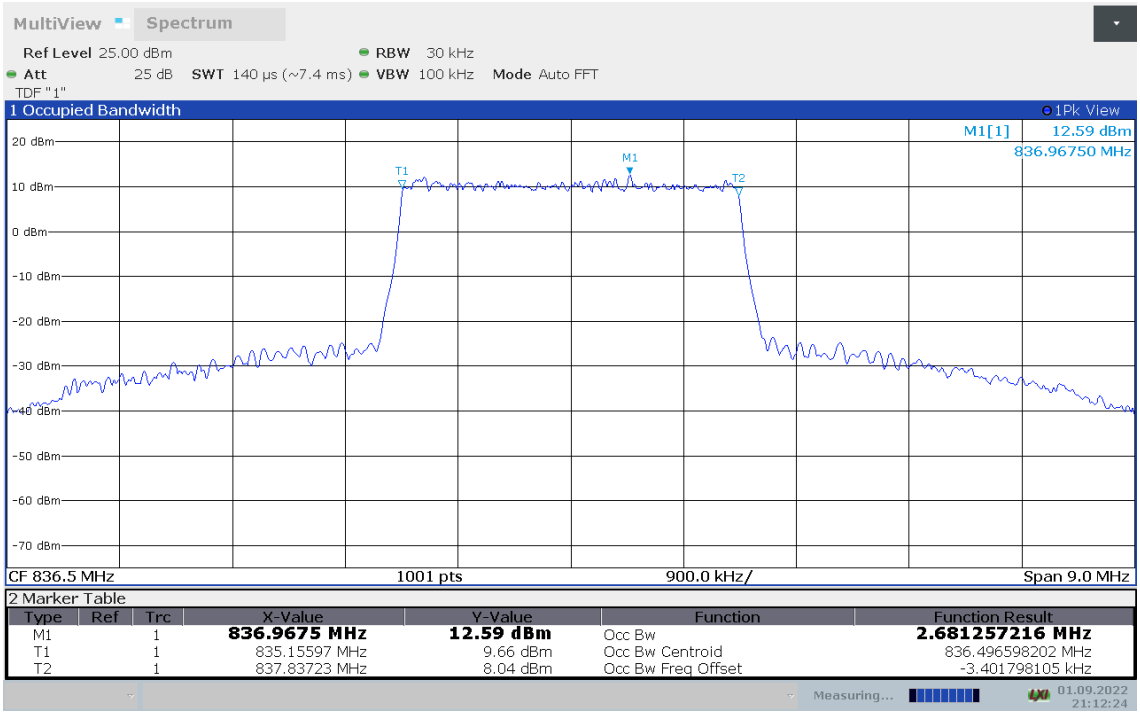
LTE band 5, 3MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
836.5	QPSK	16QAM	64QAM
	2.686	2.681	2.682

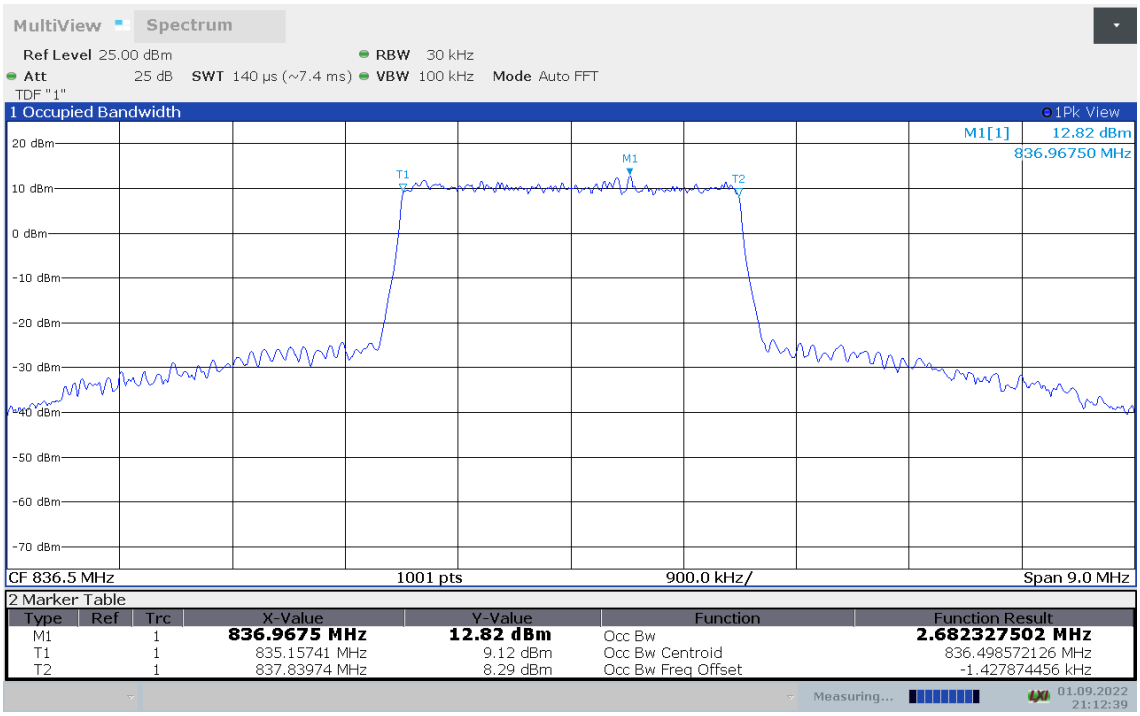
LTE band 5, 3MHz Bandwidth, QPSK (99% BW)



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



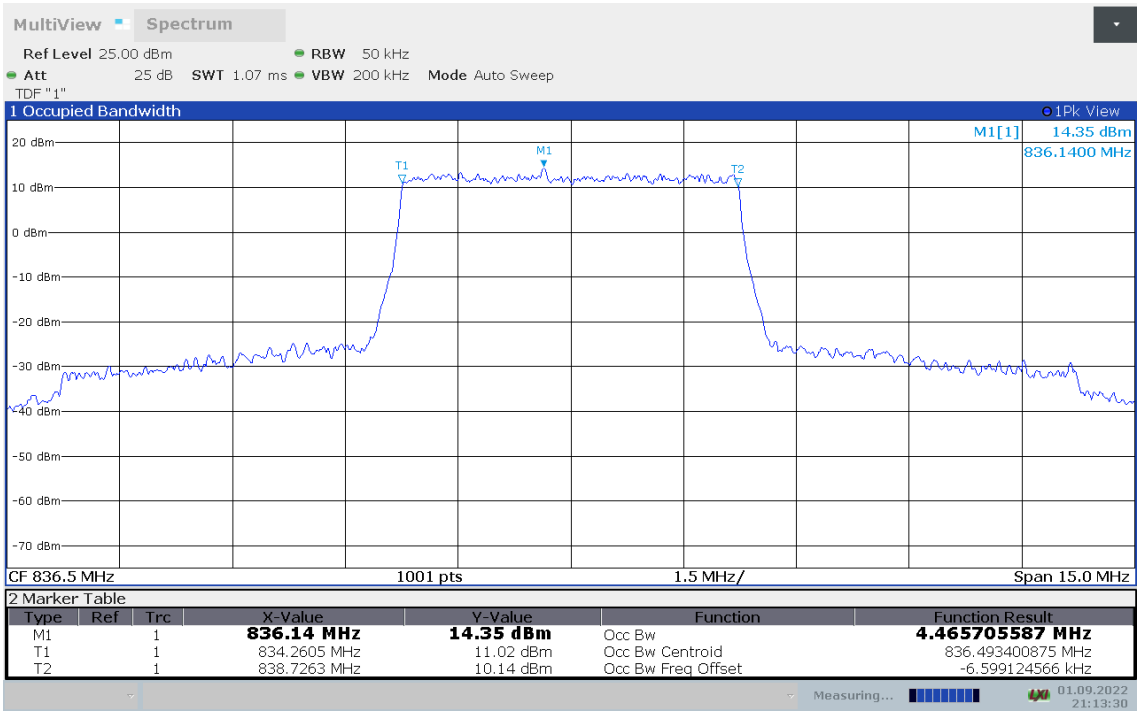
LTE band 5, 3MHz Bandwidth, 64QAM (99% BW)



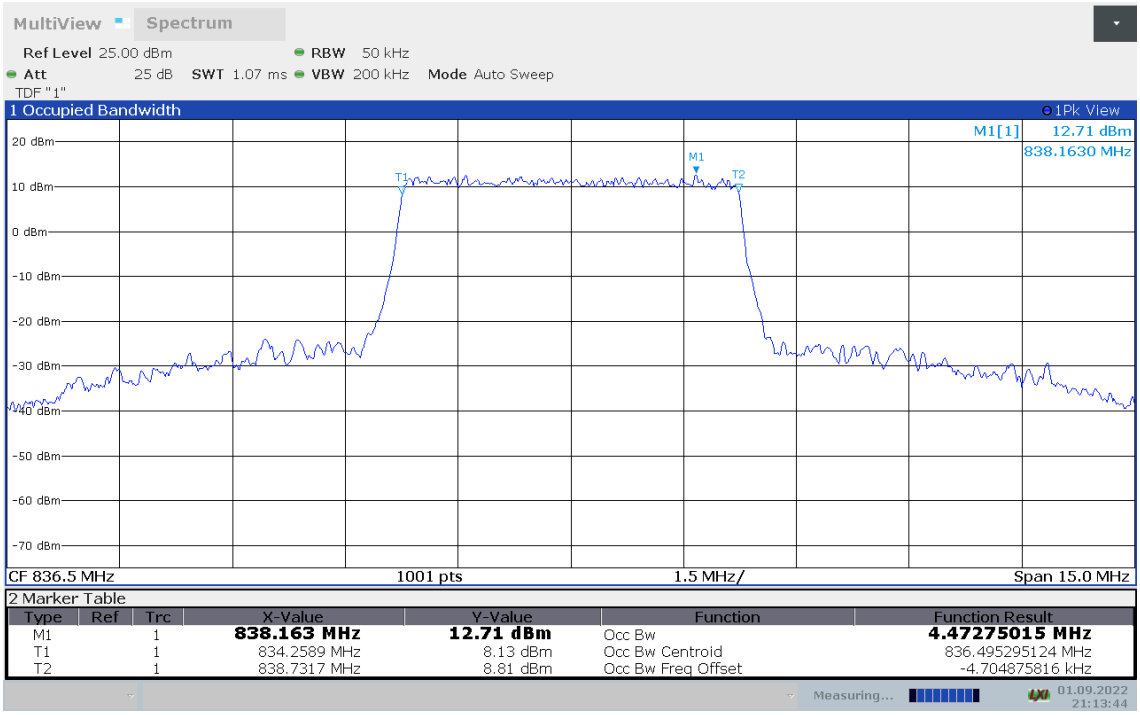
LTE band 5, 5MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
836.5	QPSK	16QAM	64QAM
	4.466	4.473	4.473

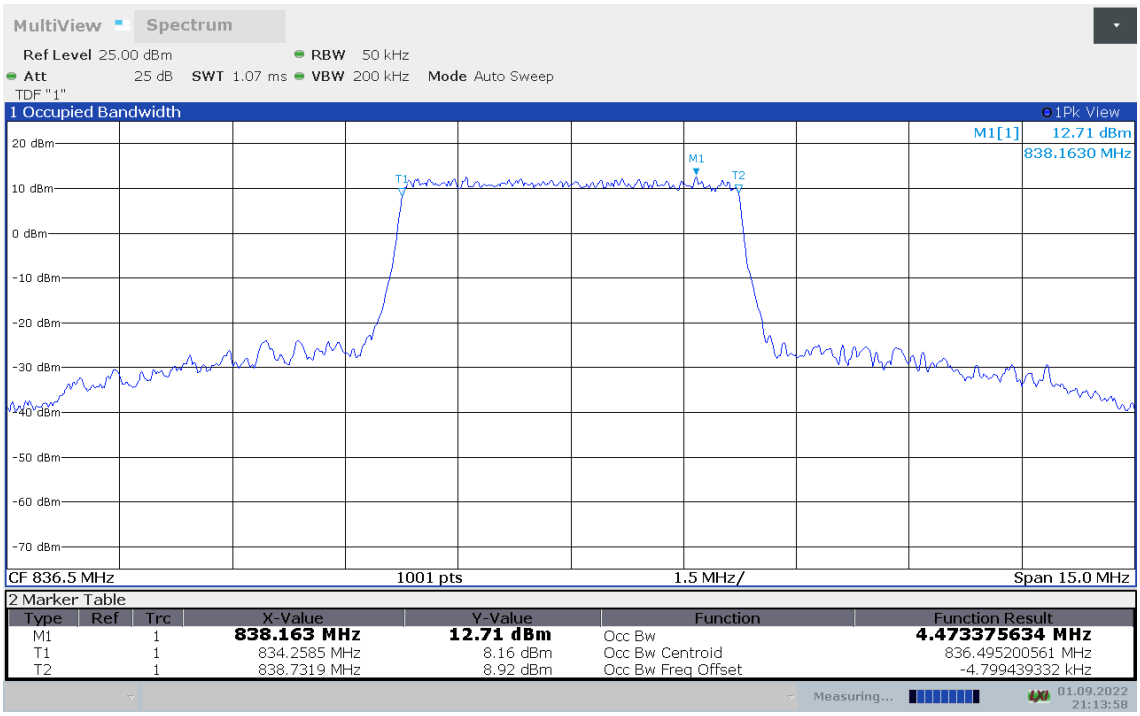
LTE band 5, 5MHz Bandwidth, QPSK (99% BW)



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



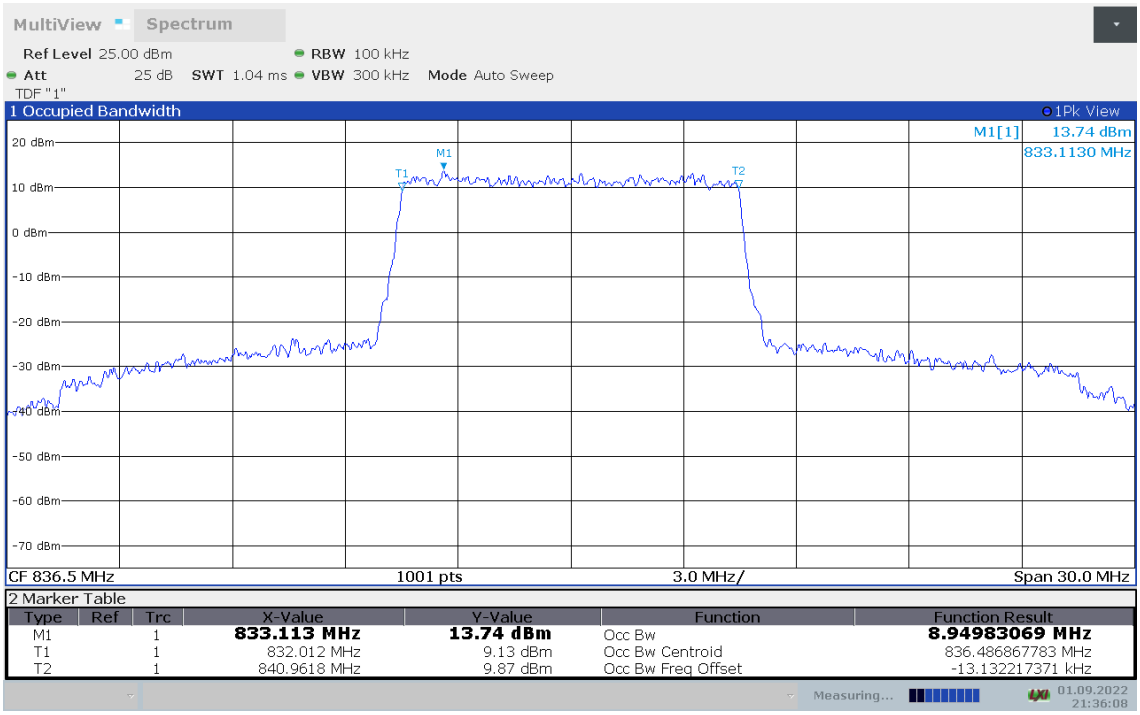
LTE band 5, 5MHz Bandwidth, 64QAM (99% BW)



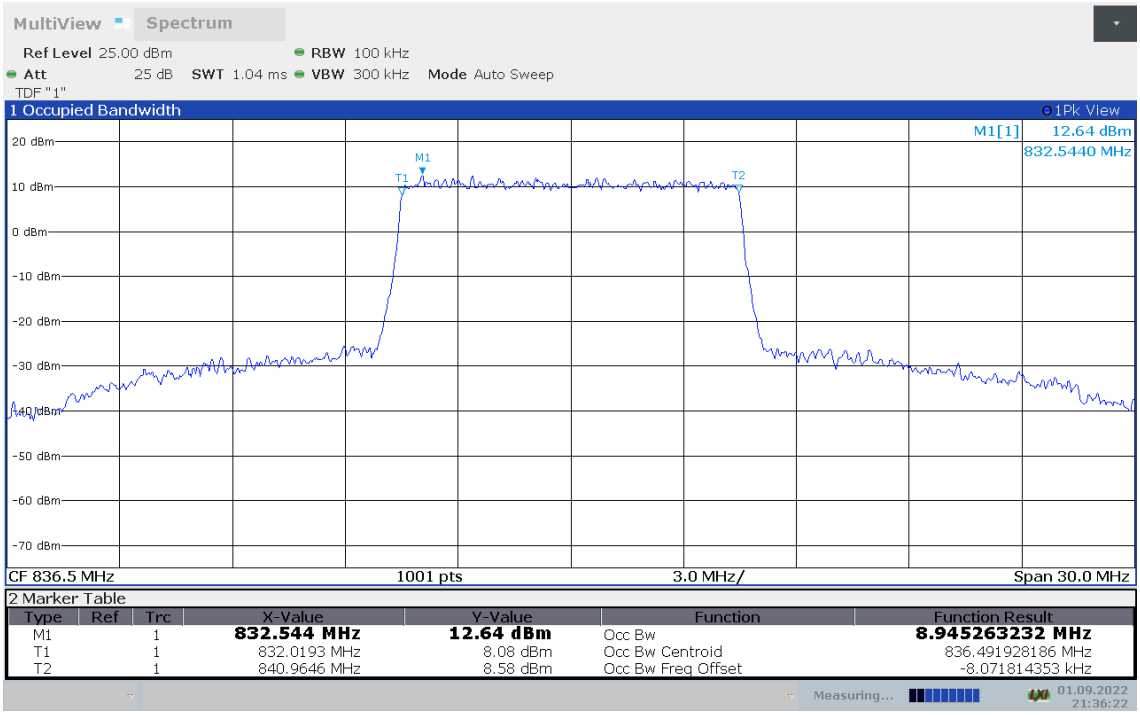
LTE band 5, 10MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
836.5	QPSK	16QAM	64QAM
	8.950	8.945	8.950

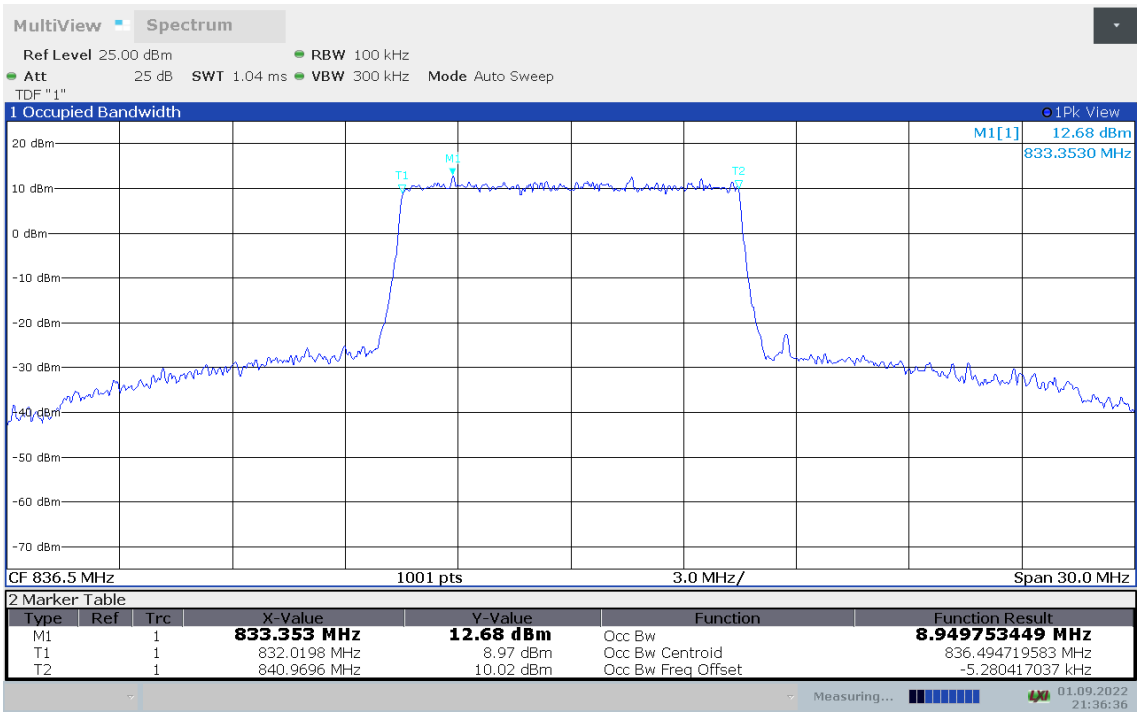
LTE band 5, 10MHz Bandwidth, QPSK (99% BW)



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



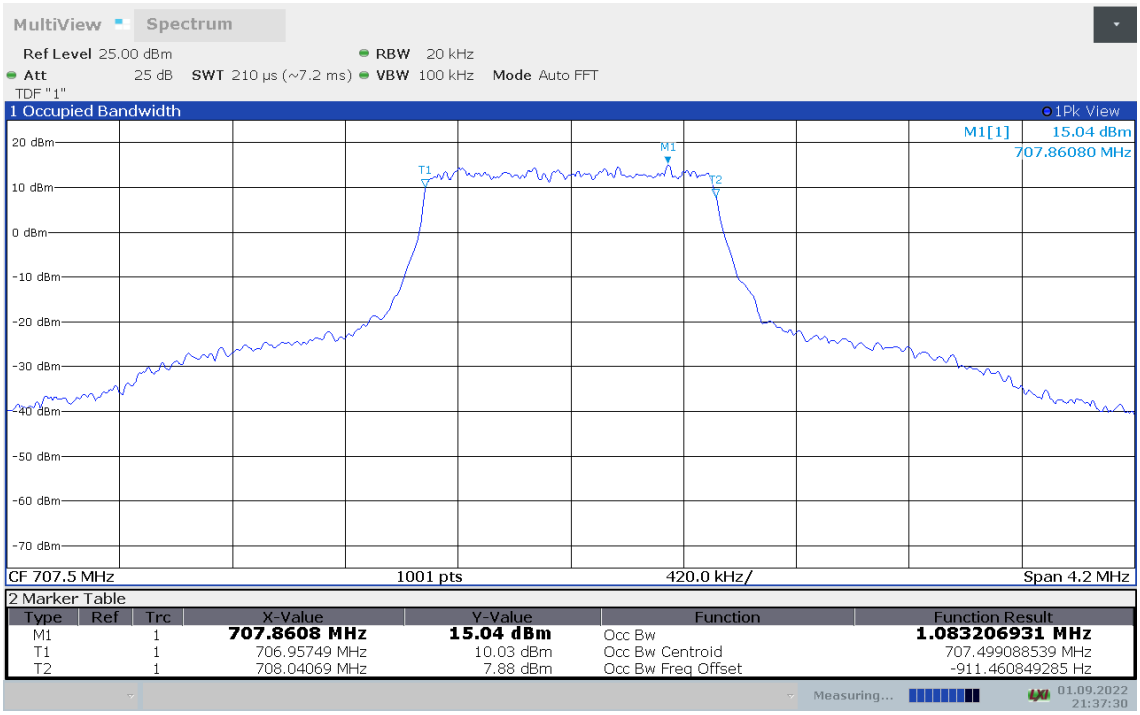
LTE band 5, 10MHz Bandwidth, 64QAM (99% BW)



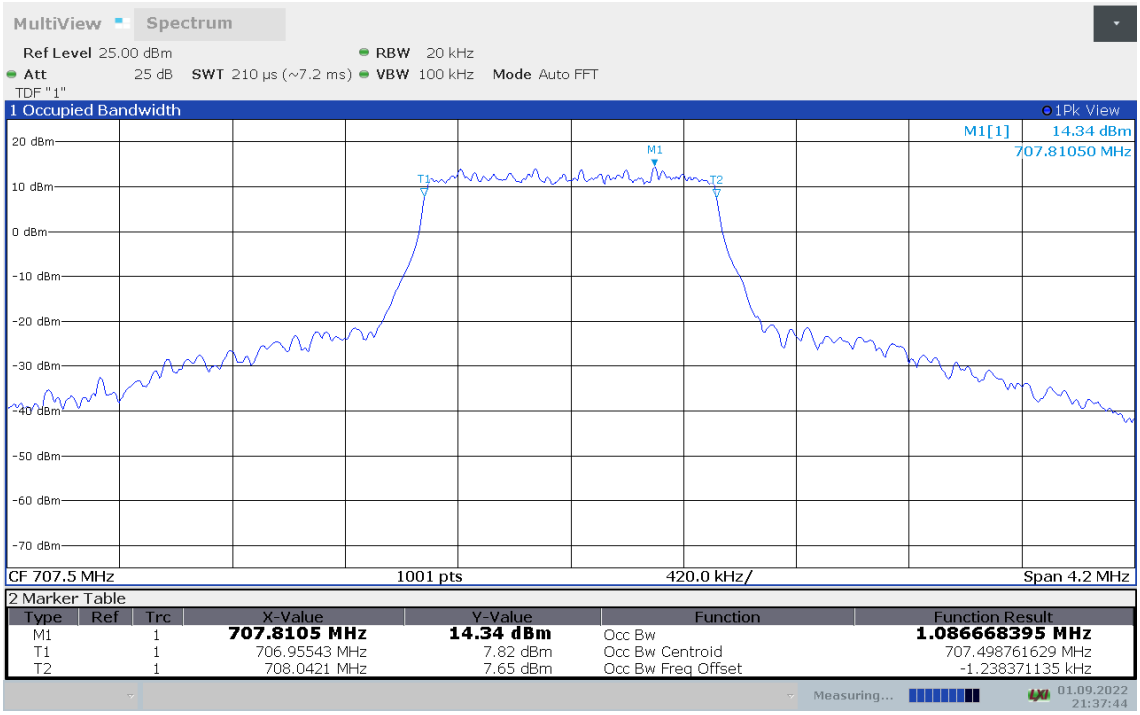
LTE band 12, 1.4MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
707.5	QPSK	16QAM	64QAM
	1.083	1.087	1.090

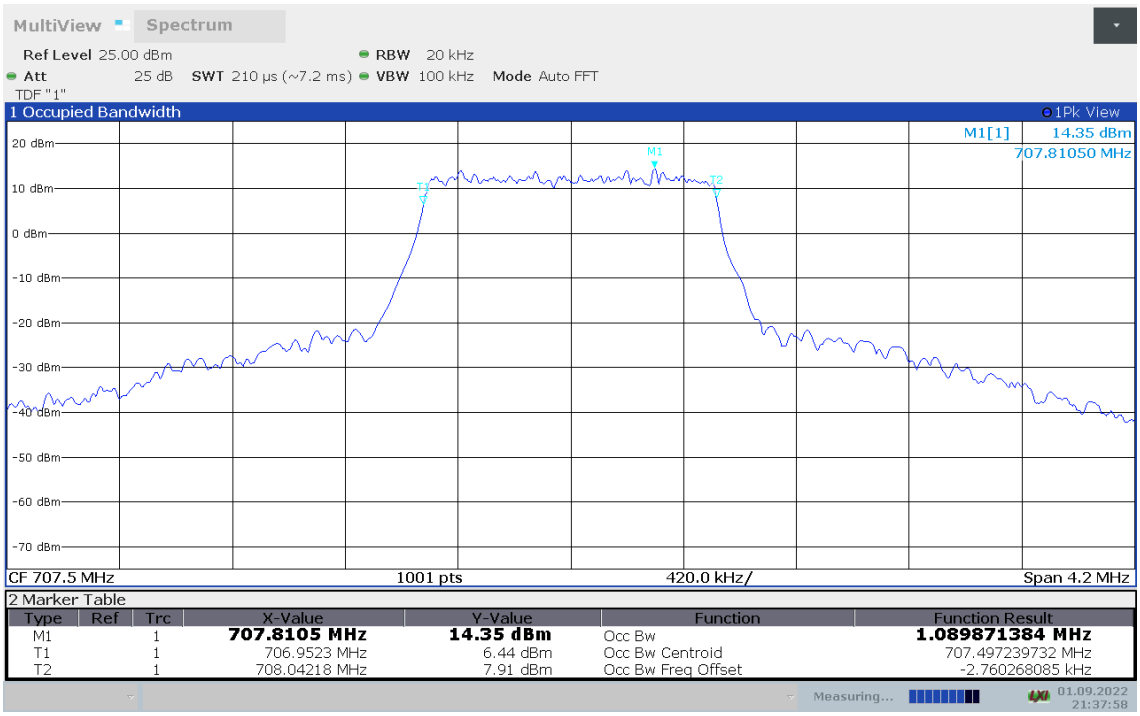
LTE band 12, 1.4MHz Bandwidth, QPSK (99% BW)



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



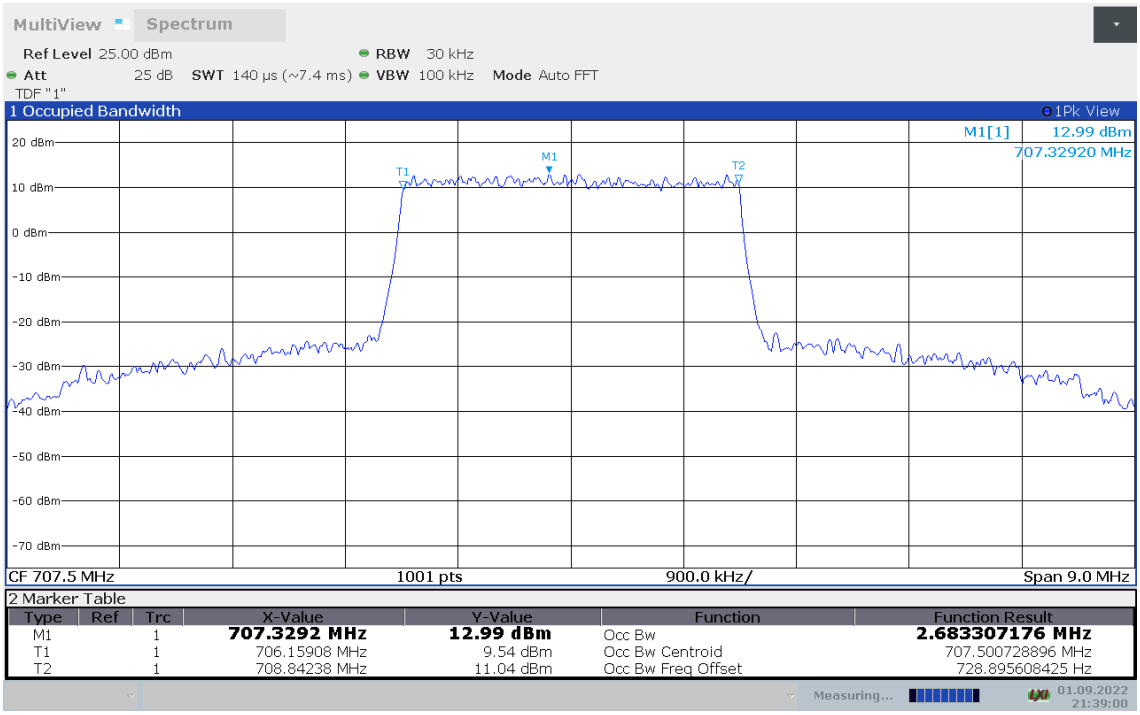
LTE band 12, 1.4MHz Bandwidth, 64QAM (99% BW)



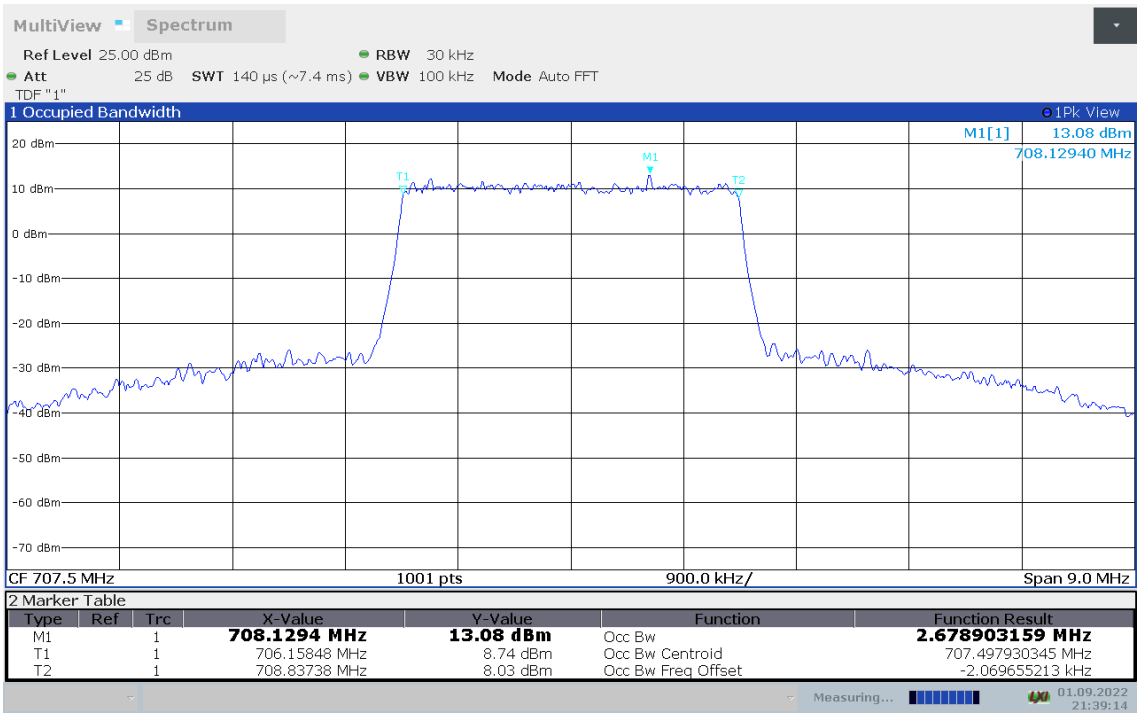
LTE band 12, 3MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
707.5	QPSK	16QAM	64QAM
	2.683	2.679	2.680

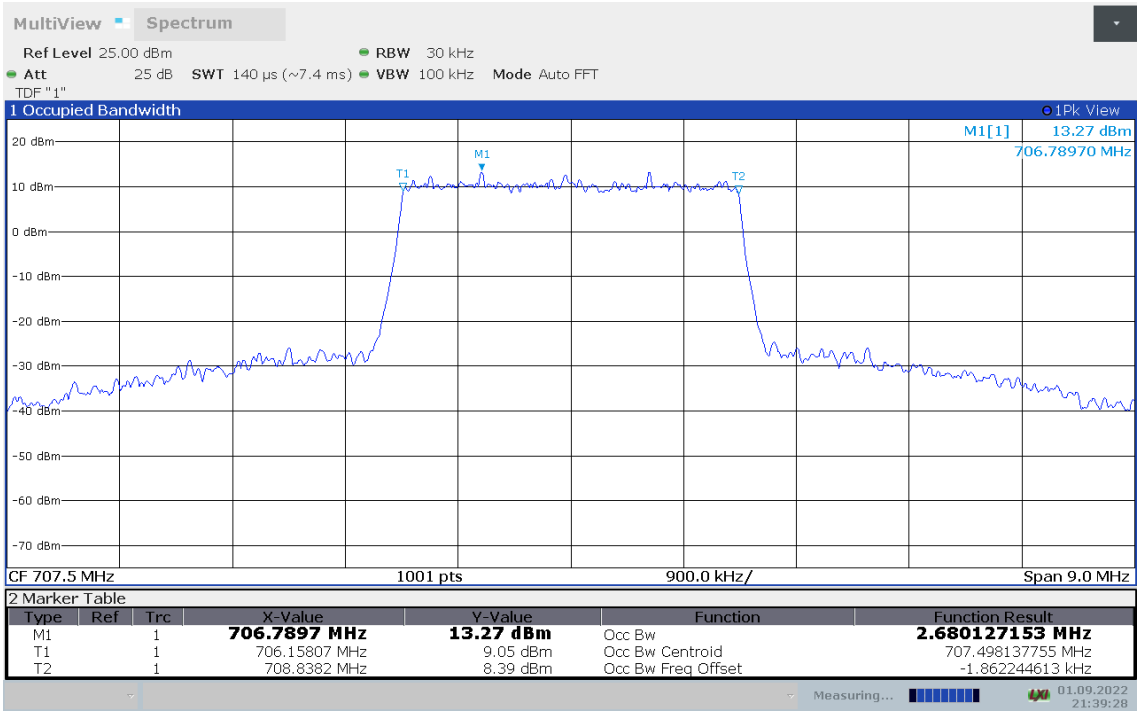
LTE band 12, 3MHz Bandwidth, QPSK (99% BW)



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



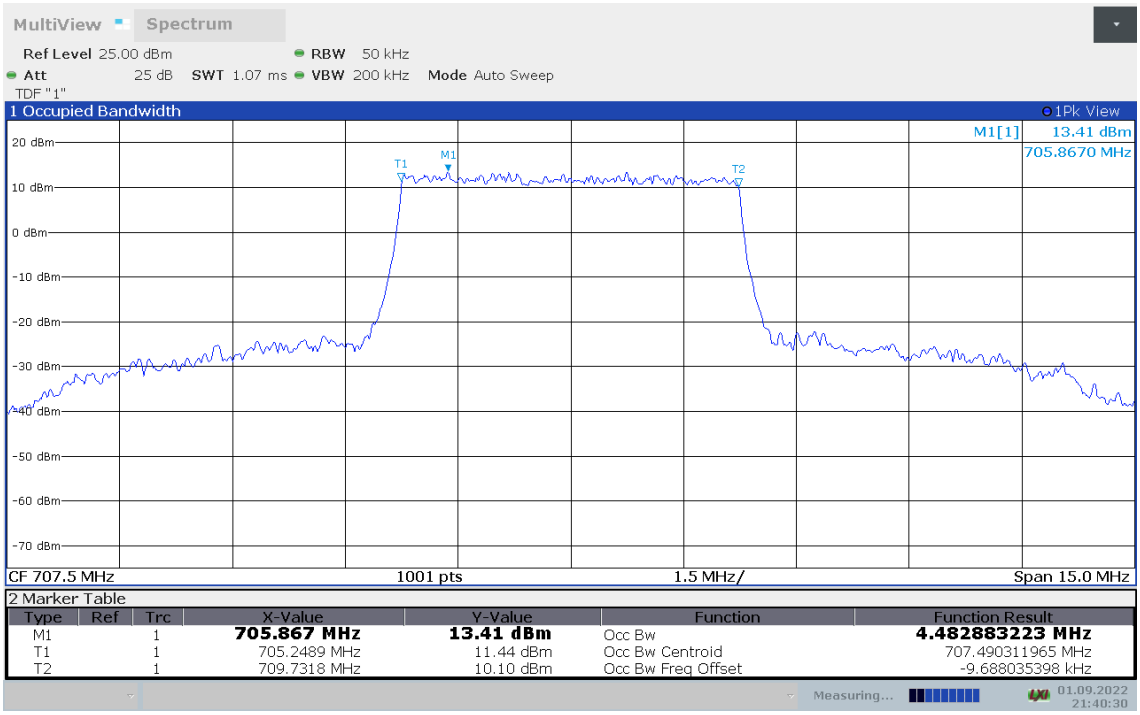
LTE band 12, 3MHz Bandwidth, 64QAM (99% BW)



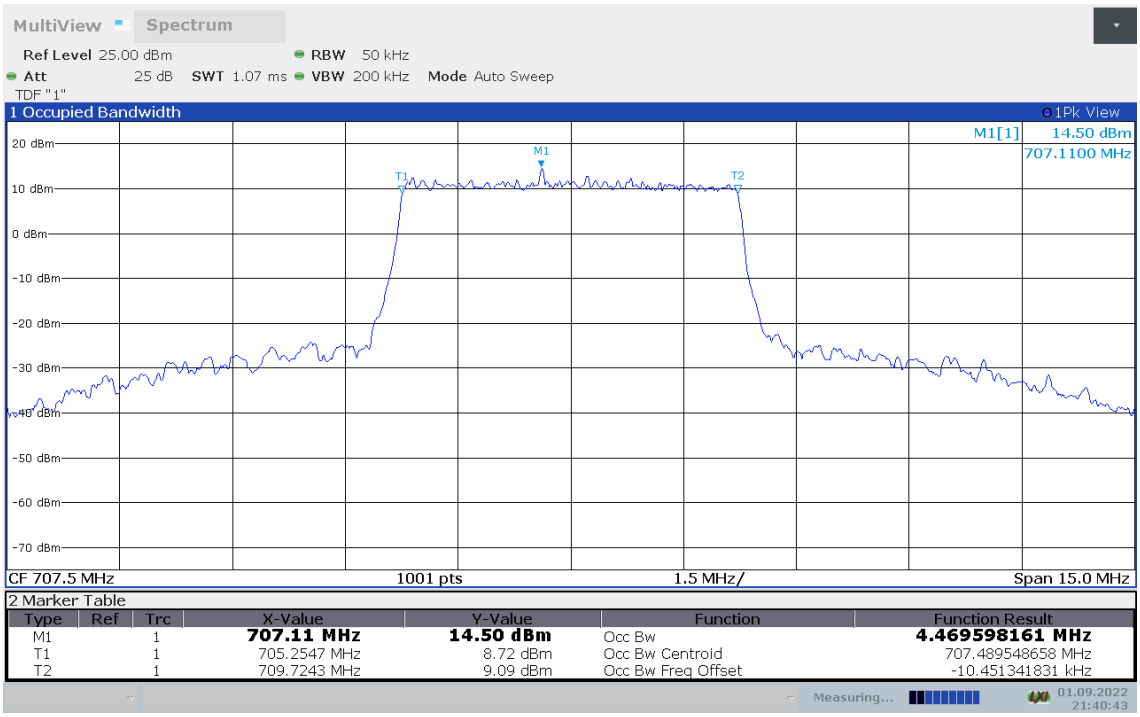
LTE band 12, 5MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
707.5	QPSK	16QAM	64QAM
	4.483	4.470	4.469

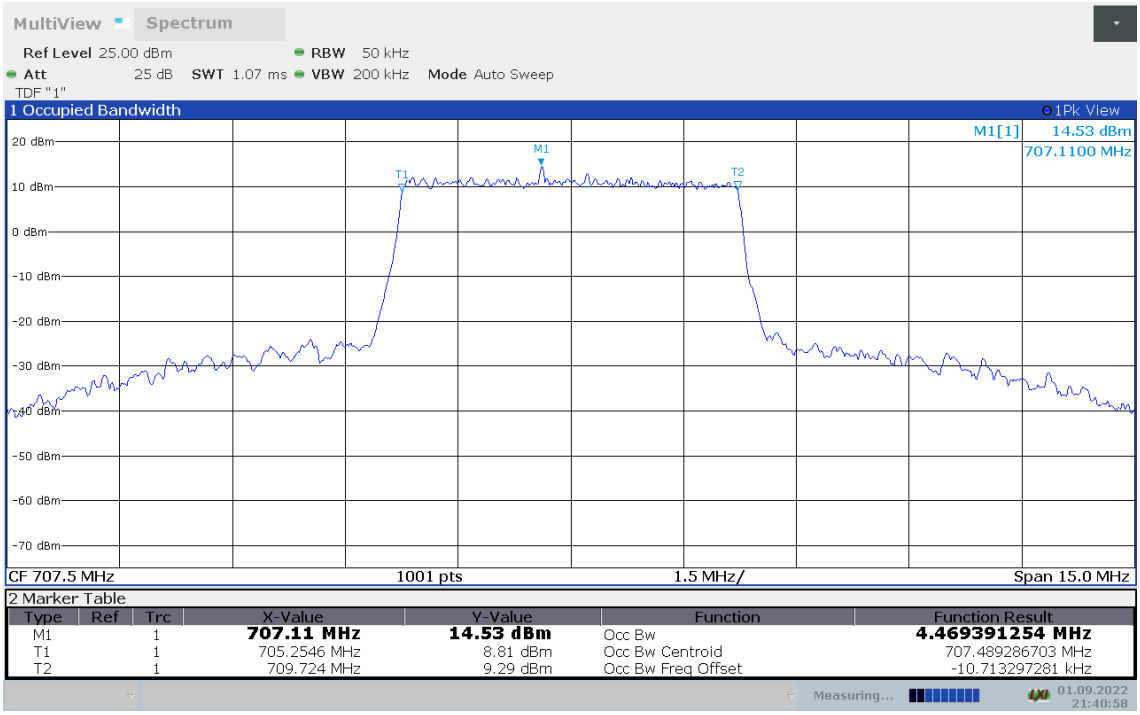
LTE band 12, 5MHz Bandwidth, QPSK (99% BW)



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



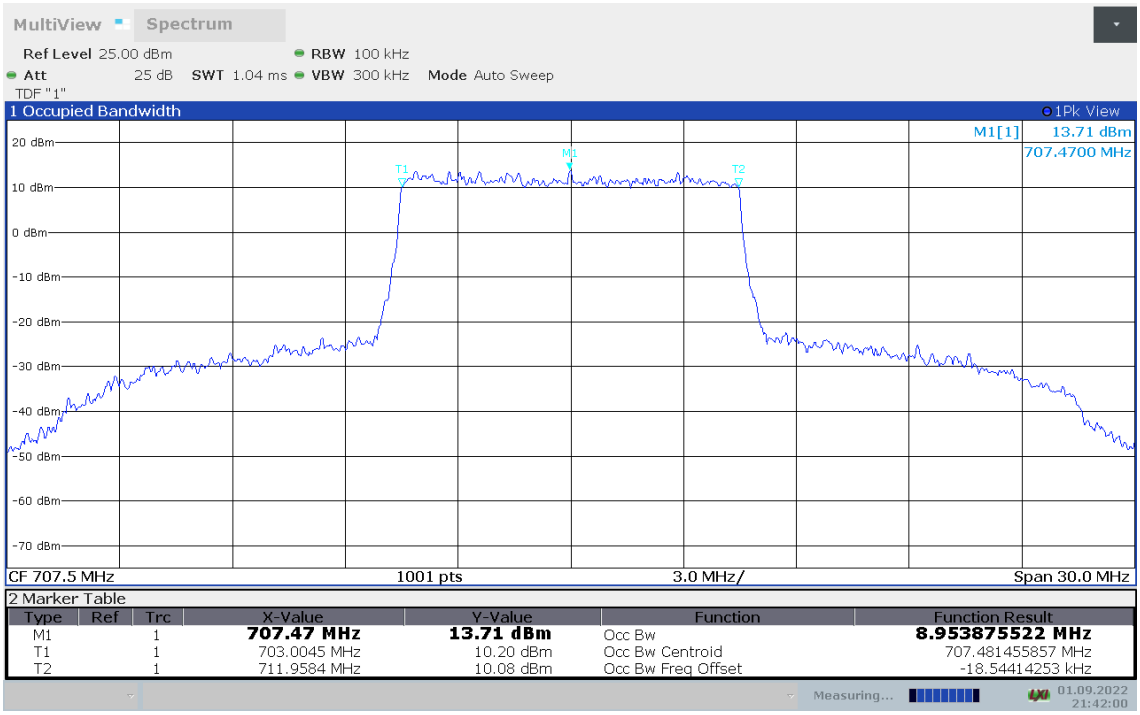
LTE band 12, 5MHz Bandwidth, 64QAM (99% BW)



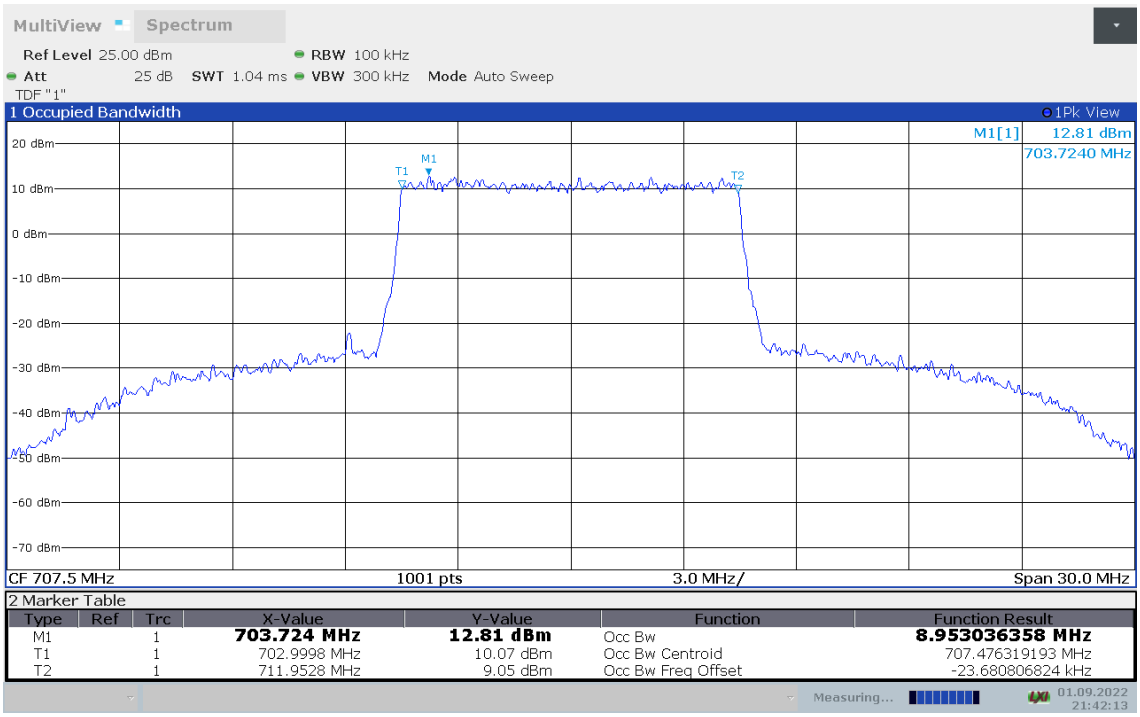
LTE band 12, 10MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
707.5	QPSK	16QAM	64QAM
	8.954	8.953	8.954

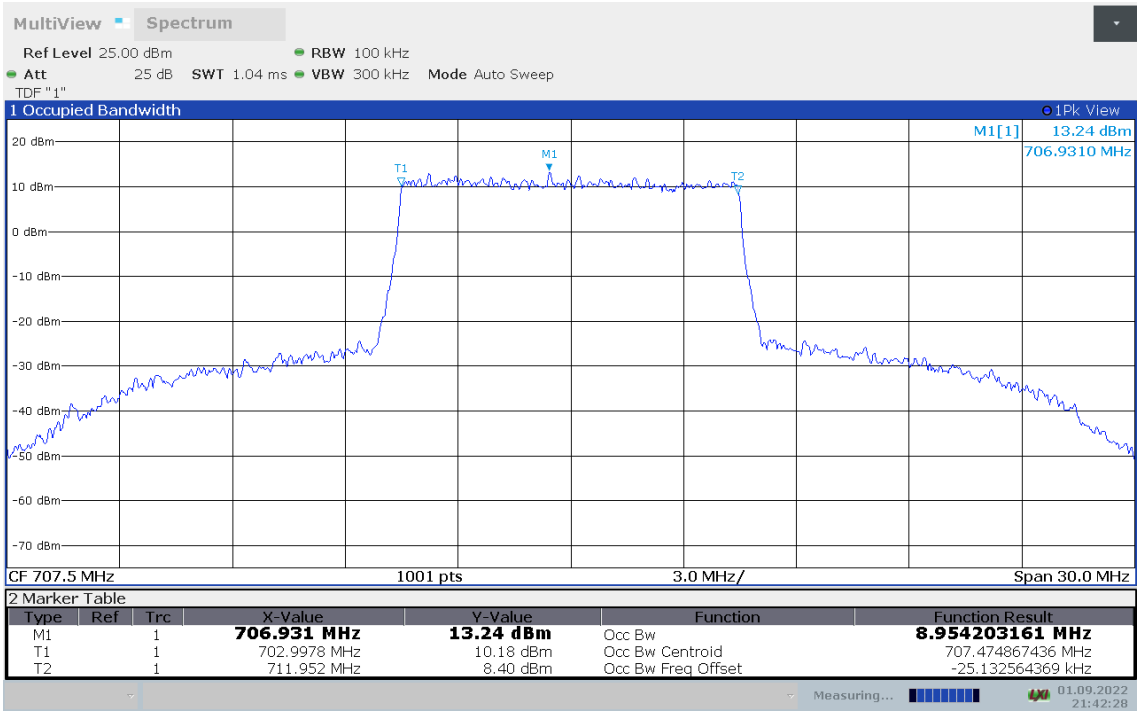
LTE band 12, 10MHz Bandwidth, QPSK (99% BW)



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



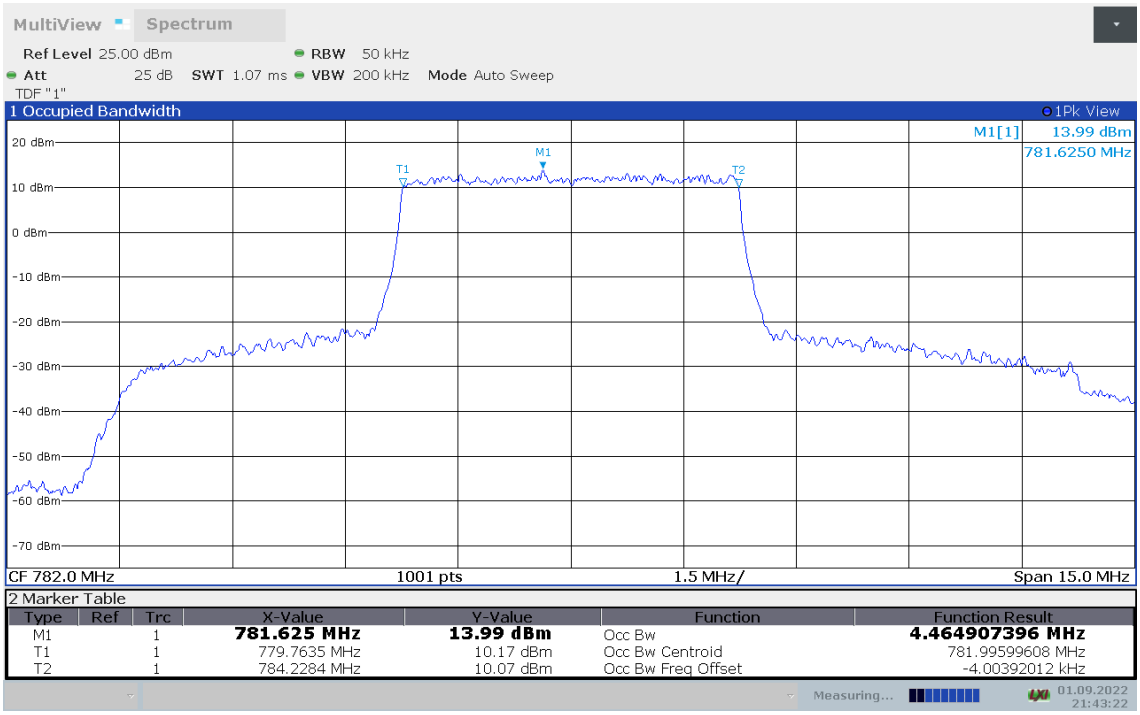
LTE band 12, 10MHz Bandwidth, 64QAM (99% BW)



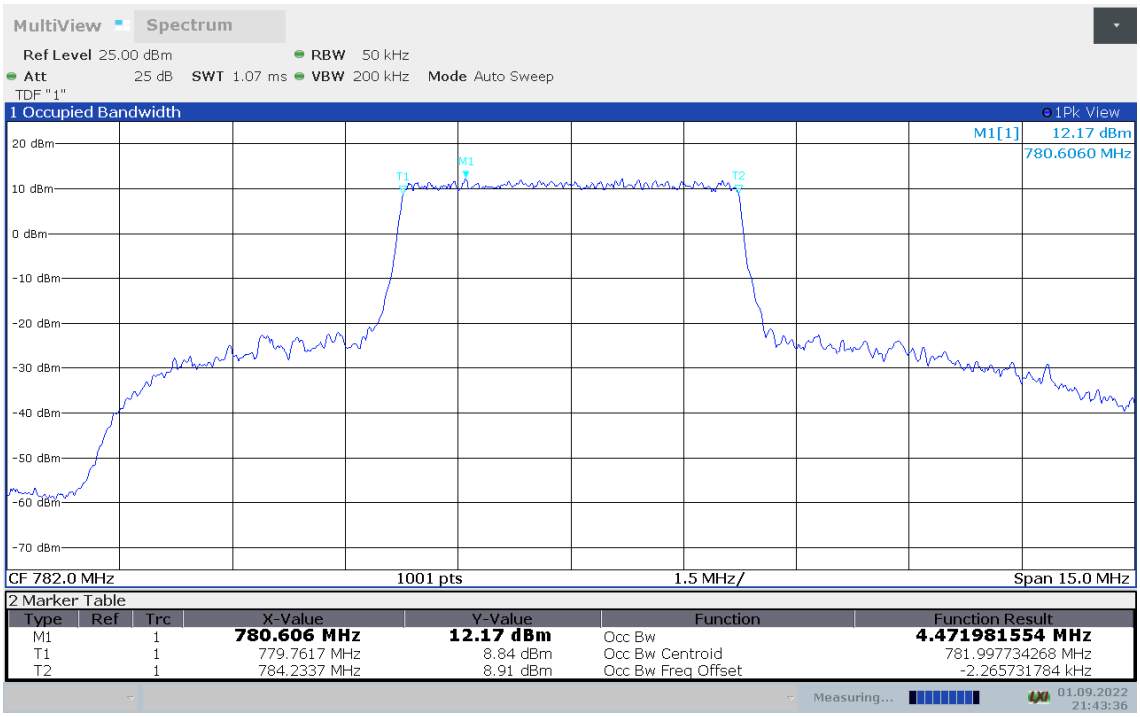
LTE band 13, 5MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
782.0	QPSK	16QAM	64QAM
	4.465	4.472	4.472

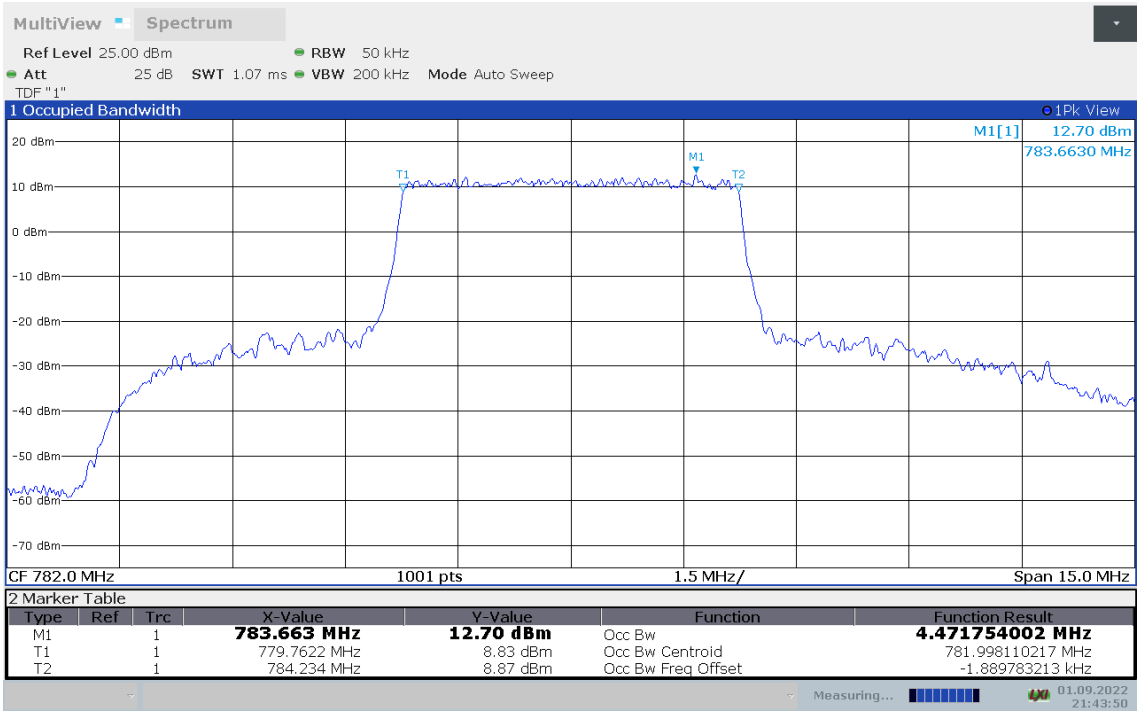
LTE band 13, 5MHz Bandwidth, QPSK (99% BW)



LTE band 13, 5MHz Bandwidth,16QAM (99% BW)



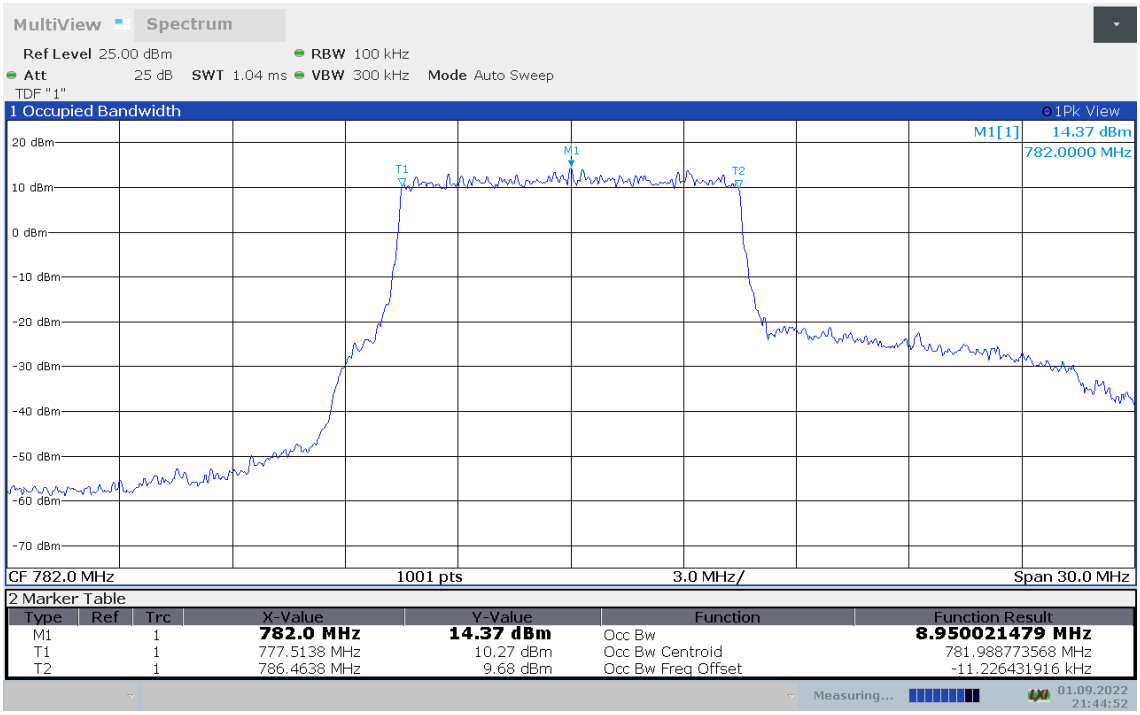
LTE band 13, 5MHz Bandwidth, 64QAM (99% BW)



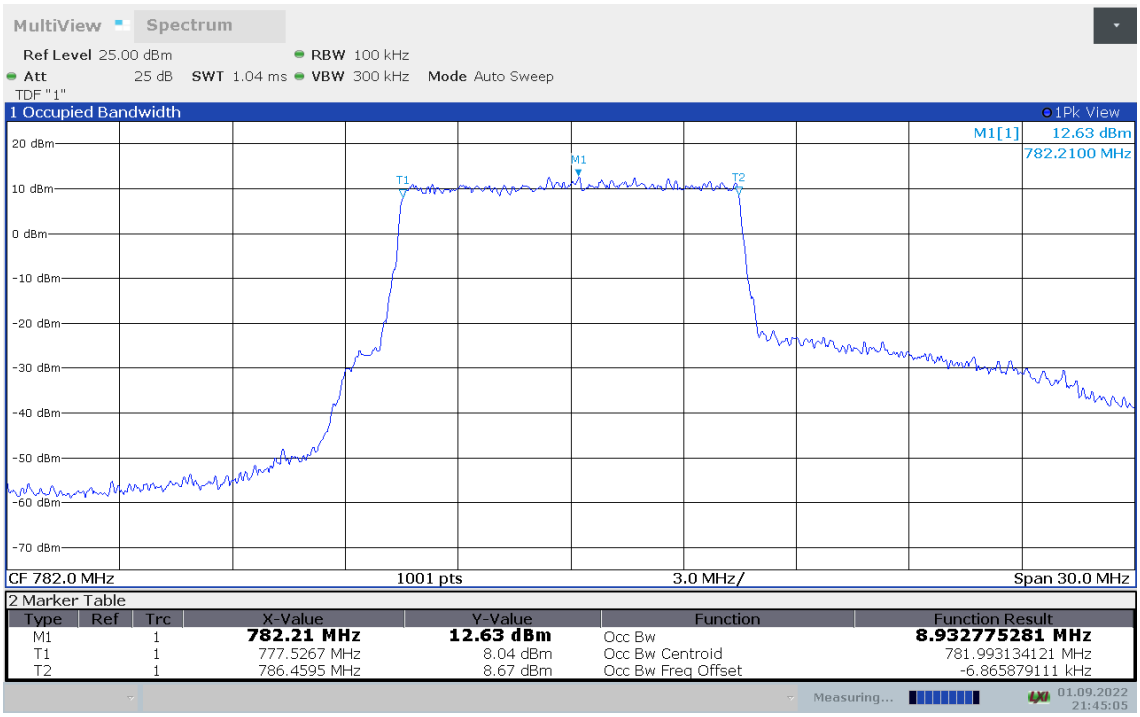
LTE band 13, 10MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
782.0	QPSK	16QAM	64QAM
	8.950	8.933	8.928

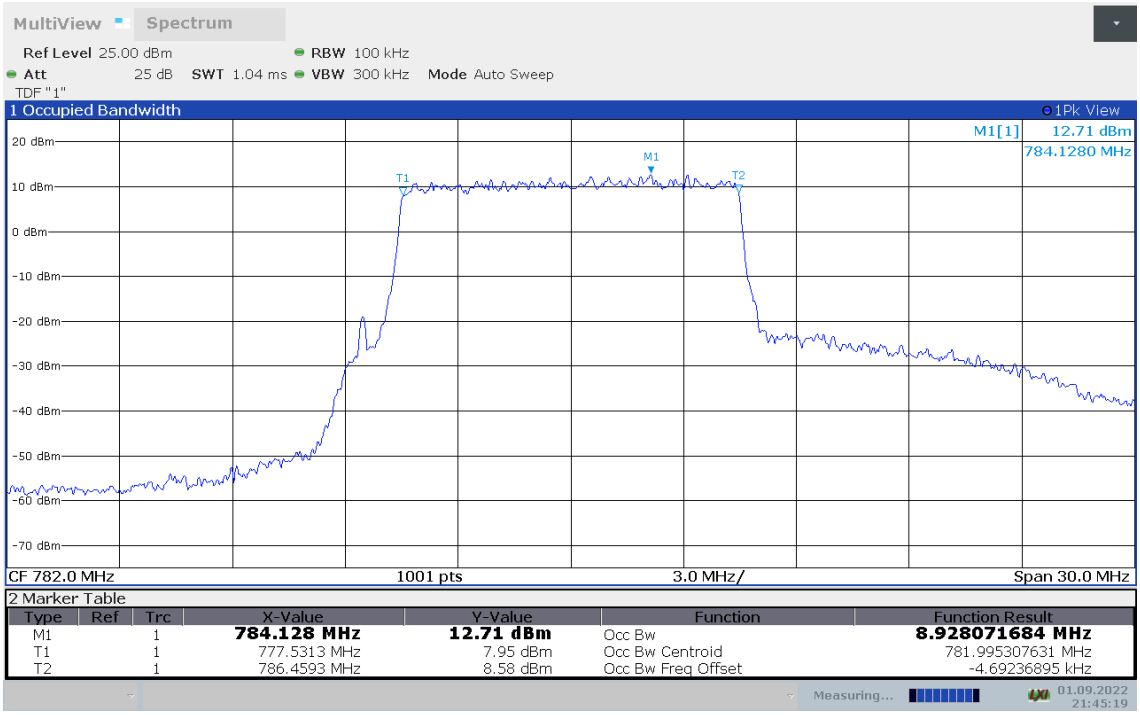
LTE band 13, 10MHz Bandwidth, QPSK (99% BW)



LTE band 13, 10MHz Bandwidth, 16QAM (99% BW)



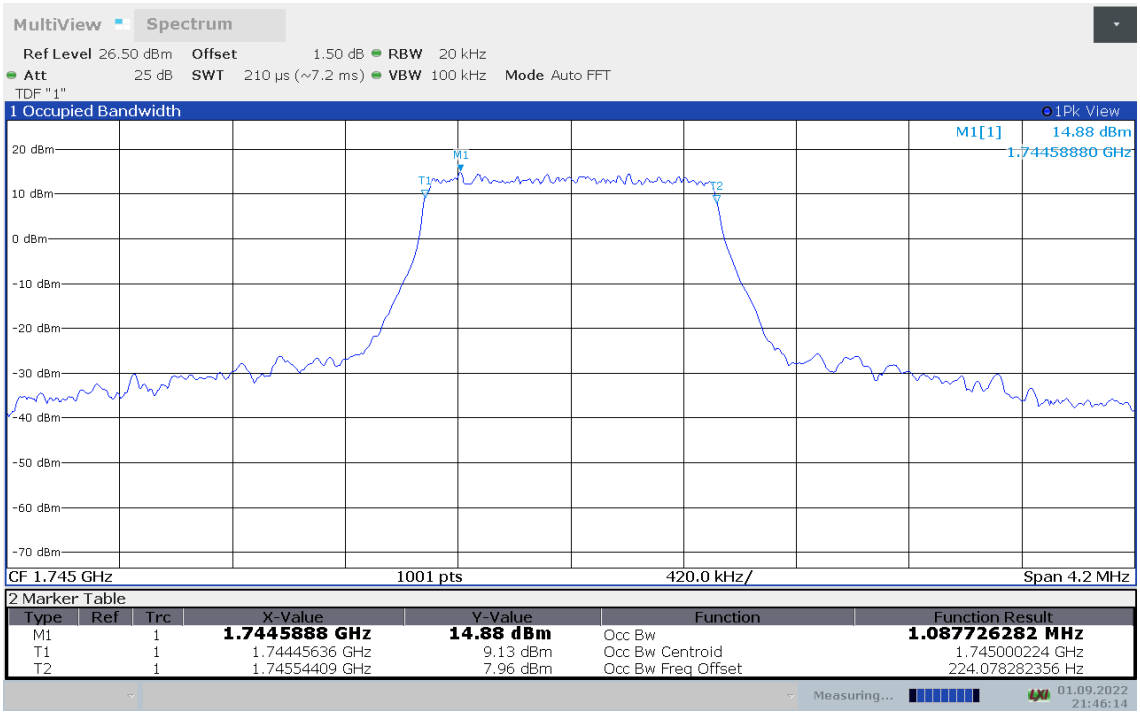
LTE band 13, 10MHz Bandwidth, 64QAM (99% BW)



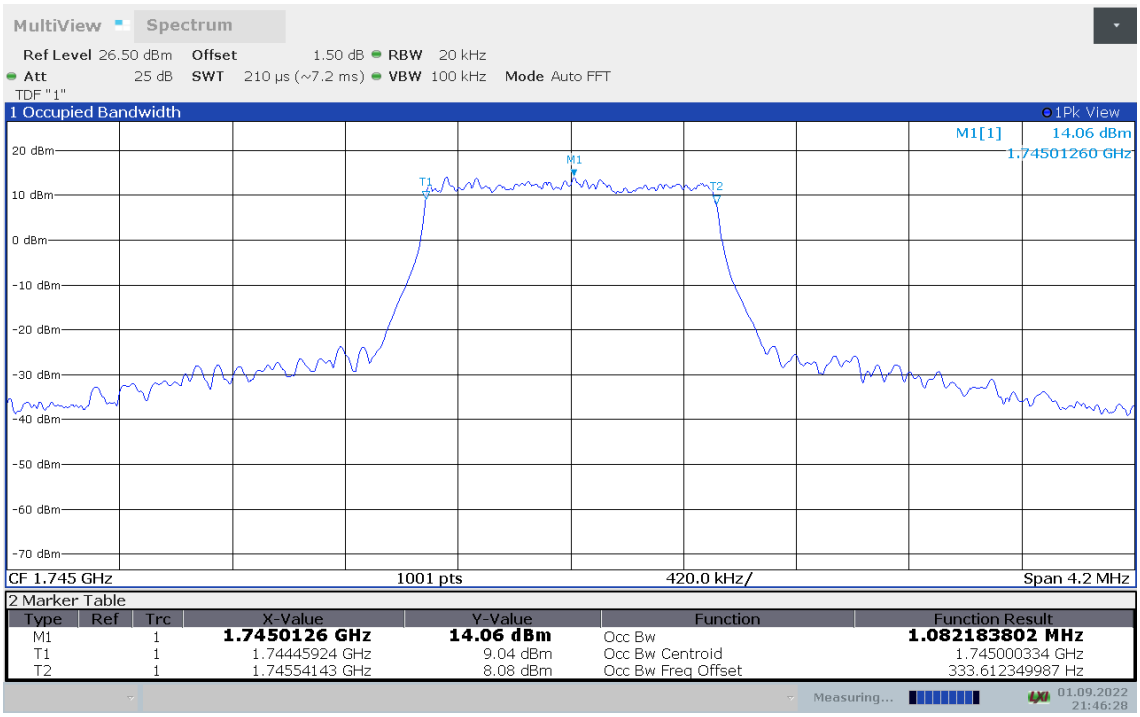
LTE band 66, 1.4MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	1.088	1.082	1.083

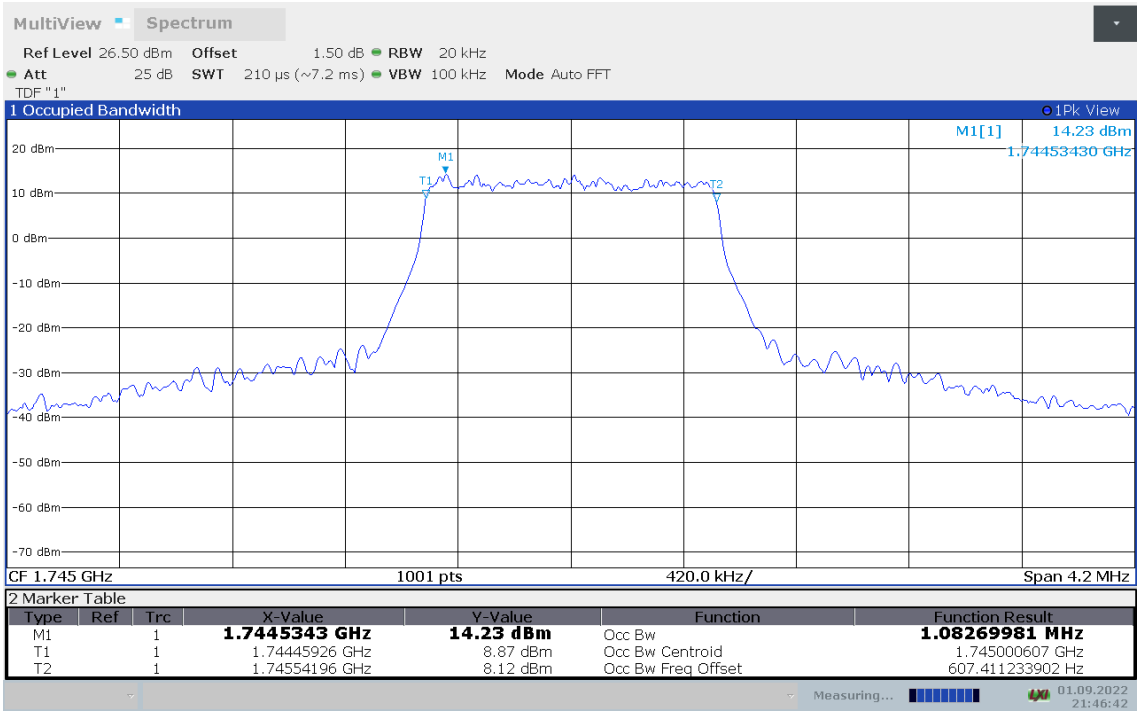
LTE band 66, 1.4MHz Bandwidth, QPSK (99% BW)



LTE band 66, 1.4MHz Bandwidth, 16QAM (99% BW)



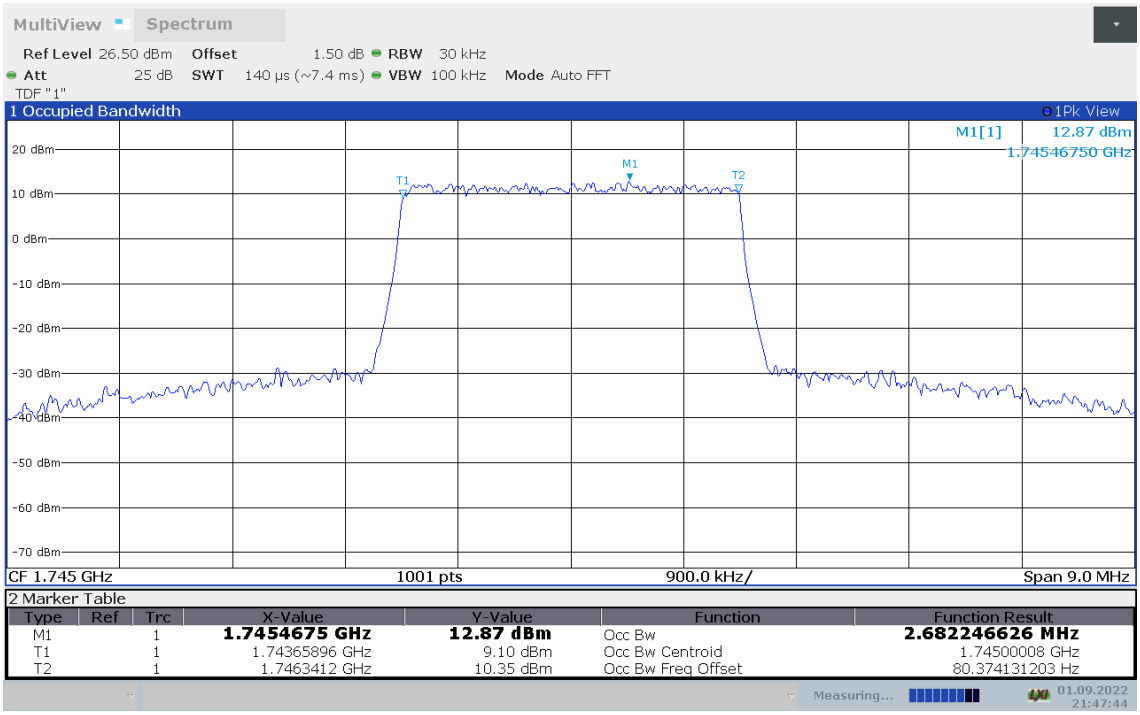
LTE band 66, 1.4MHz Bandwidth, 64QAM (99% BW)



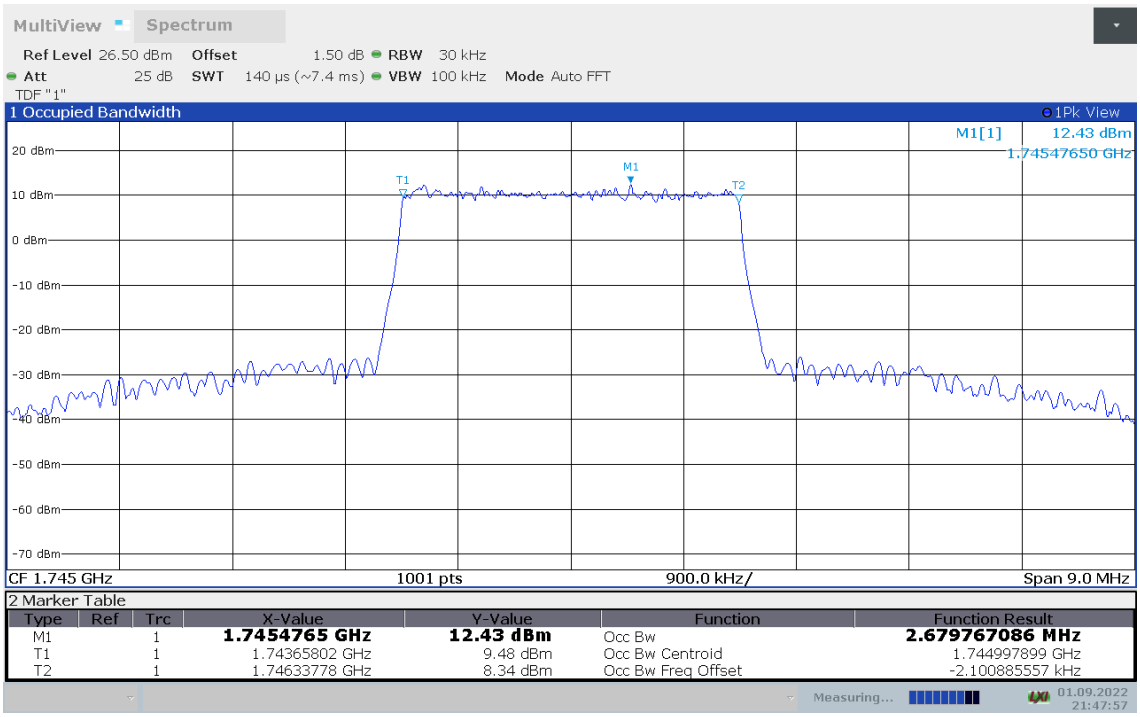
LTE band 66, 3MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	2.682	2.680	2.681

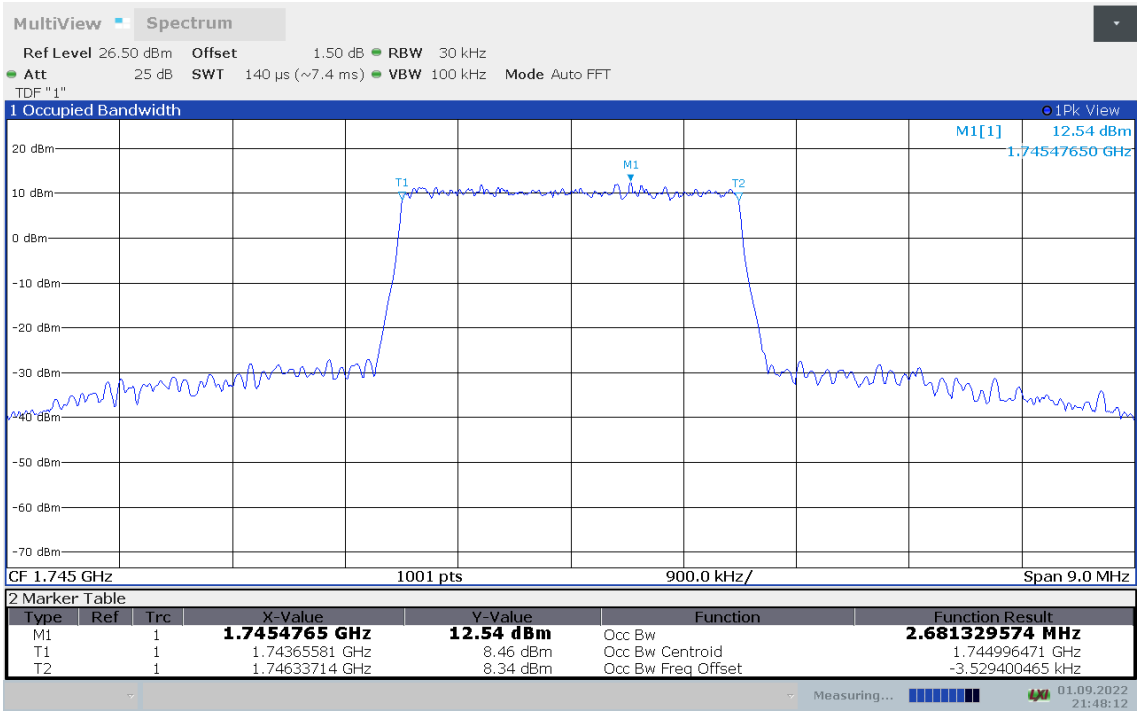
LTE band 66, 3MHz Bandwidth, QPSK (99% BW)



LTE band 66, 3MHz Bandwidth, 16QAM (99% BW)



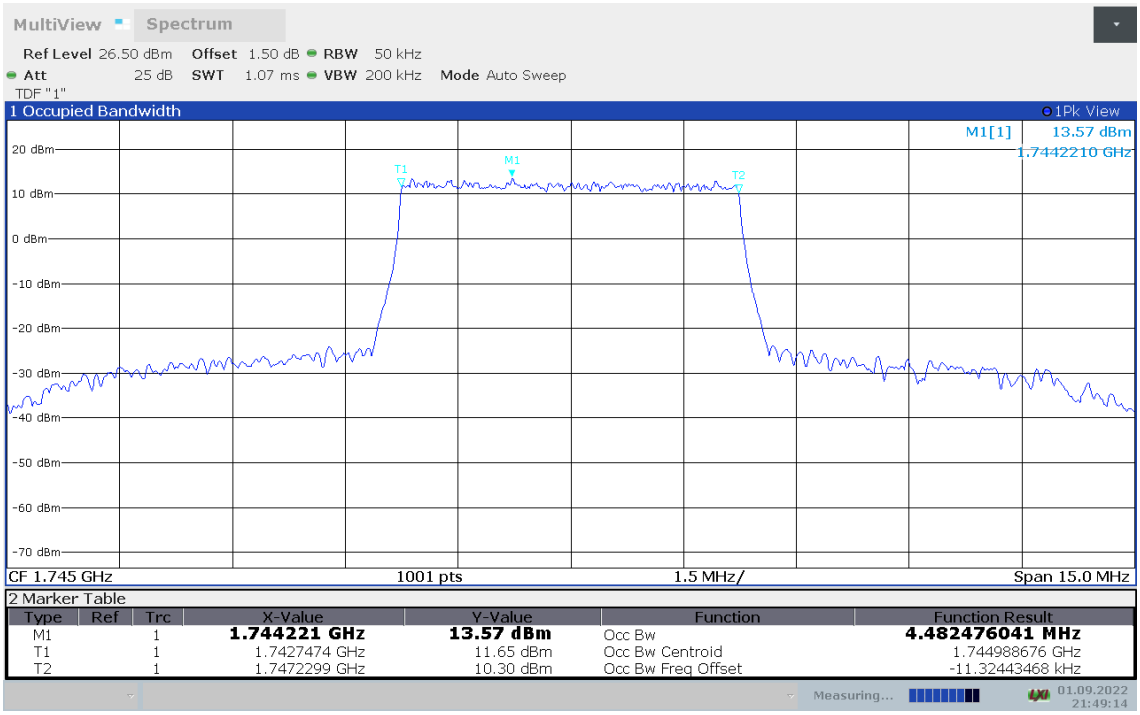
LTE band 66, 3MHz Bandwidth, 64QAM (99% BW)



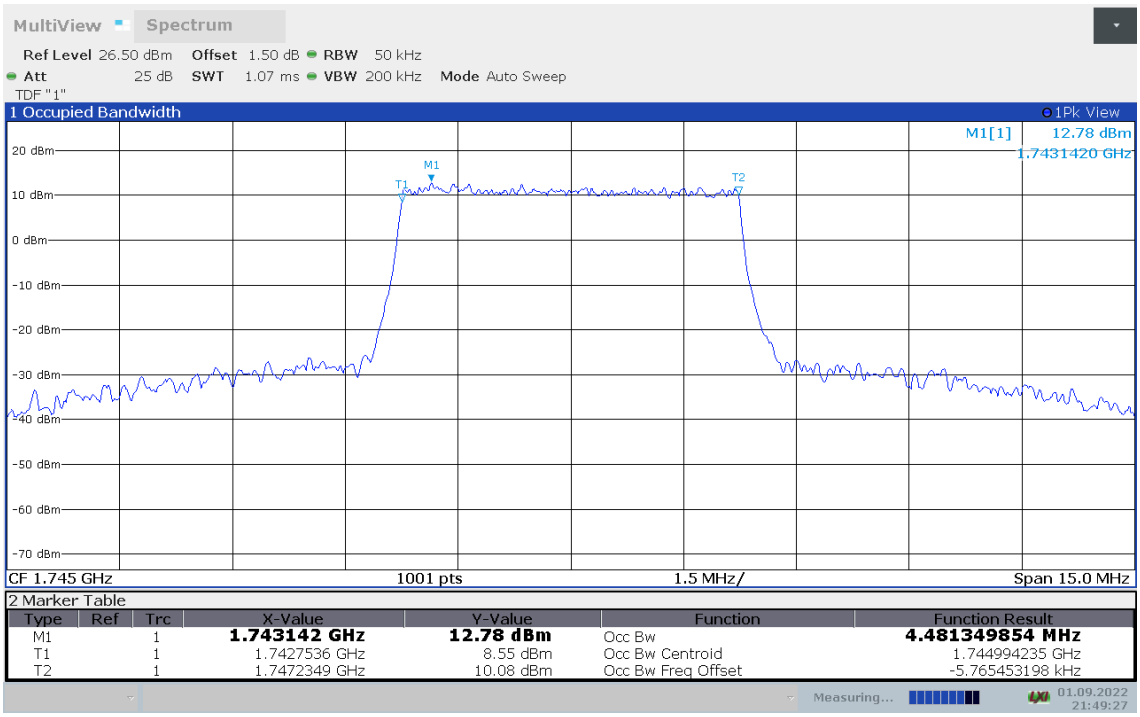
LTE band 66, 5MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	4.482	4.481	4.481

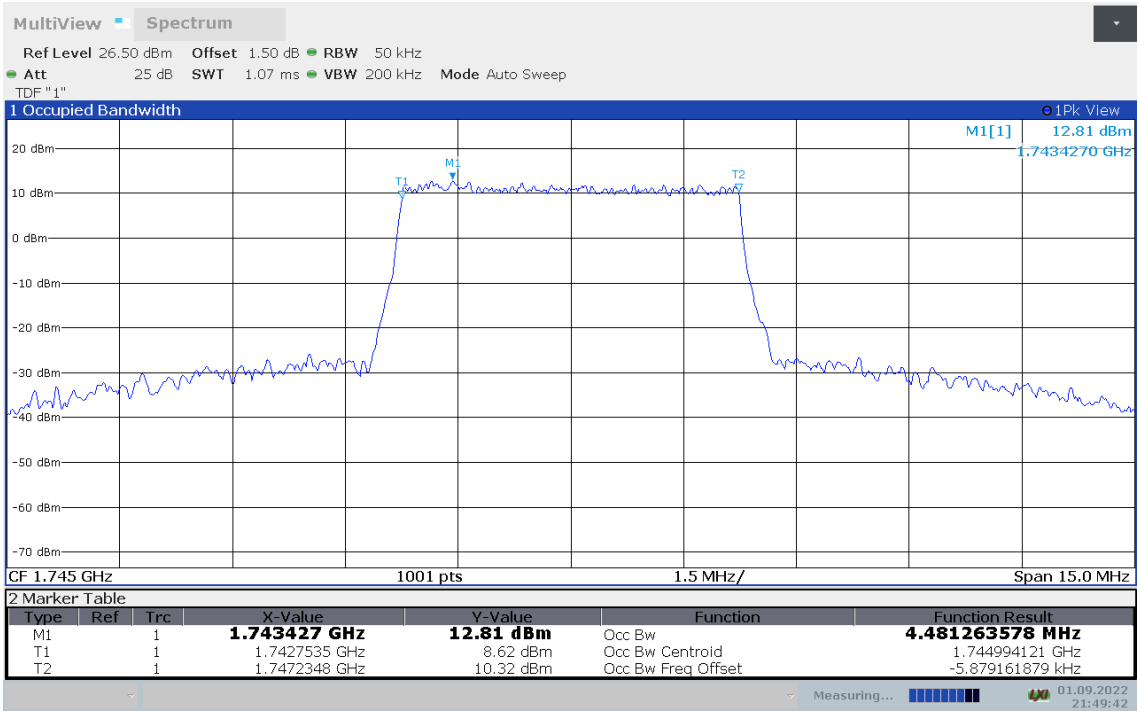
LTE band 66, 5MHz Bandwidth, QPSK (99% BW)



LTE band 66, 5MHz Bandwidth,16QAM (99% BW)



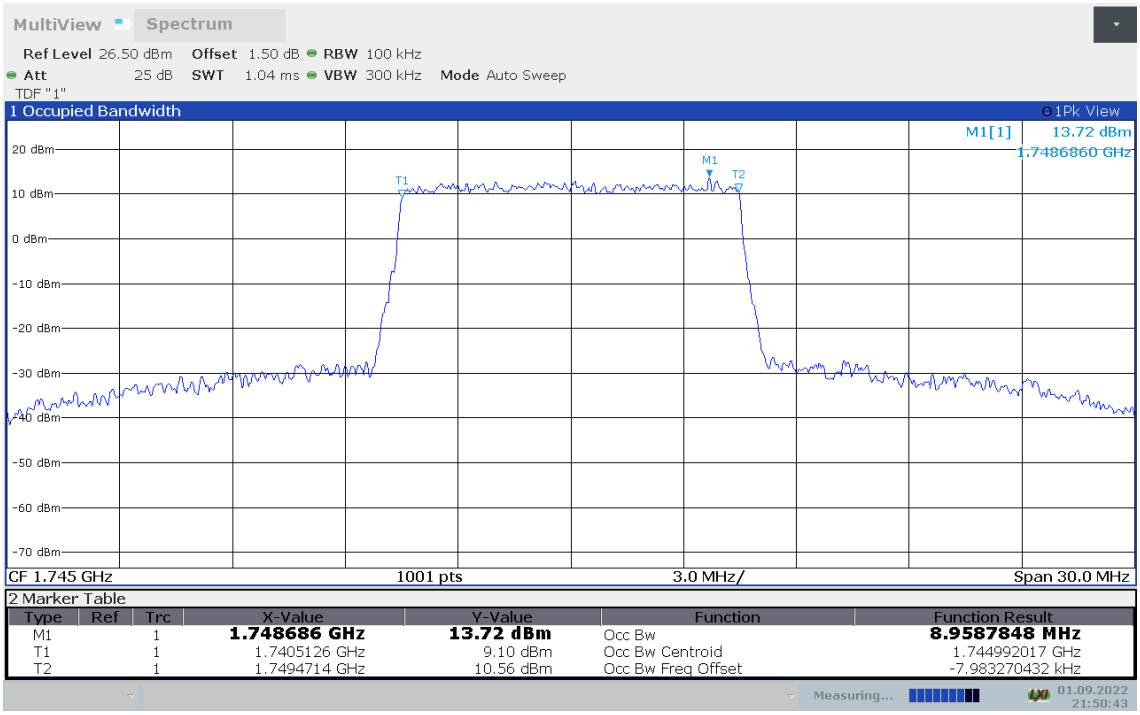
LTE band 66, 5MHz Bandwidth,64QAM (99% BW)



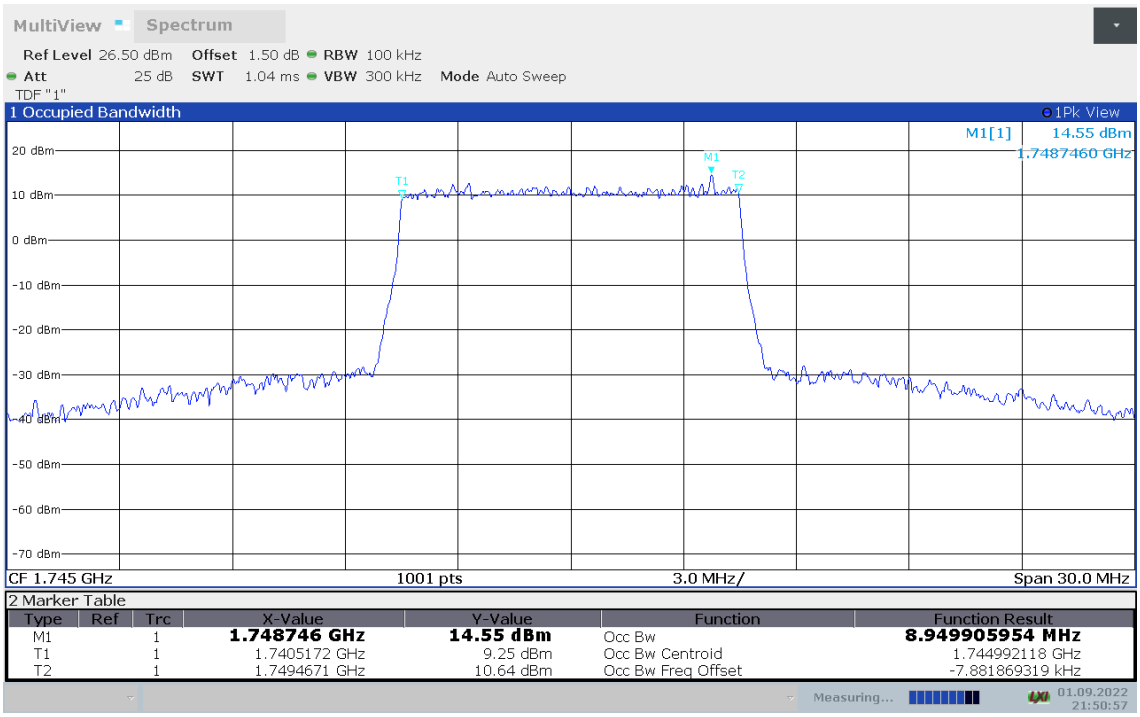
LTE band 66, 10MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	8.959	8.950	8.939

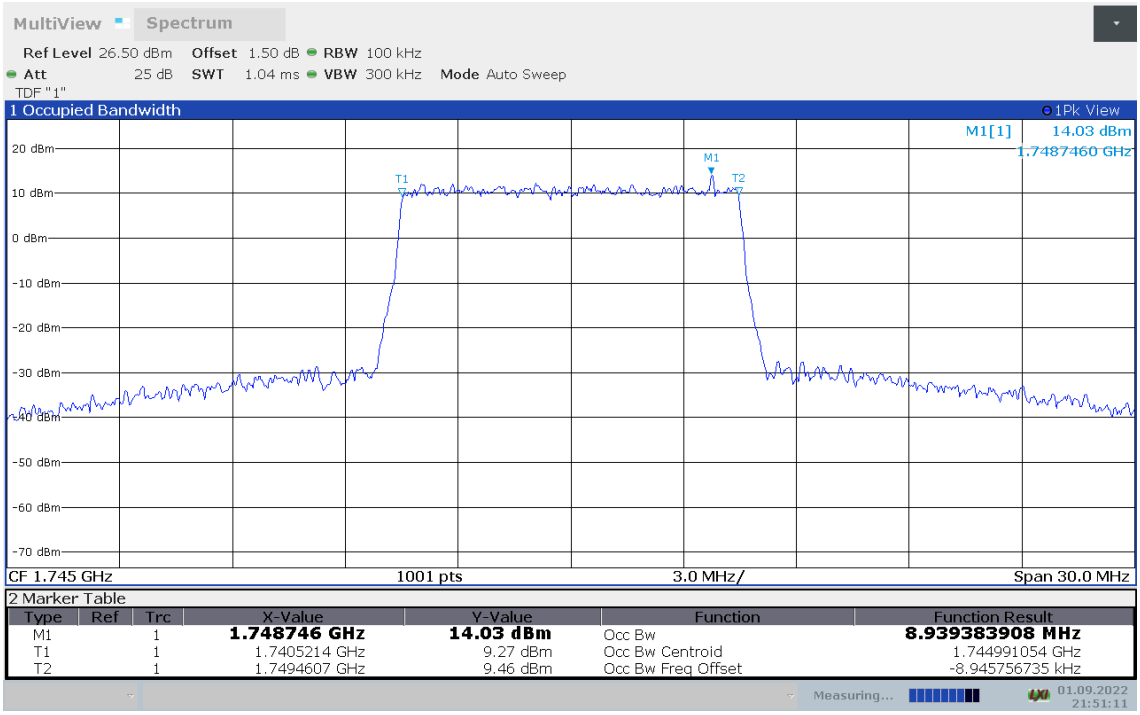
LTE band 66, 10MHz Bandwidth, QPSK (99% BW)



LTE band 66, 10MHz Bandwidth, 16QAM (99% BW)



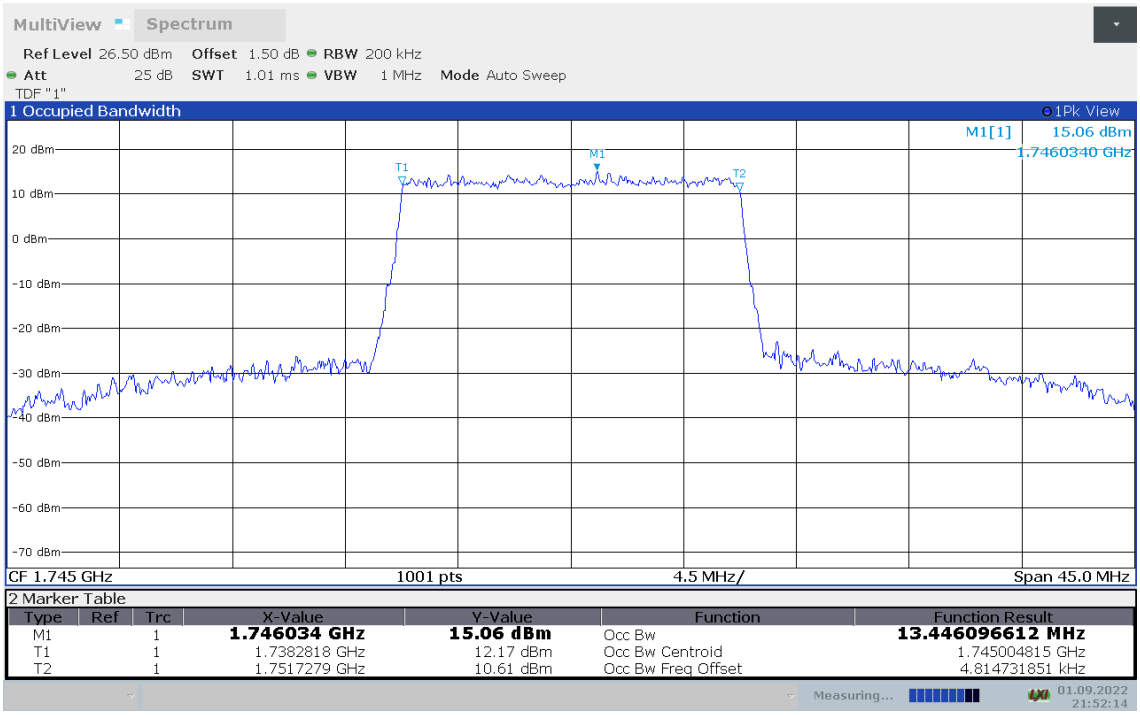
LTE band 66, 10MHz Bandwidth, 64QAM (99% BW)



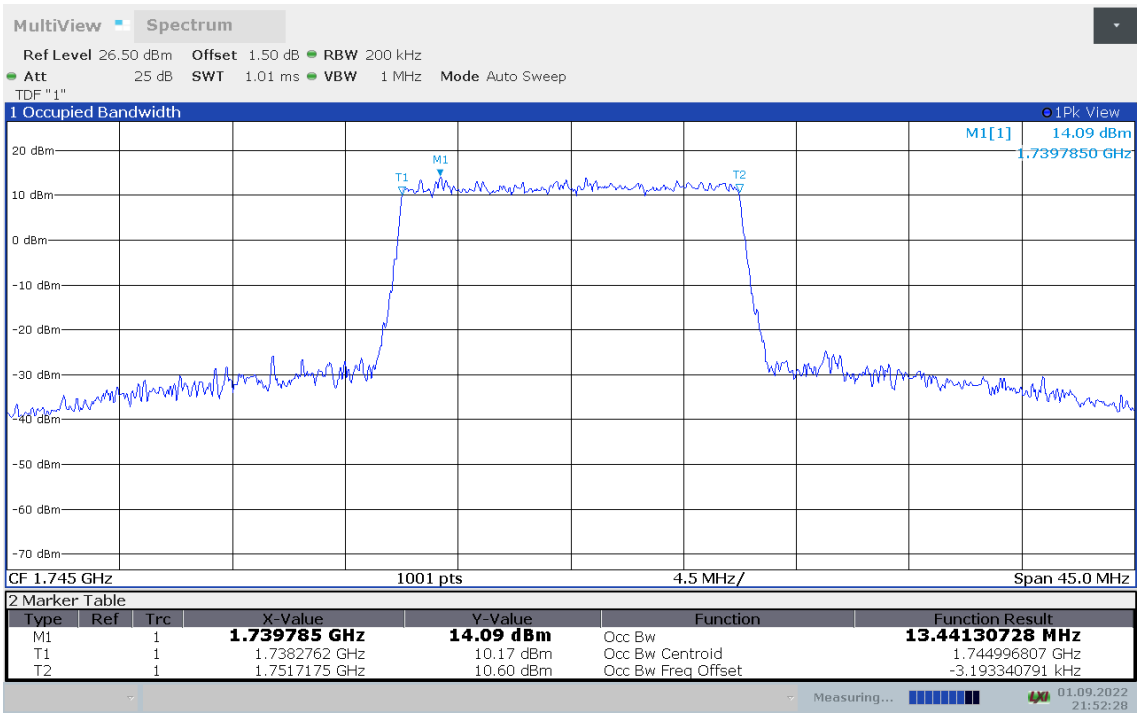
LTE band 66, 15MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	13.446	13.441	13.442

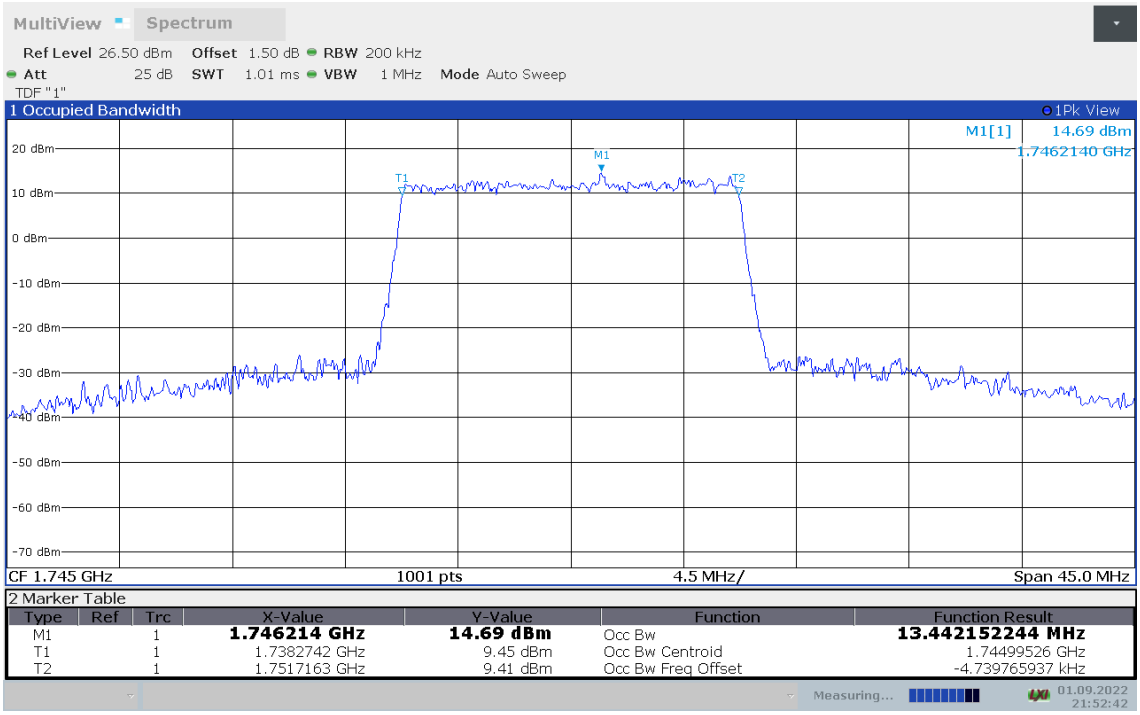
LTE band 66, 15MHz Bandwidth, QPSK (99% BW)



LTE band 66, 15MHz Bandwidth, 16QAM (99% BW)



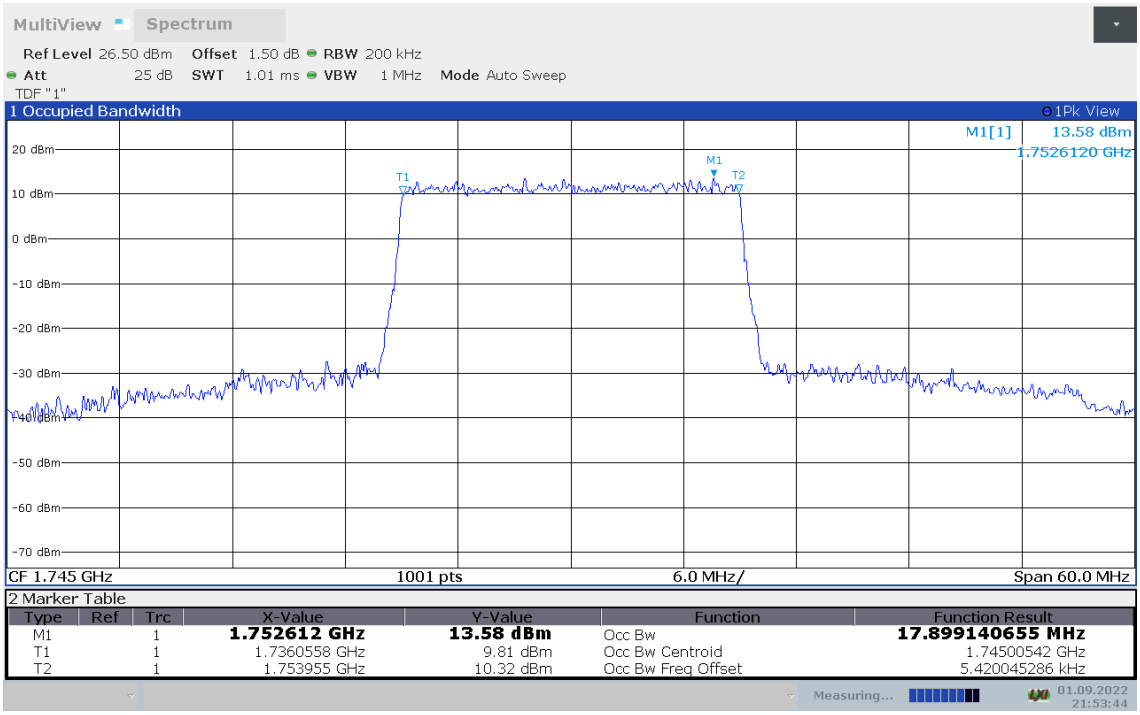
LTE band 66, 15MHz Bandwidth, 64QAM (99% BW)



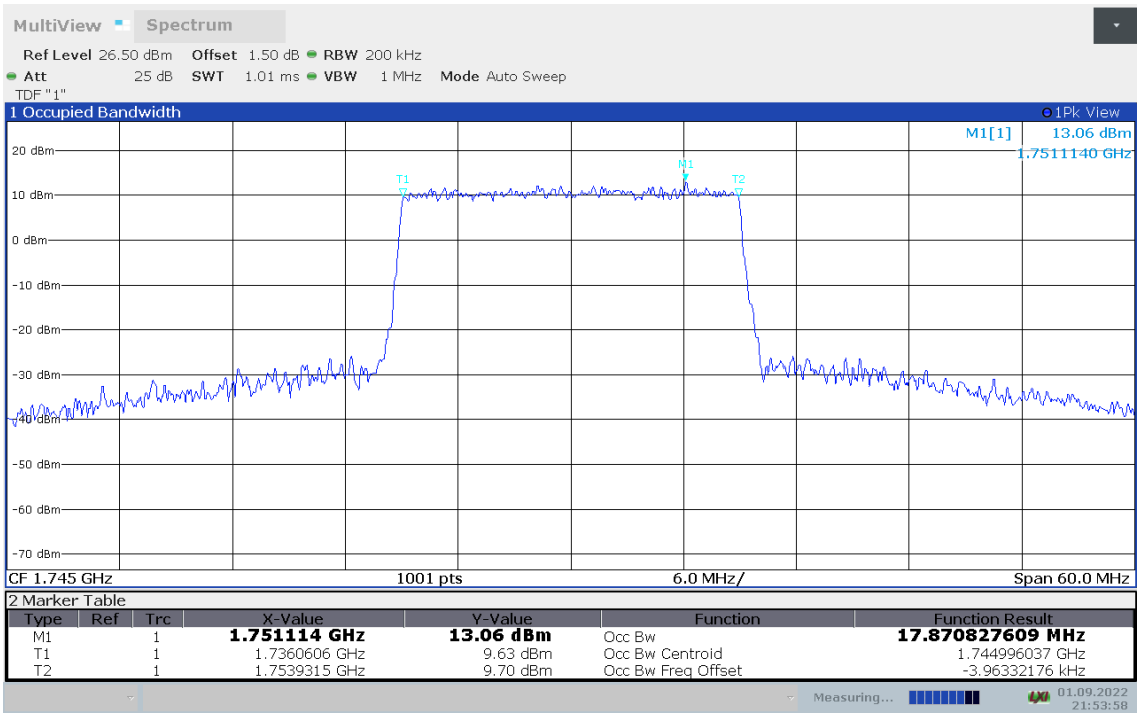
LTE band 66, 20MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	17.899	17.871	13.886

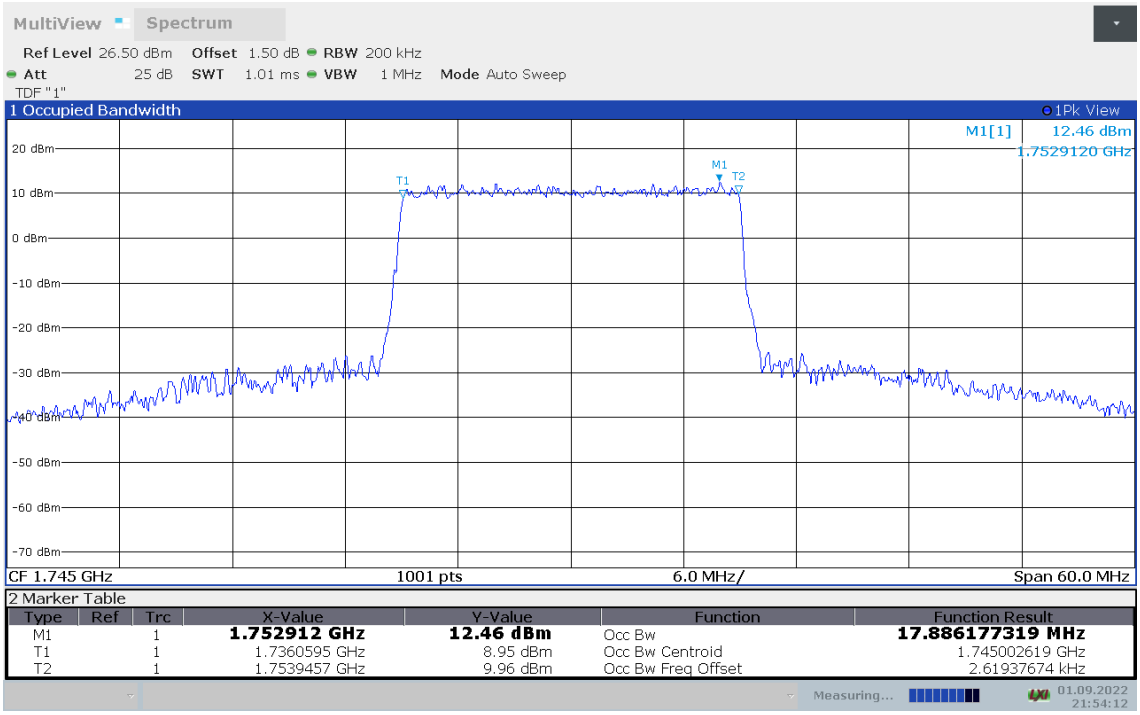
LTE band 66, 20MHz Bandwidth, QPSK (99% BW)



LTE band 66, 20MHz Bandwidth, 16QAM (99% BW)



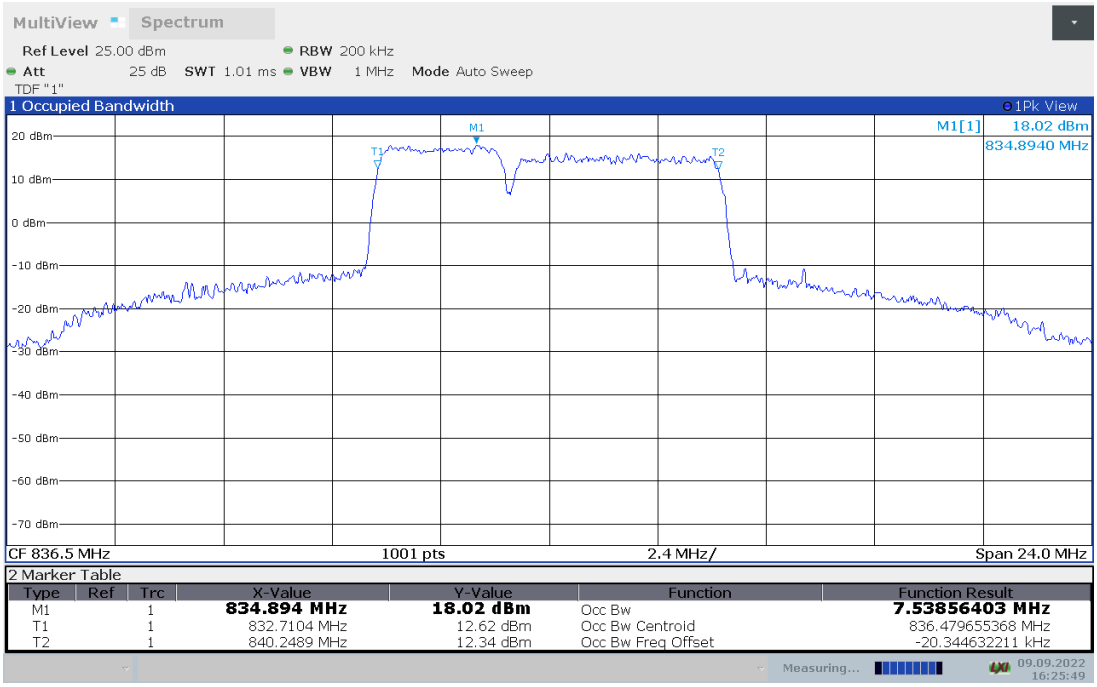
LTE band 66, 20MHz Bandwidth, 64QAM (99% BW)



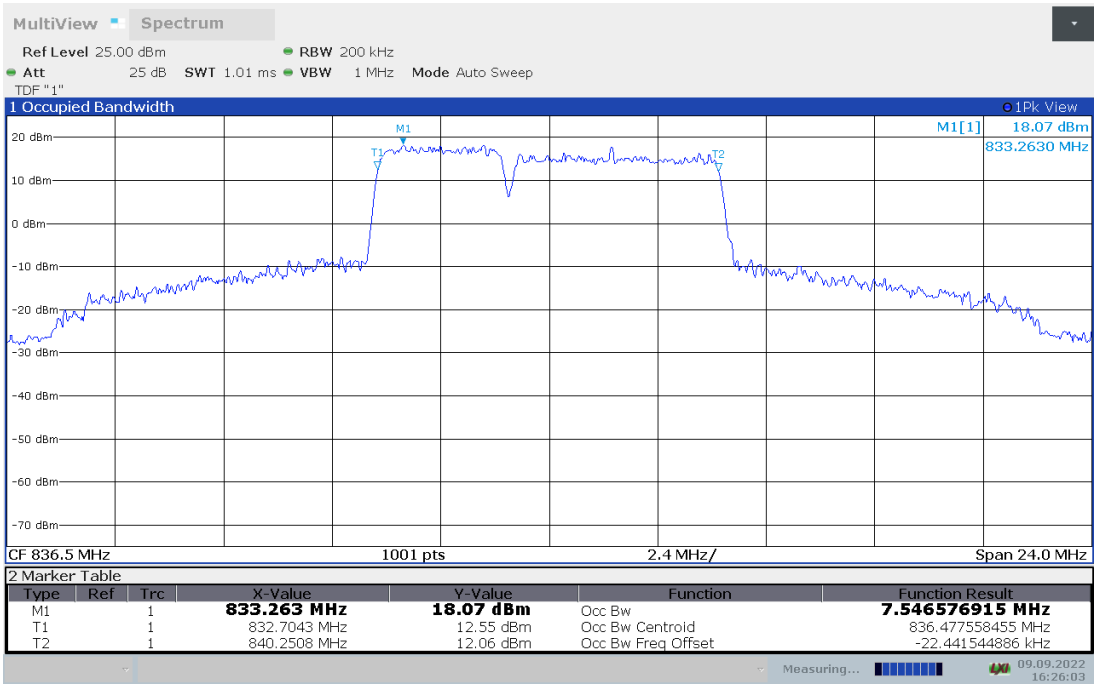
LTE CA_5B,3MHz+5MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	QPSK	16QAM	64QAM
836.5	7.539	7.547	7.547

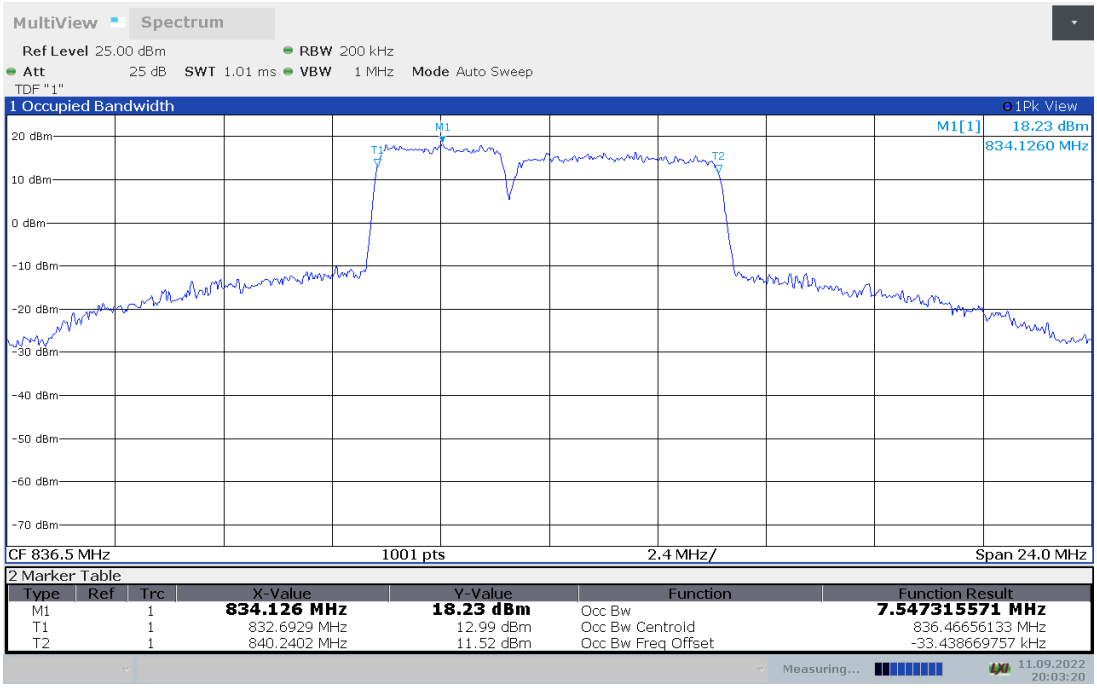
LTE CA_5B , 3MHz+5MHz Bandwidth,QPSK (99% BW)



LTE CA_5B , 3MHz+5MHz Bandwidth,16QAM (99% BW)



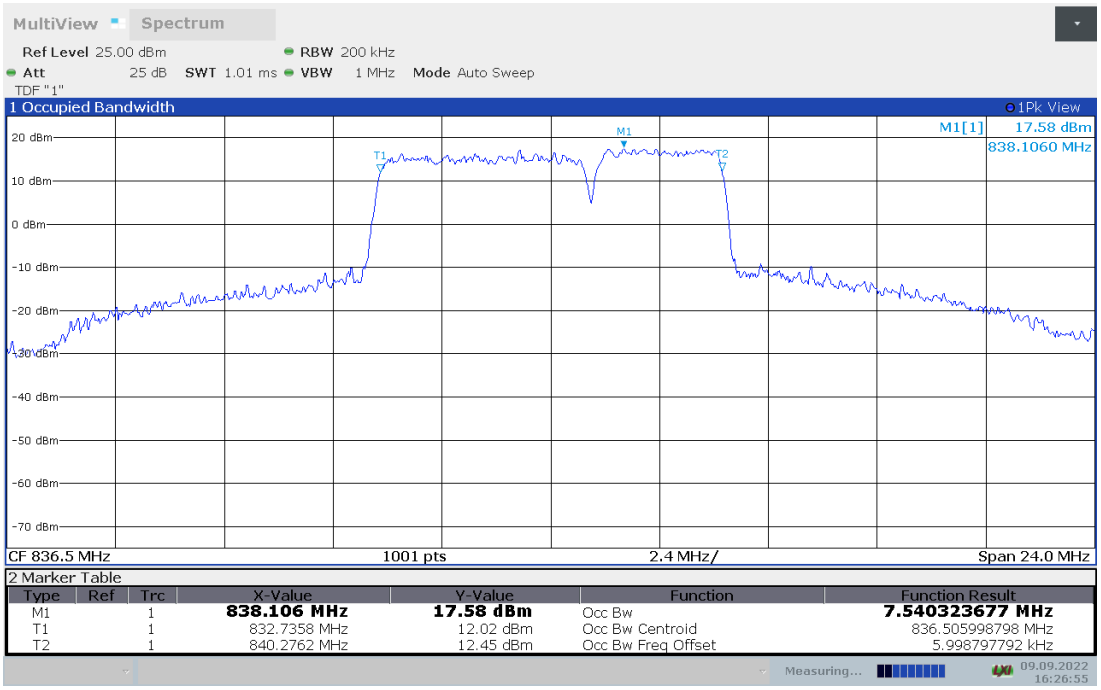
LTE CA_5B , 3MHz+5MHz Bandwidth,64QAM (99% BW)



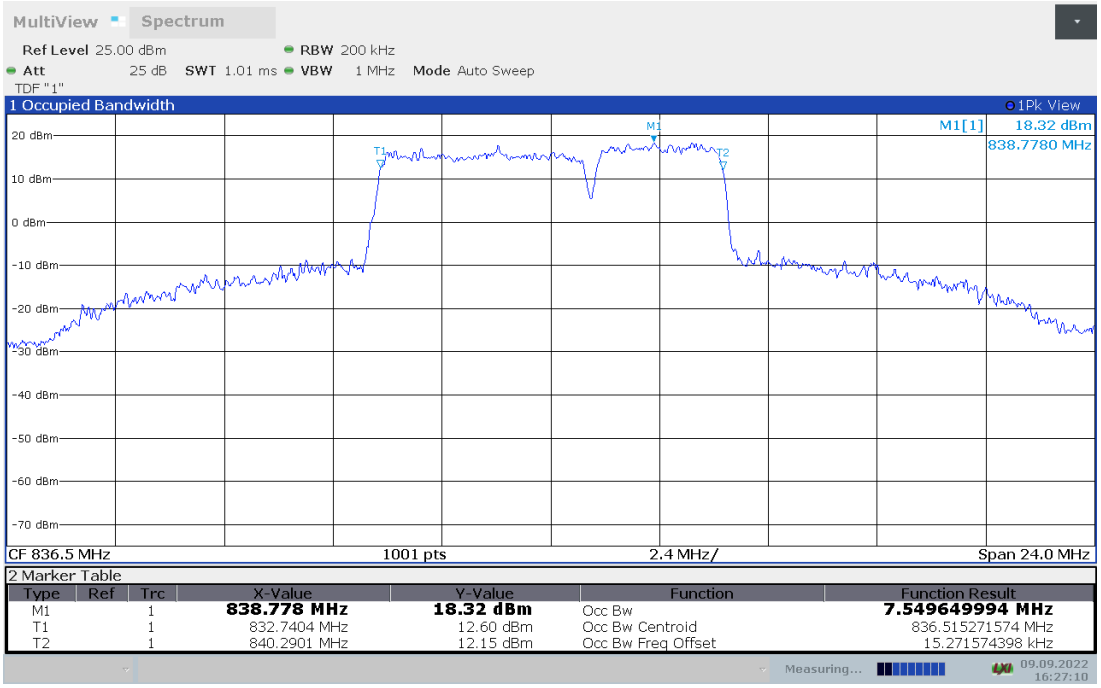
LTE CA_5B,5MHz+3MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	QPSK	16QAM	64QAM
836.5	7.540	7.550	7.539

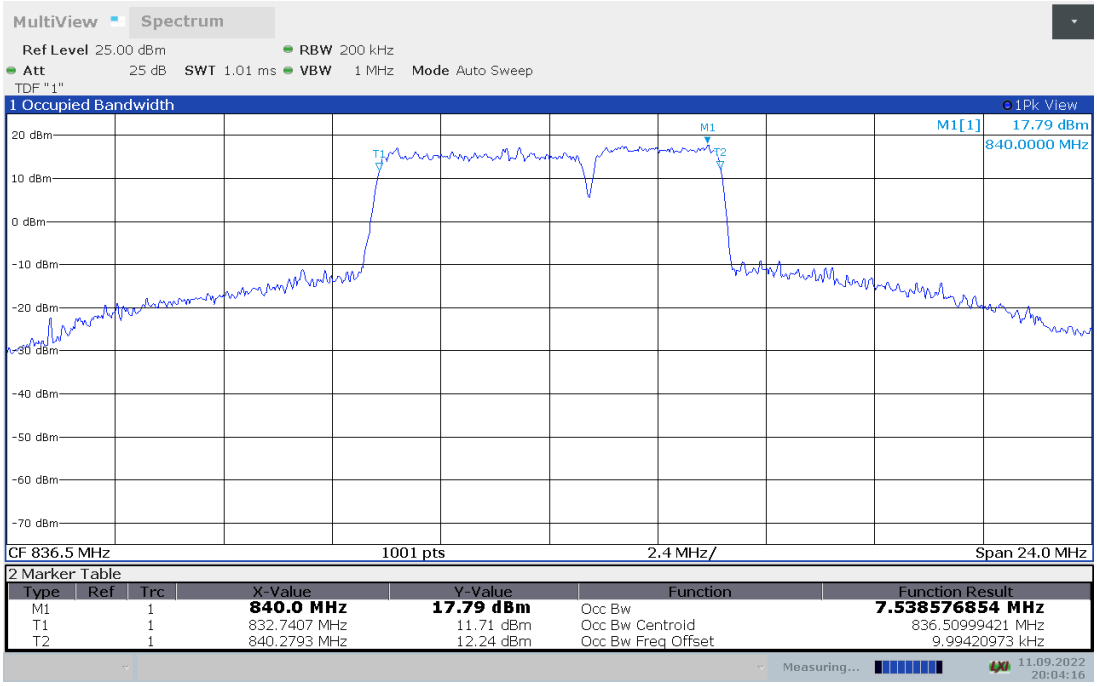
LTE CA_5B , 5MHz+3MHz Bandwidth,QPSK (99% BW)



LTE CA_5B , 5MHz+3MHz Bandwidth,16QAM (99% BW)



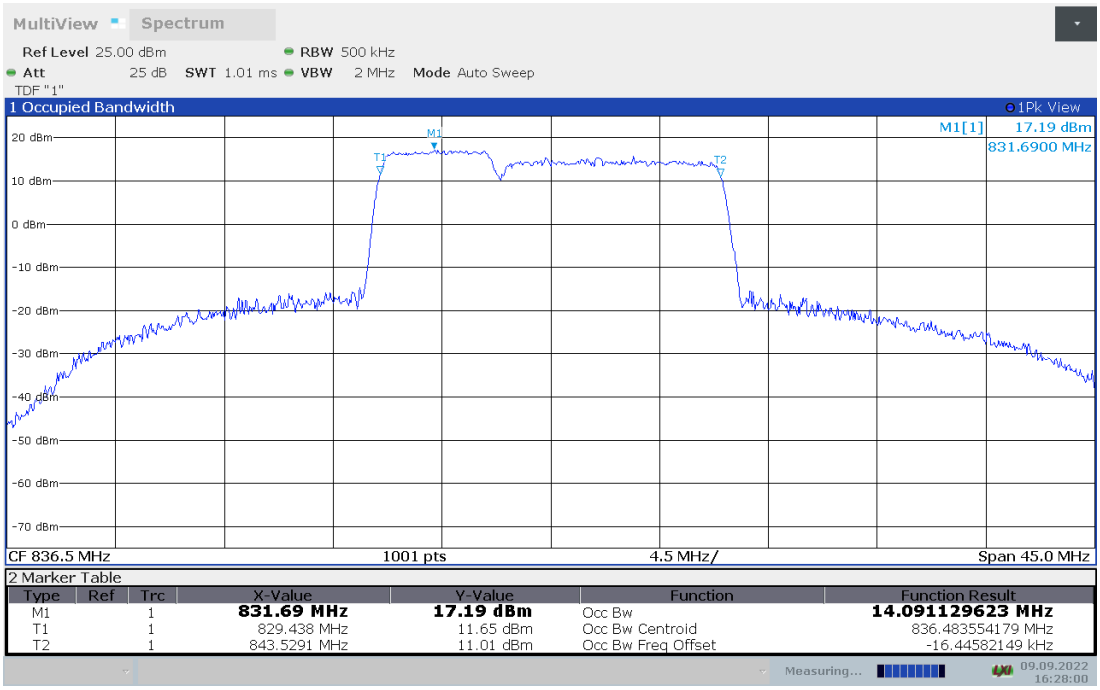
LTE CA_5B , 5MHz+3MHz Bandwidth,64QAM (99% BW)



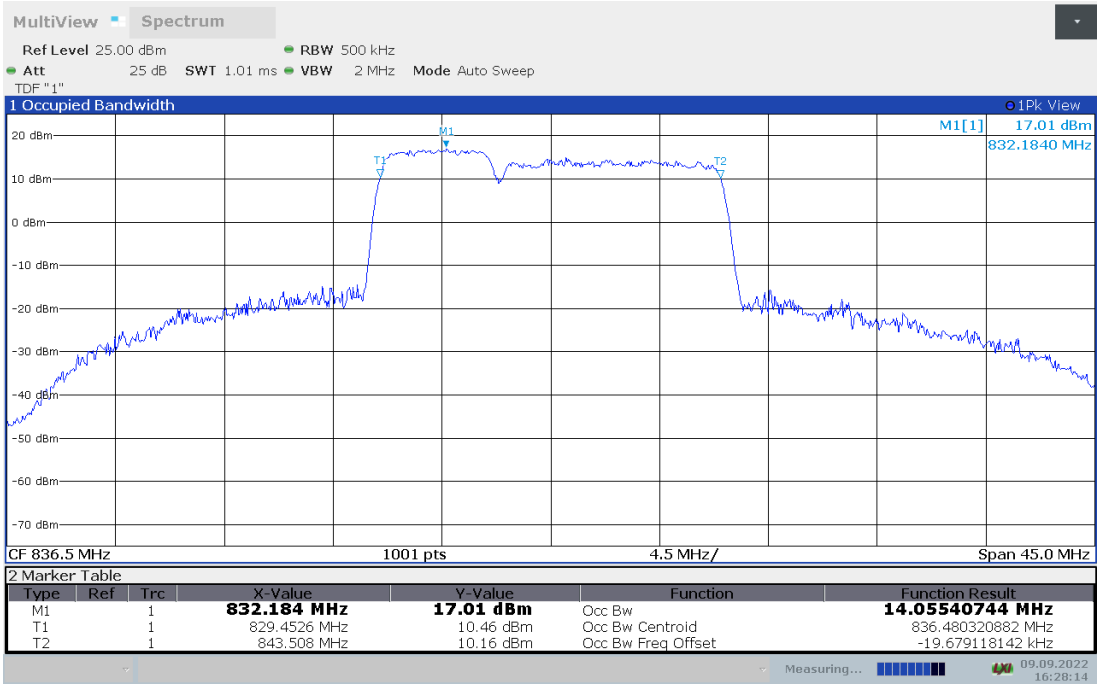
LTE CA_5B,5MHz+10MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	QPSK	16QAM	64QAM
836.5	14.091	14.055	14.093

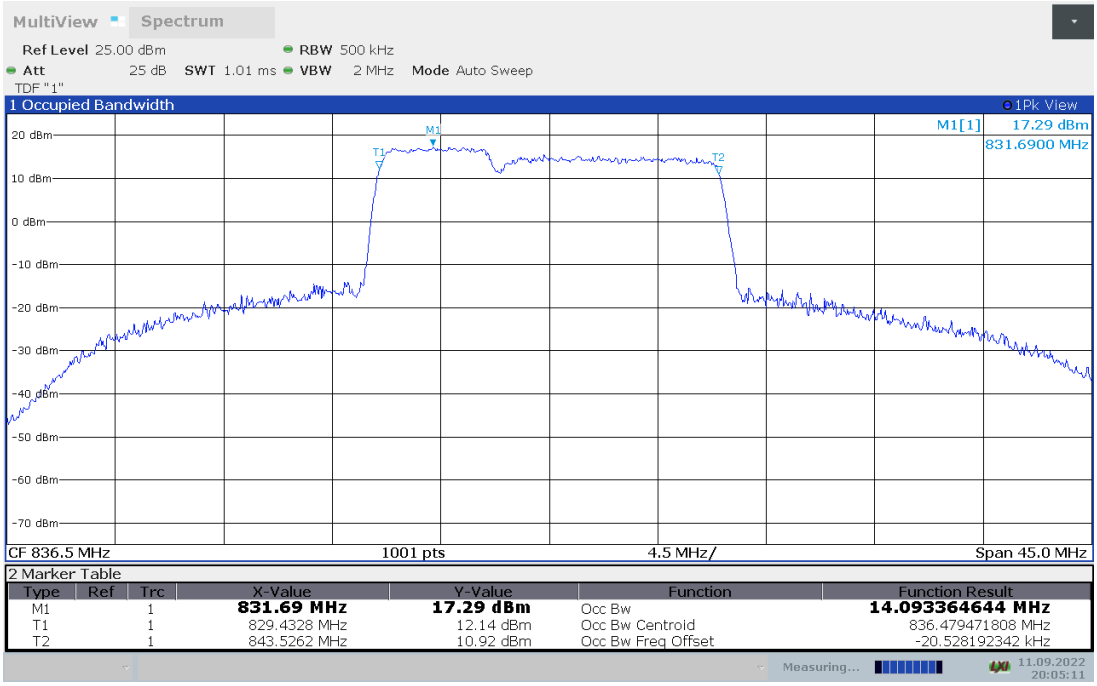
LTE CA_5B , 5MHz+10MHz Bandwidth,QPSK (99% BW)



LTE CA_5B , 5MHz+10MHz Bandwidth,16QAM (99% BW)



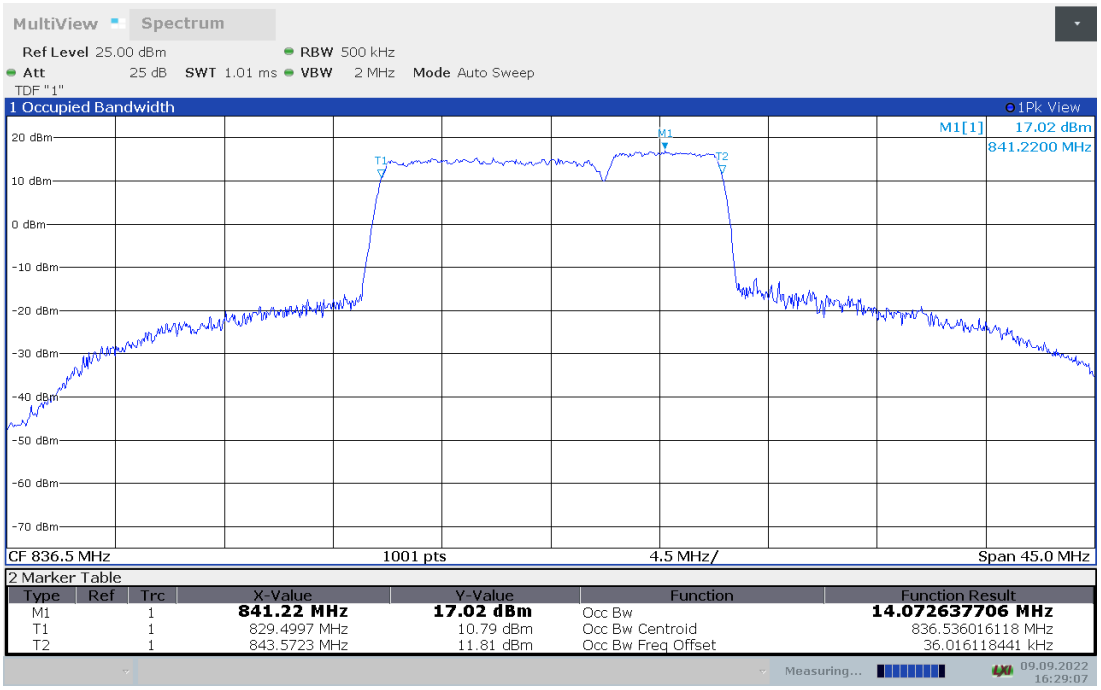
LTE CA_5B , 5MHz+10MHz Bandwidth,64QAM (99% BW)



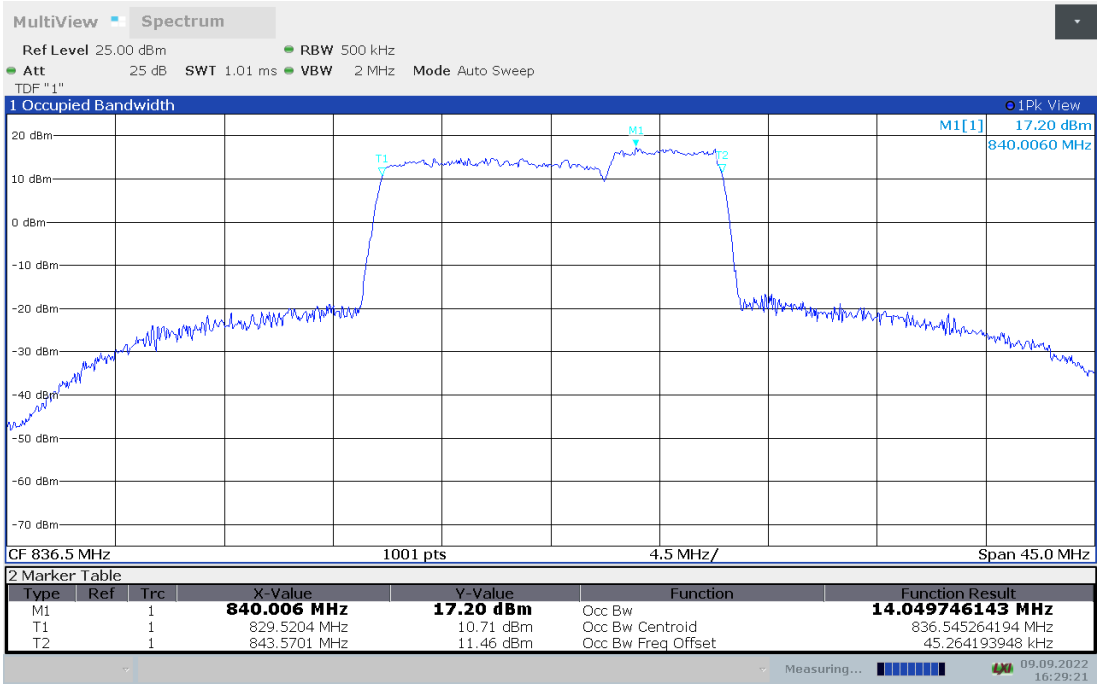
LTE CA_5B,10MHz+5MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	QPSK	16QAM	64QAM
836.5	14.073	14.050	14.075

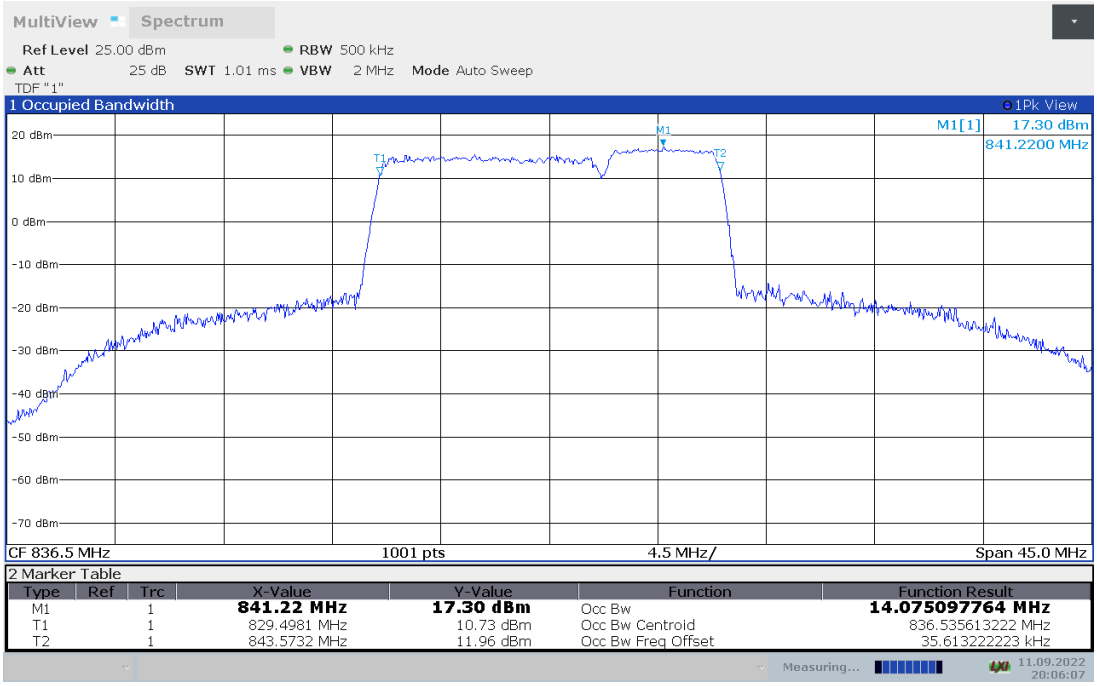
LTE CA_5B , 10MHz+5MHz Bandwidth,QPSK (99% BW)



LTE CA_5B , 10MHz+5MHz Bandwidth,16QAM (99% BW)



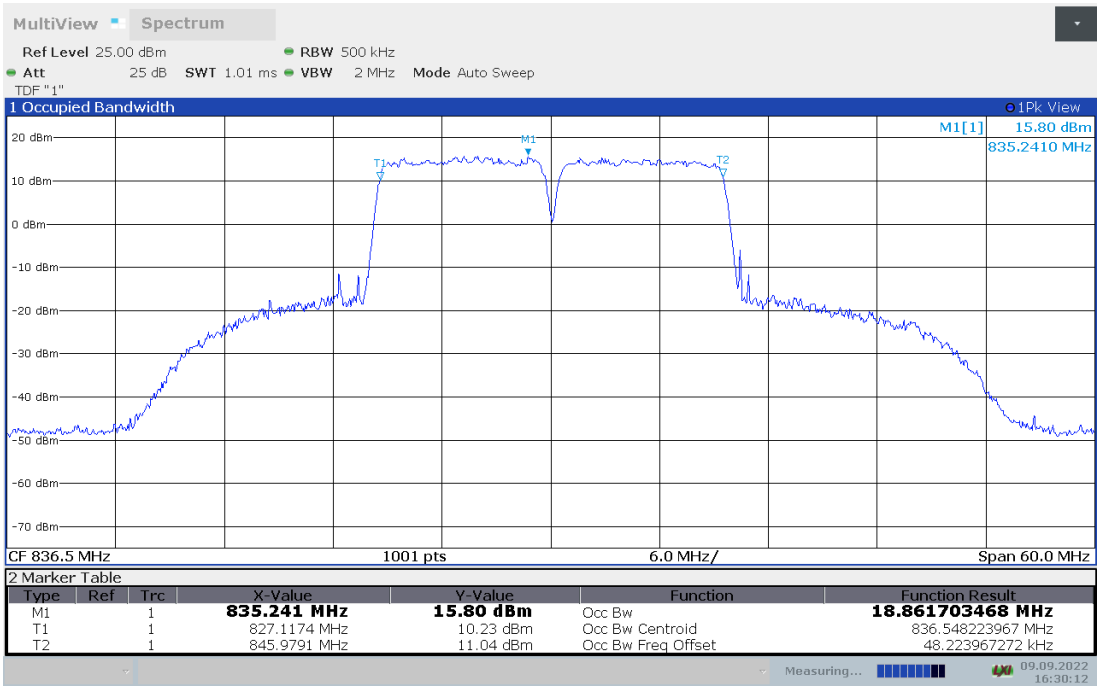
LTE CA_5B , 10MHz+5MHz Bandwidth,64QAM (99% BW)



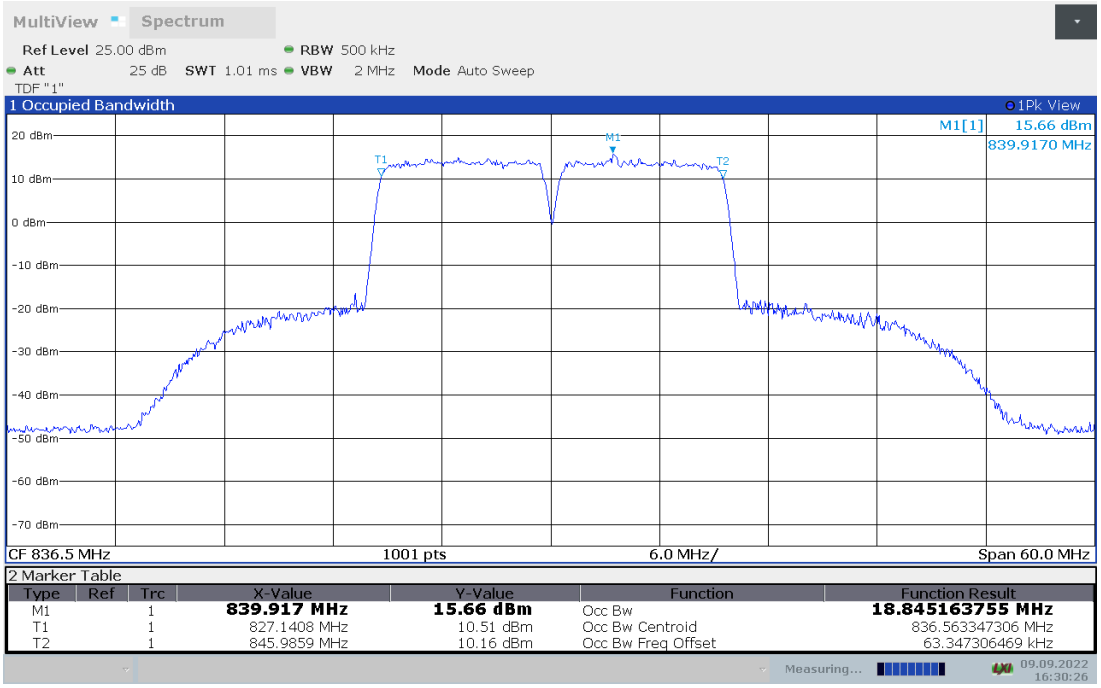
LTE CA_5B,10MHz+10MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	QPSK	16QAM	64QAM
836.5	18.862	18.845	18.864

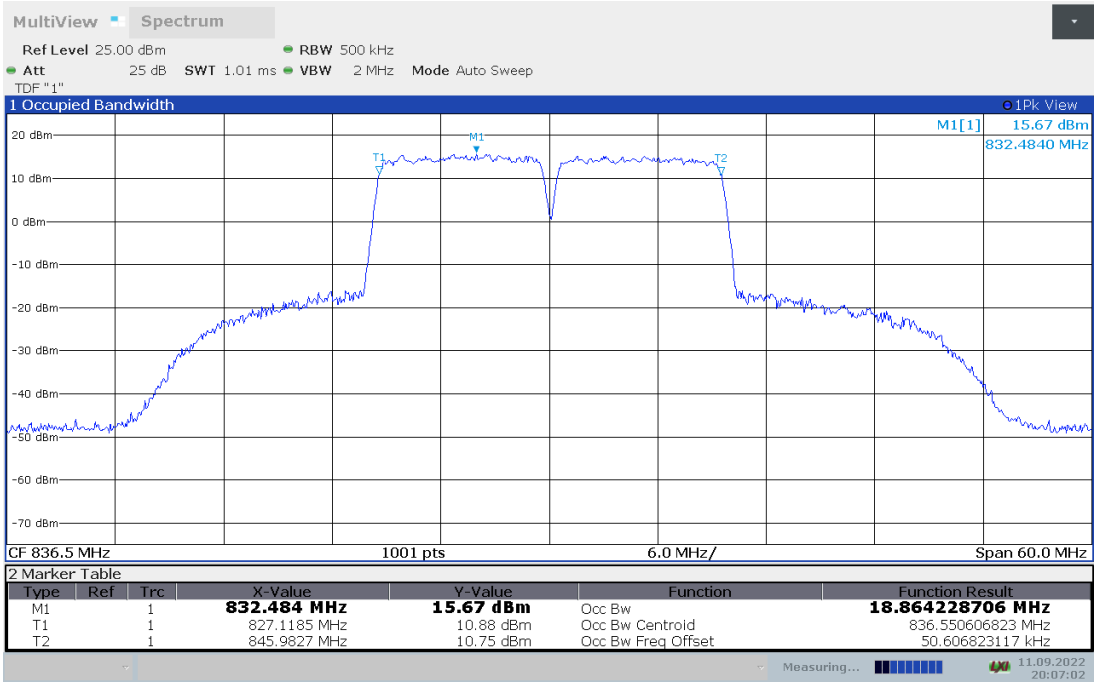
LTE CA_5B , 10MHz+10MHz Bandwidth,QPSK (99% BW)



LTE CA_5B , 10MHz+10MHz Bandwidth,16QAM (99% BW)



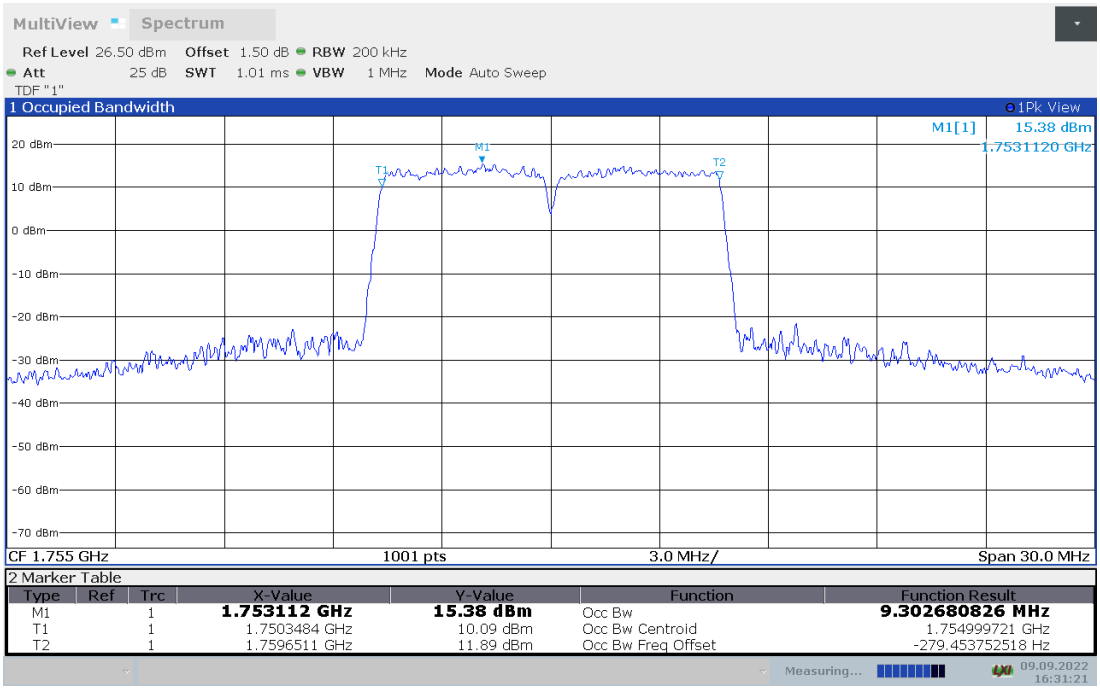
LTE CA_5B , 10MHz+10MHz Bandwidth,64QAM (99% BW)



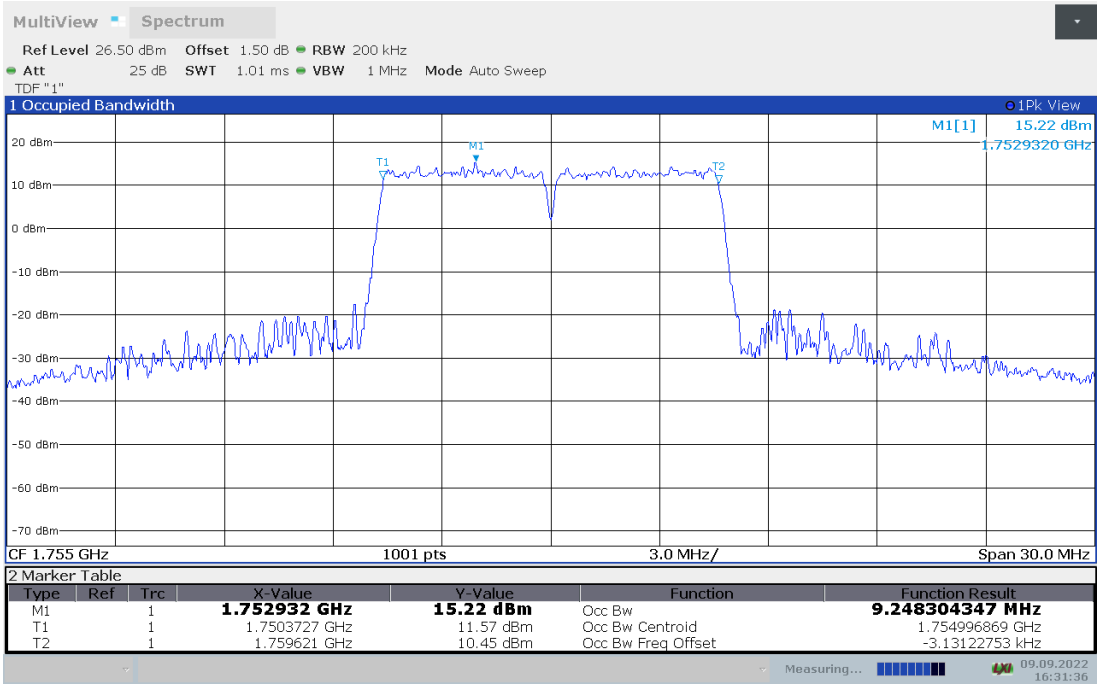
LTE CA_66B,5MHz+5MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	QPSK	16QAM	64QAM
1755	9.303	9.248	9.288

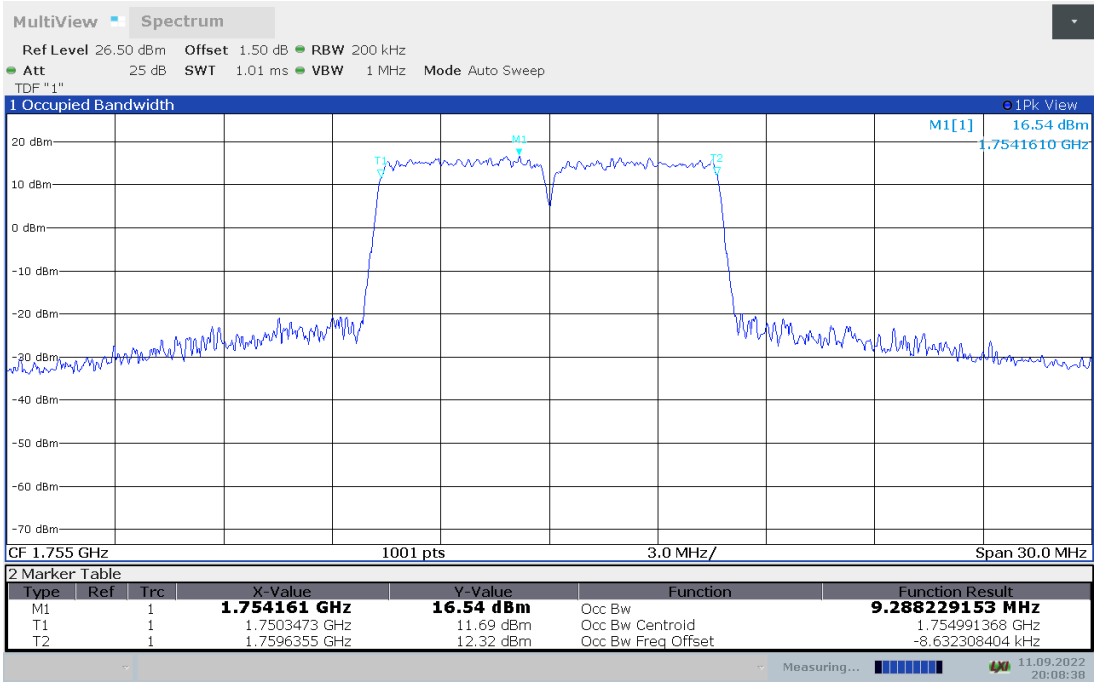
LTE CA_66B , 5MHz+5MHz Bandwidth,QPSK (99% BW)



LTE CA_66B , 5MHz+5MHz Bandwidth,16QAM (99% BW)



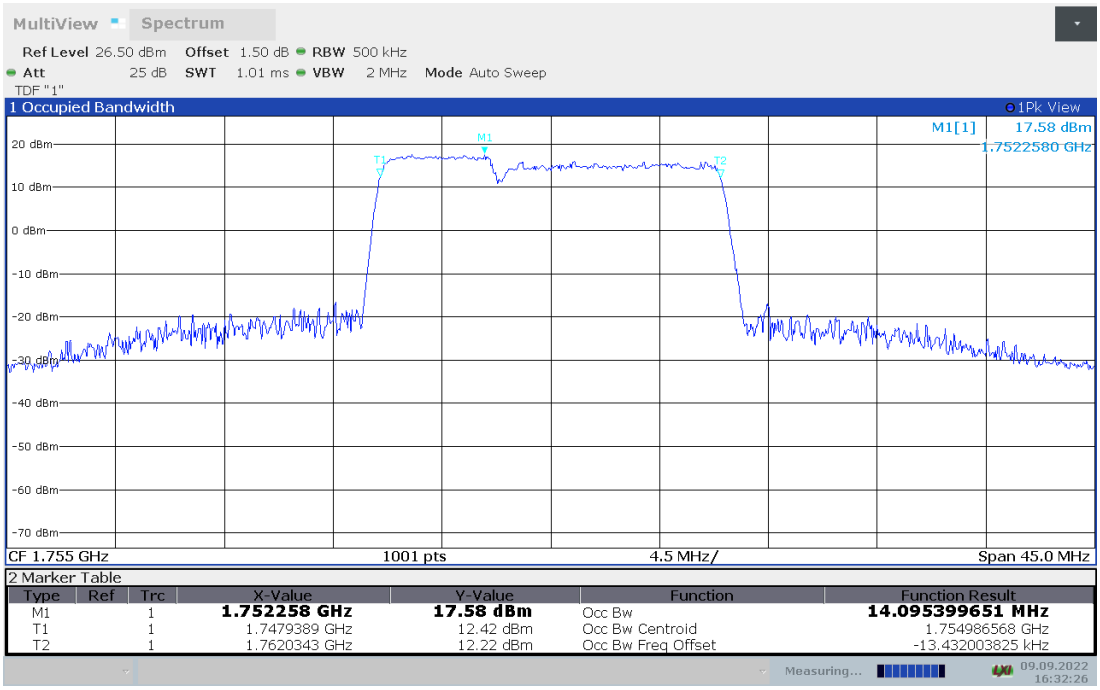
LTE CA_66B , 5MHz+5MHz Bandwidth,64QAM (99% BW)



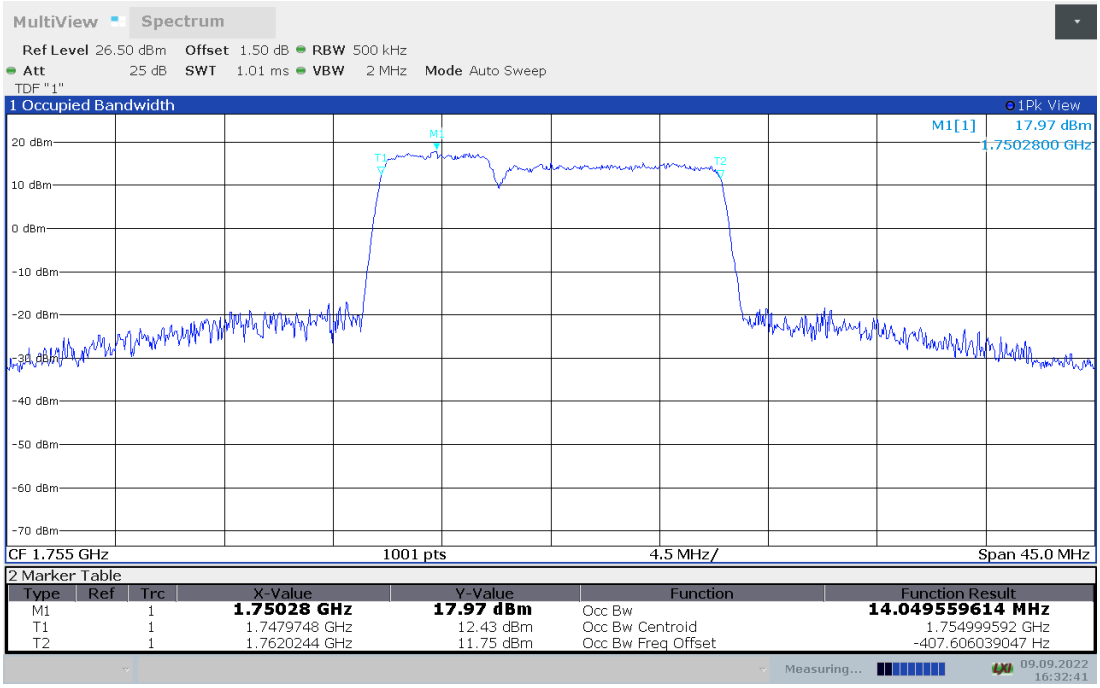
LTE CA_66B,5MHz+10MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	QPSK	16QAM	64QAM
1755	14.095	14.050	14.107

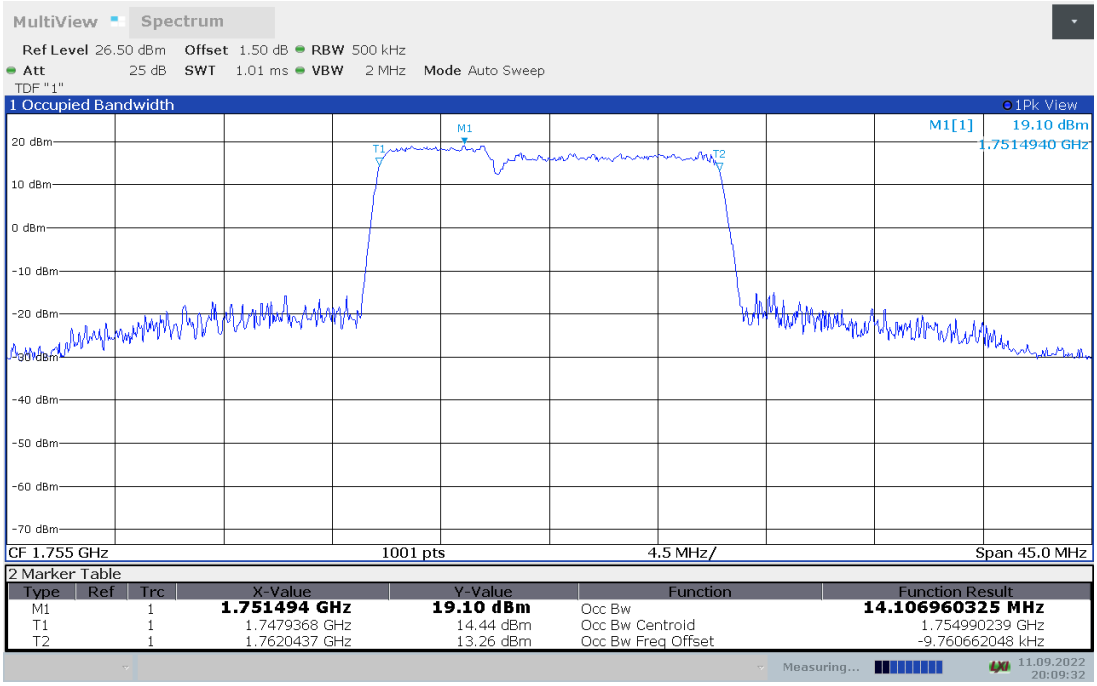
LTE CA_66B , 5MHz+10MHz Bandwidth,QPSK (99% BW)



LTE CA_66B , 5MHz+10MHz Bandwidth,16QAM (99% BW)



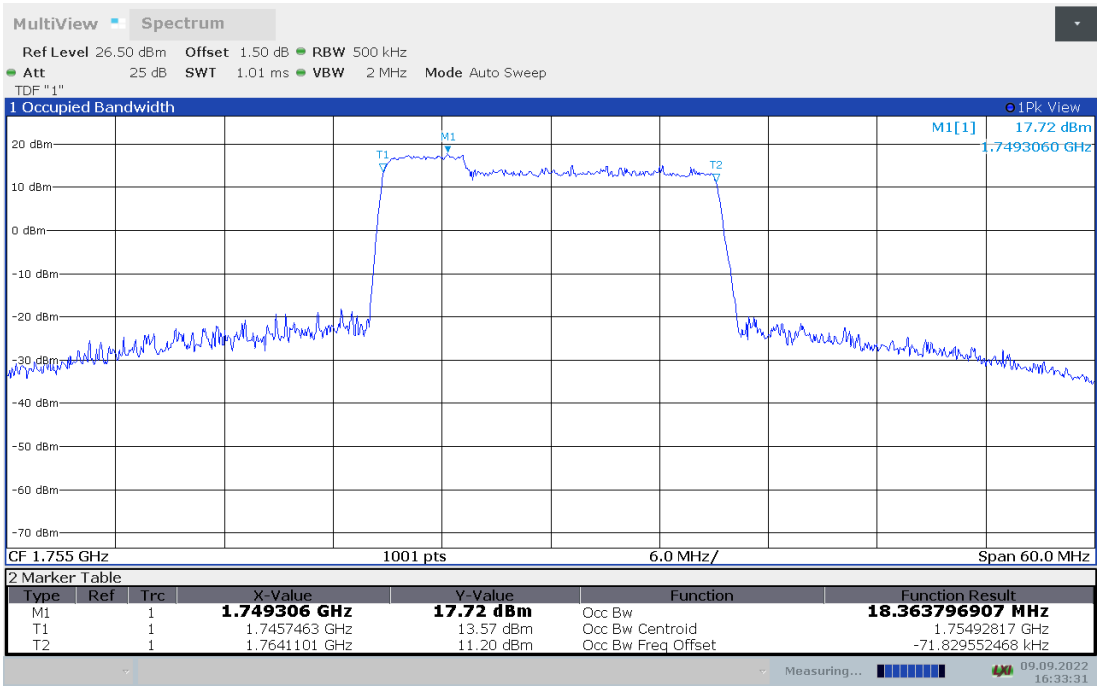
LTE CA_66B , 5MHz+10MHz Bandwidth, 64QAM (99% BW)



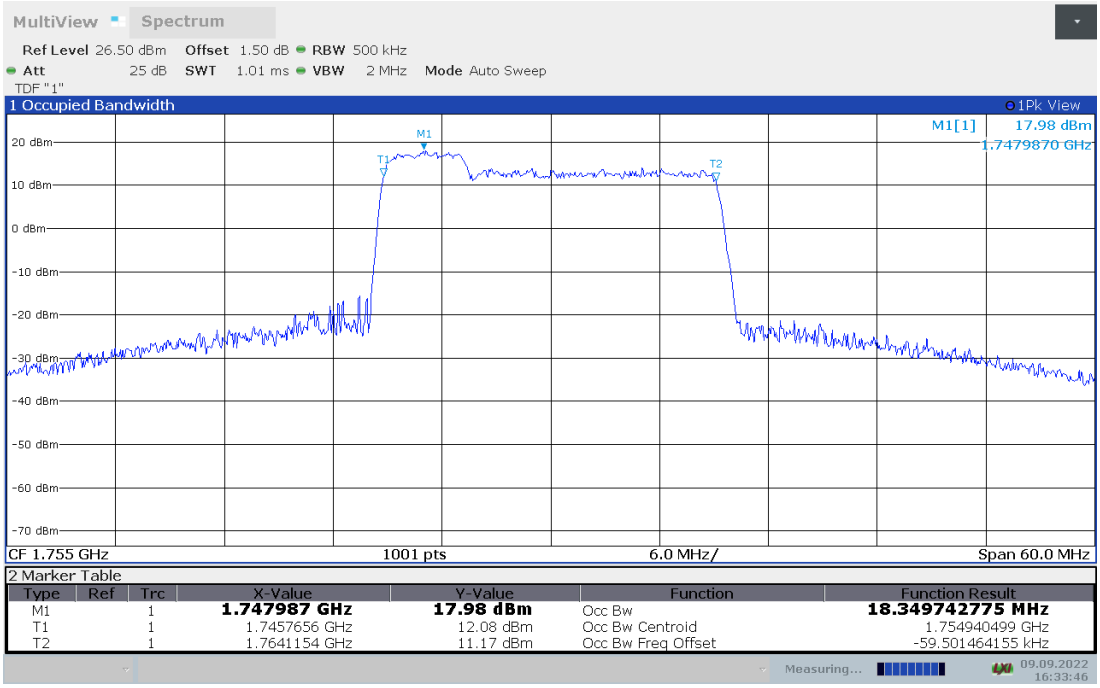
LTE CA_66B,5MHz+15MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	QPSK	16QAM	64QAM
1755	18.364	18.350	18.356

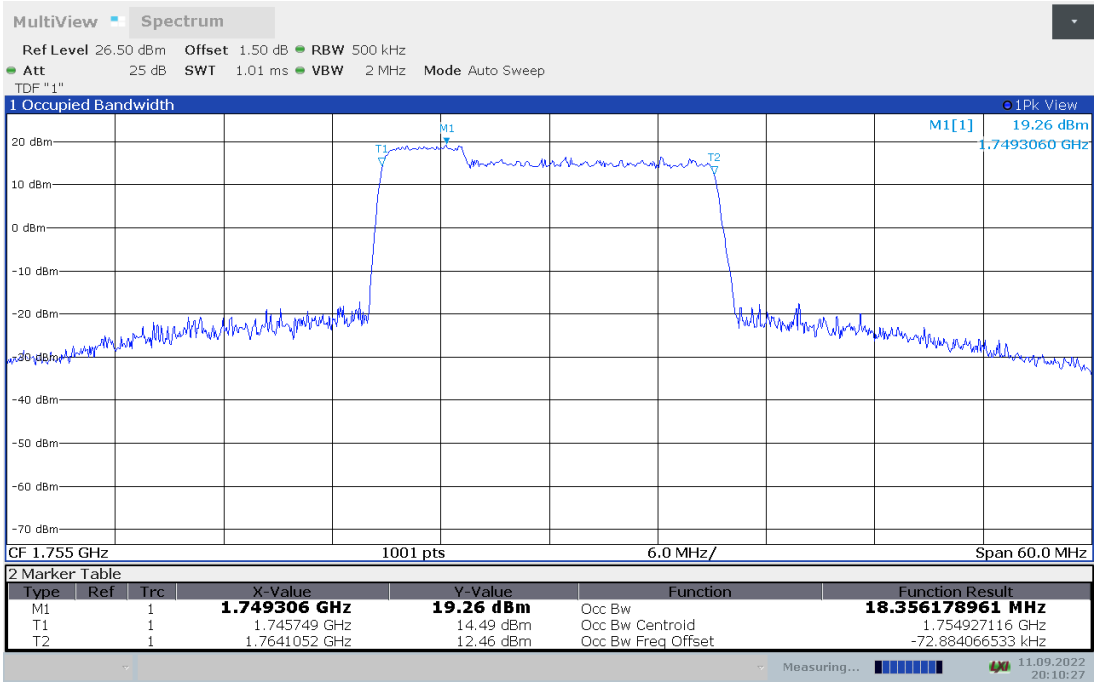
LTE CA_66B , 5MHz+15MHz Bandwidth,QPSK (99% BW)



LTE CA_66B , 5MHz+15MHz Bandwidth,16QAM (99% BW)



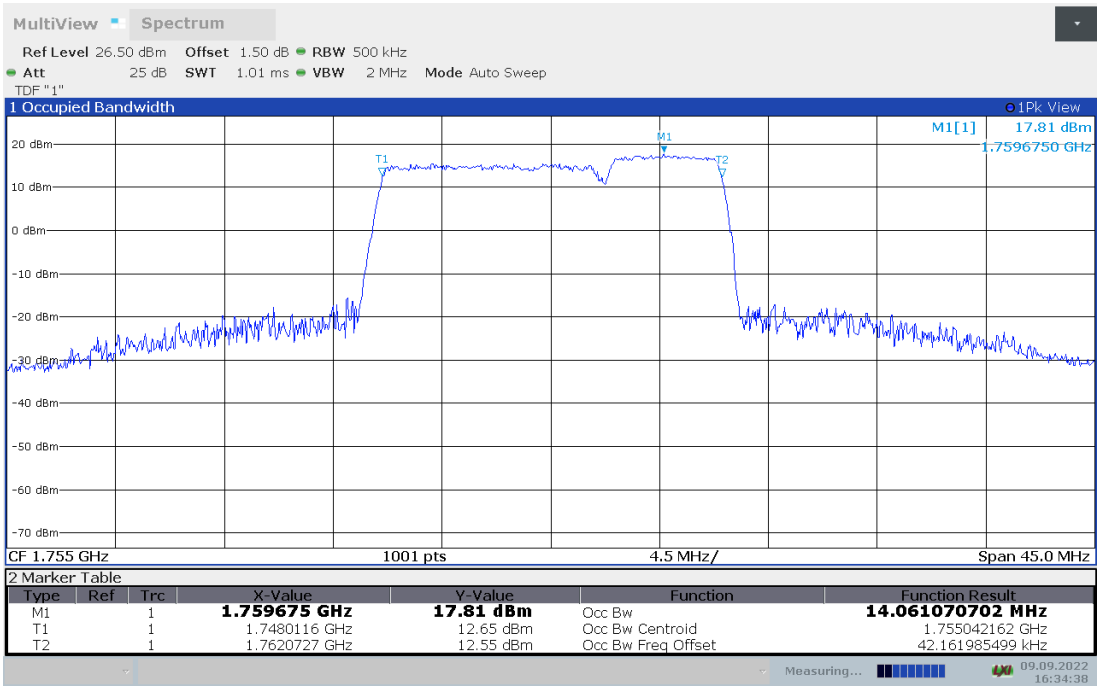
LTE CA_66B , 5MHz+15MHz Bandwidth, 64QAM (99% BW)



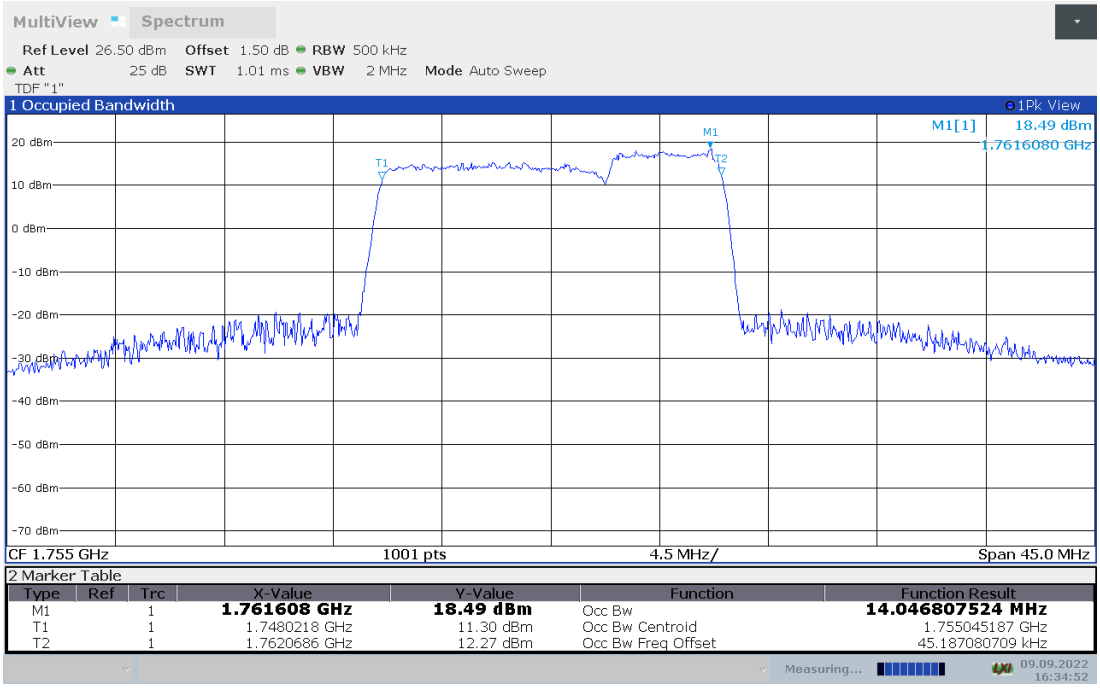
LTE CA_66B,10MHz+5MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	QPSK	16QAM	64QAM
1755	14.061	14.047	14.077

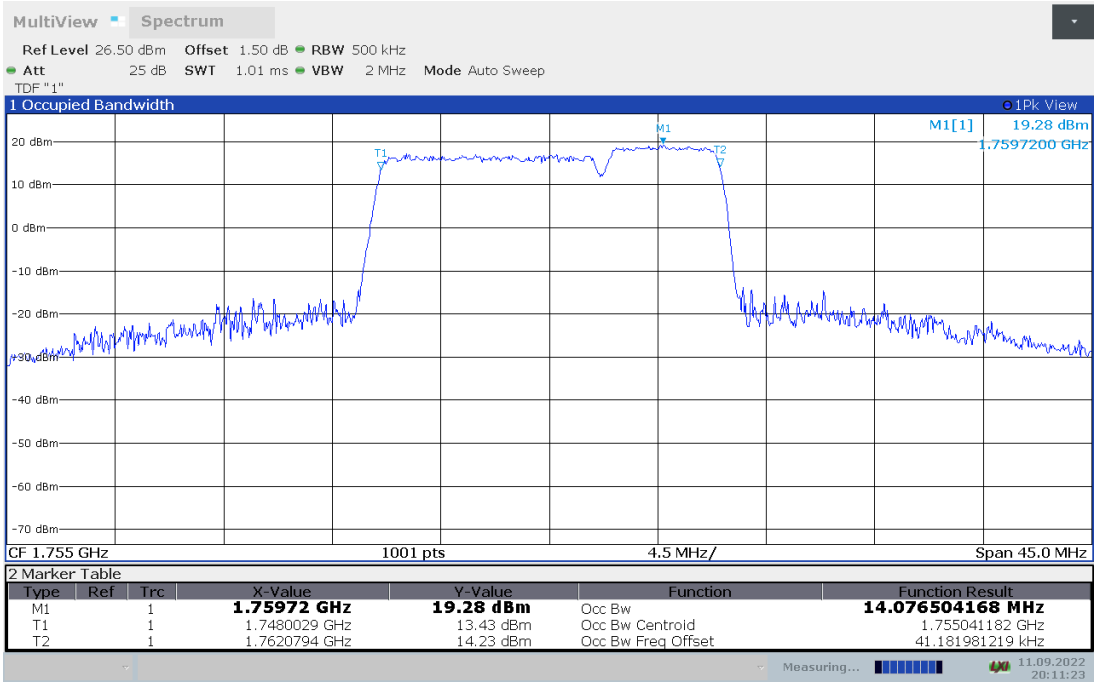
LTE CA_66B , 10MHz+5MHz Bandwidth,QPSK (99% BW)



LTE CA_66B , 10MHz+5MHz Bandwidth,16QAM (99% BW)



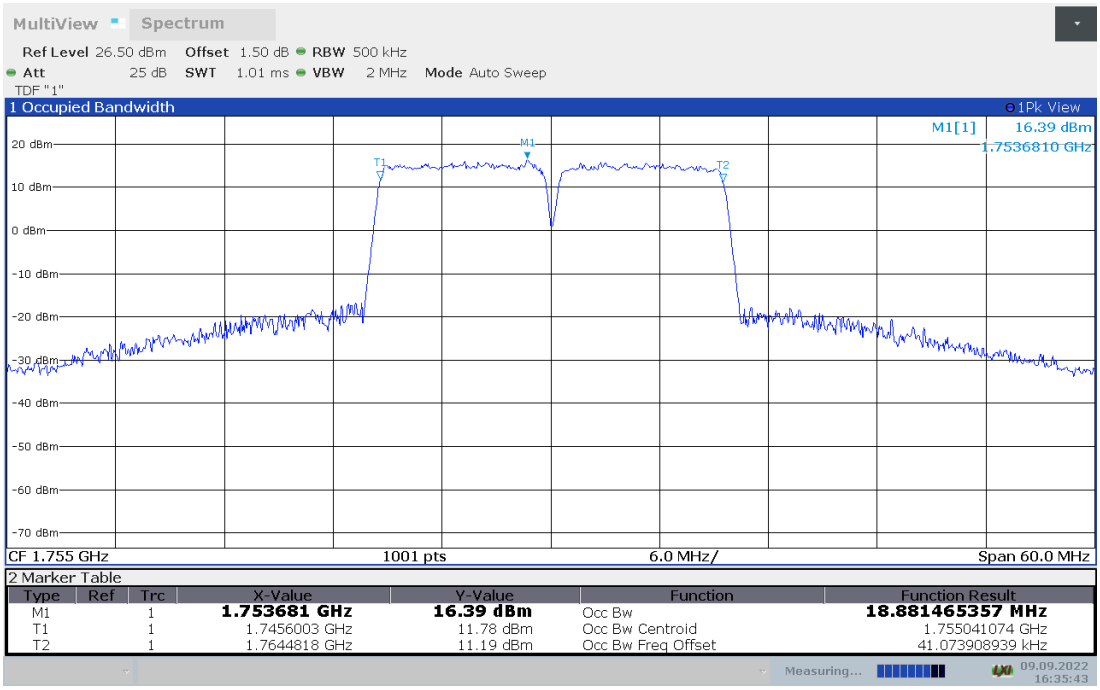
LTE CA_66B , 10MHz+5MHz Bandwidth, 64QAM (99% BW)



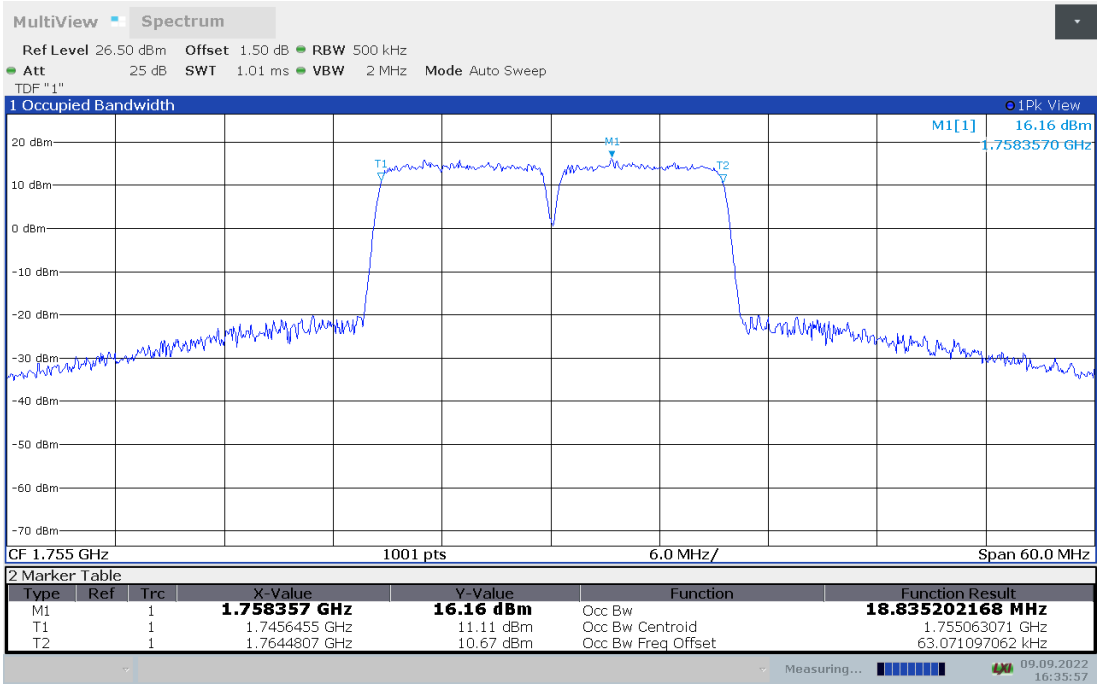
LTE CA_66B,10MHz+10MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	QPSK	16QAM	64QAM
1755	18.881	18.835	18.880

LTE CA_66B , 10MHz+10MHz Bandwidth,QPSK (99% BW)



LTE CA_66B , 10MHz+10MHz Bandwidth,16QAM (99% BW)



LTE CA_66B , 10MHz+10MHz Bandwidth, 64QAM (99% BW)