



LTE TEST REPORT

No.25T04Z100699-003

for

TCL Communication Ltd.

Tablet PC

Model Name: 8189S

FCC ID: 2ACCJB233

with

Hardware Version: 03

Software Version: 4PA5

Issued Date: 2025-06-18

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 CTTL.

Test Laboratory:

CTTL-Telecommunication Technology Labs, CAICT

No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191.

Tel:+86(0)10-62304633-2512, Fax:+86(0)10-62304633-2504

Email: cttl_terminals@caict.ac.cn, website: www.caict.ac.cn



No.25T04Z100699-003

REPORT HISTORY

Report Number	Revision	Description	Issue Date
25T04Z100699-003	Rev.0	1 st edition	2025-06-18

Note: the latest revision of the test report supersedes all previous version.

CONTENTS

1. TEST LABORATORY	4
1.1. INTRODUCTION & ACCREDITATION	4
1.2. TESTING LOCATION	4
1.3. TESTING ENVIRONMENT	4
1.4. PROJECT DATA	4
1.5. SIGNATURE	4
2. CLIENT INFORMATION	5
2.1. APPLICANT INFORMATION	5
2.2. MANUFACTURER INFORMATION	5
3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT (AE)	6
3.1. ABOUT EUT	6
3.2. INTERNAL IDENTIFICATION OF EUT USED DURING THE TEST	6
3.3. INTERNAL IDENTIFICATION OF AE USED DURING THE TEST	6
4. REFERENCE DOCUMENTS	7
4.1. DOCUMENTS SUPPLIED BY APPLICANT	7
4.2. REFERENCE DOCUMENTS FOR TESTING	7
5. SUMMARY OF TEST RESULT	8
6. TEST EQUIPMENT UTILIZED	13
7. MEASUREMENT UNCERTAINTY	14
ANNEX A: MEASUREMENT RESULTS	15
A.1 OUTPUT POWER	15
A.2 EMISSION LIMIT	71
A.3 FREQUENCY STABILITY	94
A.4 OCCUPIED BANDWIDTH	102
A.5 EMISSION BANDWIDTH	170
A.6 BAND EDGE COMPLIANCE	238
A.7 CONDUCTED SPURIOUS EMISSION	363
A.8 PEAK-TO-AVERAGE POWER RATIO	381
ANNEX B: ACCREDITATION CERTIFICATE	383

1. Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under American Association for Laboratory Accreditation (A2LA) with lab code 7049.01, and is also an FCC accredited test laboratory (CN1349), and ISED accredited test laboratory (CAB identifier:CN0066). The detail accreditation scope can be found on A2LA website.

1.2. Testing Location

Location 1: CTTL (huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing,
P. R. China 100191

Location 2: CTTL (BDA)

Address: No.18A, Kangding Street, Beijing Economic-Technology
Development Area, Beijing, P. R. China 100176

1.3. Testing Environment

Normal Temperature: 15-35℃

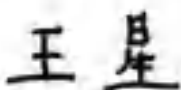
Relative Humidity: 20-75%

1.4. Project Data

Testing Start Date: 2025-04-10

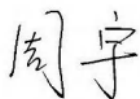
Testing End Date: 2025-06-16

1.5. Signature



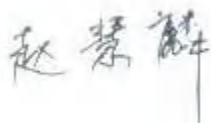
Wang Xing

(Prepared this test report)



Zhou Yu

(Reviewed this test report)



Zhao Hui Lin

(Approved this test report)

2. Client Information

2.1. Applicant Information

Company Name: TCL Communication Ltd.
Address /Post: 5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science
Park, Shatin, NT, Hong Kong
Contact: Ting Wang
Email: ting.wang.hz@tcl.com
Telephone: +86 752 2639091

2.2. Manufacturer Information

Company Name: TCL Communication Ltd.
Address /Post: 5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science
Park, Shatin, NT, Hong Kong
Contact: Ting Wang
Email: ting.wang.hz@tcl.com
Telephone: +86 752 2639091

3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description	Tablet PC
Model Name	8189S
FCC ID	2ACCJB233
Antenna	Embedded
Output power	25.09 dBm maximum EIRP measured for LTE B41
Extreme Voltage	3.5VDC to 4.4VDC (nominal: 3.85VDC)
Extreme Temperature	0°C to +60°C

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

3.2. Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version	Date of receipt
UT09a	357684210036075	03	4PA5	2025-04-02
UT37a	357684210037701	03	4PA5	2025-04-27

UT37a was used for emission limit test and UT09a was used for other testing cases.

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

3.3. Internal Identification of AE used during the test

AE ID*	Description
AE1	Battery
AE1	
Model	TLp058D7
Manufacturer	Dongguan Veken Battery Co., Ltd.
Capacitance	6000mAh

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

4. Reference Documents

4.1. Documents supplied by applicant

EUT parameters are supplied by the customer, which are the bases of testing. CAICT is not responsible for the accuracy of customer supplied technical information that may affect the test results (for example, antenna gain and loss of customer supplied cable).

4.2. Reference Documents for testing

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

Reference	Title	Version
FCC Part 24	PERSONAL COMMUNICATIONS SERVICES	10-1-23 Edition
FCC Part 22	PUBLIC MOBILE SERVICES	10-1-23 Edition
FCC Part 27	MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES	10-1-23 Edition
FCC Part 90	PRIVATE LAND MOBILE RADIO SERVICES	10-1-23 Edition
FCC Part 96	CITIZENS BROADBAND RADIO SERVICE	10-1-23 Edition
ANSI/TIA-603-E	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards	2016
ANSI C63.26	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services	2015
KDB 971168 D01	MEASUREMENT GUIDANCE FOR CERTIFICATION OF LICENSED DIGITAL TRANSMITTERS	v03r01
KDB 940660 D01	CERTIFICATION AND TEST PROCEDURES FOR CITIZENS BROADBAND RADIO SERVICE DEVICES AUTHORIZED UNDER PART 96	v03

5. Summary of Test Result

LTE Band 7

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	27.50	P
2	Emission Limit	2.1051/27.53	P
3	Frequency Stability	2.1055	P
4	Occupied Bandwidth	2.1049	P
5	Emission Bandwidth	27.53	P
6	Band Edge Compliance	27.53	P
7	Conducted Spurious Emission	27.53	P
8	Peak-to-Average Power Ratio	27.50	P

LTE Band 12 (17)

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	27.50	P
2	Emission Limit	2.1051/27.53	P
3	Frequency Stability	2.1055	P
4	Occupied Bandwidth	2.1049	P
5	Emission Bandwidth	27.53	P
6	Band Edge Compliance	27.53	P
7	Conducted Spurious Emission	27.53	P
8	Peak-to-Average Power Ratio	27.50	P

LTE Band 13

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	27.50	P
2	Emission Limit	2.1051/27.53	P
3	Frequency Stability	2.1055	P
4	Occupied Bandwidth	2.1049	P
5	Emission Bandwidth	27.53	P
6	Band Edge Compliance	27.53	P
7	Conducted Spurious Emission	27.53	P
8	Peak-to-Average Power Ratio	27.50	P

LTE Band 14

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	90.542	P
2	Emission Limit	2.1051/90.543	P
3	Frequency Stability	2.1055	P
4	Occupied Bandwidth	2.1049	P
5	Emission Bandwidth	2.1049	P
6	Band Edge Compliance	90.543	P
7	Conducted Spurious Emission	90.543	P

LTE Band 25 (2)

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	24.232	P
2	Emission Limit	2.1051/24.238	P
3	Frequency Stability	2.1055	P
4	Occupied Bandwidth	2.1049	P
5	Emission Bandwidth	24.238	P
6	Band Edge Compliance	24.238	P
7	Conducted Spurious Emission	24.238	P
8	Peak-to-Average Power Ratio	24.232	P

LTE Band 26_Part90 (814MHz~824MHz)

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	90.635	P
2	Emission Limit	2.1051/90.691	P
3	Frequency Stability	2.1055	P
4	Occupied Bandwidth	2.1049	P
5	Emission Bandwidth	2.1049	P
6	Band Edge Compliance	90.691	P
7	Conducted Spurious Emission	90.691	P

LTE Band 26_Part22 (824MHz~849MHz) (5)

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	22.913	P
2	Emission Limit	2.1051/22.917	P
3	Frequency Stability	2.1055	P
4	Occupied Bandwidth	2.1049	P
5	Emission Bandwidth	22.917	P
6	Band Edge Compliance	22.917	P
7	Conducted Spurious Emission	22.917	P

LTE Band 30

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	27.50	P
2	Emission Limit	2.1051/27.53	P
3	Frequency Stability	2.1055	P
4	Occupied Bandwidth	2.1049	P
5	Emission Bandwidth	27.53	P
6	Band Edge Compliance	27.53	P
7	Conducted Spurious Emission	27.53	P
8	Peak-to-Average Power Ratio	27.50	P

LTE Band 41 (38)

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	27.50	P
2	Emission Limit	2.1051/27.53	P
3	Frequency Stability	2.1055	P
4	Occupied Bandwidth	2.1049	P
5	Emission Bandwidth	27.53	P
6	Band Edge Compliance	27.53	P
7	Conducted Spurious Emission	27.53	P
8	Peak-to-Average Power Ratio	27.50	P

LTE Band 48

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	96.41	P
2	Emission Limit	96.41	P
3	Frequency Stability	2.1055	P
4	Occupied Bandwidth	2.1049	P
5	Emission Bandwidth	96.41	P
6	Band Edge Compliance	96.41	P
7	Conducted Spurious Emission	96.41	P
8	Peak-to-Average Power Ratio	96.41	P

LTE Band 66 (4)

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	27.50	P
2	Emission Limit	2.1051/27.53	P
3	Frequency Stability	2.1055	P
4	Occupied Bandwidth	2.1049	P
5	Emission Bandwidth	27.53	P
6	Band Edge Compliance	27.53	P
7	Conducted Spurious Emission	27.53	P
8	Peak-to-Average Power Ratio	27.50	P

LTE Band 71

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	27.50	P
2	Emission Limit	2.1051/27.53	P
3	Frequency Stability	2.1055	P
4	Occupied Bandwidth	2.1049	P
5	Emission Bandwidth	27.53	P
6	Band Edge Compliance	27.53	P
7	Conducted Spurious Emission	27.53	P
8	Peak-to-Average Power Ratio	27.50	P

Terms used in Verdict column

P	Pass. The EUT complies with the essential requirements in the standard.
NP	Not Performed. The test was not performed by CTTL.
NA	Not Applicable. The test was not applicable.
BR	Re-use test data from basic model report.
F	Fail. The EUT does not comply with the essential requirements in the standard.

All the test results are based on normal power.

Measurement uncertainty is not taken into account when stating conformity with a specified requirement.

LTE Band 25, Band 66, Band 26, Band 12 and Band 41 overlap the entire frequency range of LTE Band 2, Band 4, Band 5, Band 17 and Band 38. Therefore, test data provided in this report covers Band 2, Band 4, Band 5, Band 17, Band 38 as well as Band 25, Band 66, Band 26, Band 12, Band 41.

LTE Band 41 is tested by power class 2.

Explanation of worst-case configuration

The worst-case scenario for all measurements is based on the conducted output power measurement investigation results. Output power was measured on QPSK, 16QAM, 64QAM and 256QAM modulations. It was found that QPSK was the worst case. All testing was performed using QPSK modulations to represent the worst case unless otherwise stated. The test results shown in the following sections represent the worst case emission.

6. Test Equipment Utilized

Description	Type	Series Number	Manufacturer	Cal Due Date	Calibration Interval
Wideband Radio Communication Tester	CMW500	159082	R&S	2025-12-03	1 year
Spectrum Analyzer	FSV	101576	R&S	2026-05-05	1 year
Signal&Spectrum Analyzer	FSW	104038	R&S	2025-07-02	1 year
Climate chamber	SH-241	92004642	ESPEC	2025-10-29	1 year
Universal Radio Communication Tester	CMW500	143008	R&S	2026-01-15	1 year
Test Receiver	ESW44	103144	R&S	2026-01-05	1 year
EMI Antenna	LB-180400-25-C-KF	2110084000006	Yinglian	2025-05-15	1 year
EMI Antenna	9117	167	Schwarzbeck	2026-10-15	1 year
EMI Antenna	VULB 9163	9163-482	Schwarzbeck	2025-05-19	1 year
EMI Antenna	3115	00146404	ETS	2025-05-16	1 year
EMI Antenna	3116	2663	ETS	2026-03-03	1 year
Signal Generator	SMF100A	101295	R&S	2026-02-16	1 year
Universal Radio Communication Tester	MT8821C	62724459649	Anritsu	2026-07-06	2 years

Note: Only the latest Cal Due Dates of equipment are listed above and all equipment is in valid calibration period when used.

7. Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.26. All measurement uncertainty values are shown with a coverage factor of $k = 2$ to indicate a 95% level of confidence. Measurement uncertainty is not taken into account when stating conformity with a specified requirement.

Test item		Measurement uncertainty
Output Power(dB)		1.90
Emission Limit(dB)		5.76
Frequency Stability	FE(ppm)	1.16
	F _L F _H (kHz)	173.51
Occupied Bandwidth(%)		0.72
Emission Bandwidth(%)		0.75
Band Edge Compliance(dB)		1.94
Conducted Spurious Emission(dB)		4.77(0-20GHz)
		6.27(20-30GHz)
Peak-to-Average Power Ratio(dB)		2.10

Annex A: Measurement Results

A.1 Output Power

A.1.1 Summary

During the process of testing, the EUT was controlled via communication tester to ensure max power transmission and proper modulation.

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.

The results below include a correction factor for cable loss that is provided by the customer.

A.1.2.2 Measurement Result

LTE band 7

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	2567.5	23.30	22.32	21.24	17.82
		2535.0	23.18	22.39	21.33	17.90
		2502.5	22.89	22.06	21.14	17.74
	1 RB low	2567.5	23.23	22.27	21.29	17.87
		2535.0	23.05	22.29	21.30	17.87
		2502.5	22.83	22.05	21.04	17.66
	50% RB mid	2567.5	22.09	21.11	20.14	17.92
		2535.0	22.08	21.11	20.05	17.84
		2502.5	21.93	20.95	19.89	17.70
	100% RB	2567.5	22.13	21.22	20.11	17.89
		2535.0	22.09	21.11	20.08	17.87
		2502.5	21.96	20.95	19.88	17.69
10MHz	1 RB high	2565.0	23.24	22.24	21.28	17.86
		2535.0	23.19	22.38	21.23	17.81
		2505.0	22.93	22.31	21.06	17.67
	1 RB low	2565.0	23.10	22.46	21.28	17.86
		2535.0	23.05	22.32	21.18	17.77
		2505.0	23.05	22.12	21.09	17.70
	50% RB mid	2565.0	22.09	21.11	20.05	17.84
		2535.0	22.05	21.05	20.02	17.77
		2505.0	21.90	20.94	19.87	17.68

	100% RB	2565.0	22.11	21.13	20.09	17.88
		2535.0	22.09	21.08	20.04	17.83
		2505.0	21.90	20.89	19.88	17.69
15MHz	1 RB high	2562.5	23.20	22.24	21.28	17.86
		2535.0	23.09	22.42	21.39	17.95
		2507.5	23.10	22.22	21.07	17.68
	1 RB low	2562.5	23.13	22.26	21.29	17.87
		2535.0	23.07	22.38	21.22	17.81
		2507.5	22.85	22.06	20.98	17.61
	50% RB mid	2562.5	22.08	21.10	20.10	17.88
		2535.0	22.03	21.03	20.05	17.84
		2507.5	21.90	20.89	19.91	17.72
	100% RB	2562.5	22.11	21.12	20.12	17.90
		2535.0	22.07	21.07	20.06	17.85
		2507.5	21.93	20.97	19.95	17.75
20MHz	1 RB high	2560.0	23.16	22.35	21.31	17.88
		2535.0	23.17	22.37	21.29	17.87
		2510.0	22.98	22.25	21.11	17.71
	1 RB low	2560.0	23.17	22.39	21.42	17.97
		2535.0	23.00	22.36	21.26	17.84
		2510.0	22.89	22.18	21.04	17.66
	50% RB mid	2560.0	22.09	21.14	20.10	17.88
		2535.0	22.06	21.08	20.08	17.87
		2510.0	22.95	20.92	19.90	17.71
	100% RB	2560.0	22.10	21.14	20.08	17.87
		2535.0	22.08	21.08	20.04	17.83
		2510.0	21.95	20.91	19.94	17.74

LTE band 12

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	715.3	22.76	21.93	20.86	17.64
		707.5	22.91	22.08	20.88	17.66
		699.7	22.75	22.05	20.91	17.68
	1 RB low	715.3	22.84	22.00	20.85	17.63
		707.5	22.81	21.98	20.96	17.73
		699.7	22.82	21.89	20.99	17.75
	50% RB mid	715.3	22.70	21.65	20.89	17.68
		707.5	22.68	21.64	20.81	17.61
		699.7	22.87	21.83	20.76	17.57
	100% RB	715.3	21.72	20.74	19.68	17.60
		707.5	21.72	20.78	19.76	17.67
		699.7	21.73	20.83	19.71	17.63
3MHz	1 RB high	714.5	22.73	21.96	20.83	17.62
		707.5	22.72	22.11	20.86	17.64
		700.5	22.72	22.03	20.81	17.60
	1 RB low	714.5	22.75	21.89	20.83	17.62
		707.5	22.71	21.98	20.85	17.63
		700.5	22.83	21.88	20.86	17.64
	50% RB mid	714.5	21.68	20.72	19.66	17.58
		707.5	21.78	20.84	19.77	17.68
		700.5	21.79	20.83	19.80	17.71
	100% RB	714.5	21.71	20.68	19.69	17.61
		707.5	21.80	20.77	19.73	17.65
		700.5	21.72	20.81	19.78	17.69
5MHz	1 RB high	713.5	22.82	21.97	21.01	17.77
		707.5	22.77	21.97	20.92	17.69
		701.5	22.78	22.05	20.89	17.67
	1 RB low	713.5	22.81	22.02	20.05	17.19
		707.5	22.83	22.04	20.99	17.75
		701.5	22.82	22.06	20.97	17.74
	50% RB mid	713.5	21.76	20.73	19.78	17.69
		707.5	21.79	20.78	19.82	17.73
		701.5	21.79	20.80	19.81	17.72
	100% RB	713.5	21.77	20.73	19.73	17.65
		707.5	21.86	20.86	19.78	17.69
		701.5	21.82	20.83	19.76	17.67
10MHz	1 RB high	711.0	22.76	21.80	20.85	17.63
		707.5	22.78	21.94	20.92	17.69
		704.0	22.75	22.06	20.95	17.72
	1 RB low	711.0	22.79	22.06	20.97	17.74

		707.5	22.82	22.04	20.94	17.71
		704.0	22.75	21.91	20.97	17.74
	50% RB mid	711.0	21.78	20.77	19.77	17.68
		707.5	21.77	20.78	19.78	17.69
		704.0	21.80	20.77	19.78	17.69
	100% RB	711.0	21.74	20.74	19.75	17.67
		707.5	21.79	20.80	19.78	17.69
		704.0	21.79	20.78	19.75	17.67

LTE band 13

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	784.5	23.79	22.90	22.14	18.88
		782.0	23.67	23.00	21.93	18.70
		779.5	23.82	23.05	21.99	18.75
	1 RB low	784.5	23.85	23.14	22.03	18.79
		782.0	23.99	23.06	22.00	18.76
		779.5	23.97	22.92	21.91	18.68
	50% RB mid	784.5	22.84	21.82	20.83	18.71
		782.0	22.87	21.86	20.86	18.74
		779.5	22.89	21.86	20.91	18.78
	100% RB	784.5	22.88	21.83	20.84	18.72
		782.0	22.88	21.85	20.85	18.73
		779.5	22.86	21.81	20.86	18.74
10MHz	1 RB high	782.0	23.79	22.86	21.89	18.70
	1 RB low	782.0	23.99	22.98	21.92	18.72
	50% RB mid	782.0	22.85	21.85	20.87	18.78
	100% RB	782.0	22.83	21.83	20.78	18.70

LTE band 14

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	795.5	22.77	22.05	20.92	17.76
		793.0	22.81	22.12	20.99	17.82
		790.5	22.84	22.07	21.00	17.83
	1 RB low	795.5	22.94	22.15	21.02	17.84
		793.0	22.80	22.17	20.98	17.81
		790.5	22.90	22.15	21.00	17.83
	50% RB mid	795.5	21.85	20.85	19.87	17.86
		793.0	21.81	20.86	19.81	17.81
		790.5	21.85	20.88	19.84	17.84
	100% RB	795.5	21.84	20.84	19.81	17.81
		793.0	21.84	20.85	19.79	17.79
		790.5	21.89	20.88	19.83	17.83
10MHz	1 RB high	793.0	22.74	21.91	20.91	17.80
	1 RB low	793.0	22.82	22.07	20.83	17.73
	50% RB mid	793.0	21.83	20.82	19.81	17.81
	100% RB	793.0	21.84	20.85	19.80	17.80

LTE band 25

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	1914.3	23.88	23.16	22.10	19.19
		1882.5	24.23	23.38	22.34	19.26
		1850.7	24.04	23.18	22.09	19.10
	1 RB low	1914.3	24.13	23.12	22.82	19.19
		1882.5	24.24	23.23	22.27	19.11
		1850.7	24.15	23.07	22.11	19.07
	50% RB mid	1914.3	24.07	23.05	22.20	19.35
		1882.5	23.06	22.99	22.11	19.32
		1850.7	23.93	22.94	22.02	19.08
	100% RB	1914.3	22.95	22.05	20.98	19.19
		1882.5	23.18	22.15	21.00	19.21
		1850.7	23.06	22.00	20.85	19.23
3MHz	1 RB high	1913.5	24.00	23.19	22.12	19.19
		1882.5	24.05	23.22	22.24	19.16
		1851.5	24.06	22.99	22.06	19.32
	1 RB low	1913.5	23.86	23.31	22.19	19.21
		1882.5	23.97	23.20	22.12	19.35
		1851.5	24.07	23.08	22.04	19.32
	50% RB mid	1913.5	22.96	22.04	21.03	19.27
		1882.5	23.06	22.08	21.09	19.16
		1851.5	22.99	21.99	20.96	19.16
	100% RB	1913.5	22.99	21.97	20.93	19.33
		1882.5	23.03	22.05	20.96	19.33
		1851.5	22.94	22.01	20.89	19.19
5MHz	1 RB high	1912.5	24.11	23.04	22.16	19.26
		1882.5	24.27	23.28	22.26	19.12
		1852.5	23.90	23.19	22.05	19.21
	1 RB low	1912.5	24.03	23.21	22.09	19.09
		1882.5	24.01	23.38	22.30	19.35
		1852.5	24.07	23.15	22.14	19.11
	50% RB mid	1912.5	22.96	22.08	21.02	19.26
		1882.5	23.13	22.13	21.14	19.21
		1852.5	23.02	22.04	21.00	19.32
	100% RB	1912.5	23.05	22.06	21.03	19.12
		1882.5	23.10	22.12	21.04	19.18
		1852.5	23.03	22.04	21.01	19.19
10MHz	1 RB high	1910.0	24.01	23.06	22.12	19.17
		1882.5	24.15	23.34	22.24	19.33
		1855.0	24.00	23.21	22.04	19.11
	1 RB low	1910.0	24.05	23.26	22.16	19.17

		1882.5	23.93	23.24	22.18	19.05
		1855.0	24.06	23.14	22.07	19.05
	50% RB mid	1910.0	23.00	21.97	20.98	19.23
		1882.5	23.07	22.05	20.99	19.32
		1855.0	22.99	21.96	20.92	19.06
	100% RB	1910.0	23.03	22.04	20.98	19.23
		1882.5	23.08	22.06	20.98	19.09
		1855.0	22.98	21.98	20.93	19.12
15MHz	1 RB high	1907.5	24.04	23.18	22.12	19.35
		1882.5	24.04	23.32	22.24	19.25
		1857.5	23.98	23.15	22.12	19.07
	1 RB low	1907.5	24.03	23.19	22.18	19.10
		1882.5	23.99	23.17	22.15	19.05
		1857.5	24.06	23.16	22.13	19.31
	50% RB mid	1907.5	22.99	22.03	21.06	19.28
		1882.5	23.01	22.03	21.06	19.16
		1857.5	22.92	21.96	20.97	19.17
	100% RB	1907.5	22.99	22.03	20.98	19.35
		1882.5	23.04	22.08	21.03	19.26
		1857.5	22.95	21.99	20.96	19.33
20MHz	1 RB high	1905.0	24.05	23.20	22.18	19.26
		1882.5	24.15	23.23	22.08	19.30
		1860.0	23.92	23.12	22.12	19.11
	1 RB low	1905.0	23.95	23.36	22.09	19.30
		1882.5	24.06	23.26	22.11	19.18
		1860.0	24.04	23.98	22.09	19.14
	50% RB mid	1905.0	22.99	22.02	20.98	19.09
		1882.5	23.03	22.03	21.03	19.10
		1860.0	22.98	21.96	20.94	19.07
	100% RB	1905.0	22.94	21.96	20.98	19.22
		1882.5	23.05	22.05	20.98	19.11
		1860.0	22.98	21.92	20.91	19.15

LTE band 26_Part90

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	823.3	23.34	22.40	21.38	18.48
		819.0	23.37	22.46	21.38	18.48
		814.7	23.29	22.41	21.83	18.55
	1 RB low	823.3	23.32	22.39	21.26	18.48
		819.0	23.33	22.42	21.26	18.49
		814.7	23.27	22.45	21.70	18.52
	50% RB mid	823.3	23.41	22.50	21.34	18.49
		819.0	23.44	22.50	21.29	18.48
		814.7	23.54	22.53	21.41	18.44
	100% RB	823.3	22.35	21.65	20.44	18.52
		819.0	22.40	21.64	20.42	18.43
		814.7	22.38	21.60	20.36	18.42
3MHz	1 RB high	822.5	23.30	22.34	21.33	18.46
		819.0	23.34	22.39	21.31	18.48
		815.5	23.45	22.85	21.20	18.45
	1 RB low	822.5	23.35	22.41	21.22	18.44
		819.0	23.33	22.38	21.20	18.42
		815.5	23.48	22.89	21.13	18.38
	50% RB mid	822.5	22.30	21.51	20.51	18.49
		819.0	22.37	21.49	20.50	18.46
		815.5	22.36	21.47	20.35	18.44
	100% RB	822.5	22.37	21.44	20.49	18.47
		819.0	22.39	21.41	20.45	18.47
		815.5	22.40	21.38	20.44	18.41
5MHz	1 RB high	821.5	23.54	22.49	21.76	18.62
		819.0	23.53	22.54	21.76	18.64
		816.5	23.54	22.52	21.70	18.59
	1 RB low	821.5	23.55	22.52	21.75	18.63
		819.0	23.56	22.54	21.77	18.58
		816.5	23.54	22.54	21.77	18.53
	50% RB mid	821.5	22.43	21.60	20.69	18.64
		819.0	22.43	21.57	20.46	18.47
		816.5	22.42	21.58	20.56	18.57
	100% RB	821.5	22.50	21.50	20.62	18.60
		819.0	22.50	21.51	20.48	18.50
		816.5	22.52	21.48	20.56	18.51
10MHz	1 RB high	819.0	23.48	22.52	21.46	18.66
	1 RB low	819.0	23.46	22.53	21.34	18.51
	50% RB mid	819.0	22.49	21.62	20.62	18.60
	100% RB	819.0	22.50	21.55	20.54	18.52

LTE band 26_Part22

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	848.3	23.27	22.35	21.29	18.41
		836.5	23.37	22.48	21.43	18.52
		824.7	23.26	22.42	21.83	18.58
	1 RB low	848.3	23.25	22.36	21.17	18.44
		836.5	23.35	22.42	21.31	18.52
		824.7	23.23	22.38	21.74	18.56
	50% RB mid	848.3	23.41	22.51	21.30	18.40
		836.5	23.50	22.56	21.68	18.49
		824.7	23.42	22.51	21.41	18.47
	100% RB	848.3	22.34	21.64	20.35	18.44
		836.5	22.43	21.69	20.59	18.45
		824.7	22.36	21.66	20.42	18.45
3MHz	1 RB high	847.5	23.26	22.34	21.20	18.41
		836.5	23.38	22.44	21.36	18.49
		825.5	23.36	22.39	21.32	18.48
	1 RB low	847.5	23.30	22.37	21.14	18.35
		836.5	23.36	22.44	21.25	18.47
		825.5	23.36	22.41	21.22	18.45
	50% RB mid	847.5	22.28	21.46	20.46	18.42
		836.5	22.35	21.55	20.53	18.50
		825.5	22.34	21.55	20.39	18.48
	100% RB	847.5	22.34	21.38	20.42	18.39
		836.5	22.40	21.45	20.50	18.47
		825.5	22.37	21.47	20.51	18.46
5MHz	1 RB high	846.5	23.45	22.41	21.68	18.55
		836.5	23.57	22.55	21.80	18.64
		826.5	23.52	22.55	21.81	18.70
	1 RB low	846.5	23.52	22.54	21.76	18.53
		836.5	23.58	22.56	21.83	18.65
		826.5	23.50	22.50	21.93	18.61
	50% RB mid	846.5	22.39	21.51	20.64	18.53
		836.5	22.45	21.63	20.70	18.64
		826.5	22.43	21.63	20.63	18.63
	100% RB	846.5	22.47	21.43	20.53	18.51
		836.5	22.53	21.53	20.62	18.59
		826.5	22.49	21.54	20.63	18.61
10MHz	1 RB high	844.0	23.40	22.49	21.34	18.60
		836.5	23.55	22.57	21.44	18.61
		829.0	23.52	22.57	21.45	18.64
	1 RB low	844.0	23.50	22.54	21.28	18.60

		836.5	23.50	22.52	21.30	18.64
		829.0	23.42	22.45	21.34	18.56
		844.0	22.47	21.59	20.52	18.55
	50% RB mid	836.5	22.53	21.65	20.63	18.62
		829.0	22.50	21.66	20.67	18.63
		844.0	22.51	21.51	20.49	18.46
	100% RB	836.5	22.54	21.60	20.60	18.57
		829.0	22.48	21.60	20.59	18.55
		841.5	23.46	22.79	21.91	18.81
15MHz	1 RB high	836.5	23.52	22.91	21.91	18.86
		831.5	23.48	22.85	21.95	18.88
		841.5	23.50	22.79	21.84	18.89
	1 RB low	836.5	23.51	22.81	21.85	18.90
		831.5	23.38	22.73	21.90	18.82
		841.5	22.48	21.50	20.47	18.55
	50% RB mid	836.5	22.52	21.55	20.52	18.58
		831.5	22.49	21.54	20.58	18.59
		841.5	22.50	21.54	20.57	18.57
	100% RB	836.5	22.50	21.58	20.60	18.61
		831.5	22.49	21.58	20.60	18.60

LTE band 30

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	2312.5	23.15	22.45	21.18	18.06
		2310.0	23.14	22.37	21.34	18.20
		2307.5	22.99	22.19	21.25	18.12
	1 RB low	2312.5	23.25	22.35	21.24	18.11
		2310.0	23.09	22.24	21.25	18.12
		2307.5	23.11	22.32	21.11	18.00
	50% RB mid	2312.5	22.08	21.11	20.11	18.07
		2310.0	22.21	21.10	20.10	18.06
		2307.5	22.08	21.10	20.11	18.07
	100% RB	2312.5	22.11	21.12	20.09	18.05
		2310.0	22.12	21.08	20.06	18.03
		2307.5	22.12	21.13	20.05	18.02
10MHz	1 RB high	2310.0	23.02	22.28	21.17	18.05
	1 RB low	2310.0	23.15	22.36	21.31	18.17
	50% RB mid	2310.0	22.06	21.03	20.04	18.01
	100% RB	2310.0	22.05	21.04	20.07	18.04

LTE band 41

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	2687.5	26.04	25.14	23.94	20.50
		2593.0	26.29	25.35	24.12	20.66
		2498.5	25.98	25.06	23.85	20.43
	1 RB low	2687.5	26.05	25.13	24.62	21.09
		2593.0	26.26	25.35	24.12	20.66
		2498.5	26.00	25.05	23.86	20.43
	50% RB mid	2687.5	25.00	24.01	23.05	20.79
		2593.0	25.17	24.17	23.20	20.92
		2498.5	24.89	23.92	22.93	20.68
	100% RB	2687.5	24.99	24.01	23.07	20.80
		2593.0	25.87	24.21	23.22	20.94
		2498.5	24.90	23.95	22.94	20.69
10MHz	1 RB high	2685.0	26.02	25.17	23.89	20.46
		2593.0	26.19	25.25	24.04	20.59
		2501.0	26.00	25.09	23.88	20.45
	1 RB low	2685.0	26.08	25.24	24.72	21.17
		2593.0	26.16	25.35	24.13	20.67
		2501.0	25.94	25.07	23.86	20.43
	50% RB mid	2685.0	24.96	24.00	23.02	20.76
		2593.0	25.10	24.13	23.17	20.89
		2501.0	24.86	23.90	22.93	20.68
	100% RB	2685.0	24.99	24.03	22.97	20.71
		2593.0	25.12	24.16	23.13	20.86
		2501.0	24.87	23.93	22.90	20.61
15MHz	1 RB high	2682.5	26.03	25.13	23.89	20.46
		2593.0	26.15	25.25	24.04	20.59
		2503.5	25.97	25.12	23.89	20.46
	1 RB low	2682.5	26.08	25.21	23.99	20.55
		2593.0	26.25	25.34	24.11	21.74
		2503.5	25.94	25.05	23.83	21.49
	50% RB mid	2682.5	24.96	23.95	22.94	20.69
		2593.0	25.13	24.14	23.13	20.86
		2503.5	24.87	23.87	22.89	20.64
	100% RB	2682.5	25.02	24.04	23.04	20.78
		2593.0	25.14	24.17	23.14	20.82
		2503.5	24.91	23.95	22.95	20.66
20MHz	1 RB high	2680.0	25.97	25.16	23.90	20.47
		2593.0	26.20	25.30	24.08	20.62
		2506.0	25.97	25.17	23.92	20.49
	1 RB low	2680.0	26.15	25.30	24.04	20.59

		2593.0	26.28	25.36	24.45	20.94
		2506.0	25.92	25.10	23.85	20.43
	50% RB mid	2680.0	25.02	24.09	23.04	20.78
		2593.0	25.17	24.19	23.16	20.89
		2506.0	24.94	23.99	22.97	20.71
	100% RB	2680.0	25.04	24.10	23.07	20.80
		2593.0	25.17	24.17	23.16	20.89
		2506.0	25.23	23.99	22.98	20.72

LTE band 48

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	3697.5	23.15	22.22	20.80	17.46
		3625.0	23.11	22.13	20.73	17.40
		3552.5	22.94	21.98	20.55	17.25
	1 RB low	3697.5	23.16	22.20	20.82	17.48
		3625.0	23.09	22.97	20.71	17.39
		3552.5	22.92	21.93	20.51	17.22
	50% RB mid	3697.5	22.14	21.09	20.17	17.44
		3625.0	22.04	20.96	20.00	17.30
		3552.5	21.87	20.81	19.82	17.14
	100% RB	3697.5	22.17	21.18	20.17	17.44
		3625.0	22.05	21.04	20.06	17.35
		3552.5	21.89	20.89	19.88	17.19
10MHz	1 RB high	3695.0	23.12	22.19	20.79	17.45
		3625.0	23.15	22.15	20.72	17.40
		3555.0	23.01	22.03	20.61	17.30
	1 RB low	3695.0	23.13	22.18	20.76	17.43
		3625.0	23.10	22.33	20.68	17.36
		3555.0	22.95	21.96	20.54	17.24
	50% RB mid	3695.0	22.12	21.12	20.15	17.43
		3625.0	22.03	21.01	20.02	17.31
		3555.0	21.92	20.90	19.90	17.21
	100% RB	3695.0	22.14	21.18	20.14	17.42
		3625.0	22.03	21.06	20.01	17.31
		3555.0	21.91	20.93	19.87	17.18
15MHz	1 RB high	3692.5	23.17	22.24	20.81	17.47
		3625.0	23.13	22.19	20.77	17.44
		3557.5	23.07	22.06	20.65	17.34
	1 RB low	3692.5	23.14	22.20	20.80	17.46
		3625.0	23.06	22.10	20.70	17.38
		3557.5	23.02	21.99	20.56	17.26
	50% RB mid	3692.5	22.14	21.13	20.13	17.41
		3625.0	22.43	21.01	20.00	17.30
		3557.5	21.98	20.91	19.90	17.21
	100% RB	3692.5	22.16	21.22	20.18	17.45
		3625.0	22.09	21.10	20.06	17.35
		3557.5	21.98	20.99	19.96	17.26
20MHz	1 RB high	3690.0	23.58	22.65	21.40	17.97
		3625.0	23.46	22.52	21.09	17.71

	1 RB low	3560.0	23.67	22.58	21.32	17.90
		3690.0	23.58	22.65	21.12	17.73
		3625.0	23.60	22.61	21.19	17.79
		3560.0	23.61	22.72	21.15	17.76
	50% RB mid	3690.0	22.49	21.58	20.50	17.73
		3625.0	22.61	21.46	20.54	17.76
		3560.0	22.65	21.60	20.47	17.70
	100% RB	3690.0	22.53	21.55	20.57	17.79
		3625.0	22.52	21.62	20.43	17.67
		3560.0	22.58	21.61	20.51	17.74

LTE band 66

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	1779.3	24.09	23.24	22.06	18.92
		1745.0	24.14	23.22	22.10	18.95
		1710.7	23.87	22.93	22.02	18.89
	1 RB low	1779.3	24.00	23.16	22.16	19.01
		1745.0	24.13	23.06	22.12	18.97
		1710.7	23.99	23.10	22.16	19.01
	50% RB mid	1779.3	24.09	23.00	22.07	19.94
		1745.0	23.89	23.04	21.98	19.86
		1710.7	23.89	22.83	21.96	19.84
	100% RB	1779.3	23.08	22.13	20.92	18.90
		1745.0	22.99	21.98	20.86	18.85
		1710.7	22.89	21.94	20.75	18.75
3MHz	1 RB high	1778.5	23.94	23.28	22.15	19.00
		1745.0	24.05	23.09	22.10	18.95
		1711.5	23.93	22.99	22.07	18.93
	1 RB low	1778.5	24.04	23.13	22.05	18.91
		1745.0	23.84	23.16	22.02	18.89
		1711.5	23.88	23.11	22.01	18.88
	50% RB mid	1778.5	22.98	22.08	21.00	18.97
		1745.0	22.98	22.02	20.90	18.88
		1711.5	22.92	21.95	20.89	18.87
	100% RB	1778.5	23.00	22.01	20.97	18.95
		1745.0	22.94	21.89	20.87	18.86
		1711.5	22.86	21.97	20.82	18.81
5MHz	1 RB high	1777.5	24.10	23.15	22.20	19.04
		1745.0	24.09	23.13	22.20	19.04
		1712.5	23.94	23.20	22.11	18.96
	1 RB low	1777.5	24.02	23.21	22.13	18.98
		1745.0	24.03	23.29	22.13	18.98
		1712.5	23.97	23.03	22.08	18.94
	50% RB mid	1777.5	23.01	22.06	21.05	19.02
		1745.0	23.00	21.97	21.01	18.98
		1712.5	22.94	21.91	20.89	18.87
	100% RB	1777.5	23.08	22.04	21.01	18.98
		1745.0	23.00	22.00	20.97	18.95
		1712.5	22.95	21.93	20.91	18.89
10MHz	1 RB high	1775.0	23.85	23.25	22.17	19.01
		1745.0	24.12	23.15	22.13	18.98
		1715.0	23.92	23.09	22.05	18.91
	1 RB low	1775.0	24.06	23.25	22.18	19.02

		1745.0	24.01	23.28	22.14	18.99
		1715.0	24.09	23.00	22.09	18.95
	50% RB mid	1775.0	23.00	21.98	20.96	18.94
		1745.0	22.97	21.94	20.90	18.88
		1715.0	22.91	21.87	20.87	18.86
	100% RB	1775.0	22.97	21.97	20.96	18.94
		1745.0	22.94	21.94	20.88	18.87
		1715.0	22.87	21.84	20.81	18.80
15MHz	1 RB high	1772.5	23.95	23.32	22.27	19.10
		1745.0	24.07	23.17	22.09	18.95
		1717.5	23.95	23.13	22.15	19.00
	1 RB low	1772.5	23.98	23.08	22.15	19.00
		1745.0	24.11	23.21	22.13	18.98
		1717.5	24.03	23.19	22.04	18.90
	50% RB mid	1772.5	23.03	22.07	21.04	19.01
		1745.0	22.97	21.94	20.95	18.93
		1717.5	22.88	21.87	20.90	18.88
	100% RB	1772.5	23.03	22.05	21.03	19.00
		1745.0	22.99	21.96	20.97	18.95
		1717.5	22.92	21.89	20.90	18.88
20MHz	1 RB high	1770.0	24.07	23.22	22.19	19.03
		1745.0	24.02	23.25	22.01	18.88
		1720.0	24.01	23.24	22.09	18.95
	1 RB low	1770.0	24.08	23.18	22.14	18.99
		1745.0	24.09	23.33	22.06	18.92
		1720.0	24.05	23.15	22.02	18.89
	50% RB mid	1770.0	23.00	22.04	21.06	19.03
		1745.0	22.98	21.98	20.96	18.94
		1720.0	22.93	21.94	20.90	18.88
	100% RB	1770.0	23.05	22.01	21.02	18.99
		1745.0	22.97	21.98	20.97	18.95
		1720.0	22.92	21.93	20.88	18.87

LTE band 71

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	695.5	22.77	22.00	20.90	17.69
		680.5	22.81	22.07	20.87	17.66
		665.5	22.85	22.00	20.93	17.71
	1 RB low	695.5	22.73	22.06	20.88	17.67
		680.5	22.77	21.96	20.87	17.66
		665.5	22.90	22.07	21.06	17.82
	50% RB mid	695.5	21.72	20.70	19.74	17.82
		680.5	21.80	20.80	19.83	17.90
		665.5	21.82	20.90	19.92	17.99
	100% RB	695.5	21.76	20.77	19.74	17.82
		680.5	21.83	20.86	19.79	17.87
		665.5	21.87	20.90	19.87	17.94
10MHz	1 RB high	693.0	23.51	22.70	21.74	17.74
		680.5	22.90	21.94	20.94	17.72
		668.0	22.80	22.07	20.97	17.75
	1 RB low	693.0	23.62	22.86	21.73	17.78
		680.5	22.85	22.02	21.03	17.80
		668.0	22.97	22.25	21.03	17.80
	50% RB mid	693.0	22.61	21.66	20.58	17.58
		680.5	21.80	20.81	19.77	17.85
		668.0	21.85	20.87	19.83	17.90
	100% RB	693.0	22.62	21.61	20.62	17.62
		680.5	21.82	20.79	19.77	17.85
		668.0	21.81	20.82	19.80	17.88
15MHz	1 RB high	690.5	22.72	21.79	20.83	17.63
		680.5	22.85	22.02	20.91	17.70
		670.5	22.73	21.99	20.89	17.68
	1 RB low	690.5	22.82	22.12	20.90	17.69
		680.5	22.88	22.15	21.08	17.84
		670.5	22.94	22.22	20.99	17.79
	50% RB mid	690.5	21.74	20.76	19.75	17.83
		680.5	21.78	20.79	19.81	17.89
		670.5	21.83	20.84	19.87	17.94
	100% RB	690.5	21.77	20.77	19.77	17.85
		680.5	21.80	20.77	19.78	17.86
		670.5	21.86	20.87	19.82	17.90
20MHz	1 RB high	688.0	22.75	22.00	20.91	17.70
		680.5	22.68	21.97	20.82	17.62
		673.0	22.79	22.98	20.92	17.71
	1 RB low	688.0	22.93	22.10	20.96	17.74

		680.5	22.88	22.20	21.09	17.85
		673.0	22.93	22.17	21.11	17.87
	50% RB mid	688.0	21.82	20.85	19.84	17.91
		680.5	21.82	20.84	19.84	17.91
		673.0	21.84	20.86	19.83	17.90
	100% RB	688.0	21.84	20.86	19.82	17.90
		680.5	21.78	20.75	19.77	17.85
		673.0	21.88	20.89	19.85	17.92

LTE CA band 41C

Bandwidth	Frequency (MHz)	Frequency MHz)	Modulation	PCC RB		SCC RB		Conducted Power(dBm)
				Size	Offset	Size	Offset	
5MHz/20MHz	2583.8	2595.5	QPSK	1	24	1	0	25.82
			QPSK	25	0	100	0	23.84
			16QAM	1	24	1	0	24.31
			16QAM	25	0	100	0	22.85
			64QAM	1	24	1	0	22.78
			64QAM	25	0	100	0	22.84
			256QAM	1	24	1	0	19.87
			256QAM	25	0	100	0	19.85
10MHz/15MHz	2585.9	2597.9	QPSK	1	49	1	0	26.06
			QPSK	50	0	75	0	23.89
			16QAM	1	49	1	0	24.45
			16QAM	50	0	75	0	22.94
			64QAM	1	49	1	0	22.72
			64QAM	50	0	75	0	22.93
			256QAM	1	49	1	0	19.91
			256QAM	50	0	75	0	19.94
10MHz/20MHz	2583.6	2598.0	QPSK	1	49	1	0	26.05
			QPSK	50	0	100	0	23.92
			16QAM	1	49	1	0	24.41
			16QAM	50	0	100	0	22.90
			64QAM	1	49	1	0	22.73
			64QAM	50	0	100	0	22.90
			256QAM	1	49	1	0	19.81
			256QAM	50	0	100	0	19.87
15MHz/10MHz	2588.1	2600.1	QPSK	1	74	1	0	26.03
			QPSK	75	0	50	0	23.90
			16QAM	1	74	1	0	24.51
			16QAM	75	0	50	0	22.92
			64QAM	1	74	1	0	22.66
			64QAM	75	0	50	0	22.94
			256QAM	1	74	1	0	19.90
			256QAM	75	0	50	0	19.92
15MHz/15MHz	2585.5	2600.5	QPSK	1	74	1	0	26.10
			QPSK	75	0	75	0	23.85
			16QAM	1	74	1	0	24.43
			16QAM	75	0	75	0	22.88
			64QAM	1	74	1	0	22.75
			64QAM	75	0	75	0	22.90
			256QAM	1	74	1	0	19.93
			256QAM	75	0	75	0	19.86

15MHz/20MHz	2583.3	2600.4	QPSK	1	74	1	0	26.10
			QPSK	75	0	100	0	23.94
			16QAM	1	74	1	0	24.46
			16QAM	75	0	100	0	22.89
			64QAM	1	74	1	0	22.98
			64QAM	75	0	100	0	22.90
			256QAM	1	74	1	0	19.87
			256QAM	75	0	100	0	19.81
20MHz/5MHz	2590.5	2602.2	QPSK	1	99	1	0	25.94
			QPSK	100	0	25	0	23.91
			16QAM	1	99	1	0	24.46
			16QAM	100	0	25	0	22.94
			64QAM	1	99	1	0	22.99
			64QAM	100	0	25	0	22.91
			256QAM	1	99	1	0	19.79
			256QAM	100	0	25	0	19.90
20MHz/10MHz	2588.1	2602.5	QPSK	1	99	1	0	26.00
			QPSK	100	0	50	0	23.92
			16QAM	1	99	1	0	24.29
			16QAM	100	0	50	0	22.92
			64QAM	1	99	1	0	23.10
			64QAM	100	0	50	0	22.96
			256QAM	1	99	1	0	19.79
			256QAM	100	0	50	0	19.88
20MHz/15MHz	2585.6	2602.7	QPSK	1	99	1	0	26.01
			QPSK	100	0	75	0	23.85
			16QAM	1	99	1	0	24.48
			16QAM	100	0	75	0	22.85
			64QAM	1	99	1	0	23.02
			64QAM	100	0	75	0	22.87
			256QAM	1	99	1	0	19.80
			256QAM	100	0	75	0	19.84
20MHz/20MHz	2583.1	2602.9	QPSK	1	99	1	0	26.02
			QPSK	100	0	100	0	23.94
			16QAM	1	99	1	0	24.55
			16QAM	100	0	100	0	22.91
			64QAM	1	99	1	0	22.99
			64QAM	100	0	100	0	22.89
			256QAM	1	99	1	0	19.84
			256QAM	100	0	100	0	19.83

LTE CA band 66C

Bandwidth	Frequency (MHz)	Frequency (MHz)	Modulation	PCC RB		SCC RB		Conducted Power(dBm)
				Size	Offset	Size	Offset	
5MHz/20MHz	1745.8	1757.5	QPSK	1	24	1	0	23.46
			QPSK	25	0	100	0	21.41
			16QAM	1	24	1	0	22.54
			16QAM	25	0	100	0	20.42
			64QAM	1	24	1	0	20.48
			64QAM	25	0	100	0	20.43
			256QAM	1	24	1	0	18.57
			256QAM	25	0	100	0	18.44
10MHz/15MHz	1747.9	1759.9	QPSK	1	49	1	0	23.50
			QPSK	50	0	75	0	21.42
			16QAM	1	49	1	0	22.61
			16QAM	50	0	75	0	20.48
			64QAM	1	49	1	0	20.35
			64QAM	50	0	75	0	20.50
			256QAM	1	49	1	0	18.50
			256QAM	50	0	75	0	18.51
10MHz/20MHz	1745.6	1760.0	QPSK	1	49	1	0	23.56
			QPSK	50	0	100	0	21.50
			16QAM	1	49	1	0	22.68
			16QAM	50	0	100	0	20.57
			64QAM	1	49	1	0	20.40
			64QAM	50	0	100	0	20.57
			256QAM	1	49	1	0	18.59
			256QAM	50	0	100	0	18.58
15MHz/10MHz	1750.1	1762.1	QPSK	1	74	1	0	23.49
			QPSK	75	0	50	0	21.43
			16QAM	1	74	1	0	22.32
			16QAM	75	0	50	0	20.49
			64QAM	1	74	1	0	20.50
			64QAM	75	0	50	0	20.49
			256QAM	1	74	1	0	18.37
			256QAM	75	0	50	0	18.46
15MHz/15MHz	1747.5	1762.5	QPSK	1	74	1	0	23.48
			QPSK	75	0	75	0	21.49
			16QAM	1	74	1	0	22.30
			16QAM	75	0	75	0	20.51
			64QAM	1	74	1	0	20.52
			64QAM	75	0	75	0	20.52
			256QAM	1	74	1	0	18.42
			256QAM	75	0	75	0	18.50

15MHz/20MHz	1745.3	1762.4	QPSK	1	74	1	0	23.64
			QPSK	75	0	100	0	21.53
			16QAM	1	74	1	0	22.64
			16QAM	75	0	100	0	20.52
			64QAM	1	74	1	0	20.33
			64QAM	75	0	100	0	20.55
			256QAM	1	74	1	0	18.42
			256QAM	75	0	100	0	18.47
20MHz/5MHz	1752.5	1764.2	QPSK	1	99	1	0	23.48
			QPSK	100	0	25	0	21.45
			16QAM	1	99	1	0	22.28
			16QAM	100	0	25	0	20.48
			64QAM	1	99	1	0	20.24
			64QAM	100	0	25	0	20.40
			256QAM	1	99	1	0	18.56
			256QAM	100	0	25	0	18.47
20MHz/10MHz	1750.1	1764.5	QPSK	1	99	1	0	23.53
			QPSK	100	0	50	0	21.50
			16QAM	1	99	1	0	22.48
			16QAM	100	0	50	0	20.49
			64QAM	1	99	1	0	20.58
			64QAM	100	0	50	0	20.52
			256QAM	1	99	1	0	18.31
			256QAM	100	0	50	0	18.45
20MHz/15MHz	1747.6	1764.7	QPSK	1	99	1	0	23.50
			QPSK	100	0	75	0	21.47
			16QAM	1	99	1	0	22.55
			16QAM	100	0	75	0	20.52
			64QAM	1	99	1	0	20.63
			64QAM	100	0	75	0	20.56
			256QAM	1	99	1	0	18.33
			256QAM	100	0	75	0	18.50
20MHz/20MHz	1745.1	1764.9	QPSK	1	99	1	0	23.61
			QPSK	100	0	100	0	21.51
			16QAM	1	99	1	0	22.62
			16QAM	100	0	100	0	20.51
			64QAM	1	99	1	0	20.60
			64QAM	100	0	100	0	20.54
			256QAM	1	99	1	0	18.39
			256QAM	100	0	100	0	18.36

A.1.3 Radiated

A.1.3.1 Description

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

FDD Band 7/TDD Band 41: Part 27.50(h)(2) specifies "Mobile stations are limited to 2.0 watts EIRP".

FDD Band 12/71: 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".

FDD 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".

FDD Band 14: Part 90.542(a) specifies "Portable stations(hand-held devices) transmitting in the 758–768 MHz band and the 788–798 MHz band are limited to 3 watts ERP".

FDD Band 25: Part 24.232(c) specifies "Mobile and portable stations are limited to 2 watts EIRP".

FDD Band 26_Part22: Part 22.913(a) specifies "The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts".

LTE Band 26_Part90: Part 90.635(b) specifies "The maximum output power of the transmitter for mobile stations is 100 watts".

FDD Band 30: Part 27.50(a) specifies "For mobile and portable stations transmitting in the 2305–2315 MHz band or the 2350–2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth". TDD Band 48: Part 96.41(b) specifies the maximum effective isotropic radiated power(EIRP) of any End User Device must comply with the limits of 23dBm/10MHz".

FDD Band 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".

TDD Band 48: Part 96.41(b) specifies the power limits. The maximum effective isotropic radiated power (EIRP) of any End User Device must comply with the limits of 23 dBm/10megahertz.

A.1.3.2 Method of Measurement

According to KDB 412172 D01 and ANSI C63.26 the relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation as follows:

$$\text{ERP or EIRP} = P_T + G_T - L_C$$

where;

- **ERP or EIRP** = effective radiated power or equivalent isotropically radiated power(expressed in the same units as P_T).
- **P_T** = transmitter output power, in this report the unit express as dBm;
- **G_T** = gain of the transmitting antenna, in dBd(ERP) or dBi(EIRP);
- **L_C** = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

Alternatively, the EIRP can be determined from Equation above and then converted to ERP based



No.25T04Z100699-003

on the maximum antenna gain relationship by applying the following equation:

$$\text{ERP} = \text{EIRP} - 2.15\text{dB}$$

Note: The antenna gain information was provided by the client. The laboratory is not responsible for identifying its authenticity during the test.

A.1.3.3 Limits and Measurement Results

LTE Band 7-EIRP

Limits: $\leq 33\text{dBm}(2\text{W})$

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				EIRP(dBm)(Gt-Lc =-1.3)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	2567.5	23.30	22.32	21.24	17.82	22.00	21.02	19.94	16.52
		2535	23.18	22.39	21.33	17.90	21.88	21.09	20.03	16.60
		2502.5	22.89	22.06	21.14	17.74	21.59	20.76	19.84	16.44
	1 RB low	2567.5	23.23	22.27	21.29	17.87	21.93	20.97	19.99	16.57
		2535	23.05	22.29	21.30	17.87	21.75	20.99	20.00	16.57
		2502.5	22.83	22.05	21.04	17.66	21.53	20.75	19.74	16.36
	50% RB mid	2567.5	22.09	21.11	20.14	17.92	20.79	19.81	18.84	16.62
		2535	22.08	21.11	20.05	17.84	20.78	19.81	18.75	16.54
		2502.5	21.93	20.95	19.89	17.70	20.63	19.65	18.59	16.40
	100% RB	2567.5	22.13	21.22	20.11	17.89	20.83	19.92	18.81	16.59
		2535	22.09	21.11	20.08	17.87	20.79	19.81	18.78	16.57
		2502.5	21.96	20.95	19.88	17.69	20.66	19.65	18.58	16.39
10MHz	1 RB high	2565	23.24	22.24	21.28	17.86	21.94	20.94	19.98	16.56
		2535	23.19	22.38	21.23	17.81	21.89	21.08	19.93	16.51
		2505	22.93	22.31	21.06	17.67	21.63	21.01	19.76	16.37
	1 RB low	2565	23.10	22.46	21.28	17.86	21.80	21.16	19.98	16.56
		2535	23.05	22.32	21.18	17.77	21.75	21.02	19.88	16.47
		2505	23.05	22.12	21.09	17.70	21.75	20.82	19.79	16.40
	50% RB mid	2565	22.09	21.11	20.05	17.84	20.79	19.81	18.75	16.54
		2535	22.05	21.05	20.02	17.77	20.75	19.75	18.72	16.47
		2505	21.90	20.94	19.87	17.68	20.60	19.64	18.57	16.38
	100% RB	2565	22.11	21.13	20.09	17.88	20.81	19.83	18.79	16.58
		2535	22.09	21.08	20.04	17.83	20.79	19.78	18.74	16.53
		2505	21.90	20.89	19.88	17.69	20.60	19.59	18.58	16.39
15MHz	1 RB high	2562.5	23.20	22.24	21.28	17.86	21.90	20.94	19.98	16.56
		2535	23.09	22.42	21.39	17.95	21.79	21.12	20.09	16.65
		2507.5	23.10	22.22	21.07	17.68	21.80	20.92	19.77	16.38
	1 RB low	2562.5	23.13	22.26	21.29	17.87	21.83	20.96	19.99	16.57
		2535	23.07	22.38	21.22	17.81	21.77	21.08	19.92	16.51
		2507.5	22.85	22.06	20.98	17.61	21.55	20.76	19.68	16.31
	50% RB mid	2562.5	22.08	21.10	20.10	17.88	20.78	19.80	18.80	16.58
		2535	22.03	21.03	20.05	17.84	20.73	19.73	18.75	16.54
		2507.5	21.90	20.89	19.91	17.72	20.60	19.59	18.61	16.42
	100% RB	2562.5	22.11	21.12	20.12	17.90	20.81	19.82	18.82	16.60
		2535	22.07	21.07	20.06	17.85	20.77	19.77	18.76	16.55
		2507.5	21.93	20.97	19.95	17.75	20.63	19.67	18.65	16.45

20MHz	1 RB high	2560	23.16	22.35	21.31	17.88	21.86	21.05	20.01	16.58
		2535	23.17	22.37	21.29	17.87	21.87	21.07	19.99	16.57
		2510	22.98	22.25	21.11	17.71	21.68	20.95	19.81	16.41
	1 RB low	2560	23.17	22.39	21.42	17.97	21.87	21.09	20.12	16.67
		2535	23.00	22.36	21.26	17.84	21.70	21.06	19.96	16.54
		2510	22.89	22.18	21.04	17.66	21.59	20.88	19.74	16.36
	50% RB mid	2560	22.09	21.14	20.10	17.88	20.79	19.84	18.80	16.58
		2535	22.06	21.08	20.08	17.87	20.76	19.78	18.78	16.57
		2510	22.95	20.92	19.90	17.71	21.65	19.62	18.60	16.41
	100% RB	2560	22.10	21.14	20.08	17.87	20.80	19.84	18.78	16.57
		2535	22.08	21.08	20.04	17.83	20.78	19.78	18.74	16.53
		2510	21.95	20.91	19.94	17.74	20.65	19.61	18.64	16.44

LTE Band 12-ERP

Limits: ≤34.77dBm(3W)

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				ERP(dBm)(Gt-Lc =-3.1)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	715.3	22.76	21.93	20.86	17.64	17.51	16.68	15.61	12.39
		707.5	22.91	22.08	20.88	17.66	17.66	16.83	15.63	12.41
		699.7	22.75	22.05	20.91	17.68	17.50	16.80	15.66	12.43
	1 RB low	715.3	22.84	22.00	20.85	17.63	17.59	16.75	15.60	12.38
		707.5	22.81	21.98	20.96	17.73	17.56	16.73	15.71	12.48
		699.7	22.82	21.89	20.99	17.75	17.57	16.64	15.74	12.50
	50% RB mid	715.3	22.70	21.65	20.89	17.68	17.45	16.40	15.64	12.43
		707.5	22.68	21.64	20.81	17.61	17.43	16.39	15.56	12.36
		699.7	22.87	21.83	20.76	17.57	17.62	16.58	15.51	12.32
	100% RB	715.3	21.72	20.74	19.68	17.60	16.47	15.49	14.43	12.35
		707.5	21.72	20.78	19.76	17.67	16.47	15.53	14.51	12.42
		699.7	21.73	20.83	19.71	17.63	16.48	15.58	14.46	12.38
3MHz	1 RB high	714.5	22.73	21.96	20.83	17.62	17.48	16.71	15.58	12.37
		707.5	22.72	22.11	20.86	17.64	17.47	16.86	15.61	12.39
		700.5	22.72	22.03	20.81	17.60	17.47	16.78	15.56	12.35
	1 RB low	714.5	22.75	21.89	20.83	17.62	17.50	16.64	15.58	12.37
		707.5	22.71	21.98	20.85	17.63	17.46	16.73	15.60	12.38
		700.5	22.83	21.88	20.86	17.64	17.58	16.63	15.61	12.39
	50% RB mid	714.5	21.68	20.72	19.66	17.58	16.43	15.47	14.41	12.33
		707.5	21.78	20.84	19.77	17.68	16.53	15.59	14.52	12.43
		700.5	21.79	20.83	19.80	17.71	16.54	15.58	14.55	12.46
	100% RB	714.5	21.71	20.68	19.69	17.61	16.46	15.43	14.44	12.36
		707.5	21.80	20.77	19.73	17.65	16.55	15.52	14.48	12.40
		700.5	21.72	20.81	19.78	17.69	16.47	15.56	14.53	12.44
5MHz	1 RB high	713.5	22.82	21.97	21.01	17.77	17.57	16.72	15.76	12.52
		707.5	22.77	21.97	20.92	17.69	17.52	16.72	15.67	12.44
		701.5	22.78	22.05	20.89	17.67	17.53	16.80	15.64	12.42
	1 RB low	713.5	22.81	22.02	20.05	17.19	17.56	16.77	14.80	11.94
		707.5	22.83	22.04	20.99	17.75	17.58	16.79	15.74	12.50
		701.5	22.82	22.06	20.97	17.74	17.57	16.81	15.72	12.49
	50% RB mid	713.5	21.76	20.73	19.78	17.69	16.51	15.48	14.53	12.44
		707.5	21.79	20.78	19.82	17.73	16.54	15.53	14.57	12.48
		701.5	21.79	20.80	19.81	17.72	16.54	15.55	14.56	12.47
	100% RB	713.5	21.77	20.73	19.73	17.65	16.52	15.48	14.48	12.40
		707.5	21.86	20.86	19.78	17.69	16.61	15.61	14.53	12.44
		701.5	21.82	20.83	19.76	17.67	16.57	15.58	14.51	12.42
10MHz	1 RB high	711	22.76	21.80	20.85	17.63	17.51	16.55	15.60	12.38
		707.5	22.78	21.94	20.92	17.69	17.53	16.69	15.67	12.44

		704	22.75	22.06	20.95	17.72	17.50	16.81	15.70	12.47
	1 RB low	711	22.79	22.06	20.97	17.74	17.54	16.81	15.72	12.49
		707.5	22.82	22.04	20.94	17.71	17.57	16.79	15.69	12.46
		704	22.75	21.91	20.97	17.74	17.50	16.66	15.72	12.49
	50% RB mid	711	21.78	20.77	19.77	17.68	16.53	15.52	14.52	12.43
		707.5	21.77	20.78	19.78	17.69	16.52	15.53	14.53	12.44
		704	21.80	20.77	19.78	17.69	16.55	15.52	14.53	12.44
	100% RB	711	21.74	20.74	19.75	17.67	16.49	15.49	14.50	12.42
		707.5	21.79	20.80	19.78	17.69	16.54	15.55	14.53	12.44
		704	21.79	20.78	19.75	17.67	16.54	15.53	14.50	12.42

LTE Band 13-ERP

Limits: ≤34.77dBm(3W)

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				ERP(dBm)(Gt-Lc =-2.3)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	784.5	23.79	22.90	22.14	18.88	19.34	18.45	17.69	14.43
		782	23.67	23.00	21.93	18.70	19.22	18.55	17.48	14.25
		779.5	23.82	23.05	21.99	18.75	19.37	18.60	17.54	14.30
	1 RB low	784.5	23.85	23.14	22.03	18.79	19.40	18.69	17.58	14.34
		782	23.99	23.06	22.00	18.76	19.54	18.61	17.55	14.31
		779.5	23.97	22.92	21.91	18.68	19.52	18.47	17.46	14.23
	50% RB mid	784.5	22.84	21.82	20.83	18.71	18.39	17.37	16.38	14.26
		782	22.87	21.86	20.86	18.74	18.42	17.41	16.41	14.29
		779.5	22.89	21.86	20.91	18.78	18.44	17.41	16.46	14.33
	100% RB	784.5	22.88	21.83	20.84	18.72	18.43	17.38	16.39	14.27
		782	22.88	21.85	20.85	18.73	18.43	17.40	16.40	14.28
		779.5	22.86	21.81	20.86	18.74	18.41	17.36	16.41	14.29
10MHz	1 RB high	782	23.79	22.86	21.89	18.70	19.34	18.41	17.44	14.25
	1 RB low	782	23.99	22.98	21.92	18.72	19.54	18.53	17.47	14.27
	50% RB mid	782	22.85	21.85	20.87	18.78	18.40	17.40	16.42	14.33
	100% RB	782	22.83	21.83	20.78	18.70	18.38	17.38	16.33	14.25

LTE Band 14-ERP

Limits: $\leq 34.77\text{dBm}(3\text{W})$

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				ERP(dBm)(Gt-Lc =-2.6)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	795.5	22.77	22.05	20.92	17.76	18.02	17.30	16.17	13.01
		793	22.81	22.12	20.99	17.82	18.06	17.37	16.24	13.07
		790.5	22.84	22.07	21.00	17.83	18.09	17.32	16.25	13.08
	1 RB low	795.5	22.94	22.15	21.02	17.84	18.19	17.40	16.27	13.09
		793	22.80	22.17	20.98	17.81	18.05	17.42	16.23	13.06
		790.5	22.90	22.15	21.00	17.83	18.15	17.40	16.25	13.08
	50% RB mid	795.5	21.85	20.85	19.87	17.86	17.10	16.10	15.12	13.11
		793	21.81	20.86	19.81	17.81	17.06	16.11	15.06	13.06
		790.5	21.85	20.88	19.84	17.84	17.10	16.13	15.09	13.09
	100% RB	795.5	21.84	20.84	19.81	17.81	17.09	16.09	15.06	13.06
		793	21.84	20.85	19.79	17.79	17.09	16.10	15.04	13.04
		790.5	21.89	20.88	19.83	17.83	17.14	16.13	15.08	13.08
10MHz	1 RB high	793	22.74	21.91	20.91	17.80	17.99	17.16	16.16	13.05
	1 RB low	793	22.82	22.07	20.83	17.73	18.07	17.32	16.08	12.98
	50% RB mid	793	21.83	20.82	19.81	17.81	17.08	16.07	15.06	13.06
	100% RB	793	21.84	20.85	19.80	17.80	17.09	16.10	15.05	13.05

LTE Band 25-EIRP
Limits: ≤33dBm(2W)

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				EIRP(dBm)(Gt-Lc =-0.9)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	1914.3	23.88	23.16	22.1	19.19	22.98	22.26	21.20	18.29
		1882.5	24.23	23.38	22.34	19.26	23.33	22.48	21.44	18.36
		1850.7	24.04	23.18	22.09	19.1	23.14	22.28	21.19	18.20
	1 RB low	1914.3	24.13	23.12	22.82	19.19	23.23	22.22	21.92	18.29
		1882.5	24.24	23.23	22.27	19.11	23.34	22.33	21.37	18.21
		1850.7	24.15	23.07	22.11	19.07	23.25	22.17	21.21	18.17
	50% RB mid	1914.3	24.07	23.05	22.2	19.35	23.17	22.15	21.30	18.45
		1882.5	23.06	22.99	22.11	19.32	22.16	22.09	21.21	18.42
		1850.7	23.93	22.94	22.02	19.08	23.03	22.04	21.12	18.18
	100% RB	1914.3	22.95	22.05	20.98	19.19	22.05	21.15	20.08	18.29
		1882.5	23.18	22.15	21	19.21	22.28	21.25	20.10	18.31
		1850.7	23.06	22	20.85	19.23	22.16	21.10	19.95	18.33
3MHz	1 RB high	1913.5	24	23.19	22.12	19.19	23.10	22.29	21.22	18.29
		1882.5	24.05	23.22	22.24	19.16	23.15	22.32	21.34	18.26
		1851.5	24.06	22.99	22.06	19.32	23.16	22.09	21.16	18.42
	1 RB low	1913.5	23.86	23.31	22.19	19.21	22.96	22.41	21.29	18.31
		1882.5	23.97	23.2	22.12	19.35	23.07	22.30	21.22	18.45
		1851.5	24.07	23.08	22.04	19.32	23.17	22.18	21.14	18.42
	50% RB mid	1913.5	22.96	22.04	21.03	19.27	22.06	21.14	20.13	18.37
		1882.5	23.06	22.08	21.09	19.16	22.16	21.18	20.19	18.26
		1851.5	22.99	21.99	20.96	19.16	22.09	21.09	20.06	18.26
	100% RB	1913.5	22.99	21.97	20.93	19.33	22.09	21.07	20.03	18.43
		1882.5	23.03	22.05	20.96	19.33	22.13	21.15	20.06	18.43
		1851.5	22.94	22.01	20.89	19.19	22.04	21.11	19.99	18.29
5MHz	1 RB high	1912.5	24.11	23.04	22.16	19.26	23.21	22.14	21.26	18.36
		1882.5	24.27	23.28	22.26	19.12	23.37	22.38	21.36	18.22
		1852.5	23.9	23.19	22.05	19.21	23.00	22.29	21.15	18.31
	1 RB low	1912.5	24.03	23.21	22.09	19.09	23.13	22.31	21.19	18.19
		1882.5	24.01	23.38	22.3	19.35	23.11	22.48	21.40	18.45
		1852.5	24.07	23.15	22.14	19.11	23.17	22.25	21.24	18.21
	50% RB mid	1912.5	22.96	22.08	21.02	19.26	22.06	21.18	20.12	18.36
		1882.5	23.13	22.13	21.14	19.21	22.23	21.23	20.24	18.31
		1852.5	23.02	22.04	21	19.32	22.12	21.14	20.10	18.42
	100% RB	1912.5	23.05	22.06	21.03	19.12	22.15	21.16	20.13	18.22
		1882.5	23.1	22.12	21.04	19.18	22.20	21.22	20.14	18.28
		1852.5	23.03	22.04	21.01	19.19	22.13	21.14	20.11	18.29
10MHz	1 RB high	1910	24.01	23.06	22.12	19.17	23.11	22.16	21.22	18.27
		1882.5	24.15	23.34	22.24	19.33	23.25	22.44	21.34	18.43

		1855	24	23.21	22.04	19.11	23.10	22.31	21.14	18.21
		1910	24.05	23.26	22.16	19.17	23.15	22.36	21.26	18.27
		1882.5	23.93	23.24	22.18	19.05	23.03	22.34	21.28	18.15
		1855	24.06	23.14	22.07	19.05	23.16	22.24	21.17	18.15
		1910	23	21.97	20.98	19.23	22.10	21.07	20.08	18.33
		1882.5	23.07	22.05	20.99	19.32	22.17	21.15	20.09	18.42
		1855	22.99	21.96	20.92	19.06	22.09	21.06	20.02	18.16
		1910	23.03	22.04	20.98	19.23	22.13	21.14	20.08	18.33
		1882.5	23.08	22.06	20.98	19.09	22.18	21.16	20.08	18.19
		1855	22.98	21.98	20.93	19.12	22.08	21.08	20.03	18.22
15MHz	1 RB high	1907.5	24.04	23.18	22.12	19.35	23.14	22.28	21.22	18.45
		1882.5	24.04	23.32	22.24	19.25	23.14	22.42	21.34	18.35
		1857.5	23.98	23.15	22.12	19.07	23.08	22.25	21.22	18.17
	1 RB low	1907.5	24.03	23.19	22.18	19.1	23.13	22.29	21.28	18.20
		1882.5	23.99	23.17	22.15	19.05	23.09	22.27	21.25	18.15
		1857.5	24.06	23.16	22.13	19.31	23.16	22.26	21.23	18.41
	50% RB mid	1907.5	22.99	22.03	21.06	19.28	22.09	21.13	20.16	18.38
		1882.5	23.01	22.03	21.06	19.16	22.11	21.13	20.16	18.26
		1857.5	22.92	21.96	20.97	19.17	22.02	21.06	20.07	18.27
	100% RB	1907.5	22.99	22.03	20.98	19.35	22.09	21.13	20.08	18.45
		1882.5	23.04	22.08	21.03	19.26	22.14	21.18	20.13	18.36
		1857.5	22.95	21.99	20.96	19.33	22.05	21.09	20.06	18.43
20MHz	1 RB high	1905	24.05	23.2	22.18	19.26	23.15	22.30	21.28	18.36
		1882.5	24.15	23.23	22.08	19.3	23.25	22.33	21.18	18.40
		1860	23.92	23.12	22.12	19.11	23.02	22.22	21.22	18.21
	1 RB low	1905	23.95	23.36	22.09	19.3	23.05	22.46	21.19	18.40
		1882.5	24.06	23.26	22.11	19.18	23.16	22.36	21.21	18.28
		1860	24.04	23.98	22.09	19.14	23.14	23.08	21.19	18.24
	50% RB mid	1905	22.99	22.02	20.98	19.09	22.09	21.12	20.08	18.19
		1882.5	23.03	22.03	21.03	19.1	22.13	21.13	20.13	18.20
		1860	22.98	21.96	20.94	19.07	22.08	21.06	20.04	18.17
	100% RB	1905	22.94	21.96	20.98	19.22	22.04	21.06	20.08	18.32
		1882.5	23.05	22.05	20.98	19.11	22.15	21.15	20.08	18.21
		1860	22.98	21.92	20.91	19.15	22.08	21.02	20.01	18.25

LTE Band 26_Part90-ERP
Limits: ≤38.45dBm(7W)

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				ERP(dBm)(Gt-Lc =-1.3)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	823.3	23.34	22.40	21.38	18.48	19.89	18.95	17.93	15.03
		819	23.37	22.46	21.38	18.48	19.92	19.01	17.93	15.03
		814.7	23.29	22.41	21.83	18.55	19.84	18.96	18.38	15.10
	1 RB low	823.3	23.32	22.39	21.26	18.48	19.87	18.94	17.81	15.03
		819	23.33	22.42	21.26	18.49	19.88	18.97	17.81	15.04
		814.7	23.27	22.45	21.70	18.52	19.82	19.00	18.25	15.07
	50% RB mid	823.3	23.41	22.50	21.34	18.49	19.96	19.05	17.89	15.04
		819	23.44	22.50	21.29	18.48	19.99	19.05	17.84	15.03
		814.7	23.54	22.53	21.41	18.44	20.09	19.08	17.96	14.99
	100% RB	823.3	22.35	21.65	20.44	18.52	18.90	18.20	16.99	15.07
		819	22.40	21.64	20.42	18.43	18.95	18.19	16.97	14.98
		814.7	22.38	21.60	20.36	18.42	18.93	18.15	16.91	14.97
3MHz	1 RB high	822.5	23.30	22.34	21.33	18.46	19.85	18.89	17.88	15.01
		819	23.34	22.39	21.31	18.48	19.89	18.94	17.86	15.03
		815.5	23.45	22.85	21.20	18.45	20.00	19.40	17.75	15.00
	1 RB low	822.5	23.35	22.41	21.22	18.44	19.90	18.96	17.77	14.99
		819	23.33	22.38	21.20	18.42	19.88	18.93	17.75	14.97
		815.5	23.48	22.89	21.13	18.38	20.03	19.44	17.68	14.93
	50% RB mid	822.5	22.30	21.51	20.51	18.49	18.85	18.06	17.06	15.04
		819	22.37	21.49	20.50	18.46	18.92	18.04	17.05	15.01
		815.5	22.36	21.47	20.35	18.44	18.91	18.02	16.90	14.99
	100% RB	822.5	22.37	21.44	20.49	18.47	18.92	17.99	17.04	15.02
		819	22.39	21.41	20.45	18.47	18.94	17.96	17.00	15.02
		815.5	22.40	21.38	20.44	18.41	18.95	17.93	16.99	14.96
5MHz	1 RB high	821.5	23.54	22.49	21.76	18.62	20.09	19.04	18.31	15.17
		819	23.53	22.54	21.76	18.64	20.08	19.09	18.31	15.19
		816.5	23.54	22.52	21.70	18.59	20.09	19.07	18.25	15.14
	1 RB low	821.5	23.55	22.52	21.75	18.63	20.10	19.07	18.30	15.18
		819	23.56	22.54	21.77	18.58	20.11	19.09	18.32	15.13
		816.5	23.54	22.54	21.77	18.53	20.09	19.09	18.32	15.08
	50% RB mid	821.5	22.43	21.60	20.69	18.64	18.98	18.15	17.24	15.19
		819	22.43	21.57	20.46	18.47	18.98	18.12	17.01	15.02
		816.5	22.42	21.58	20.56	18.57	18.97	18.13	17.11	15.12
	100% RB	821.5	22.50	21.50	20.62	18.60	19.05	18.05	17.17	15.15
		819	22.50	21.51	20.48	18.50	19.05	18.06	17.03	15.05
		816.5	22.52	21.48	20.56	18.51	19.07	18.03	17.11	15.06
10MHz	1 RB high	819	23.48	22.52	21.46	18.66	20.03	19.07	18.01	15.21
	1 RB low	819	23.46	22.53	21.34	18.51	20.01	19.08	17.89	15.06



No.25T04Z100699-003

	50% RB mid	819	22.49	21.62	20.62	18.60	19.04	18.17	17.17	15.15
	100% RB	819	22.50	21.55	20.54	18.52	19.05	18.10	17.09	15.07

LTE Band 26_Part22-ERP

Limits: ≤50dBm(100W)

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				ERP(dBm)(Gt-Lc =-1.3)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	848.3	23.27	22.35	21.29	18.41	19.82	18.90	17.84	14.96
		836.5	23.37	22.48	21.43	18.52	19.92	19.03	17.98	15.07
		824.7	23.26	22.42	21.83	18.58	19.81	18.97	18.38	15.13
	1 RB low	848.3	23.25	22.36	21.17	18.44	19.80	18.91	17.72	14.99
		836.5	23.35	22.42	21.31	18.52	19.90	18.97	17.86	15.07
		824.7	23.23	22.38	21.74	18.56	19.78	18.93	18.29	15.11
	50% RB mid	848.3	23.41	22.51	21.30	18.40	19.96	19.06	17.85	14.95
		836.5	23.50	22.56	21.68	18.49	20.05	19.11	18.23	15.04
		824.7	23.42	22.51	21.41	18.47	19.97	19.06	17.96	15.02
	100% RB	848.3	22.34	21.64	20.35	18.44	18.89	18.19	16.90	14.99
		836.5	22.43	21.69	20.59	18.45	18.98	18.24	17.14	15.00
		824.7	22.36	21.66	20.42	18.45	18.91	18.21	16.97	15.00
3MHz	1 RB high	847.5	23.26	22.34	21.20	18.41	19.81	18.89	17.75	14.96
		836.5	23.38	22.44	21.36	18.49	19.93	18.99	17.91	15.04
		825.5	23.36	22.39	21.32	18.48	19.91	18.94	17.87	15.03
	1 RB low	847.5	23.30	22.37	21.14	18.35	19.85	18.92	17.69	14.90
		836.5	23.36	22.44	21.25	18.47	19.91	18.99	17.80	15.02
		825.5	23.36	22.41	21.22	18.45	19.91	18.96	17.77	15.00
	50% RB mid	847.5	22.28	21.46	20.46	18.42	18.83	18.01	17.01	14.97
		836.5	22.35	21.55	20.53	18.50	18.90	18.10	17.08	15.05
		825.5	22.34	21.55	20.39	18.48	18.89	18.10	16.94	15.03
	100% RB	847.5	22.34	21.38	20.42	18.39	18.89	17.93	16.97	14.94
		836.5	22.40	21.45	20.50	18.47	18.95	18.00	17.05	15.02
		825.5	22.37	21.47	20.51	18.46	18.92	18.02	17.06	15.01
5MHz	1 RB high	846.5	23.45	22.41	21.68	18.55	20.00	18.96	18.23	15.10
		836.5	23.57	22.55	21.80	18.64	20.12	19.10	18.35	15.19
		826.5	23.52	22.55	21.81	18.70	20.07	19.10	18.36	15.25
	1 RB low	846.5	23.52	22.54	21.76	18.53	20.07	19.09	18.31	15.08
		836.5	23.58	22.56	21.83	18.65	20.13	19.11	18.38	15.20
		826.5	23.50	22.50	21.93	18.61	20.05	19.05	18.48	15.16
	50% RB mid	846.5	22.39	21.51	20.64	18.53	18.94	18.06	17.19	15.08
		836.5	22.45	21.63	20.70	18.64	19.00	18.18	17.25	15.19
		826.5	22.43	21.63	20.63	18.63	18.98	18.18	17.18	15.18
	100% RB	846.5	22.47	21.43	20.53	18.51	19.02	17.98	17.08	15.06
		836.5	22.53	21.53	20.62	18.59	19.08	18.08	17.17	15.14
		826.5	22.49	21.54	20.63	18.61	19.04	18.09	17.18	15.16
10MHz	1 RB high	844	23.40	22.49	21.34	18.60	19.95	19.04	17.89	15.15
		836.5	23.55	22.57	21.44	18.61	20.10	19.12	17.99	15.16

		829	23.52	22.57	21.45	18.64	20.07	19.12	18.00	15.19
		844	23.50	22.54	21.28	18.60	20.05	19.09	17.83	15.15
		836.5	23.50	22.52	21.30	18.64	20.05	19.07	17.85	15.19
		829	23.42	22.45	21.34	18.56	19.97	19.00	17.89	15.11
		844	22.47	21.59	20.52	18.55	19.02	18.14	17.07	15.10
		836.5	22.53	21.65	20.63	18.62	19.08	18.20	17.18	15.17
		829	22.50	21.66	20.67	18.63	19.05	18.21	17.22	15.18
		844	22.51	21.51	20.49	18.46	19.06	18.06	17.04	15.01
		836.5	22.54	21.60	20.60	18.57	19.09	18.15	17.15	15.12
		829	22.48	21.60	20.59	18.55	19.03	18.15	17.14	15.10
		841.5	23.46	22.79	21.91	18.81	20.01	19.34	18.46	15.36
		836.5	23.52	22.91	21.91	18.86	20.07	19.46	18.46	15.41
15MHz	1 RB high	831.5	23.48	22.85	21.95	18.88	20.03	19.40	18.50	15.43
		841.5	23.50	22.79	21.84	18.89	20.05	19.34	18.39	15.44
		836.5	23.51	22.81	21.85	18.90	20.06	19.36	18.40	15.45
	1 RB low	831.5	23.38	22.73	21.90	18.82	19.93	19.28	18.45	15.37
		841.5	22.48	21.50	20.47	18.55	19.03	18.05	17.02	15.10
		836.5	22.52	21.55	20.52	18.58	19.07	18.10	17.07	15.13
	50% RB mid	831.5	22.49	21.54	20.58	18.59	19.04	18.09	17.13	15.14
		841.5	22.50	21.54	20.57	18.57	19.05	18.09	17.12	15.12
		836.5	22.50	21.58	20.60	18.61	19.05	18.13	17.15	15.16
	100% RB	831.5	22.49	21.58	20.60	18.60	19.04	18.13	17.15	15.15

LTE Band30

Limits: $\leq 23.9794\text{dBm}/5\text{MHz}(250\text{mW}/5\text{MHz})$

The results for dBm/5MHz

Bandwidth	Frequency (MHz)	Modulation	RB size/offset	Conducted Power (dBm/5MHz)	EIRP (dBm/5MHz) GT = -2.5dBi
5MHz	2307.5	QPSK	1 RB low	23.11	20.61
5MHz	2307.5	QPSK	1 RB high	23.31	20.81
5MHz	2307.5	QPSK	100% RB	21.35	18.85
5MHz	2307.5	16QAM	1 RB low	22.04	19.54
5MHz	2307.5	16QAM	1 RB high	22.28	19.78
5MHz	2307.5	16QAM	100% RB	20.38	17.88
5MHz	2307.5	64QAM	1 RB low	21.18	18.68
5MHz	2307.5	64QAM	1 RB high	21.37	18.87
5MHz	2307.5	64QAM	100% RB	19.39	16.89
5MHz	2307.5	256QAM	1 RB low	18.11	15.61
5MHz	2307.5	256QAM	1 RB high	18.27	15.77
5MHz	2307.5	256QAM	100% RB	17.39	14.89
5MHz	2310	QPSK	1 RB low	23.28	20.78
5MHz	2310	QPSK	1 RB high	23.34	20.84
5MHz	2310	QPSK	100% RB	21.43	18.93
5MHz	2310	16QAM	1 RB low	22.26	19.76
5MHz	2310	16QAM	1 RB high	22.29	19.79
5MHz	2310	16QAM	100% RB	20.44	17.94
5MHz	2310	64QAM	1 RB low	21.35	18.85
5MHz	2310	64QAM	1 RB high	21.41	18.91
5MHz	2310	64QAM	100% RB	19.44	16.94
5MHz	2310	256QAM	1 RB low	18.24	15.74
5MHz	2310	256QAM	1 RB high	18.29	15.79
5MHz	2310	256QAM	100% RB	17.44	14.94
5MHz	2312.5	QPSK	1 RB low	23.32	20.82
5MHz	2312.5	QPSK	1 RB high	23.39	20.89
5MHz	2312.5	QPSK	100% RB	21.44	18.94
5MHz	2312.5	16QAM	1 RB low	22.27	19.77
5MHz	2312.5	16QAM	1 RB high	22.30	19.80
5MHz	2312.5	16QAM	100% RB	20.46	17.96
5MHz	2312.5	64QAM	1 RB low	21.38	18.88
5MHz	2312.5	64QAM	1 RB high	21.43	18.93
5MHz	2312.5	64QAM	100% RB	19.46	16.96
5MHz	2312.5	256QAM	1 RB low	18.28	15.78
5MHz	2312.5	256QAM	1 RB high	18.29	15.79
5MHz	2312.5	256QAM	100% RB	17.46	14.96

10MHz	2310	QPSK	1 RB low	23.17	20.67
10MHz	2310	QPSK	1 RB high	23.32	20.82
10MHz	2310	QPSK	100% RB	19.76	17.26
10MHz	2310	16QAM	1 RB low	22.36	19.86
10MHz	2310	16QAM	1 RB high	22.52	20.02
10MHz	2310	16QAM	100% RB	18.78	16.28
10MHz	2310	64QAM	1 RB low	21.14	18.64
10MHz	2310	64QAM	1 RB high	21.35	18.85
10MHz	2310	64QAM	100% RB	17.75	15.25
10MHz	2310	256QAM	1 RB low	18.22	15.72
10MHz	2310	256QAM	1 RB high	18.44	15.94
10MHz	2310	256QAM	100% RB	15.72	13.22

Radiated power(dBm) calculated from conducted power(dBm)

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				EIRP(dBm)(Gt-Lc =-2.5)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	2312.5	23.15	22.45	21.18	18.06	20.65	19.95	18.68	15.56
		2310	23.14	22.37	21.34	18.20	20.64	19.87	18.84	15.70
		2307.5	22.99	22.19	21.25	18.12	20.49	19.69	18.75	15.62
	1 RB low	2312.5	23.25	22.35	21.24	18.11	20.75	19.85	18.74	15.61
		2310	23.09	22.24	21.25	18.12	20.59	19.74	18.75	15.62
		2307.5	23.11	22.32	21.11	18.00	20.61	19.82	18.61	15.50
	50% RB mid	2312.5	22.08	21.11	20.11	18.07	19.58	18.61	17.61	15.57
		2310	22.21	21.10	20.10	18.06	19.71	18.60	17.60	15.56
		2307.5	22.08	21.10	20.11	18.07	19.58	18.60	17.61	15.57
	100% RB	2312.5	22.11	21.12	20.09	18.05	19.61	18.62	17.59	15.55
		2310	22.12	21.08	20.06	18.03	19.62	18.58	17.56	15.53
		2307.5	22.12	21.13	20.05	18.02	19.62	18.63	17.55	15.52
10MHz	1 RB high	2310	23.02	22.28	21.17	18.05	20.52	19.78	18.67	15.55
	1 RB low	2310	23.15	22.36	21.31	18.17	20.65	19.86	18.81	15.67
	50% RB mid	2310	22.06	21.03	20.04	18.01	19.56	18.53	17.54	15.51
	100% RB	2310	22.05	21.04	20.07	18.04	19.55	18.54	17.57	15.54

LTE Band 41-EIRP
Limits: ≤33dBm(2W)

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				EIRP(dBm)(Gt-Lc =-1.2)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	2687.5	26.04	25.14	23.94	20.50	24.84	23.94	22.74	19.30
		2593	26.29	25.35	24.12	20.66	25.09	24.15	22.92	19.46
		2498.5	25.98	25.06	23.85	20.43	24.78	23.86	22.65	19.23
	1 RB low	2687.5	26.05	25.13	24.62	21.09	24.85	23.93	23.42	19.89
		2593	26.26	25.35	24.12	20.66	25.06	24.15	22.92	19.46
		2498.5	26.00	25.05	23.86	20.43	24.80	23.85	22.66	19.23
	50% RB mid	2687.5	25.00	24.01	23.05	20.79	23.80	22.81	21.85	19.59
		2593	25.17	24.17	23.20	20.92	23.97	22.97	22.00	19.72
		2498.5	24.89	23.92	22.93	20.68	23.69	22.72	21.73	19.48
	100% RB	2687.5	24.99	24.01	23.07	20.80	23.79	22.81	21.87	19.60
		2593	25.87	24.21	23.22	20.94	24.67	23.01	22.02	19.74
		2498.5	24.90	23.95	22.94	20.69	23.70	22.75	21.74	19.49
10MHz	1 RB high	2685	26.02	25.17	23.89	20.46	24.82	23.97	22.69	19.26
		2593	26.19	25.25	24.04	20.59	24.99	24.05	22.84	19.39
		2501	26.00	25.09	23.88	20.45	24.80	23.89	22.68	19.25
	1 RB low	2685	26.08	25.24	24.72	21.17	24.88	24.04	23.52	19.97
		2593	26.16	25.35	24.13	20.67	24.96	24.15	22.93	19.47
		2501	25.94	25.07	23.86	20.43	24.74	23.87	22.66	19.23
	50% RB mid	2685	24.96	24.00	23.02	20.76	23.76	22.80	21.82	19.56
		2593	25.10	24.13	23.17	20.89	23.90	22.93	21.97	19.69
		2501	24.86	23.90	22.93	20.68	23.66	22.70	21.73	19.48
	100% RB	2685	24.99	24.03	22.97	20.71	23.79	22.83	21.77	19.51
		2593	25.12	24.16	23.13	20.86	23.92	22.96	21.93	19.66
		2501	24.87	23.93	22.90	20.61	23.67	22.73	21.70	19.41
15MHz	1 RB high	2682.5	26.03	25.13	23.89	20.46	24.83	23.93	22.69	19.26
		2593	26.15	25.25	24.04	20.59	24.95	24.05	22.84	19.39
		2503.5	25.97	25.12	23.89	20.46	24.77	23.92	22.69	19.26
	1 RB low	2682.5	26.08	25.21	23.99	20.55	24.88	24.01	22.79	19.35
		2593	26.25	25.34	24.11	21.74	25.05	24.14	22.91	20.54
		2503.5	25.94	25.05	23.83	21.49	24.74	23.85	22.63	20.29
	50% RB mid	2682.5	24.96	23.95	22.94	20.69	23.76	22.75	21.74	19.49
		2593	25.13	24.14	23.13	20.86	23.93	22.94	21.93	19.66
		2503.5	24.87	23.87	22.89	20.64	23.67	22.67	21.69	19.44
	100% RB	2682.5	25.02	24.04	23.04	20.78	23.82	22.84	21.84	19.58
		2593	25.14	24.17	23.14	20.82	23.94	22.97	21.94	19.62
		2503.5	24.91	23.95	22.95	20.66	23.71	22.75	21.75	19.46
20MHz	1 RB high	2680	25.97	25.16	23.90	20.47	24.77	23.96	22.70	19.27
		2593	26.20	25.30	24.08	20.62	25.00	24.10	22.88	19.42
		2506	25.97	25.17	23.92	20.49	24.77	23.97	22.72	19.29

	1 RB low	2680	26.15	25.30	24.04	20.59	24.95	24.10	22.84	19.39
		2593	26.28	25.36	24.45	20.94	25.08	24.16	23.25	19.74
		2506	25.92	25.10	23.85	20.43	24.72	23.90	22.65	19.23
	50% RB mid	2680	25.02	24.09	23.04	20.78	23.82	22.89	21.84	19.58
		2593	25.17	24.19	23.16	20.89	23.97	22.99	21.96	19.69
		2506	24.94	23.99	22.97	20.71	23.74	22.79	21.77	19.51
	100% RB	2680	25.04	24.10	23.07	20.80	23.84	22.90	21.87	19.60
		2593	25.17	24.17	23.16	20.89	23.97	22.97	21.96	19.69
		2506	25.23	23.99	22.98	20.72	24.03	22.79	21.78	19.52

LTE Band 48-EIRP

Limits: $\leq 23\text{dBm}/10\text{MHz}$

The results for dBm/10MHz

Bandwidth	Frequency (MHz)	Modulation	RB size/offset	Conducted Power (dBm/10MHz)	EIRP (dBm/10MHz) (Gt - Lc = -1.2)
5MHz	3552.5	QPSK	1 RB low	23.86	22.66
5MHz	3552.5	QPSK	1 RB high	23.84	22.64
5MHz	3552.5	QPSK	100% RB	22.57	21.37
5MHz	3552.5	16QAM	1 RB low	22.92	21.72
5MHz	3552.5	16QAM	1 RB high	22.90	21.70
5MHz	3552.5	16QAM	100% RB	21.56	20.36
5MHz	3552.5	64QAM	1 RB low	21.93	20.73
5MHz	3552.5	64QAM	1 RB high	21.91	20.71
5MHz	3552.5	64QAM	100% RB	20.58	19.38
5MHz	3552.5	256QAM	1 RB low	18.82	17.62
5MHz	3552.5	256QAM	1 RB high	18.85	17.65
5MHz	3552.5	256QAM	100% RB	18.56	17.36
5MHz	3625	QPSK	1 RB low	24.12	22.92
5MHz	3625	QPSK	1 RB high	24.10	22.90
5MHz	3625	QPSK	100% RB	22.84	21.64
5MHz	3625	16QAM	1 RB low	23.22	22.02
5MHz	3625	16QAM	1 RB high	23.19	21.99
5MHz	3625	16QAM	100% RB	21.82	20.62
5MHz	3625	64QAM	1 RB low	22.21	21.01
5MHz	3625	64QAM	1 RB high	22.21	21.01
5MHz	3625	64QAM	100% RB	20.84	19.64
5MHz	3625	256QAM	1 RB low	19.21	18.01
5MHz	3625	256QAM	1 RB high	19.12	17.92
5MHz	3625	256QAM	100% RB	18.84	17.64
5MHz	3697.5	QPSK	1 RB low	23.89	22.69
5MHz	3697.5	QPSK	1 RB high	23.81	22.61
5MHz	3697.5	QPSK	100% RB	22.62	21.42
5MHz	3697.5	16QAM	1 RB low	23.03	21.83
5MHz	3697.5	16QAM	1 RB high	22.93	21.73
5MHz	3697.5	16QAM	100% RB	21.61	20.41
5MHz	3697.5	64QAM	1 RB low	22.00	20.80
5MHz	3697.5	64QAM	1 RB high	21.91	20.71
5MHz	3697.5	64QAM	100% RB	20.63	19.43
5MHz	3697.5	256QAM	1 RB low	18.95	17.75
5MHz	3697.5	256QAM	1 RB high	18.84	17.64
5MHz	3697.5	256QAM	100% RB	18.60	17.40
10MHz	3555	QPSK	1 RB low	23.76	22.56
10MHz	3555	QPSK	1 RB high	23.81	22.61

10MHz	3555	QPSK	100% RB	21.98	20.78
10MHz	3555	16QAM	1 RB low	22.94	21.74
10MHz	3555	16QAM	1 RB high	23.01	21.81
10MHz	3555	16QAM	100% RB	20.97	19.77
10MHz	3555	64QAM	1 RB low	21.75	20.55
10MHz	3555	64QAM	1 RB high	21.81	20.61
10MHz	3555	64QAM	100% RB	19.95	18.75
10MHz	3555	256QAM	1 RB low	18.81	17.61
10MHz	3555	256QAM	1 RB high	18.85	17.65
10MHz	3555	256QAM	100% RB	17.96	16.76
10MHz	3625	QPSK	1 RB low	23.96	22.76
10MHz	3625	QPSK	1 RB high	24.02	22.82
10MHz	3625	QPSK	100% RB	22.23	21.03
10MHz	3625	16QAM	1 RB low	23.06	21.86
10MHz	3625	16QAM	1 RB high	23.12	21.92
10MHz	3625	16QAM	100% RB	21.21	20.01
10MHz	3625	64QAM	1 RB low	21.99	20.79
10MHz	3625	64QAM	1 RB high	22.08	20.88
10MHz	3625	64QAM	100% RB	20.22	19.02
10MHz	3625	256QAM	1 RB low	18.99	17.79
10MHz	3625	256QAM	1 RB high	19.06	17.86
10MHz	3625	256QAM	100% RB	18.19	16.99
10MHz	3695	QPSK	1 RB low	23.90	22.70
10MHz	3695	QPSK	1 RB high	23.77	22.57
10MHz	3695	QPSK	100% RB	22.07	20.87
10MHz	3695	16QAM	1 RB low	23.01	21.81
10MHz	3695	16QAM	1 RB high	22.89	21.69
10MHz	3695	16QAM	100% RB	21.07	19.87
10MHz	3695	64QAM	1 RB low	21.94	20.74
10MHz	3695	64QAM	1 RB high	21.82	20.62
10MHz	3695	64QAM	100% RB	20.07	18.87
10MHz	3695	256QAM	1 RB low	18.91	17.71
10MHz	3695	256QAM	1 RB high	18.80	17.60
10MHz	3695	256QAM	100% RB	18.03	16.83
15MHz	3557.5	QPSK	1 RB low	23.88	22.68
15MHz	3557.5	QPSK	1 RB high	24.05	22.85
15MHz	3557.5	QPSK	100% RB	21.24	20.04
15MHz	3557.5	16QAM	1 RB low	23.03	21.83
15MHz	3557.5	16QAM	1 RB high	23.15	21.95
15MHz	3557.5	16QAM	100% RB	20.24	19.04
15MHz	3557.5	64QAM	1 RB low	21.98	20.78
15MHz	3557.5	64QAM	1 RB high	22.30	21.10
15MHz	3557.5	64QAM	100% RB	19.22	18.02

15MHz	3557.5	256QAM	1 RB low	18.90	17.70
15MHz	3557.5	256QAM	1 RB high	19.13	17.93
15MHz	3557.5	256QAM	100% RB	17.20	16.00
15MHz	3625	QPSK	1 RB low	23.97	22.77
15MHz	3625	QPSK	1 RB high	24.03	22.83
15MHz	3625	QPSK	100% RB	21.51	20.31
15MHz	3625	16QAM	1 RB low	23.11	21.91
15MHz	3625	16QAM	1 RB high	23.16	21.96
15MHz	3625	16QAM	100% RB	20.50	19.30
15MHz	3625	64QAM	1 RB low	22.02	20.82
15MHz	3625	64QAM	1 RB high	22.11	20.91
15MHz	3625	64QAM	100% RB	19.49	18.29
15MHz	3625	256QAM	1 RB low	19.01	17.81
15MHz	3625	256QAM	1 RB high	19.07	17.87
15MHz	3625	256QAM	100% RB	17.45	16.25
15MHz	3692.5	QPSK	1 RB low	23.83	22.63
15MHz	3692.5	QPSK	1 RB high	23.77	22.57
15MHz	3692.5	QPSK	100% RB	21.36	20.16
15MHz	3692.5	16QAM	1 RB low	22.96	21.76
15MHz	3692.5	16QAM	1 RB high	22.95	21.75
15MHz	3692.5	16QAM	100% RB	20.38	19.18
15MHz	3692.5	64QAM	1 RB low	21.89	20.69
15MHz	3692.5	64QAM	1 RB high	21.85	20.65
15MHz	3692.5	64QAM	100% RB	19.39	18.19
15MHz	3692.5	256QAM	1 RB low	18.91	17.71
15MHz	3692.5	256QAM	1 RB high	18.90	17.70
15MHz	3692.5	256QAM	100% RB	17.38	16.18
20MHz	3560	QPSK	1 RB low	23.87	22.67
20MHz	3560	QPSK	1 RB high	23.97	22.77
20MHz	3560	QPSK	100% RB	20.37	19.17
20MHz	3560	16QAM	1 RB low	22.90	21.70
20MHz	3560	16QAM	1 RB high	23.10	21.90
20MHz	3560	16QAM	100% RB	19.37	18.17
20MHz	3560	64QAM	1 RB low	21.93	20.73
20MHz	3560	64QAM	1 RB high	22.08	20.88
20MHz	3560	64QAM	100% RB	18.37	17.17
20MHz	3560	256QAM	1 RB low	18.84	17.64
20MHz	3560	256QAM	1 RB high	18.97	17.77
20MHz	3560	256QAM	100% RB	16.35	15.15
20MHz	3625	QPSK	1 RB low	24.01	22.81
20MHz	3625	QPSK	1 RB high	24.16	22.96
20MHz	3625	QPSK	100% RB	20.68	19.48
20MHz	3625	16QAM	1 RB low	23.21	22.01

20MHz	3625	16QAM	1 RB high	23.37	22.17
20MHz	3625	16QAM	100% RB	19.65	18.45
20MHz	3625	64QAM	1 RB low	22.16	20.96
20MHz	3625	64QAM	1 RB high	22.37	21.17
20MHz	3625	64QAM	100% RB	18.60	17.40
20MHz	3625	256QAM	1 RB low	19.19	17.99
20MHz	3625	256QAM	1 RB high	19.38	18.18
20MHz	3625	256QAM	100% RB	16.59	15.39
20MHz	3690	QPSK	1 RB low	23.95	22.75
20MHz	3690	QPSK	1 RB high	23.86	22.66
20MHz	3690	QPSK	100% RB	20.57	19.37
20MHz	3690	16QAM	1 RB low	23.15	21.95
20MHz	3690	16QAM	1 RB high	23.05	21.85
20MHz	3690	16QAM	100% RB	19.55	18.35
20MHz	3690	64QAM	1 RB low	22.08	20.88
20MHz	3690	64QAM	1 RB high	21.90	20.70
20MHz	3690	64QAM	100% RB	18.49	17.29
20MHz	3690	256QAM	1 RB low	19.09	17.89
20MHz	3690	256QAM	1 RB high	18.99	17.79
20MHz	3690	256QAM	100% RB	16.52	15.32

Radiated power(dBm) calculated from conducted power(dBm)

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				EIRP(dBm)(Gt-Lc = -1.2)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	3697.5	23.15	22.22	20.80	17.46	21.95	21.02	19.60	16.26
		3625	23.11	22.13	20.73	17.40	21.91	20.93	19.53	16.20
		3552.5	22.94	21.98	20.55	17.25	21.74	20.78	19.35	16.05
	1 RB low	3697.5	23.16	22.20	20.82	17.48	21.96	21.00	19.62	16.28
		3625	23.09	22.97	20.71	17.39	21.89	21.77	19.51	16.19
		3552.5	22.92	21.93	20.51	17.22	21.72	20.73	19.31	16.02
	50% RB mid	3697.5	22.14	21.09	20.17	17.44	20.94	19.89	18.97	16.24
		3625	22.04	20.96	20.00	17.30	20.84	19.76	18.80	16.10
		3552.5	21.87	20.81	19.82	17.14	20.67	19.61	18.62	15.94
	100% RB	3697.5	22.17	21.18	20.17	17.44	20.97	19.98	18.97	16.24
		3625	22.05	21.04	20.06	17.35	20.85	19.84	18.86	16.15
		3552.5	21.89	20.89	19.88	17.19	20.69	19.69	18.68	15.99
10MHz	1 RB high	3695	23.12	22.19	20.79	17.45	21.92	20.99	19.59	16.25
		3625	23.15	22.15	20.72	17.40	21.95	20.95	19.52	16.20
		3555	23.01	22.03	20.61	17.30	21.81	20.83	19.41	16.10
	1 RB low	3695	23.13	22.18	20.76	17.43	21.93	20.98	19.56	16.23
		3625	23.10	22.33	20.68	17.36	21.90	21.13	19.48	16.16
		3555	22.95	21.96	20.54	17.24	21.75	20.76	19.34	16.04
	50% RB	3695	22.12	21.12	20.15	17.43	20.92	19.92	18.95	16.23

	mid	3625	22.03	21.01	20.02	17.31	20.83	19.81	18.82	16.11
		3555	21.92	20.90	19.90	17.21	20.72	19.70	18.70	16.01
	100% RB	3695	22.14	21.18	20.14	17.42	20.94	19.98	18.94	16.22
		3625	22.03	21.06	20.01	17.31	20.83	19.86	18.81	16.11
		3555	21.91	20.93	19.87	17.18	20.71	19.73	18.67	15.98
15MHz	1 RB high	3692.5	23.17	22.24	20.81	17.47	21.97	21.04	19.61	16.27
		3625	23.13	22.19	20.77	17.44	21.93	20.99	19.57	16.24
		3557.5	23.07	22.06	20.65	17.34	21.87	20.86	19.45	16.14
	1 RB low	3692.5	23.14	22.20	20.80	17.46	21.94	21.00	19.60	16.26
		3625	23.06	22.10	20.70	17.38	21.86	20.90	19.50	16.18
		3557.5	23.02	21.99	20.56	17.26	21.82	20.79	19.36	16.06
	50% RB mid	3692.5	22.14	21.13	20.13	17.41	20.94	19.93	18.93	16.21
		3625	22.43	21.01	20.00	17.30	21.23	19.81	18.80	16.10
		3557.5	21.98	20.91	19.90	17.21	20.78	19.71	18.70	16.01
	100% RB	3692.5	22.16	21.22	20.18	17.45	20.96	20.02	18.98	16.25
		3625	22.09	21.10	20.06	17.35	20.89	19.90	18.86	16.15
		3557.5	21.98	20.99	19.96	17.26	20.78	19.79	18.76	16.06
20MHz	1 RB high	3690	23.58	22.65	21.40	17.97	22.38	21.45	20.20	16.77
		3625	23.46	22.52	21.09	17.71	22.26	21.32	19.89	16.51
		3560	23.67	22.58	21.32	17.90	22.47	21.38	20.12	16.70
	1 RB low	3690	23.58	22.65	21.12	17.73	22.38	21.45	19.92	16.53
		3625	23.60	22.61	21.19	17.79	22.40	21.41	19.99	16.59
		3560	23.61	22.72	21.15	17.76	22.41	21.52	19.95	16.56
	50% RB mid	3690	22.49	21.58	20.50	17.73	21.29	20.38	19.30	16.53
		3625	22.61	21.46	20.54	17.76	21.41	20.26	19.34	16.56
		3560	22.65	21.60	20.47	17.70	21.45	20.40	19.27	16.50
	100% RB	3690	22.53	21.55	20.57	17.79	21.33	20.35	19.37	16.59
		3625	22.52	21.62	20.43	17.67	21.32	20.42	19.23	16.47
		3560	22.58	21.61	20.51	17.74	21.38	20.41	19.31	16.54

LTE Band 66-EIRP
Limits: ≤30dBm(1W)

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				EIRP(dBm)(Gt-Lc =-0.23)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	1779.3	24.09	23.24	22.06	18.92	23.86	23.01	21.83	18.69
		1745	24.14	23.22	22.10	18.95	23.91	22.99	21.87	18.72
		1710.7	23.87	22.93	22.02	18.89	23.64	22.70	21.79	18.66
	1 RB low	1779.3	24.00	23.16	22.16	19.01	23.77	22.93	21.93	18.78
		1745	24.13	23.06	22.12	18.97	23.90	22.83	21.89	18.74
		1710.7	23.99	23.10	22.16	19.01	23.76	22.87	21.93	18.78
	50% RB mid	1779.3	24.09	23.00	22.07	19.94	23.86	22.77	21.84	19.71
		1745	23.89	23.04	21.98	19.86	23.66	22.81	21.75	19.63
		1710.7	23.89	22.83	21.96	19.84	23.66	22.60	21.73	19.61
	100% RB	1779.3	23.08	22.13	20.92	18.90	22.85	21.90	20.69	18.67
		1745	22.99	21.98	20.86	18.85	22.76	21.75	20.63	18.62
		1710.7	22.89	21.94	20.75	18.75	22.66	21.71	20.52	18.52
3MHz	1 RB high	1778.5	23.94	23.28	22.15	19.00	23.71	23.05	21.92	18.77
		1745	24.05	23.09	22.10	18.95	23.82	22.86	21.87	18.72
		1711.5	23.93	22.99	22.07	18.93	23.70	22.76	21.84	18.70
	1 RB low	1778.5	24.04	23.13	22.05	18.91	23.81	22.90	21.82	18.68
		1745	23.84	23.16	22.02	18.89	23.61	22.93	21.79	18.66
		1711.5	23.88	23.11	22.01	18.88	23.65	22.88	21.78	18.65
	50% RB mid	1778.5	22.98	22.08	21.00	18.97	22.75	21.85	20.77	18.74
		1745	22.98	22.02	20.90	18.88	22.75	21.79	20.67	18.65
		1711.5	22.92	21.95	20.89	18.87	22.69	21.72	20.66	18.64
	100% RB	1778.5	23.00	22.01	20.97	18.95	22.77	21.78	20.74	18.72
		1745	22.94	21.89	20.87	18.86	22.71	21.66	20.64	18.63
		1711.5	22.86	21.97	20.82	18.81	22.63	21.74	20.59	18.58
5MHz	1 RB high	1777.5	24.10	23.15	22.20	19.04	23.87	22.92	21.97	18.81
		1745	24.09	23.13	22.20	19.04	23.86	22.90	21.97	18.81
		1712.5	23.94	23.20	22.11	18.96	23.71	22.97	21.88	18.73
	1 RB low	1777.5	24.02	23.21	22.13	18.98	23.79	22.98	21.90	18.75
		1745	24.03	23.29	22.13	18.98	23.80	23.06	21.90	18.75
		1712.5	23.97	23.03	22.08	18.94	23.74	22.80	21.85	18.71
	50% RB mid	1777.5	23.01	22.06	21.05	19.02	22.78	21.83	20.82	18.79
		1745	23.00	21.97	21.01	18.98	22.77	21.74	20.78	18.75
		1712.5	22.94	21.91	20.89	18.87	22.71	21.68	20.66	18.64
	100% RB	1777.5	23.08	22.04	21.01	18.98	22.85	21.81	20.78	18.75
		1745	23.00	22.00	20.97	18.95	22.77	21.77	20.74	18.72
		1712.5	22.95	21.93	20.91	18.89	22.72	21.70	20.68	18.66
10MHz	1 RB high	1775	23.85	23.25	22.17	19.01	23.62	23.02	21.94	18.78
		1745	24.12	23.15	22.13	18.98	23.89	22.92	21.90	18.75

		1715	23.92	23.09	22.05	18.91	23.69	22.86	21.82	18.68
		1775	24.06	23.25	22.18	19.02	23.83	23.02	21.95	18.79
		1745	24.01	23.28	22.14	18.99	23.78	23.05	21.91	18.76
		1715	24.09	23.00	22.09	18.95	23.86	22.77	21.86	18.72
		1775	23.00	21.98	20.96	18.94	22.77	21.75	20.73	18.71
		1745	22.97	21.94	20.90	18.88	22.74	21.71	20.67	18.65
		1715	22.91	21.87	20.87	18.86	22.68	21.64	20.64	18.63
		1775	22.97	21.97	20.96	18.94	22.74	21.74	20.73	18.71
		1745	22.94	21.94	20.88	18.87	22.71	21.71	20.65	18.64
		1715	22.87	21.84	20.81	18.80	22.64	21.61	20.58	18.57
15MHz	1 RB high	1772.5	23.95	23.32	22.27	19.10	23.72	23.09	22.04	18.87
		1745	24.07	23.17	22.09	18.95	23.84	22.94	21.86	18.72
		1717.5	23.95	23.13	22.15	19.00	23.72	22.90	21.92	18.77
	1 RB low	1772.5	23.98	23.08	22.15	19.00	23.75	22.85	21.92	18.77
		1745	24.11	23.21	22.13	18.98	23.88	22.98	21.90	18.75
		1717.5	24.03	23.19	22.04	18.90	23.80	22.96	21.81	18.67
	50% RB mid	1772.5	23.03	22.07	21.04	19.01	22.80	21.84	20.81	18.78
		1745	22.97	21.94	20.95	18.93	22.74	21.71	20.72	18.70
		1717.5	22.88	21.87	20.90	18.88	22.65	21.64	20.67	18.65
	100% RB	1772.5	23.03	22.05	21.03	19.00	22.80	21.82	20.80	18.77
		1745	22.99	21.96	20.97	18.95	22.76	21.73	20.74	18.72
		1717.5	22.92	21.89	20.90	18.88	22.69	21.66	20.67	18.65
20MHz	1 RB high	1770	24.07	23.22	22.19	19.03	23.84	22.99	21.96	18.80
		1745	24.02	23.25	22.01	18.88	23.79	23.02	21.78	18.65
		1720	24.01	23.24	22.09	18.95	23.78	23.01	21.86	18.72
	1 RB low	1770	24.08	23.18	22.14	18.99	23.85	22.95	21.91	18.76
		1745	24.09	23.33	22.06	18.92	23.86	23.10	21.83	18.69
		1720	24.05	23.15	22.02	18.89	23.82	22.92	21.79	18.66
	50% RB mid	1770	23.00	22.04	21.06	19.03	22.77	21.81	20.83	18.80
		1745	22.98	21.98	20.96	18.94	22.75	21.75	20.73	18.71
		1720	22.93	21.94	20.90	18.88	22.70	21.71	20.67	18.65
	100% RB	1770	23.05	22.01	21.02	18.99	22.82	21.78	20.79	18.76
		1745	22.97	21.98	20.97	18.95	22.74	21.75	20.74	18.72
		1720	22.92	21.93	20.88	18.87	22.69	21.70	20.65	18.64

LTE Band 71-ERP

Limits: ≤34.77dBm(3W)

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				ERP(dBm)(Gt-Lc =-2.9)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	695.5	22.77	22.00	20.90	17.69	17.72	16.95	15.85	12.64
		680.5	22.81	22.07	20.87	17.66	17.76	17.02	15.82	12.61
		665.5	22.85	22.00	20.93	17.71	17.80	16.95	15.88	12.66
	1 RB low	695.5	22.73	22.06	20.88	17.67	17.68	17.01	15.83	12.62
		680.5	22.77	21.96	20.87	17.66	17.72	16.91	15.82	12.61
		665.5	22.90	22.07	21.06	17.82	17.85	17.02	16.01	12.77
	50% RB mid	695.5	21.72	20.70	19.74	17.82	16.67	15.65	14.69	12.77
		680.5	21.80	20.80	19.83	17.90	16.75	15.75	14.78	12.85
		665.5	21.82	20.90	19.92	17.99	16.77	15.85	14.87	12.94
	100% RB	695.5	21.76	20.77	19.74	17.82	16.71	15.72	14.69	12.77
		680.5	21.83	20.86	19.79	17.87	16.78	15.81	14.74	12.82
		665.5	21.87	20.90	19.87	17.94	16.82	15.85	14.82	12.89
10MHz	1 RB high	693	23.51	22.70	21.74	17.74	18.46	17.65	16.69	12.69
		680.5	22.90	21.94	20.94	17.72	17.85	16.89	15.89	12.67
		668	22.80	22.07	20.97	17.75	17.75	17.02	15.92	12.70
	1 RB low	693	23.62	22.86	21.73	17.78	18.57	17.81	16.68	12.73
		680.5	22.85	22.02	21.03	17.80	17.80	16.97	15.98	12.75
		668	22.97	22.25	21.03	17.80	17.92	17.20	15.98	12.75
	50% RB mid	693	22.61	21.66	20.58	17.58	17.56	16.61	15.53	12.53
		680.5	21.80	20.81	19.77	17.85	16.75	15.76	14.72	12.80
		668	21.85	20.87	19.83	17.90	16.80	15.82	14.78	12.85
	100% RB	693	22.62	21.61	20.62	17.62	17.57	16.56	15.57	12.57
		680.5	21.82	20.79	19.77	17.85	16.77	15.74	14.72	12.80
		668	21.81	20.82	19.80	17.88	16.76	15.77	14.75	12.83
15MHz	1 RB high	690.5	22.72	21.79	20.83	17.63	17.67	16.74	15.78	12.58
		680.5	22.85	22.02	20.91	17.70	17.80	16.97	15.86	12.65
		670.5	22.73	21.99	20.89	17.68	17.68	16.94	15.84	12.63
	1 RB low	690.5	22.82	22.12	20.90	17.69	17.77	17.07	15.85	12.64
		680.5	22.88	22.15	21.08	17.84	17.83	17.10	16.03	12.79
		670.5	22.94	22.22	20.99	17.79	17.89	17.17	15.94	12.74
	50% RB mid	690.5	21.74	20.76	19.75	17.83	16.69	15.71	14.70	12.78
		680.5	21.78	20.79	19.81	17.89	16.73	15.74	14.76	12.84
		670.5	21.83	20.84	19.87	17.94	16.78	15.79	14.82	12.89
	100% RB	690.5	21.77	20.77	19.77	17.85	16.72	15.72	14.72	12.80
		680.5	21.80	20.77	19.78	17.86	16.75	15.72	14.73	12.81
		670.5	21.86	20.87	19.82	17.90	16.81	15.82	14.77	12.85
20MHz	1 RB high	688	22.75	22.00	20.91	17.70	17.70	16.95	15.86	12.65
		680.5	22.68	21.97	20.82	17.62	17.63	16.92	15.77	12.57

		673	22.79	22.98	20.92	17.71	17.74	17.93	15.87	12.66
	1 RB low	688	22.93	22.10	20.96	17.74	17.88	17.05	15.91	12.69
		680.5	22.88	22.20	21.09	17.85	17.83	17.15	16.04	12.80
		673	22.93	22.17	21.11	17.87	17.88	17.12	16.06	12.82
	50% RB mid	688	21.82	20.85	19.84	17.91	16.77	15.80	14.79	12.86
		680.5	21.82	20.84	19.84	17.91	16.77	15.79	14.79	12.86
		673	21.84	20.86	19.83	17.90	16.79	15.81	14.78	12.85
	100% RB	688	21.84	20.86	19.82	17.90	16.79	15.81	14.77	12.85
		680.5	21.78	20.75	19.77	17.85	16.73	15.70	14.72	12.80
		673	21.88	20.89	19.85	17.92	16.83	15.84	14.80	12.87

CA 41C-EIRP
Limits: $\leq 33\text{dBm}(2\text{W})$

Bandwidth	Frequency (MHz)	Frequency (MHz)	Modulation	PCC RB		SCC RB		Conducted Power(dBm)	EIRP(dBm) (MAX Gt - Lc = -1.2)
				Size	Offset	Size	Offset		
5MHz/20MHz	2583.8	2595.5	QPSK	1	24	1	0	25.82	24.62
			QPSK	25	0	100	0	23.84	22.64
			16QAM	1	24	1	0	24.31	23.11
			16QAM	25	0	100	0	22.85	21.65
			64QAM	1	24	1	0	22.78	21.58
			64QAM	25	0	100	0	22.84	21.64
			256QAM	1	24	1	0	19.87	18.67
			256QAM	25	0	100	0	19.85	18.65
10MHz/15MHz	2585.9	2597.9	QPSK	1	49	1	0	26.06	24.86
			QPSK	50	0	75	0	23.89	22.69
			16QAM	1	49	1	0	24.45	23.25
			16QAM	50	0	75	0	22.94	21.74
			64QAM	1	49	1	0	22.72	21.52
			64QAM	50	0	75	0	22.93	21.73
			256QAM	1	49	1	0	19.91	18.71
			256QAM	50	0	75	0	19.94	18.74
10MHz/20MHz	2583.6	2598	QPSK	1	49	1	0	26.05	24.85
			QPSK	50	0	100	0	23.92	22.72
			16QAM	1	49	1	0	24.41	23.21
			16QAM	50	0	100	0	22.90	21.70
			64QAM	1	49	1	0	22.73	21.53
			64QAM	50	0	100	0	22.90	21.70
			256QAM	1	49	1	0	19.81	18.61
			256QAM	50	0	100	0	19.87	18.67
15MHz/10MHz	2588.1	2600.1	QPSK	1	74	1	0	26.03	24.83
			QPSK	75	0	50	0	23.90	22.70
			16QAM	1	74	1	0	24.51	23.31
			16QAM	75	0	50	0	22.92	21.72
			64QAM	1	74	1	0	22.66	21.46
			64QAM	75	0	50	0	22.94	21.74
			256QAM	1	74	1	0	19.90	18.70
			256QAM	75	0	50	0	19.92	18.72
15MHz/15MHz	2585.5	2600.5	QPSK	1	74	1	0	26.10	24.90
			QPSK	75	0	75	0	23.85	22.65
			16QAM	1	74	1	0	24.43	23.23
			16QAM	75	0	75	0	22.88	21.68
			64QAM	1	74	1	0	22.75	21.55

			64QAM	75	0	75	0	22.90	21.70
			256QAM	1	74	1	0	19.93	18.73
			256QAM	75	0	75	0	19.86	18.66
15MHz/20MHz	2583.3	2600.4	QPSK	1	74	1	0	26.10	24.90
			QPSK	75	0	100	0	23.94	22.74
			16QAM	1	74	1	0	24.46	23.26
			16QAM	75	0	100	0	22.89	21.69
			64QAM	1	74	1	0	22.98	21.78
			64QAM	75	0	100	0	22.90	21.70
			256QAM	1	74	1	0	19.87	18.67
			256QAM	75	0	100	0	19.81	18.61
20MHz/5MHz	2590.5	2602.2	QPSK	1	99	1	0	25.94	24.74
			QPSK	100	0	25	0	23.91	22.71
			16QAM	1	99	1	0	24.46	23.26
			16QAM	100	0	25	0	22.94	21.74
			64QAM	1	99	1	0	22.99	21.79
			64QAM	100	0	25	0	22.91	21.71
			256QAM	1	99	1	0	19.79	18.59
			256QAM	100	0	25	0	19.90	18.70
20MHz/10MHz	2588.1	2602.5	QPSK	1	99	1	0	26.00	24.80
			QPSK	100	0	50	0	23.92	22.72
			16QAM	1	99	1	0	24.29	23.09
			16QAM	100	0	50	0	22.92	21.72
			64QAM	1	99	1	0	23.10	21.90
			64QAM	100	0	50	0	22.96	21.76
			256QAM	1	99	1	0	19.79	18.59
			256QAM	100	0	50	0	19.88	18.68
20MHz/15MHz	2585.6	2602.7	QPSK	1	99	1	0	26.01	24.81
			QPSK	100	0	75	0	23.85	22.65
			16QAM	1	99	1	0	24.48	23.28
			16QAM	100	0	75	0	22.85	21.65
			64QAM	1	99	1	0	23.02	21.82
			64QAM	100	0	75	0	22.87	21.67
			256QAM	1	99	1	0	19.80	18.60
			256QAM	100	0	75	0	19.84	18.64
20MHz/20MHz	2583.1	2602.9	QPSK	1	99	1	0	26.02	24.82
			QPSK	100	0	100	0	23.94	22.74
			16QAM	1	99	1	0	24.55	23.35
			16QAM	100	0	100	0	22.91	21.71
			64QAM	1	99	1	0	22.99	21.79
			64QAM	100	0	100	0	22.89	21.69
			256QAM	1	99	1	0	19.84	18.64
			256QAM	100	0	100	0	19.83	18.63

CA 66C-EIRP
Limits: $\leq 30\text{dBm}(1\text{W})$

Bandwidth	Frequency (MHz)	Frequency (MHz)	Modulation	PCC RB		SCC RB		Conducted Power(dBm)	EIRP(dBm) (MAX Gt - Lc = -0.23)
				Size	Offset	Size	Offset		
5MHz/20MHz	1745.8	1757.5	QPSK	1	24	1	0	23.46	23.23
			QPSK	25	0	100	0	21.41	21.18
			16QAM	1	24	1	0	22.54	22.31
			16QAM	25	0	100	0	20.42	20.19
			64QAM	1	24	1	0	20.48	20.25
			64QAM	25	0	100	0	20.43	20.20
			256QAM	1	24	1	0	18.57	18.34
			256QAM	25	0	100	0	18.44	18.21
10MHz/15MHz	1747.9	1759.9	QPSK	1	49	1	0	23.50	23.27
			QPSK	50	0	75	0	21.42	21.19
			16QAM	1	49	1	0	22.61	22.38
			16QAM	50	0	75	0	20.48	20.25
			64QAM	1	49	1	0	20.35	20.12
			64QAM	50	0	75	0	20.50	20.27
			256QAM	1	49	1	0	18.50	18.27
			256QAM	50	0	75	0	18.51	18.28
10MHz/20MHz	1745.6	1760	QPSK	1	49	1	0	23.56	23.33
			QPSK	50	0	100	0	21.50	21.27
			16QAM	1	49	1	0	22.68	22.45
			16QAM	50	0	100	0	20.57	20.34
			64QAM	1	49	1	0	20.40	20.17
			64QAM	50	0	100	0	20.57	20.34
			256QAM	1	49	1	0	18.59	18.36
			256QAM	50	0	100	0	18.58	18.35
15MHz/10MHz	1750.1	1762.1	QPSK	1	74	1	0	23.49	23.26
			QPSK	75	0	50	0	21.43	21.20
			16QAM	1	74	1	0	22.32	22.09
			16QAM	75	0	50	0	20.49	20.26
			64QAM	1	74	1	0	20.50	20.27
			64QAM	75	0	50	0	20.49	20.26
			256QAM	1	74	1	0	18.37	18.14
			256QAM	75	0	50	0	18.46	18.23
15MHz/15MHz	1747.5	1762.5	QPSK	1	74	1	0	23.48	23.25
			QPSK	75	0	75	0	21.49	21.26
			16QAM	1	74	1	0	22.30	22.07
			16QAM	75	0	75	0	20.51	20.28

			64QAM	1	74	1	0	20.52	20.29
			64QAM	75	0	75	0	20.52	20.29
			256QAM	1	74	1	0	18.42	18.19
			256QAM	75	0	75	0	18.50	18.27
15MHz/20MHz	1745.3	1762.4	QPSK	1	74	1	0	23.64	23.41
			QPSK	75	0	100	0	21.53	21.30
			16QAM	1	74	1	0	22.64	22.41
			16QAM	75	0	100	0	20.52	20.29
			64QAM	1	74	1	0	20.33	20.10
			64QAM	75	0	100	0	20.55	20.32
			256QAM	1	74	1	0	18.42	18.19
			256QAM	75	0	100	0	18.47	18.24
20MHz/5MHz	1752.5	1764.2	QPSK	1	99	1	0	23.48	23.25
			QPSK	100	0	25	0	21.45	21.22
			16QAM	1	99	1	0	22.28	22.05
			16QAM	100	0	25	0	20.48	20.25
			64QAM	1	99	1	0	20.24	20.01
			64QAM	100	0	25	0	20.40	20.17
			256QAM	1	99	1	0	18.56	18.33
			256QAM	100	0	25	0	18.47	18.24
20MHz/10MHz	1750.1	1764.5	QPSK	1	99	1	0	23.53	23.30
			QPSK	100	0	50	0	21.50	21.27
			16QAM	1	99	1	0	22.48	22.25
			16QAM	100	0	50	0	20.49	20.26
			64QAM	1	99	1	0	20.58	20.35
			64QAM	100	0	50	0	20.52	20.29
			256QAM	1	99	1	0	18.31	18.08
			256QAM	100	0	50	0	18.45	18.22
20MHz/15MHz	1747.6	1764.7	QPSK	1	99	1	0	23.50	23.27
			QPSK	100	0	75	0	21.47	21.24
			16QAM	1	99	1	0	22.55	22.32
			16QAM	100	0	75	0	20.52	20.29
			64QAM	1	99	1	0	20.63	20.40
			64QAM	100	0	75	0	20.56	20.33
			256QAM	1	99	1	0	18.33	18.10
			256QAM	100	0	75	0	18.50	18.27
20MHz/20MHz	1745.1	1764.9	QPSK	1	99	1	0	23.61	23.38
			QPSK	100	0	100	0	21.51	21.28
			16QAM	1	99	1	0	22.62	22.39
			16QAM	100	0	100	0	20.51	20.28
			64QAM	1	99	1	0	20.60	20.37
			64QAM	100	0	100	0	20.54	20.31
			256QAM	1	99	1	0	18.39	18.16



No.25T04Z100699-003

			256QAM	100	0	100	0	18.36	18.13
--	--	--	--------	-----	---	-----	---	-------	-------

A.2 Emission Limit

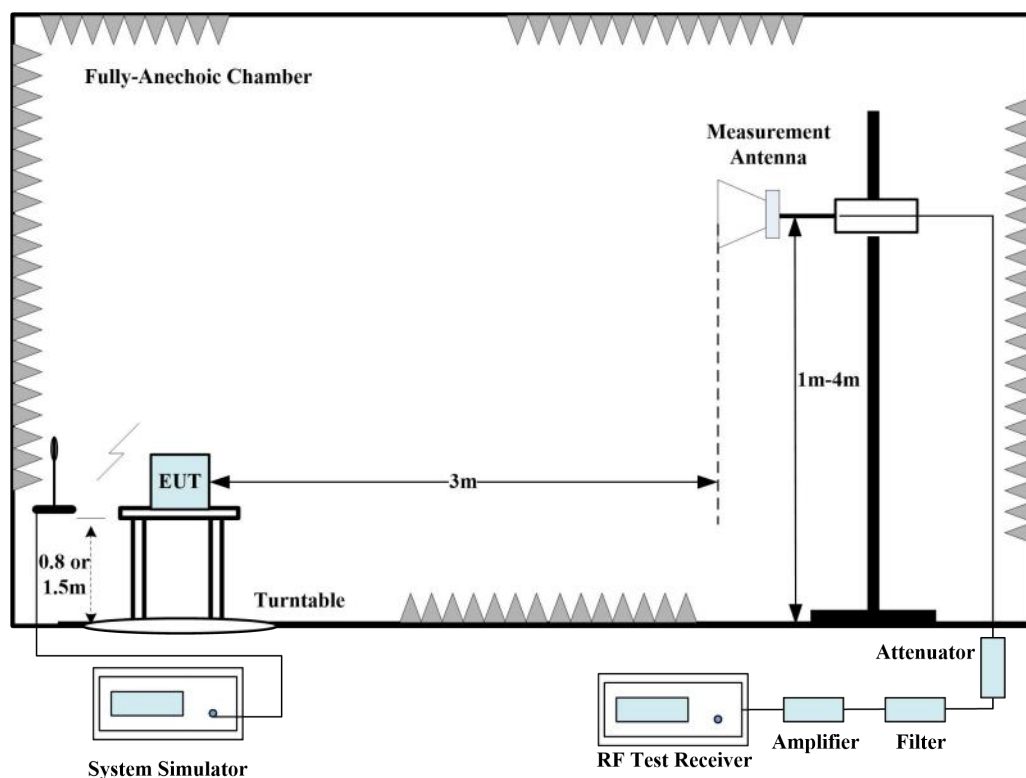
A.2.1 Measurement Method

The measurement procedures in TIA-603E-2016 are used.

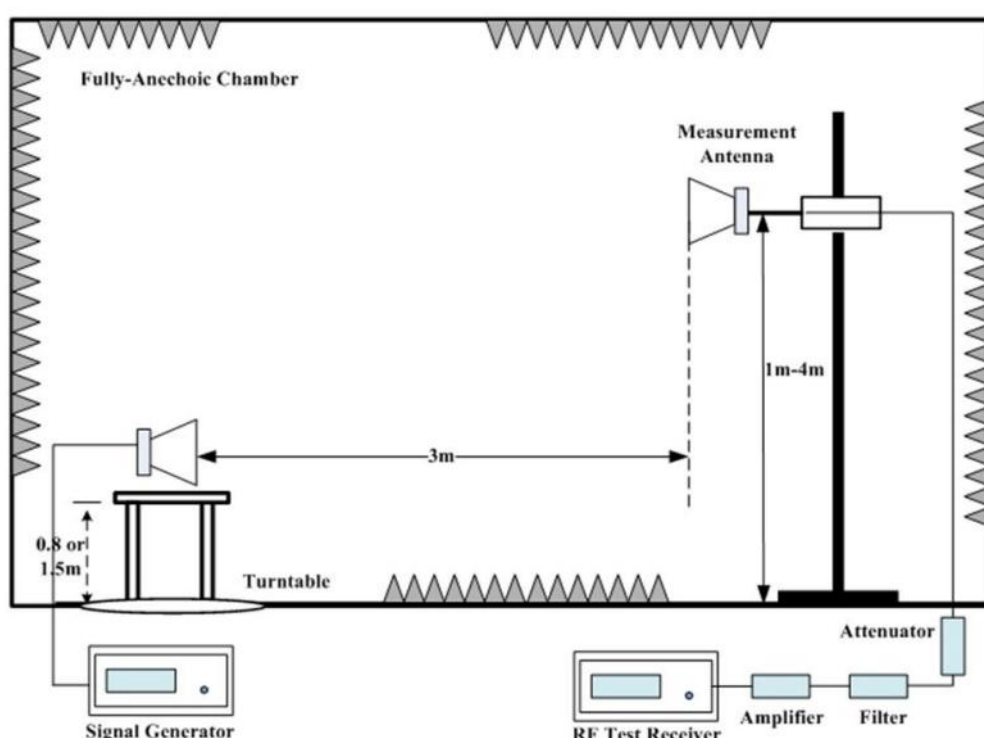
The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment, which is the transmitted carrier. The resolution bandwidth is set 1MHz. The spectrum was scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of each LTE Band.

The procedure of radiated spurious emissions is as follows:

For measurements performed at frequencies less than or equal to 1 GHz, the EUT was placed on a 80cm-high non-conductive support; For measurements performed at frequencies above 1GHz,EUT was placed on a 1.5-meter-high non-conductive support. A measurement antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. In the initial test, the height of the measurement antenna was varied from 1 m to 4 m 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 non-harmonic and harmonics of the transmit frequency through the 10th harmonic were measured with peak detector.



1. 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).
2. 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. The height of measurement antenna varied between 1 m to 4 m to maximize the received signal amplitude for each emission that was detected and measured in the initial test. 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 reach the previously recorded (P_r). The power of signal source (P_{Mea}) is recorded. The test was performed with the measurement antenna in both vertical and horizontal polarization.

3. The Path loss (P_{pl}) between the Signal Source and the Substitution Antenna and the Substitution Antenna Gain (G_a) were recorded after test. A amplifier was connected in for the test. The Path loss (P_{pl}) is the summation of the cable loss and the gain of the amplifier.
4. The measurement results are obtained as described below:

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

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

A.2.2 Measurement Limit

FDD Band 25: Part 24.238 specifies that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

FDD Band 12/13/71: Part 27.53(g) states for operations in the 600 MHz band and the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in

watts, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

FDD Band 14: Part 90.543 states that for operations in the 758–768 MHz and the 788–798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following: (1) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than $76 + 10 \log (P)$ dB in a 6.25 kHz band segment, for base and fixed stations. (2) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations. (3) On any frequency between 775–788 MHz, above 805 MHz, and below 758 MHz, by at least $43 + 10 \log (P)$ dB. (4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment. (5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

LTE Band 26_Part90: Part 90.691 states that out-of-band emission requirement shall apply only to the "outer" channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows: For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116 \log_{10}(f/6.1)$ decibels or $50 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz. For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

FDD Band 26_Part22: Part 22.917 specifies that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

LTE Band 30: Part 27.53(a) states for mobile and portable stations operating in the 2305–2315 MHz and 2350–2360 MHz bands: By a factor of not less than: $43 + 10 \log (P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log (P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than $61 + 10 \log (P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than $67 + 10 \log (P)$ dB on all frequencies between 2328 and 2337 MHz; By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2300 and 2305 MHz, $55 + 10 \log (P)$ dB on all frequencies between 2296 and 2300 MHz, $61 + 10 \log (P)$ dB on all frequencies between 2292 and 2296 MHz, $67 + 10 \log (P)$ dB on all

frequencies between 2288 and 2292 MHz, and $70 + 10 \log (P)$ dB below 2288 MHz; By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log (P)$ dB above 2365 MHz.

FDD Band 7/TDD Band 41: Part 27.53(m) specifies for mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

FDD Band 66: Part 27.53(h) specifies that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

A.2.3 Measurement Results

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies of each LTE Band. It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of each LTE Band into any of the other blocks. The equipment must still, however, meet emissions requirements with the carrier at all frequencies over which it is capable of operating and it is the manufacturer's responsibility to verify this. The range of evaluated frequency is from 30MHz to 26GHz.

Note 1: All CA UL combination bands have been tested, only the worst cases are reported.

Note 2: Both of Vertical and Horizontal polarizations are evaluated, but only the worst case is recorded in this report.

A.2.4 Measurement Results Table

Frequency	Channel	Frequency Range	Result
LTE Bands	Low	9kHz-26GHz	Pass
	Middle	9kHz-26GHz	Pass
	High	9kHz-26GHz	Pass

A.2.5 Sweep Table

Subrange	RBW	VBW
9~150 kHz	0.2kHz	0.6kHz
150kHz~30MHz	9kHz	27kHz
30MHz~1 GHz	100KHz	300KHz
1~20 GHz	1 MHz	3 MHz

A.2.6 Measurement Result

LB7, 5MHz,CH20775,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5005.00	-54.27	5.15	11.33	-48.09	-25.00	23.09	V
7508.00	-44.15	7.70	10.22	-41.63	-25.00	16.63	V
10010.50	-50.01	9.35	11.79	-47.57	-25.00	22.57	V
12512.50	-45.13	12.37	13.56	-43.94	-25.00	18.94	V
15021.50	-44.46	14.74	14.66	-44.54	-25.00	19.54	V
17518.00	-33.74	19.70	13.12	-40.32	-25.00	15.32	H

LB7, 5MHz,CH21100,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5070.00	-53.51	5.30	11.60	-47.21	-25.00	22.21	V
7605.50	-47.34	7.58	10.31	-44.61	-25.00	19.61	V
10141.00	-48.98	9.74	11.78	-46.94	-25.00	21.94	V
12667.50	-46.19	11.66	13.16	-44.69	-25.00	19.69	H
15206.00	-45.73	15.11	15.01	-45.83	-25.00	20.83	H
17744.00	-34.61	19.56	13.44	-40.73	-25.00	15.73	H

LB7, 5MHz,CH21425,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5135.50	-53.74	5.55	11.60	-47.69	-25.00	22.69	V
7703.00	-43.02	6.72	10.61	-39.13	-25.00	14.13	V
10270.50	-44.65	10.76	11.90	-43.51	-25.00	18.51	V
12841.50	-45.54	13.02	12.92	-45.64	-25.00	20.64	V
15399.50	-46.55	14.89	15.40	-46.04	-25.00	21.04	H
17979.50	-33.57	19.98	13.44	-40.11	-25.00	15.11	H

LB12, 1.4MHz,CH23017,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2103.50	-56.07	3.73	7.86	2.15	-54.09	-13.00	41.09	H
2808.00	-51.88	5.22	10.42	2.15	-48.83	-13.00	35.83	H
4199.50	-60.61	4.17	10.10	2.15	-56.83	-13.00	43.83	H
4886.00	-60.77	4.79	10.97	2.15	-56.74	-13.00	43.74	V
6291.00	-58.82	6.08	10.80	2.15	-56.25	-13.00	43.25	H
6984.00	-53.87	8.01	10.40	2.15	-53.63	-13.00	40.63	V

LB12, 1.4MHz,CH23095,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2136.00	-57.06	3.69	8.38	2.15	-54.52	-13.00	41.52	V
2818.00	-51.28	5.15	10.44	2.15	-48.14	-13.00	35.14	V
4960.50	-61.55	4.92	11.22	2.15	-57.40	-13.00	44.40	V
5658.50	-60.49	5.73	11.40	2.15	-56.97	-13.00	43.97	V
6358.50	-58.40	5.94	10.92	2.15	-55.57	-13.00	42.57	V
7079.00	-54.73	6.91	10.38	2.15	-53.41	-13.00	40.41	V

LB12, 1.4MHz,CH23173,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2152.50	-56.26	3.70	8.63	2.15	-53.48	-13.00	40.48	V
2869.00	-51.28	5.45	10.61	2.15	-48.27	-13.00	35.27	V
5007.00	-61.52	5.14	11.34	2.15	-57.47	-13.00	44.47	V
5728.50	-59.84	5.89	11.34	2.15	-56.54	-13.00	43.54	H
6440.50	-57.72	6.85	10.84	2.15	-55.88	-13.00	42.88	H
7167.00	-54.19	6.75	10.10	2.15	-52.99	-13.00	39.99	H

LB13, 5MHz,CH23205,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1559.34	-68.12	6.94	8.77	0.00	-66.29	-40.00	26.29	V
2339.01	-52.67	8.56	10.21	2.15	-53.18	-13.00	40.18	V
3118.68	-60.99	9.20	10.06	2.15	-62.28	-13.00	49.28	H
3898.35	-58.84	10.07	10.14	2.15	-60.92	-13.00	47.92	V
4678.02	-56.86	11.10	11.25	2.15	-58.86	-13.00	45.86	H
5457.69	-57.14	11.26	11.22	2.15	-59.33	-13.00	46.33	V

LB13, 5MHz,CH23230,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1564.48	-69.08	6.94	8.82	0.00	-67.20	-40.00	27.20	V
2346.72	-53.28	8.51	10.26	2.15	-53.68	-13.00	40.68	V
3128.96	-59.87	9.47	10.04	2.15	-61.45	-13.00	48.45	H
3911.20	-59.22	10.10	10.22	2.15	-61.25	-13.00	48.25	V
4693.44	-57.39	11.10	11.30	2.15	-59.35	-13.00	46.35	V
5475.68	-56.83	11.26	11.18	2.15	-59.06	-13.00	46.06	H

LB13, 5MHz,CH23255,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1569.32	-69.52	6.94	8.85	0.00	-67.60	-40.00	27.60	V
2353.98	-52.28	8.54	10.17	2.15	-52.80	-13.00	39.80	V
3138.64	-60.83	9.47	10.02	2.15	-62.43	-13.00	49.43	H
3923.30	-58.54	10.10	10.25	2.15	-60.55	-13.00	47.55	H
4707.96	-57.67	11.44	11.19	2.15	-60.07	-13.00	47.07	H
5492.62	-56.49	11.26	11.15	2.15	-58.76	-13.00	45.76	H

LB14, 5MHz,CH23305,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1581.44	-68.73	6.89	8.95	0.00	-66.67	-40.00	26.67	V
2372.16	-51.94	8.45	10.19	2.15	-52.35	-13.00	39.35	H
3162.88	-61.22	9.14	10.16	2.15	-62.35	-13.00	49.35	V
3953.60	-59.00	10.32	10.27	2.15	-61.20	-13.00	48.20	V
4744.32	-57.59	11.44	11.16	2.15	-60.03	-13.00	47.03	H
5535.04	-56.89	11.63	11.20	2.15	-59.46	-13.00	46.46	V

LB14, 5MHz,CH23330,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1586.40	-68.33	6.89	8.99	0.00	-66.23	-40.00	26.23	V
2379.60	-52.07	8.45	10.20	2.15	-52.47	-13.00	39.47	H
3172.80	-60.38	9.14	10.18	2.15	-61.49	-13.00	48.49	V
3966.00	-58.16	10.32	10.28	2.15	-60.35	-13.00	47.35	H
4759.20	-57.89	11.25	11.19	2.15	-60.10	-13.00	47.10	V
5552.40	-55.82	11.63	11.20	2.15	-58.40	-13.00	45.40	V

LB14, 5MHz,CH23355,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1591.44	-69.05	6.83	9.03	0.00	-66.85	-40.00	26.85	V
2387.16	-52.83	8.45	10.20	2.15	-53.22	-13.00	40.22	H
3182.88	-61.60	9.14	10.20	2.15	-62.69	-13.00	49.69	H
3978.60	-57.92	10.71	10.30	2.15	-60.49	-13.00	47.49	H
4774.32	-57.72	11.25	11.18	2.15	-59.94	-13.00	46.94	V
5570.04	-55.72	11.63	11.20	2.15	-58.30	-13.00	45.30	V

LB25, 1.4MHz,CH26047,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3712.50	-64.54	3.51	10.35	-57.70	-13.00	44.70	V
5552.00	-55.38	5.32	11.20	-49.50	-13.00	36.50	V
7408.50	-52.03	8.05	10.10	-49.98	-13.00	36.98	H
9254.00	-48.77	8.85	11.70	-45.92	-13.00	32.92	V
11106.00	-49.43	9.76	12.61	-46.58	-13.00	33.58	H
12942.50	-45.80	12.47	12.76	-45.51	-13.00	32.51	V

LB25, 1.4MHz,CH26365,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3773.00	-64.16	3.91	10.11	-57.96	-13.00	44.96	H
5647.50	-59.84	5.60	11.40	-54.04	-13.00	41.04	V
7528.00	-53.16	7.71	10.26	-50.61	-13.00	37.61	V
9412.50	-45.92	9.06	11.55	-43.43	-13.00	30.43	H
11308.50	-45.94	12.98	12.60	-46.32	-13.00	33.32	V
13174.00	-44.80	13.16	12.53	-45.43	-13.00	32.43	H

LB25, 1.4MHz,CH26683,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3838.50	-63.23	3.91	9.92	-57.22	-13.00	44.22	V
5743.00	-51.55	5.86	11.31	-46.10	-13.00	33.10	V
7648.50	-53.31	6.84	10.40	-49.75	-13.00	36.75	H
9572.00	-47.62	8.64	11.90	-44.36	-13.00	31.36	H
11496.50	-46.63	12.25	12.50	-46.38	-13.00	33.38	H
13389.00	-44.21	12.43	12.41	-44.23	-13.00	31.23	V

LB26_Part22, 1.4MHz,CH26797,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1643.50	-60.52	2.65	9.45	2.15	-55.87	-13.00	42.87	H
2463.50	-55.20	4.31	10.37	2.15	-51.29	-13.00	38.29	V
5768.00	-59.50	5.67	11.19	2.15	-56.13	-13.00	43.13	V
6612.50	-55.67	6.98	10.32	2.15	-54.48	-13.00	41.48	V
7432.50	-52.15	7.91	10.10	2.15	-52.11	-13.00	39.11	H
8247.50	-53.11	7.59	11.20	2.15	-51.65	-13.00	38.65	H

LB26_Part22, 1.4MHz,CH26915,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2505.00	-54.86	4.43	10.30	2.15	-51.14	-13.00	38.14	V
5018.00	-61.39	5.10	11.41	2.15	-57.23	-13.00	44.23	H
5846.00	-60.43	5.59	11.00	2.15	-57.17	-13.00	44.17	V
6700.00	-55.80	6.21	10.50	2.15	-53.66	-13.00	40.66	V
7542.00	-53.55	7.47	10.28	2.15	-52.89	-13.00	39.89	H
8370.50	-52.78	8.18	11.30	2.15	-51.81	-13.00	38.81	H

LB26_Part22, 1.4MHz,CH27033,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1706.00	-61.84	2.85	9.42	2.15	-57.42	-13.00	44.42	H
2554.00	-53.82	4.56	10.30	2.15	-50.23	-13.00	37.23	V
5939.50	-59.62	5.99	10.72	2.15	-57.04	-13.00	44.04	V
6780.50	-55.84	6.40	10.36	2.15	-54.03	-13.00	41.03	V
7634.50	-53.52	6.75	10.37	2.15	-52.05	-13.00	39.05	H
8469.00	-53.10	8.02	11.30	2.15	-51.97	-13.00	38.97	V

LB26_Part90, 1.4MHz,CH26697,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2454.50	-55.07	4.45	10.39	2.15	-51.28	-13.00	38.28	H
4888.50	-60.58	4.81	10.98	2.15	-56.56	-13.00	43.56	V
5694.00	-59.78	5.68	11.40	2.15	-56.21	-13.00	43.21	H
6527.50	-56.67	6.28	10.60	2.15	-54.50	-13.00	41.50	H
7319.00	-52.12	7.82	9.90	2.15	-52.19	-13.00	39.19	H
8150.00	-52.19	8.18	11.10	2.15	-51.42	-13.00	38.42	V

LB26_Part90, 1.4MHz,CH26740,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2462.50	-54.75	4.31	10.38	2.15	-50.83	-13.00	37.83	V
4902.50	-60.64	4.88	11.01	2.15	-56.66	-13.00	43.66	H
5747.50	-59.48	5.84	11.31	2.15	-56.16	-13.00	43.16	H
6560.00	-55.81	7.44	10.54	2.15	-54.86	-13.00	41.86	V
7385.00	-52.63	8.18	10.04	2.15	-52.92	-13.00	39.92	H
8177.50	-53.06	7.23	11.16	2.15	-51.28	-13.00	38.28	H

LB26_Part90, 1.4MHz,CH26783,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2476.50	-55.00	4.33	10.35	2.15	-51.13	-13.00	38.13	H
4130.50	-60.26	4.66	10.04	2.15	-57.03	-13.00	44.03	H
5769.50	-60.23	5.67	11.18	2.15	-56.87	-13.00	43.87	H
6588.50	-55.76	7.19	10.37	2.15	-54.73	-13.00	41.73	H
7408.00	-52.11	8.05	10.10	2.15	-52.21	-13.00	39.21	H
8230.00	-53.33	7.59	11.20	2.15	-51.87	-13.00	38.87	V

LB30, 5MHz,CH27685,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4615.00	-63.36	4.68	10.97	-57.07	-40.00	17.07	V
6923.00	-61.16	6.47	10.35	-57.28	-40.00	17.28	V
9230.50	-57.88	8.85	11.74	-54.99	-40.00	14.99	V
11541.50	-58.25	10.61	12.54	-56.32	-40.00	16.32	V
13849.50	-53.10	13.09	12.10	-54.09	-40.00	14.09	H
16165.50	-51.72	18.56	15.10	-55.18	-40.00	15.18	V

LB30, 5MHz,CH27710,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4620.00	-64.08	4.69	10.96	-57.81	-40.00	17.81	H
6931.00	-57.84	6.47	10.36	-53.95	-40.00	13.95	H
9240.50	-59.73	8.85	11.72	-56.86	-40.00	16.86	H
11554.00	-57.50	10.70	12.55	-55.65	-40.00	15.65	V
13859.00	-53.24	13.10	12.10	-54.24	-40.00	14.24	H
16162.50	-50.77	18.58	15.10	-54.25	-40.00	14.25	V

LB30, 5MHz,CH27735,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4621.50	-64.41	4.70	10.96	-58.15	-40.00	18.15	V
6938.00	-58.21	6.47	10.38	-54.30	-40.00	14.30	V
9251.00	-58.86	8.85	11.70	-56.01	-40.00	16.01	H
11564.50	-57.82	10.77	12.56	-56.03	-40.00	16.03	H
13880.50	-53.09	13.13	12.10	-54.12	-40.00	14.12	H
16192.50	-51.49	18.42	15.10	-54.81	-40.00	14.81	V

LB41, 5MHz,CH39675,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4997.00	-54.16	5.17	11.29	-48.04	-25.00	23.04	V
7496.00	-51.99	7.70	10.19	-49.50	-25.00	24.50	V
9994.50	-44.86	9.36	11.79	-42.43	-25.00	17.43	V
12505.00	-45.20	12.36	13.58	-43.98	-25.00	18.98	V
14988.50	-44.84	14.77	14.55	-45.06	-25.00	20.06	H
17502.50	-32.54	19.72	13.10	-39.16	-25.00	14.16	H

LB41, 5MHz,CH40620,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5186.50	-52.29	5.75	11.67	-46.37	-25.00	21.37	V
7779.50	-49.60	7.37	10.76	-46.21	-25.00	21.21	H
10372.50	-45.02	10.73	11.97	-43.78	-25.00	18.78	H
12974.50	-45.33	12.55	12.73	-45.15	-25.00	20.15	V
15550.50	-43.78	16.76	15.60	-44.94	-25.00	19.94	H
17973.00	-34.00	19.99	13.45	-40.54	-25.00	15.54	H

LB41, 5MHz,CH41565,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5375.00	-49.39	5.75	11.65	-43.49	-25.00	18.49	V
8063.00	-49.49	7.86	11.13	-46.22	-25.00	21.22	H
10750.50	-46.41	9.83	12.15	-44.09	-25.00	19.09	H
13439.00	-43.89	12.56	12.36	-44.09	-25.00	19.09	H
16136.50	-43.44	16.99	15.10	-45.33	-25.00	20.33	H
17976.00	-33.89	19.99	13.45	-40.43	-25.00	15.43	H

LB48, 5MHz,CH55265,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
7105.13	-54.64	12.86	10.36	0.00	-57.15	NA	NA	V
10659.00	-54.25	15.15	12.20	0.00	-57.20	NA	NA	H
14212.00	-51.57	17.17	12.68	0.00	-56.06	NA	NA	V
17145.75	-44.80	19.21	12.85	0.00	-51.16	NA	NA	H
17373.38	-43.72	18.73	12.53	0.00	-49.92	NA	NA	V
17765.00	-46.71	17.91	12.83	0.00	-51.78	NA	NA	H

LB48, 5MHz,CH55590,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
7170.00	-52.66	13.45	10.19	0.00	-55.92	NA	NA	V
9166.88	-54.43	14.51	11.83	0.00	-57.10	NA	NA	H
10875.00	-54.06	16.33	12.38	0.00	-58.01	NA	NA	H
14500.00	-52.15	17.66	13.17	0.00	-56.65	NA	NA	H
16296.75	-49.64	18.36	14.49	0.00	-53.50	NA	NA	V
17725.88	-44.30	19.20	12.81	0.00	-50.69	NA	NA	H

LB48, 5MHz,CH56715,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
7395.00	-49.80	13.13	10.09	0.00	-52.83	NA	NA	V
11094.00	-53.45	15.86	12.48	0.00	-56.84	NA	NA	V
12138.75	-52.13	16.67	13.32	0.00	-55.48	NA	NA	V
14792.00	-52.66	17.66	14.06	0.00	-56.26	NA	NA	H
17487.75	-43.77	18.76	12.49	0.00	-50.04	NA	NA	H
17676.75	-45.11	18.65	12.85	0.00	-50.91	NA	NA	H

LB66, 1.4MHz,CH131979,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3421.50	-61.29	3.24	10.04	-54.49	-13.00	41.49	H
8553.50	-54.60	8.53	11.20	-51.93	-13.00	38.93	V
11967.00	-56.56	12.32	13.03	-55.85	-13.00	42.85	V
13699.50	-53.77	13.06	12.20	-54.63	-13.00	41.63	H
15404.00	-56.74	14.89	15.41	-56.22	-13.00	43.22	H
17104.50	-47.37	18.45	13.50	-52.32	-13.00	39.32	V

LB66, 1.4MHz,CH132322,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
8725.50	-49.45	8.45	11.10	-46.80	-13.00	33.80	V
10476.00	-59.15	10.36	11.92	-57.59	-13.00	44.59	H
12208.00	-58.10	12.17	13.40	-56.87	-13.00	43.87	V
13973.50	-51.50	14.54	12.17	-53.87	-13.00	40.87	V
15698.50	-54.99	16.66	15.50	-56.15	-13.00	43.15	H
17442.00	-44.28	19.25	13.04	-50.49	-13.00	37.49	H

LB66, 1.4MHz,CH132665,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5338.00	-57.52	6.18	11.72	-51.98	-13.00	38.98	V
7117.50	-59.02	6.56	10.26	-55.32	-13.00	42.32	V
8897.00	-51.39	8.04	11.59	-47.84	-13.00	34.84	V
12455.50	-55.88	12.90	13.51	-55.27	-13.00	42.27	V
14231.50	-54.88	13.12	12.63	-55.37	-13.00	42.37	V
17799.50	-44.87	19.55	13.50	-50.92	-13.00	37.92	H

LB71, 5MHz,CH133147,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1331.00	-54.18	1.84	7.45	2.15	-50.72	-13.00	37.72	H
1983.50	-57.47	3.47	7.86	2.15	-55.23	-13.00	42.23	V
2659.00	-53.60	4.75	10.20	2.15	-50.30	-13.00	37.30	V
5318.00	-62.11	5.08	11.76	2.15	-57.58	-13.00	44.58	H
5999.00	-58.54	6.21	10.70	2.15	-56.20	-13.00	43.20	V
6658.00	-56.55	6.22	10.42	2.15	-54.50	-13.00	41.50	H

LB71, 5MHz,CH133297,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2035.00	-56.74	3.43	7.70	2.15	-54.62	-13.00	41.62	H
2719.50	-52.01	4.88	10.24	2.15	-48.80	-13.00	35.80	H
4777.00	-61.68	4.81	10.95	2.15	-57.69	-13.00	44.69	H
5454.50	-61.83	5.36	11.35	2.15	-57.99	-13.00	44.99	V
6112.50	-58.03	6.15	10.62	2.15	-55.71	-13.00	42.71	V
6790.50	-55.25	6.39	10.38	2.15	-53.41	-13.00	40.41	H

LB71, 5MHz,CH133447,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2080.50	-56.62	3.52	7.76	2.15	-54.53	-13.00	41.53	H
2788.00	-52.33	4.90	10.38	2.15	-49.00	-13.00	36.00	V
4176.50	-61.15	4.03	10.05	2.15	-57.28	-13.00	44.28	H
4882.50	-60.95	4.77	10.96	2.15	-56.91	-13.00	43.91	V
6250.00	-59.27	6.15	10.80	2.15	-56.77	-13.00	43.77	H
6959.00	-55.45	6.47	10.40	2.15	-53.67	-13.00	40.67	V

CA_41C, CH39683_CH39800,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5010.47	-53.66	11.66	11.23	-54.09	-25.00	29.09	V
7500.00	-49.57	13.07	10.27	-52.37	-25.00	27.37	V
10000.00	-49.03	12.09	12.09	-49.03	-25.00	24.03	H
12500.00	-42.39	16.68	13.37	-45.70	-25.00	20.70	V
15000.00	-43.07	18.29	14.63	-46.73	-25.00	21.73	H
17500.00	-34.59	19.64	12.57	-41.66	-25.00	16.66	V

CA_41C, CH40528_CH40645,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5179.22	-51.48	11.33	11.62	-51.19	-25.00	26.19	V
7752.00	-47.79	13.21	10.90	-50.09	-25.00	25.09	H
10336.00	-48.24	12.13	12.13	-48.24	-25.00	23.24	V
12920.00	-42.88	16.64	12.99	-46.52	-25.00	21.52	V
15504.00	-45.05	18.53	15.44	-48.14	-25.00	23.14	H
17845.31	-33.37	18.80	12.87	-39.31	-25.00	14.31	V

CA_41C, CH41373_CH41490,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5336.72	-47.96	11.89	11.43	-48.42	-25.00	23.42	H
8007.00	-48.19	13.83	11.25	-50.77	-25.00	25.77	H
10676.00	-48.58	12.20	12.20	-48.58	-25.00	23.58	H
13345.00	-42.06	16.39	12.54	-45.91	-25.00	20.91	V
16014.00	-43.82	18.34	15.29	-46.87	-25.00	21.87	V
17405.63	-32.81	18.61	12.53	-38.89	-25.00	13.89	V

CA66C
CH132025_CH132145, QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3430.31	-61.68	9.62	10.34	-60.97	-13.00	47.97	V
5145.94	-60.83	11.26	11.47	-60.63	-13.00	47.63	V
6864.00	-62.50	10.38	10.38	-62.50	-13.00	49.50	V
8577.19	-53.95	14.32	11.40	-56.87	-13.00	43.87	V
10296.00	-55.47	15.69	12.21	-58.95	-13.00	45.95	H
12012.00	-53.23	16.34	13.15	-56.42	-13.00	43.42	V

CH132351_CH132471, QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3495.94	-63.65	9.80	10.37	-63.08	-13.00	50.08	V
3507.66	-62.88	9.83	10.50	-62.21	-13.00	49.21	V
5244.00	-62.72	11.49	11.49	-62.72	-13.00	49.72	V
5267.34	-62.46	11.77	11.50	-62.74	-13.00	49.74	V
6992.00	-60.18	12.60	10.29	-62.48	-13.00	49.48	H
8740.00	-54.08	14.36	11.32	-57.12	-13.00	44.12	V

CH132477_CH132597, QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3520.78	-65.83	9.83	10.55	-65.11	-13.00	52.11	H
3532.97	-66.04	10.13	10.60	-65.57	-13.00	52.57	H
5281.41	-58.34	11.47	11.47	-58.34	-13.00	45.34	H
5305.78	-63.30	11.89	11.43	-63.76	-13.00	50.76	H
7044.00	-59.73	13.12	10.45	-62.39	-13.00	49.39	V
8803.13	-53.92	14.06	11.34	-56.64	-13.00	43.64	H

CA_2A_5A, CH18625_CH20425,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1653.32	-45.81	7.12	9.10	2.15	-45.98	-13.00	32.98	H
2479.98	-38.15	8.96	10.16	2.15	-39.09	-13.00	26.09	V
3306.64	-60.82	10.35	10.35	2.15	-62.97	-13.00	49.97	V
4133.30	-58.18	10.39	10.37	2.15	-60.35	-13.00	47.35	H
4959.96	-56.85	11.34	11.27	2.15	-59.07	-13.00	46.07	V
5786.62	-55.62	11.65	10.82	2.15	-58.59	-13.00	45.59	V
3706.00	-60.14	9.89	10.55	0.00	-59.48	-13.00	46.48	V
5557.97	-47.72	11.63	11.20	0.00	-48.14	-13.00	35.14	V
7412.00	-48.70	12.76	10.12	0.00	-51.34	-13.00	38.34	V
9263.44	-42.83	14.94	11.80	0.00	-45.97	-13.00	32.97	V
11118.00	-45.17	16.05	12.56	0.00	-48.66	-13.00	35.66	V
12971.00	-42.79	16.92	12.89	0.00	-46.82	-13.00	33.82	V

CA_2A_5A, CH18900_CH20525,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1673.31	-45.54	7.23	9.10	2.15	-45.82	-13.00	32.82	V
2509.96	-38.64	8.67	10.12	2.15	-39.34	-13.00	26.34	V
3346.61	-59.28	10.43	10.43	2.15	-61.43	-13.00	48.43	V
4183.27	-57.25	10.96	10.40	2.15	-59.96	-13.00	46.96	V
5019.92	-56.58	11.66	11.23	2.15	-59.16	-13.00	46.16	V
5856.57	-56.05	11.43	10.60	2.15	-59.03	-13.00	46.03	V
3760.00	-59.45	10.10	10.45	0.00	-59.10	-13.00	46.10	H
5640.00	-54.14	11.61	11.20	0.00	-54.55	-13.00	41.55	V
7520.00	-50.02	12.82	10.31	0.00	-52.53	-13.00	39.53	V
9400.31	-42.41	14.74	11.67	0.00	-45.48	-13.00	32.48	H
11280.00	-44.50	16.04	12.64	0.00	-47.90	-13.00	34.90	H
13160.00	-43.87	16.78	12.67	0.00	-47.97	-13.00	34.97	V

CA_2A_5A, CH19175_CH20625,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1693.38	-44.77	7.36	9.10	2.15	-45.19	-13.00	32.19	V
2540.07	-38.52	8.65	10.18	2.15	-39.14	-13.00	26.14	V
3386.76	-60.22	10.44	10.44	2.15	-62.37	-13.00	49.37	H
4233.45	-57.09	10.33	10.67	2.15	-58.90	-13.00	45.90	V
5080.14	-57.07	11.46	11.27	2.15	-59.41	-13.00	46.41	H
5926.83	-55.29	11.71	10.39	2.15	-58.75	-13.00	45.75	V
3816.00	-60.08	10.12	10.25	0.00	-59.95	-13.00	46.95	V
5722.97	-52.33	11.65	11.00	0.00	-52.98	-13.00	39.98	H
7632.00	-49.81	13.21	10.40	0.00	-52.62	-13.00	39.62	H
9538.59	-41.58	14.83	11.95	0.00	-44.46	-13.00	31.46	H
11448.00	-44.02	16.26	12.66	0.00	-47.63	-13.00	34.63	H
13356.00	-42.26	16.98	12.54	0.00	-46.71	-13.00	33.71	V

CA_2A_66A, CH18650_CH132022,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3430.00	-62.33	9.62	10.34	0.00	-61.62	-13.00	48.62	V
5145.00	-62.43	11.26	11.47	0.00	-62.23	-13.00	49.23	V
6860.00	-61.63	10.38	10.38	0.00	-61.63	-13.00	48.63	H
8575.00	-56.46	14.32	11.40	0.00	-59.38	-13.00	46.38	V
10290.00	-55.23	15.49	12.20	0.00	-58.51	-13.00	45.51	H
12005.00	-53.12	16.58	13.14	0.00	-56.56	-13.00	43.56	V
3710.00	-68.51	9.89	10.54	0.00	-67.86	-13.00	54.86	V
5565.00	-58.66	11.63	11.20	0.00	-59.09	-13.00	46.09	V
7420.00	-57.90	12.96	10.14	0.00	-60.72	-13.00	47.72	V
9275.00	-55.91	14.75	11.80	0.00	-58.86	-13.00	45.86	V
11130.00	-53.87	16.14	12.58	0.00	-57.44	-13.00	44.44	V
12985.00	-52.07	17.20	12.86	0.00	-56.41	-13.00	43.41	H

CA_2A_66A, CH18900_CH132322,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3490.00	-64.24	9.80	10.37	0.00	-63.67	-13.00	50.67	V
5235.00	-61.87	11.91	11.50	0.00	-62.28	-13.00	49.28	V
6980.00	-61.61	10.30	10.30	0.00	-61.61	-13.00	48.61	H
8725.31	-51.12	14.20	11.35	0.00	-53.97	-13.00	40.97	V
10470.00	-54.65	15.55	12.10	0.00	-58.10	-13.00	45.10	H
12215.00	-54.23	16.69	13.33	0.00	-57.58	-13.00	44.58	H
3760.00	-68.61	10.10	10.45	0.00	-68.27	-13.00	55.27	H
5640.00	-61.99	11.61	11.20	0.00	-62.40	-13.00	49.40	V
7520.00	-57.26	12.82	10.31	0.00	-59.77	-13.00	46.77	V
9400.00	-56.62	14.74	11.67	0.00	-59.69	-13.00	46.69	H
11280.00	-53.28	16.04	12.64	0.00	-56.68	-13.00	43.68	H
13160.00	-52.53	16.78	12.67	0.00	-56.63	-13.00	43.63	H

CA_2A_66A, CH19150_CH132622,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction (dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3550.00	-65.15	10.23	10.53	0.00	-64.85	-13.00	51.85	H
5325.00	-60.85	11.89	11.43	0.00	-61.31	-13.00	48.31	V
7100.00	-58.39	10.37	10.37	0.00	-58.39	-13.00	45.39	H
8875.00	-51.83	14.30	11.48	0.00	-54.66	-13.00	41.66	V
10650.00	-54.81	15.47	12.19	0.00	-58.09	-13.00	45.09	V
12425.00	-53.18	16.88	13.38	0.00	-56.68	-13.00	43.68	V
3810.00	-68.87	10.33	10.27	0.00	-68.93	-13.00	55.93	V
5715.00	-60.02	11.65	11.02	0.00	-60.65	-13.00	47.65	V
7620.00	-57.72	13.62	10.40	0.00	-60.94	-13.00	47.94	H
9525.00	-56.74	14.78	11.91	0.00	-59.61	-13.00	46.61	V
11430.00	-53.41	16.17	12.65	0.00	-56.93	-13.00	43.93	V
13335.00	-50.88	16.87	12.55	0.00	-55.20	-13.00	42.20	V

A.3 Frequency Stability

A.3.1 Method of Measurement

Frequency stability is a measure of the frequency drift due to temperature and supply voltage variations, with reference to the frequency measured at +20 °C and rated supply voltage. Two reference points are established at the applicable unwanted emissions limit using a RBW equal to the RBW required by the unwanted emissions specification of the applicable regulatory standard. These reference points measured using the lowest and highest channel of operation shall be identified as F_L and F_H respectively.

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 CMW500.

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

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

A.3.2 Measurement results

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

Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	2500.640	2569.340		
50				-1.02	0.0004
40				-1.35	0.0005
30				1.97	0.0008
10				-0.86	0.0003
0				-1.99	0.0008
-10				-0.34	0.0001
-20				1.65	0.0006
-30				-4.13	0.0016

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	2500.640	2569.340	-3.10	0.0012
4.4				0.63	0.0002

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

Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	699.490	715.510		
50				-0.72	0.0010
40				-0.39	0.0005
30				0.59	0.0008
10				-1.13	0.0016
0				-0.62	0.0009
-10				0.26	0.0004
-20				0.13	0.0002
-30				0.60	0.0008

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	699.490	715.510	-0.36	0.0005
4.4				-0.57	0.0008

LTE band 13, 10MHz bandwidth QPSK(worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	777.490	786.520		
50				0.12	0.0001
40				0.43	0.0005
30				-0.30	0.0004
10				0.16	0.0002
0				0.83	0.0011
-10				-0.21	0.0003
-20				-0.37	0.0005
-30				0.10	0.0001

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	777.490	786.520	0.42	0.0005
4.4				0.40	0.0005

LTE band 14, 10MHz bandwidth QPSK(worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	788.490	797.510		
50				-0.20	0.0003
40				-0.37	0.0005
30				-0.87	0.0011
10				-1.52	0.0019
0				0.67	0.0008
-10				0.10	0.0001
-20				0.12	0.0001
-30				0.26	0.0003

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	788.490	797.510	-0.19	0.0002
4.4				0.50	0.0006

LTE band 25, 20MHz bandwidth QPSK(worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	1850.860	1914.120		
50				0.93	0.0005
40				0.09	0.0000
30				2.16	0.0011
10				3.38	0.0018
0				3.36	0.0018
-10				5.09	0.0027
-20				3.99	0.0021
-30				0.76	0.0004

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	1850.860	1914.120	-0.99	0.0005
4.4				-1.89	0.0010

LTE band 26_Part22, 15MHz bandwidth QPSK(worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	824.600	848.390		
50				0.04	0.0001
40				0.02	0.0000
30				1.12	0.0013
10				0.07	0.0001
0				-0.52	0.0006
-10				-0.57	0.0007
-20				0.02	0.0000
-30				0.57	0.0007

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	824.600	848.390	0.73	0.0009
4.4				0.24	0.0003

LTE band 26_Part90, 10MHz bandwidth QPSK(worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	814.430	823.570		
50				-1.20	0.0015
40				-0.99	0.0012
30				-1.90	0.0023
10				-2.22	0.0027
0				-1.33	0.0016
-10				-0.63	0.0008
-20				-1.17	0.0014
-30				-1.06	0.0013

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	814.430	823.570	-1.00	0.0012
4.4				-0.74	0.0009

LTE band 30, 10MHz bandwidth QPSK(worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	2305.430	2314.570		
50				-1.77	0.0008
40				-4.01	0.0017
30				-3.43	0.0015
10				-1.70	0.0007
0				-2.69	0.0012
-10				-1.62	0.0007
-20				-2.65	0.0011
-30				0.06	0.0000

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	2305.430	2314.570	-0.49	0.0002
4.4				0.94	0.0004

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

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	2496.500	2689.400		
50				-0.47	0.0002
40				-1.63	0.0006
30				-0.53	0.0002
10				-2.92	0.0011
0				-1.89	0.0007
-10				-3.66	0.0014
-20				-1.96	0.0008
-30				-3.68	0.0014

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	2496.500	2689.400	-1.06	0.0004
4.4				-2.39	0.0009

LTE band 48, 20MHz bandwidth QPSK(worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	3550.976	3699.024		
50				-3.22	0.0009
40				-1.96	0.0005
30				-0.80	0.0002
10				-3.36	0.0009
0				-2.98	0.0008
-10				-2.10	0.0006
-20				-3.29	0.0009
-30				-3.58	0.0010

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	3550.976	3699.024	-1.00	0.0003
4.4				-4.31	0.0012

LTE band 66, 20MHz bandwidth QPSK(worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	1710.860	1779.150		
50				-2.90	0.0017
40				-0.59	0.0003
30				-1.12	0.0006
10				-0.06	0.0000
0				-4.12	0.0024
-10				-2.93	0.0017
-20				-2.40	0.0014
-30				-2.79	0.0016

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	1710.860	1779.150	-1.53	0.0009
4.4				-1.03	0.0006

LTE band 71, 20MHz bandwidth QPSK(worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	663.870	697.130		
50				-0.10	0.0001
40				0.33	0.0005
30				0.07	0.0001
10				-2.19	0.0032
0				-1.92	0.0028
-10				-0.24	0.0004
-20				-0.50	0.0007
-30				-0.21	0.0003

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	663.870	697.130	-0.27	0.0004
4.4				-1.00	0.0015

LTE CA band 41C, 20MHz+20MHz bandwidth QPSK(worst case of all bandwidths)
Frequency Error vs Voltage

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	2496.900	2689.080		
50				-2.65	0.0010
40				-3.09	0.0012
30				-3.76	0.0015
10				-2.15	0.0008
0				0.43	0.0002
-10				1.32	0.0005
-20				0.36	0.0001
-30				-1.32	0.0005

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	2496.900	2689.080	-0.04	0.0000
4.4				-2.53	0.0010

LTE CA band 66C, 20MHz+20MHz bandwidth QPSK(worst case of all bandwidths)
Frequency Error vs Voltage

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	1710.660	1779.340		
50				6.54	0.0037
40				1.15	0.0007
30				-1.59	0.0009
10				-0.83	0.0005
0				-1.55	0.0009
-10				-3.99	0.0023
-20				-6.29	0.0036
-30				-5.52	0.0031

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	1710.660	1779.340	-5.58	0.0032
4.4				-6.65	0.0038

A.4 Occupied Bandwidth

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 frequency. The table below lists the measured 99% BW. Spectrum analyzer plots are included on the following pages.

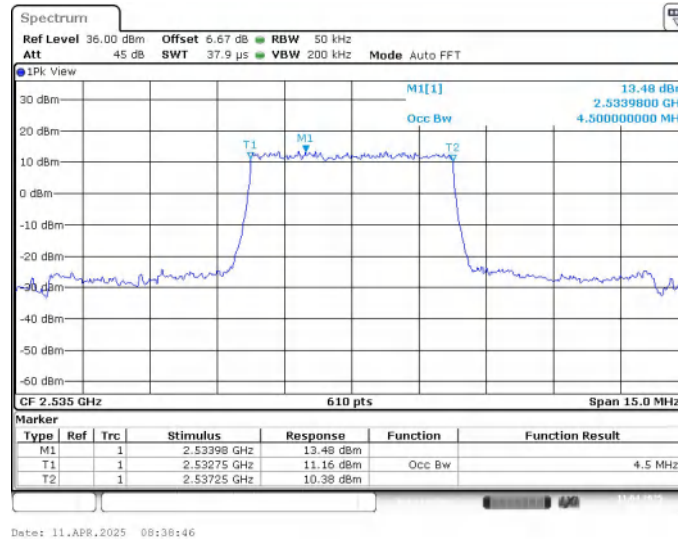
The measurement method is from ANSI C63.26:

- 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.
- b) The nominal IF filter 3 dB bandwidth (RBW) shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set $\geq 3 \times \text{RBW}$.
- c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation.
- d) Set the detection mode to peak, and the trace mode to max-hold.

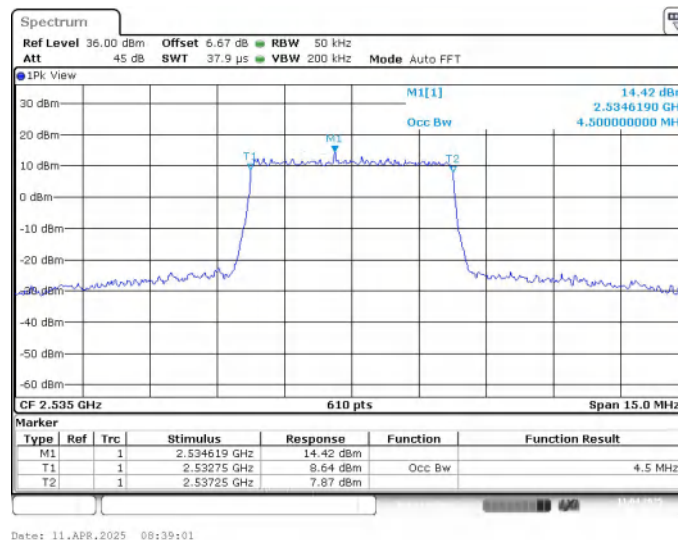
LTE band 7,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
2535	4.500	4.500

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



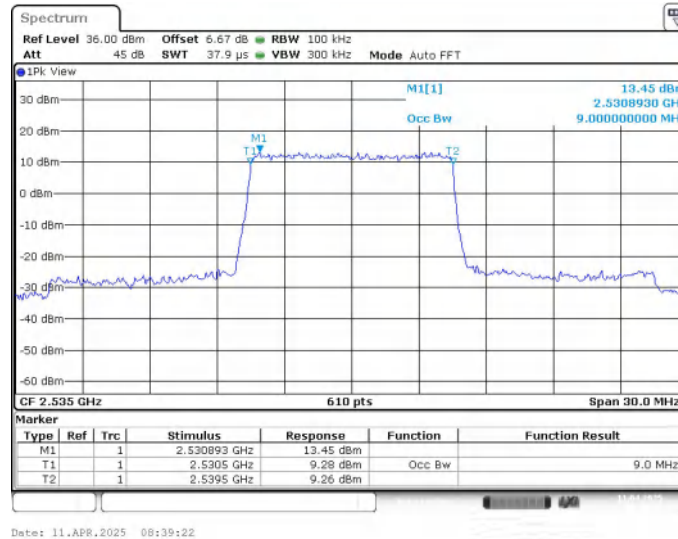
LTE band 7 , 5MHz Bandwidth,MID,16QAM (99% BW)



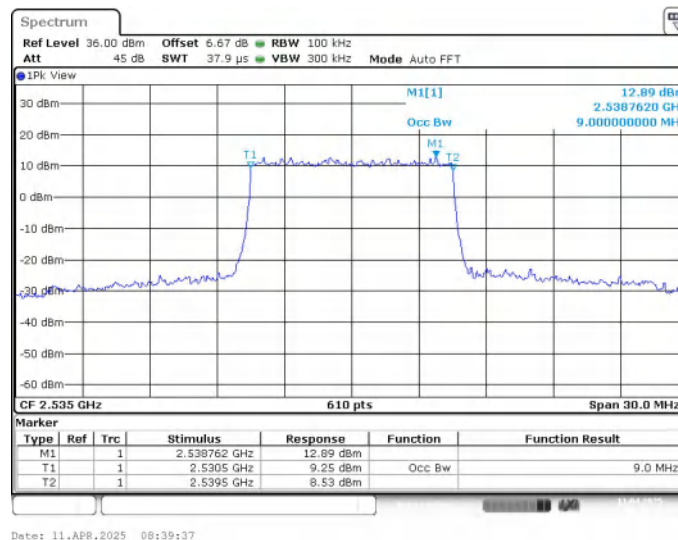
LTE band 7,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
2535	9.000	9.000

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



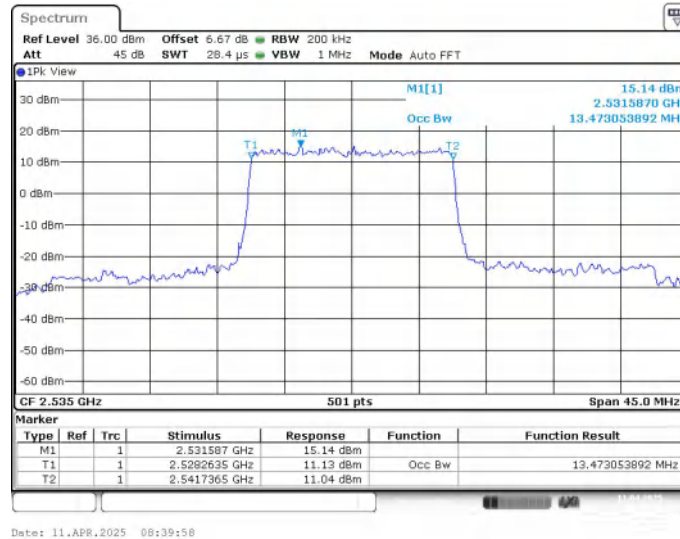
LTE band 7 , 10MHz Bandwidth,MID,16QAM (99% BW)



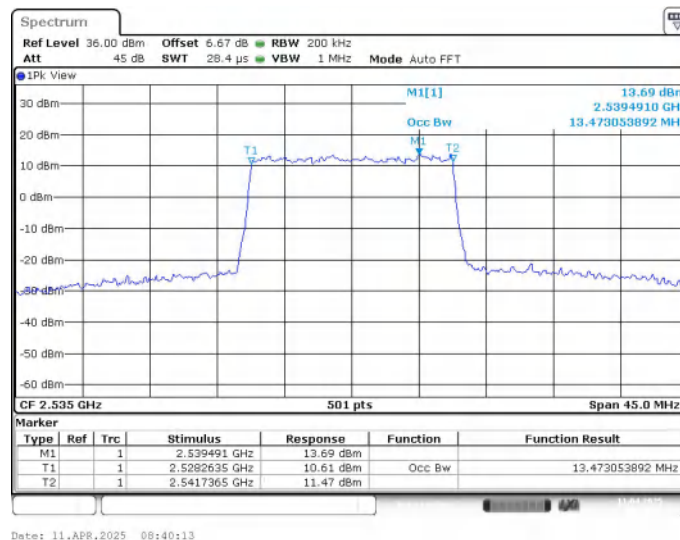
LTE band 7,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
2535	13.473	13.473

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



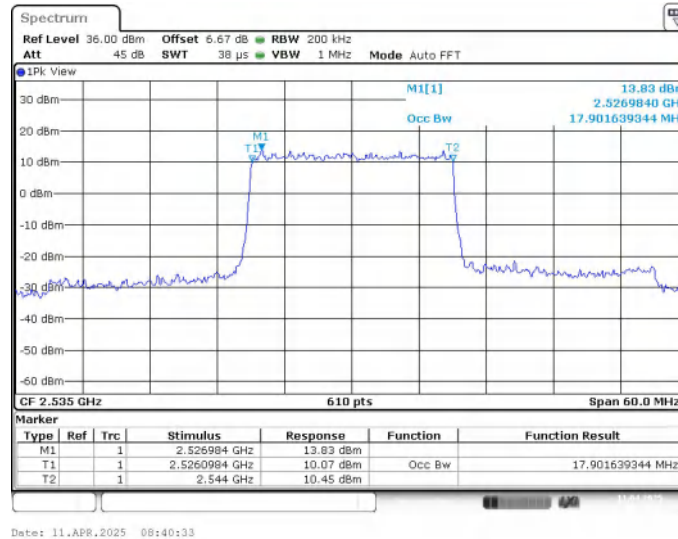
LTE band 7 , 15MHz Bandwidth,MID,16QAM (99% BW)



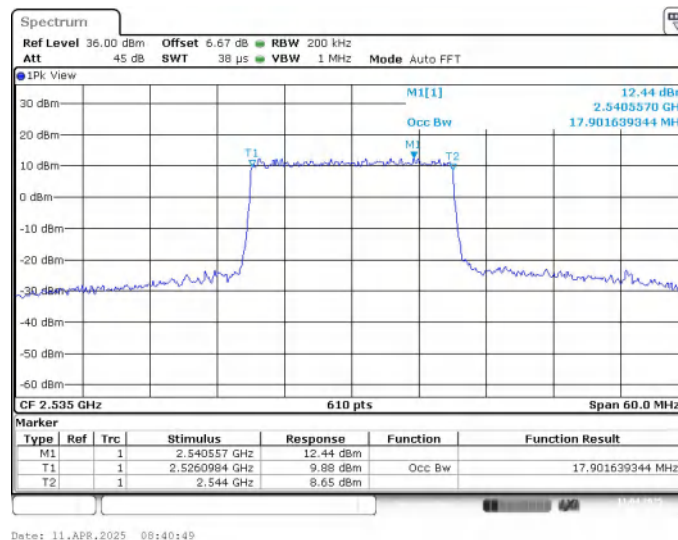
LTE band 7,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
2535	17.902	17.902

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



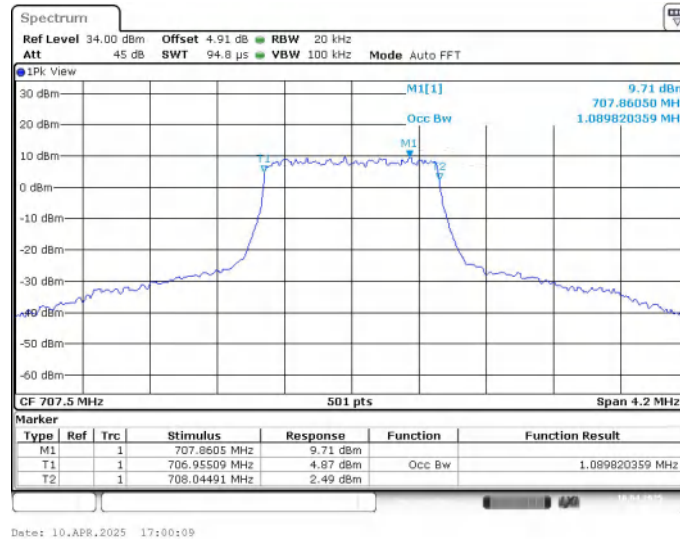
LTE band 7 , 20MHz Bandwidth,MID,16QAM (99% BW)



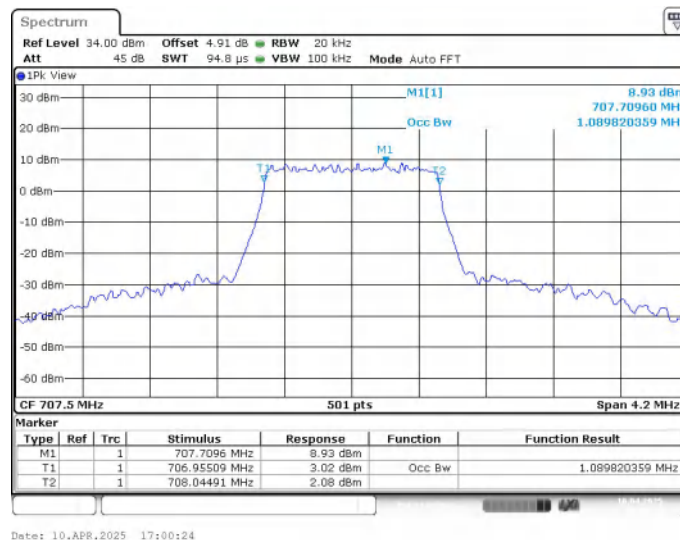
LTE band 12,1.4MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
707.5	1.090	1.090

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



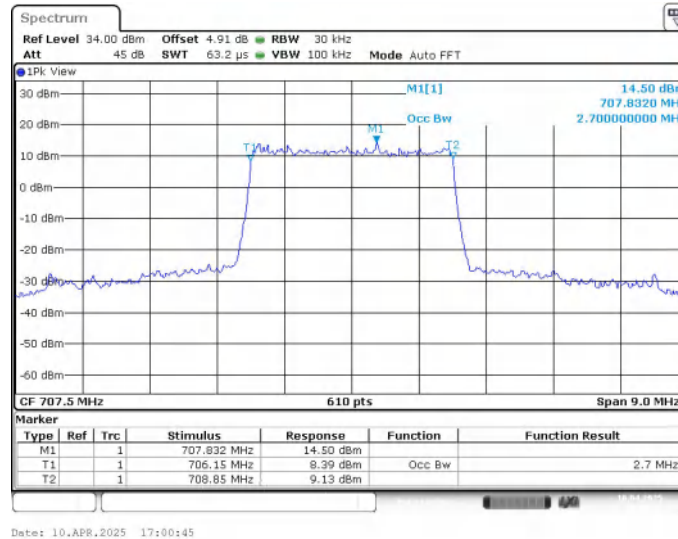
LTE band 12 , 1.4MHz Bandwidth,MID,16QAM (99% BW)



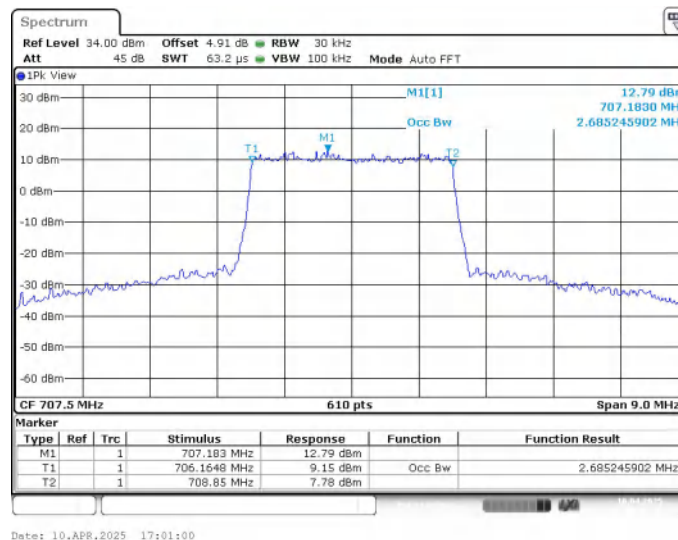
LTE band 12,3MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
707.5	2.700	2.685

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



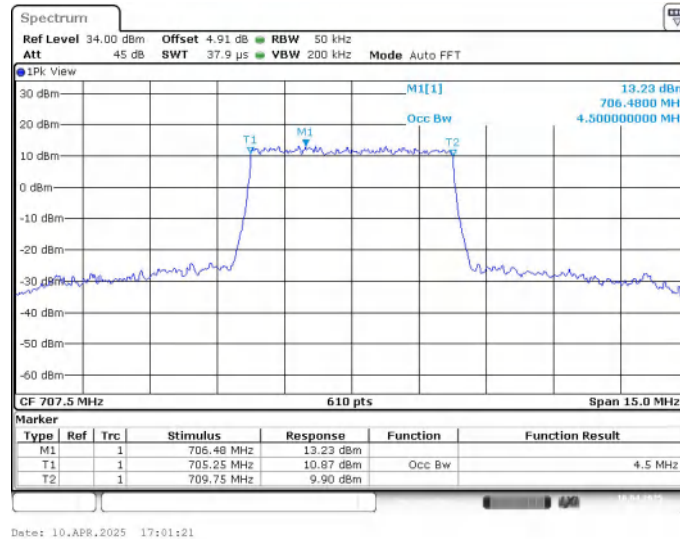
LTE band 12 , 3MHz Bandwidth,MID,16QAM (99% BW)



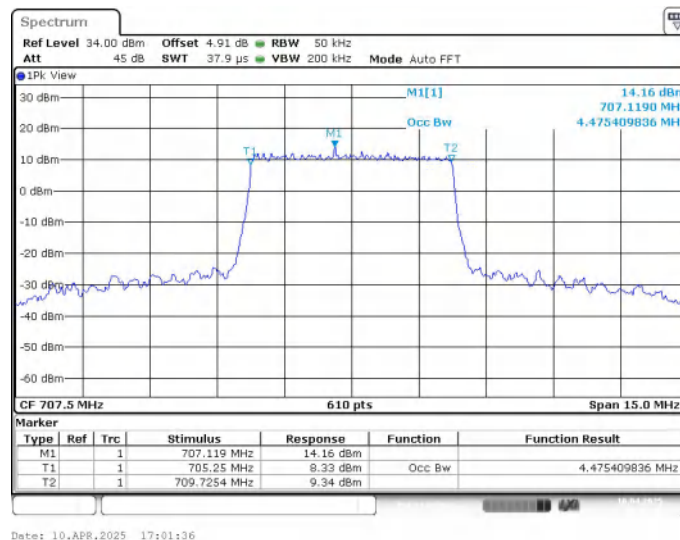
LTE band 12,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
707.5	4.500	4.475

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



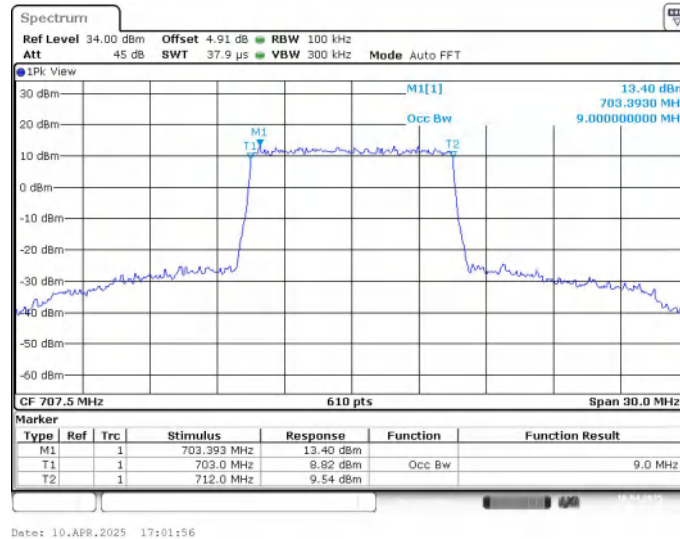
LTE band 12 , 5MHz Bandwidth,MID,16QAM (99% BW)



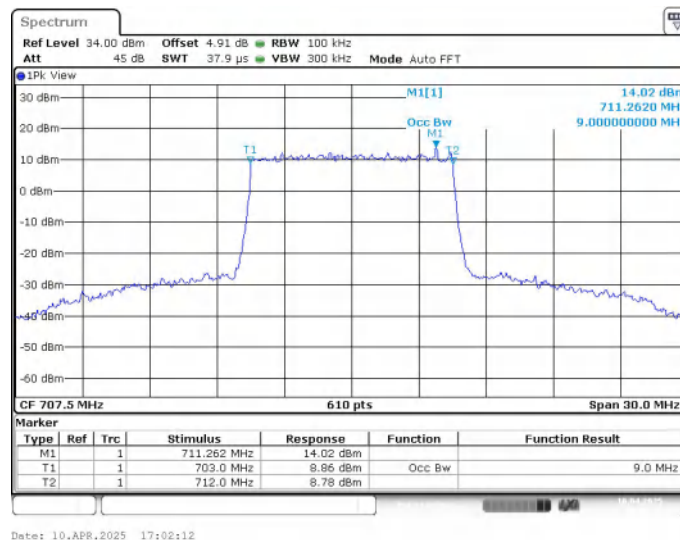
LTE band 12,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
707.5	9.000	9.000

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



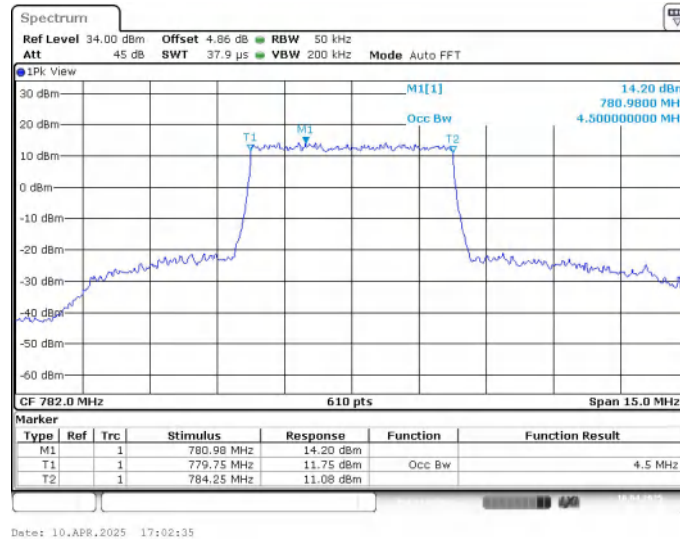
LTE band 12 , 10MHz Bandwidth,MID,16QAM (99% BW)



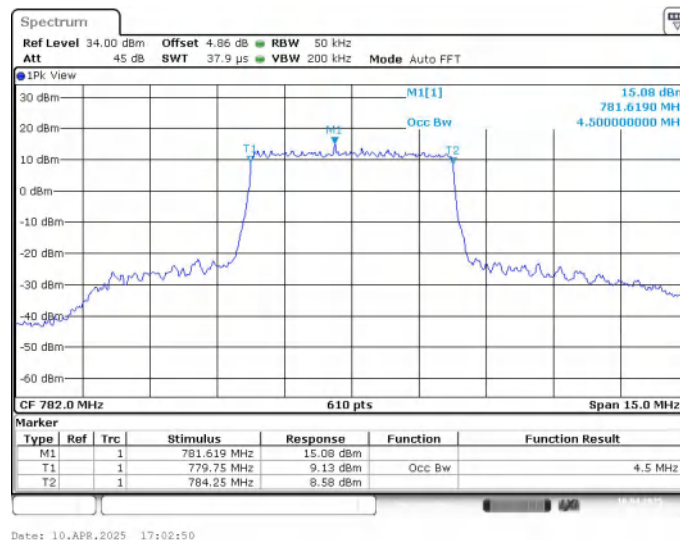
LTE band 13,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
782	4.500	4.500

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



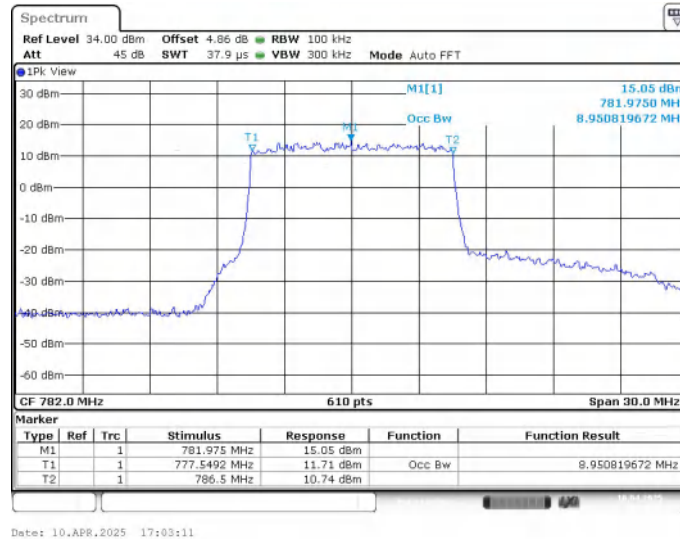
LTE band 13 , 5MHz Bandwidth,MID,16QAM (99% BW)



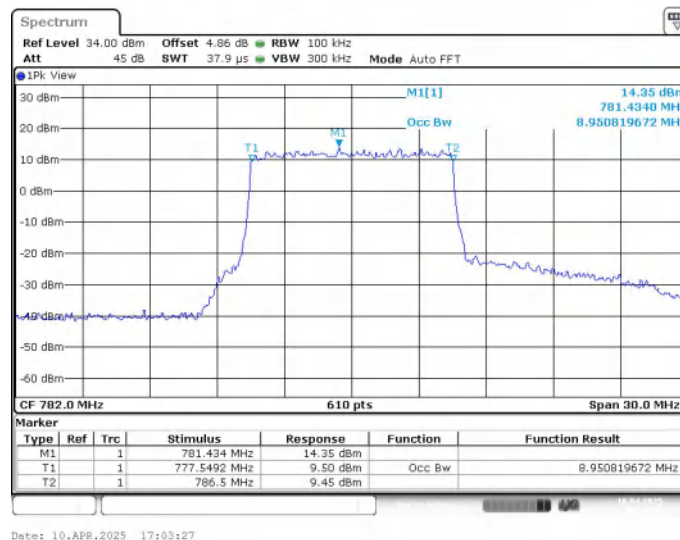
LTE band 13,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
782	8.951	8.951

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



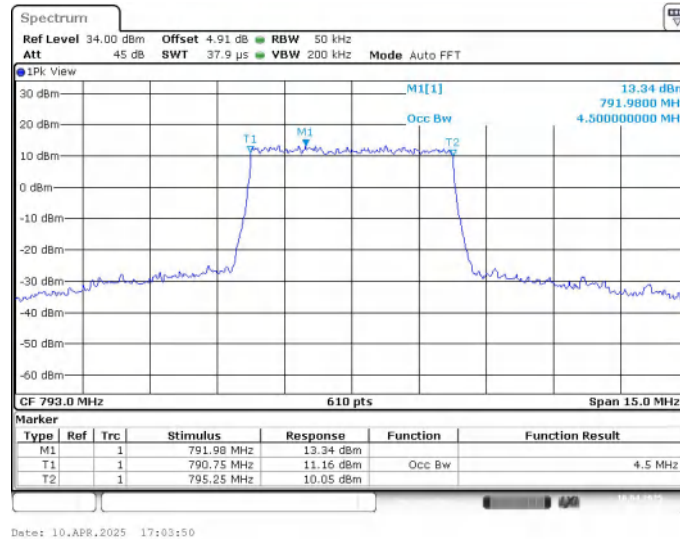
LTE band 13 , 10MHz Bandwidth,MID,16QAM (99% BW)



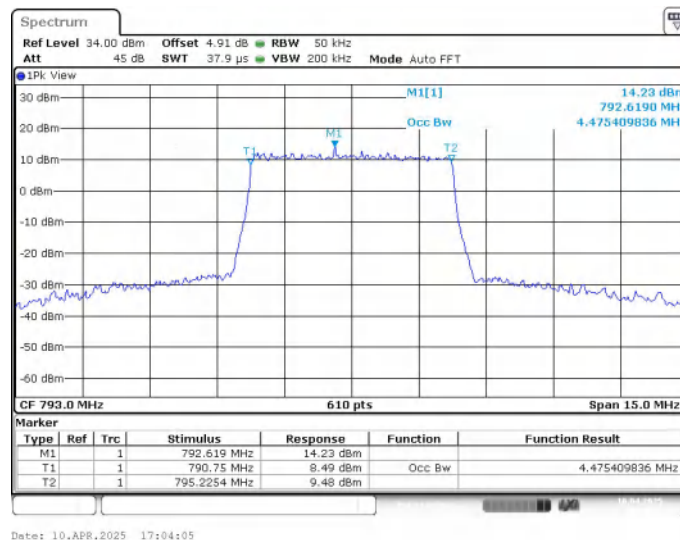
LTE band 14,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
793	4.500	4.475

LTE band 14 , 5MHz Bandwidth,MID,QPSK (99% BW)



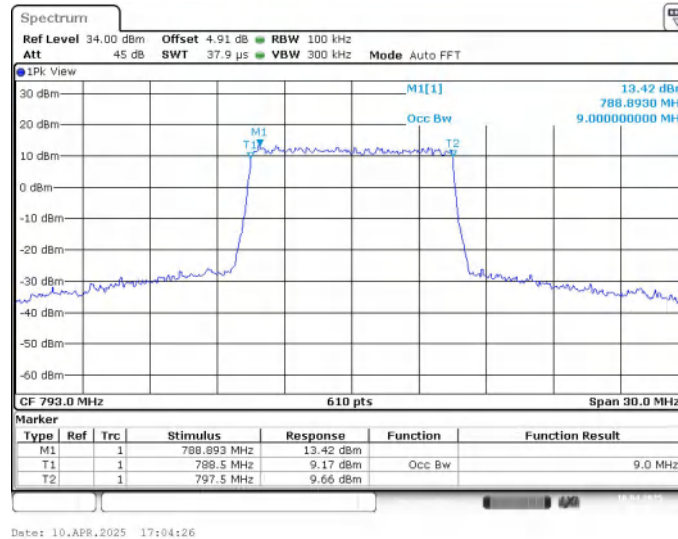
LTE band 14 , 5MHz Bandwidth,MID,16QAM (99% BW)



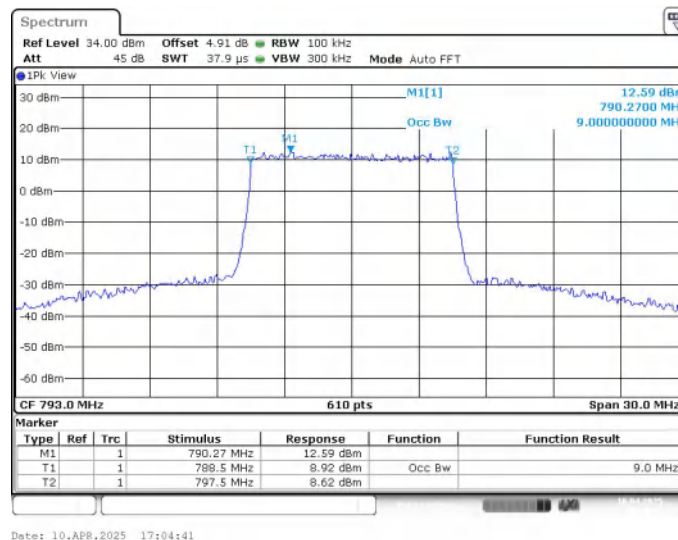
LTE band 14,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
793	9.000	9.000

LTE band 14 , 10MHz Bandwidth,MID,QPSK (99% BW)



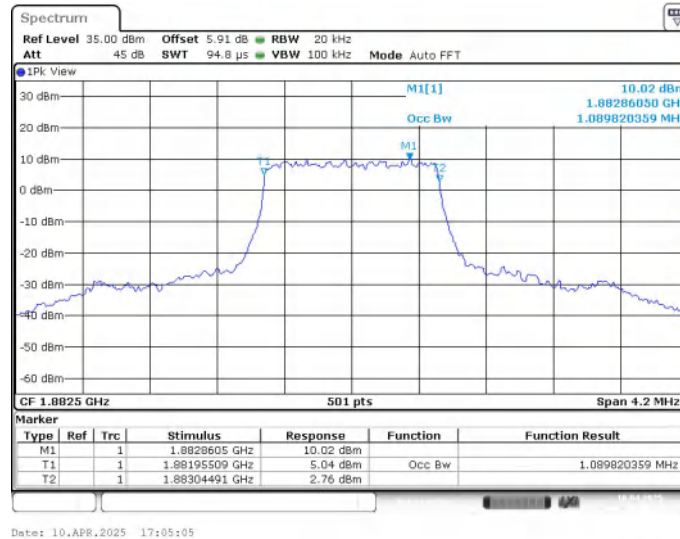
LTE band 14 , 10MHz Bandwidth,MID,16QAM (99% BW)



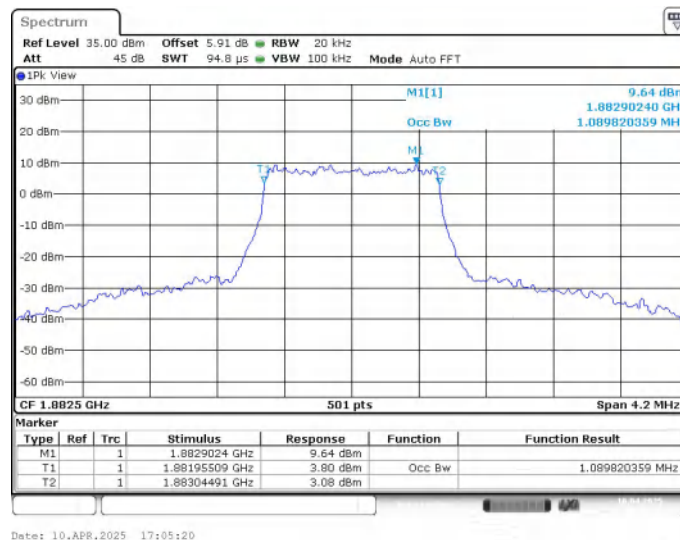
LTE band 25,1.4MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1882.5	1.090	1.090

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



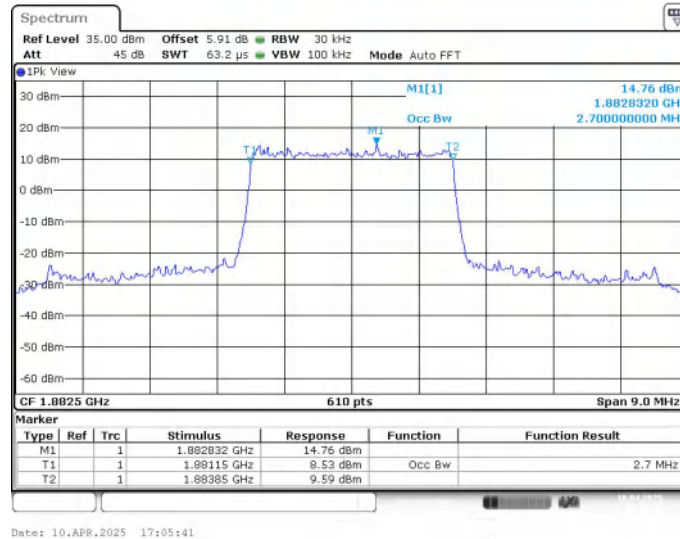
LTE band 25 , 1.4MHz Bandwidth,MID,16QAM (99% BW)



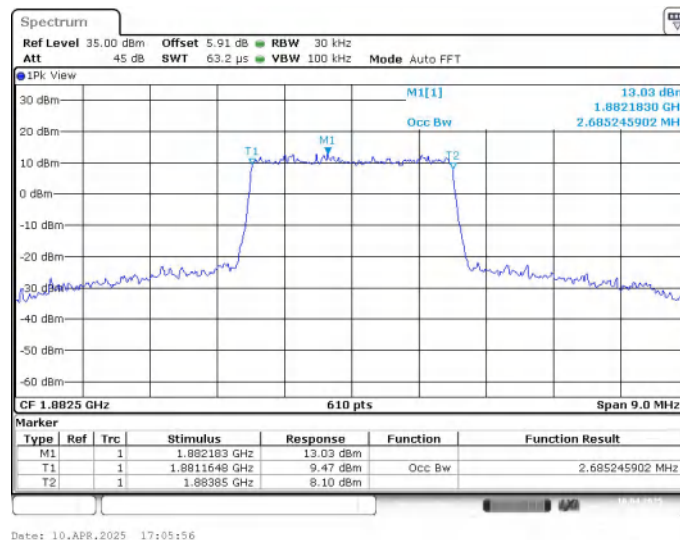
LTE band 25,3MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1882.5	2.700	2.685

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



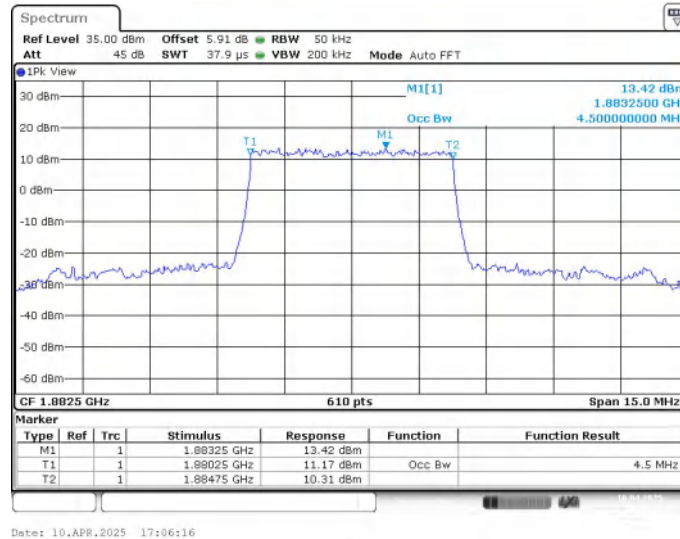
LTE band 25 , 3MHz Bandwidth,MID,16QAM (99% BW)



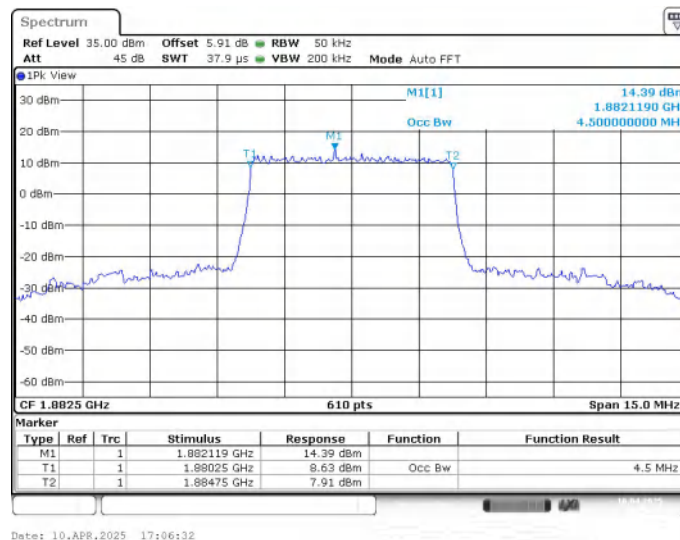
LTE band 25,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1882.5	4.500	4.500

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



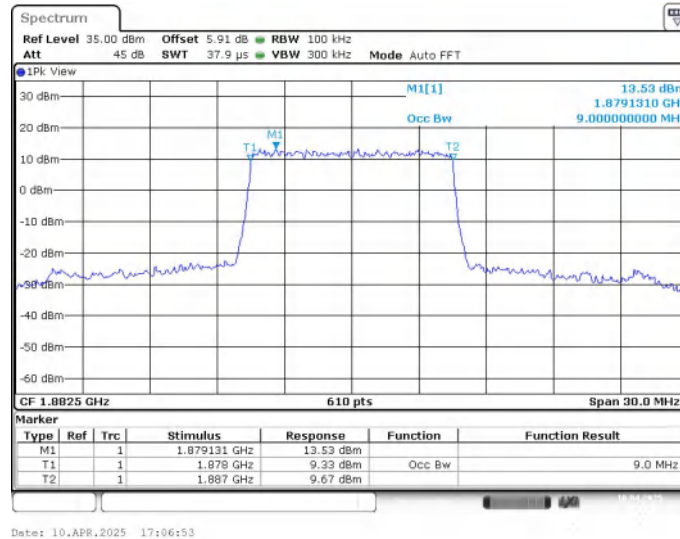
LTE band 25 , 5MHz Bandwidth,MID,16QAM (99% BW)



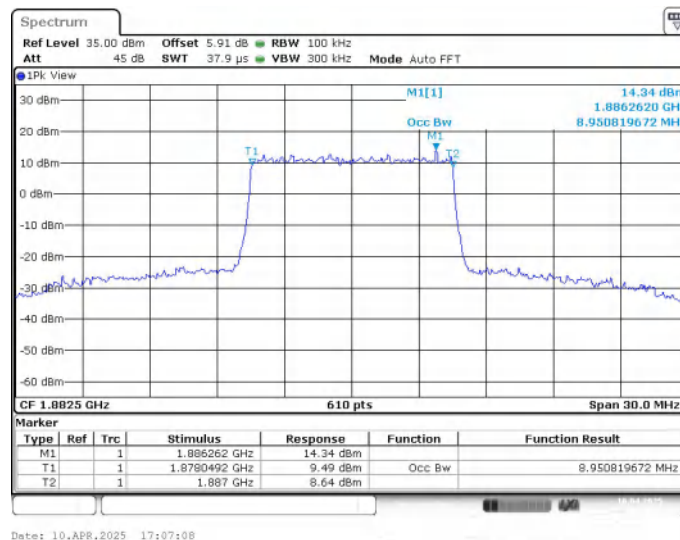
LTE band 25,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1882.5	9.000	8.951

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



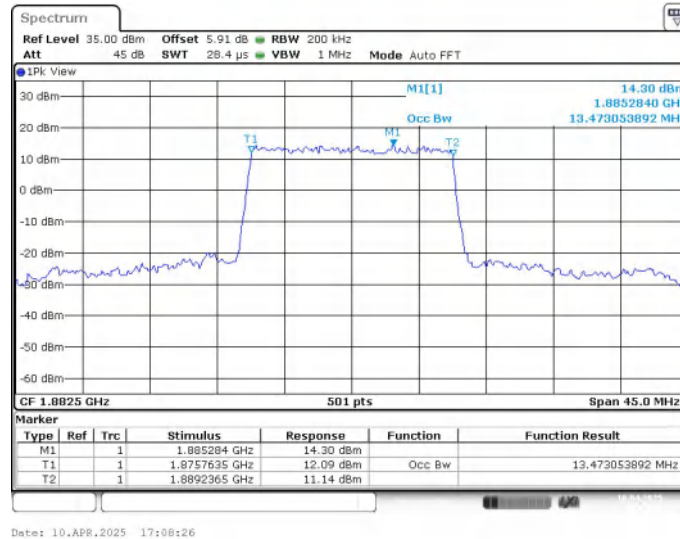
LTE band 25 , 10MHz Bandwidth,MID,16QAM (99% BW)



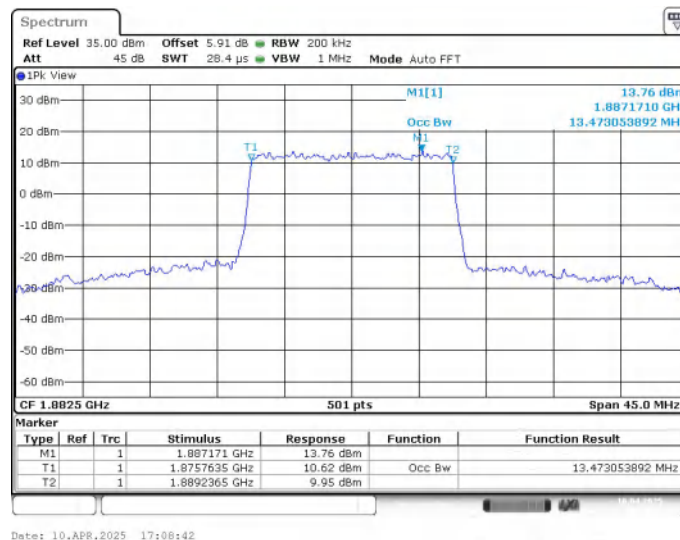
LTE band 25,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1882.5	13.473	13.473

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



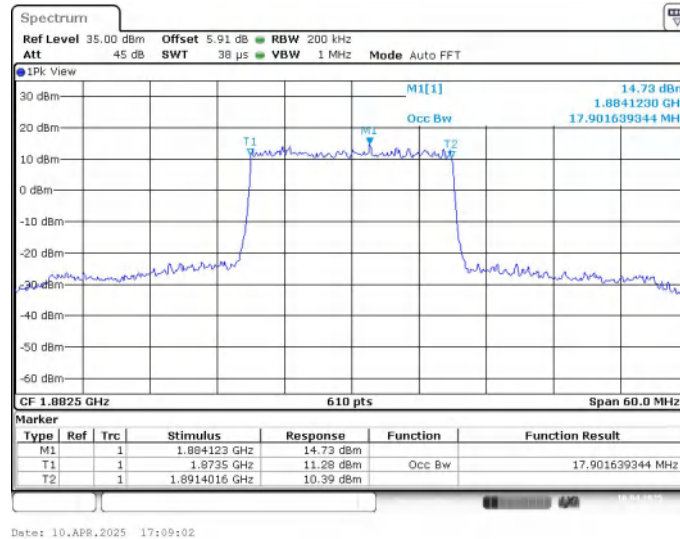
LTE band 25 , 15MHz Bandwidth,MID,16QAM (99% BW)



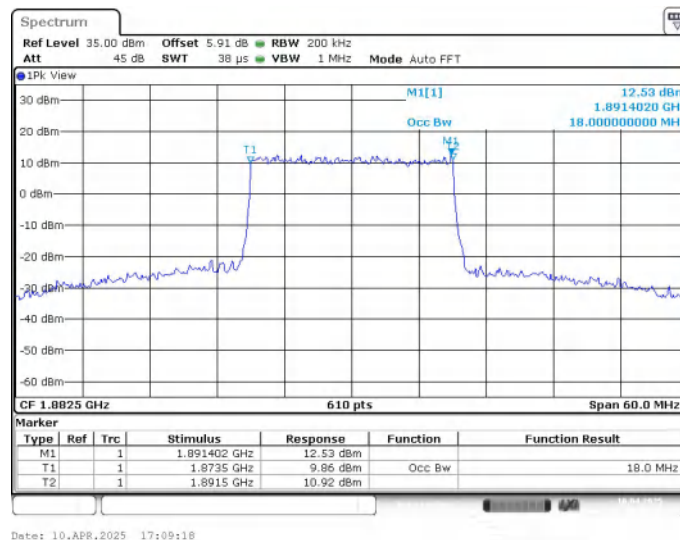
LTE band 25,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1882.5	17.902	18.000

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



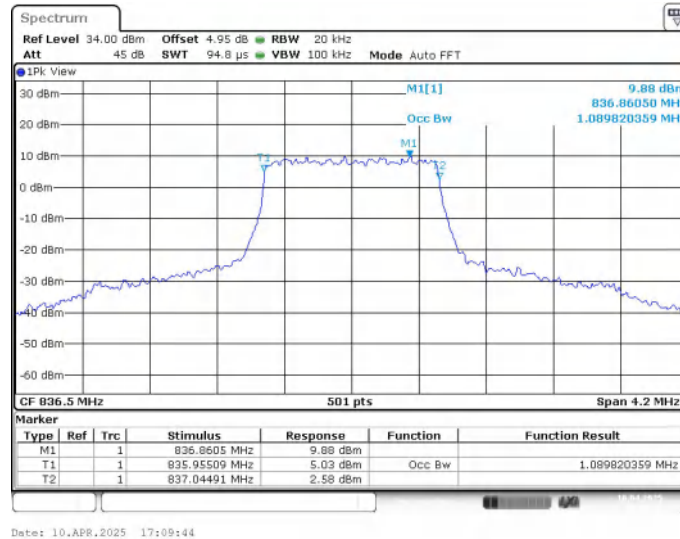
LTE band 25 , 20MHz Bandwidth,MID,16QAM (99% BW)



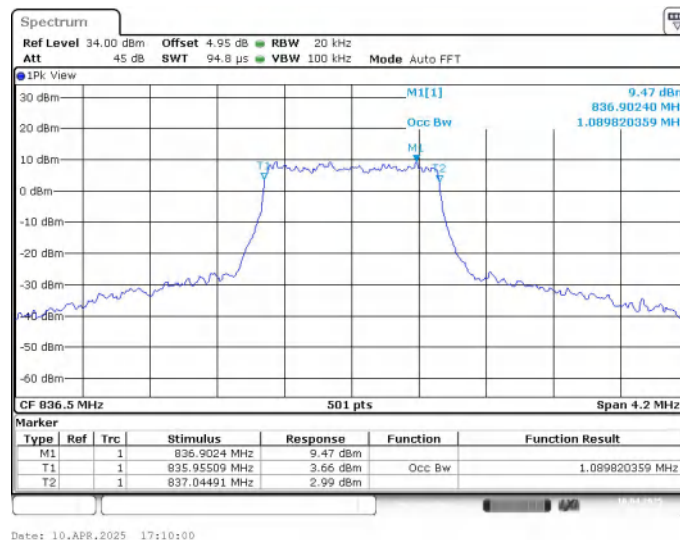
LTE band 26_Part22,1.4MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
836.5	1.090	1.090

LTE band 26 , 1.4MHz Bandwidth,MID,QPSK (99% BW)



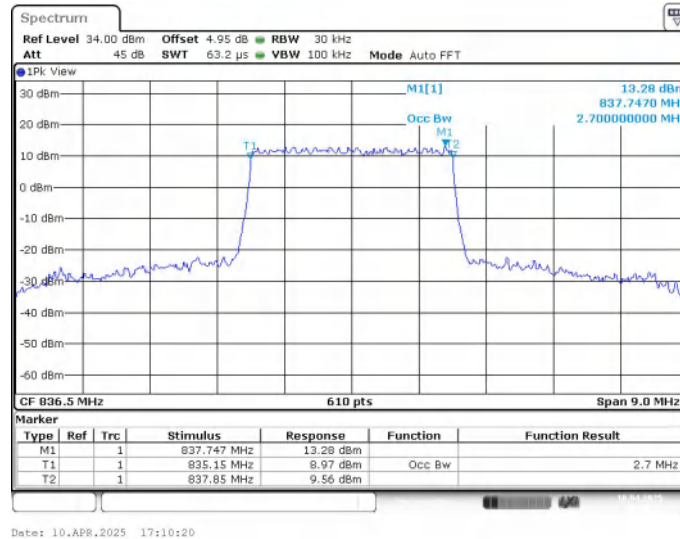
LTE band 26 , 1.4MHz Bandwidth,MID,16QAM (99% BW)



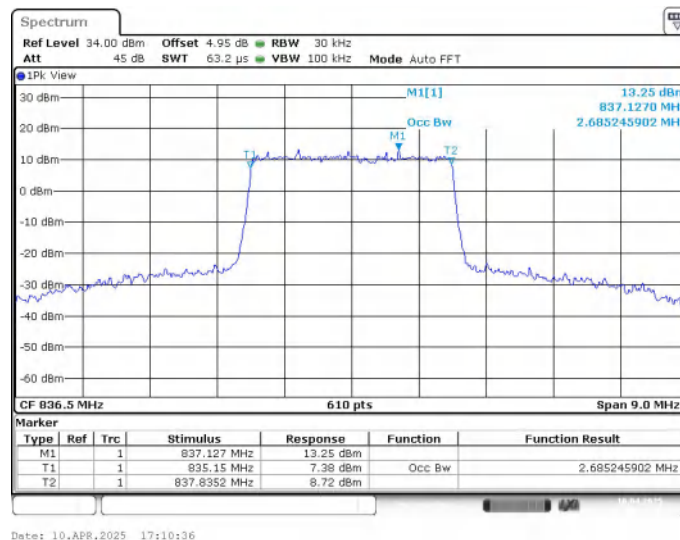
LTE band 26_Part22,3MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
836.5	2.700	2.685

LTE band 26 , 3MHz Bandwidth,MID,QPSK (99% BW)



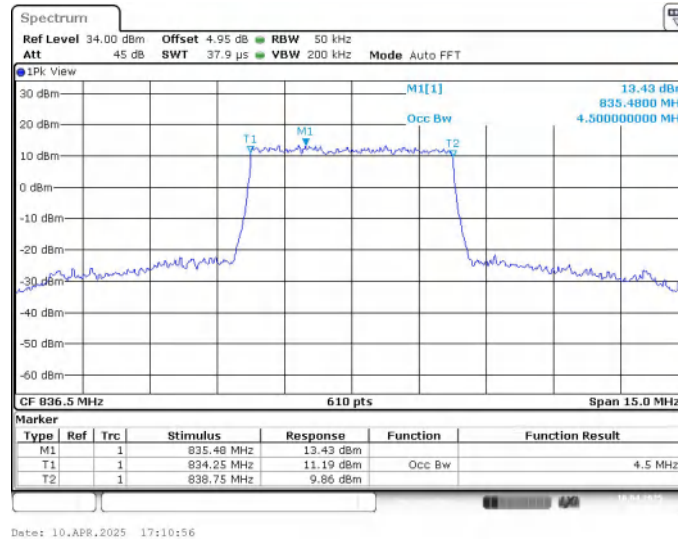
LTE band 26 , 3MHz Bandwidth,MID,16QAM (99% BW)



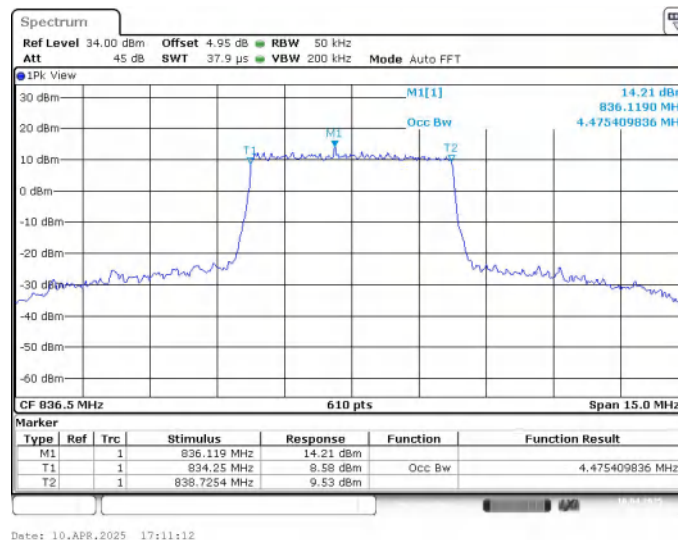
LTE band 26_Part22,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
836.5	4.500	4.475

LTE band 26 , 5MHz Bandwidth,MID,QPSK (99% BW)



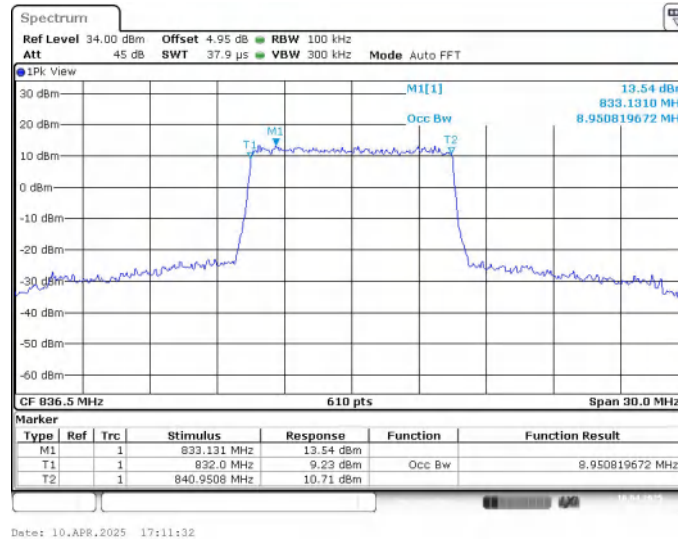
LTE band 26 , 5MHz Bandwidth,MID,16QAM (99% BW)



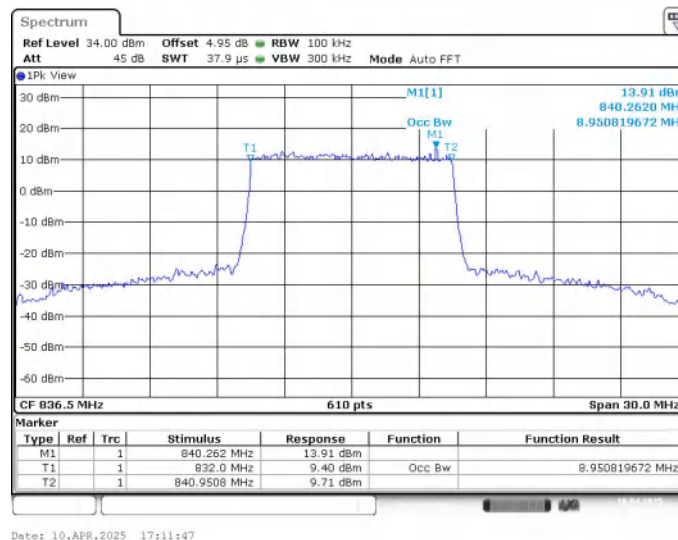
LTE band 26_Part22,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
836.5	8.951	8.951

LTE band 26 , 10MHz Bandwidth,MID,QPSK (99% BW)



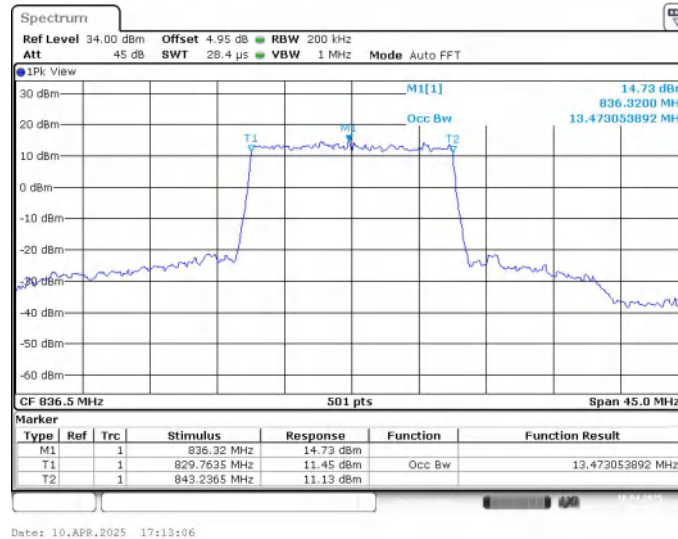
LTE band 26 , 10MHz Bandwidth,MID,16QAM (99% BW)



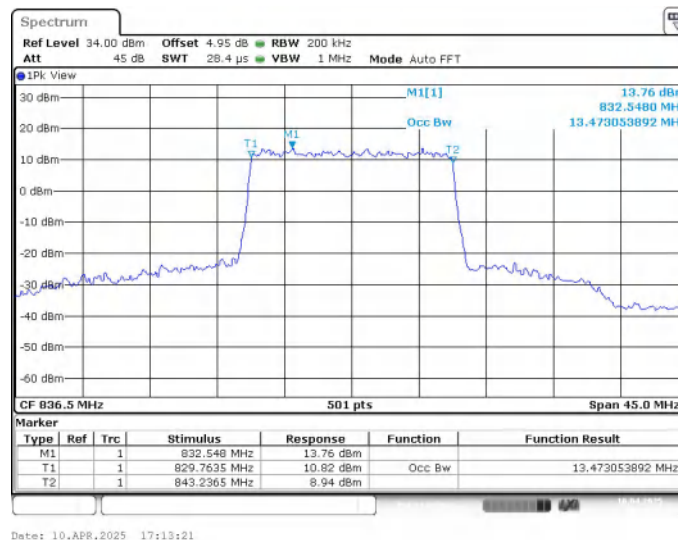
LTE band 26_Part22,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
836.5	13.473	13.473

LTE band 26 , 15MHz Bandwidth,MID,QPSK (99% BW)



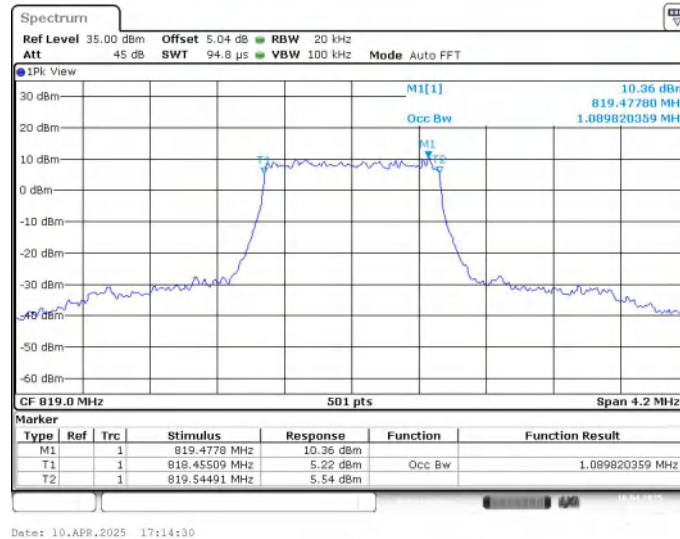
LTE band 26 , 15MHz Bandwidth,MID,16QAM (99% BW)



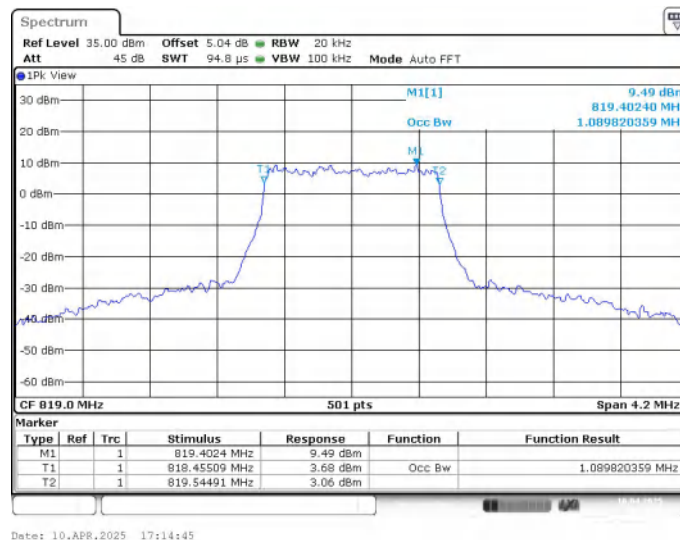
LTE band 26_Part90,1.4MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
819	1.090	1.090

LTE band 26 , 1.4MHz Bandwidth,MID,QPSK (99% BW)



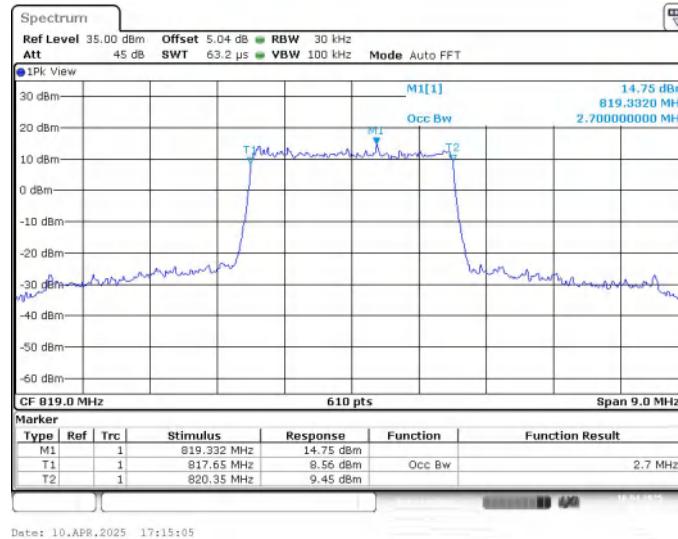
LTE band 26 , 1.4MHz Bandwidth,MID,16QAM (99% BW)



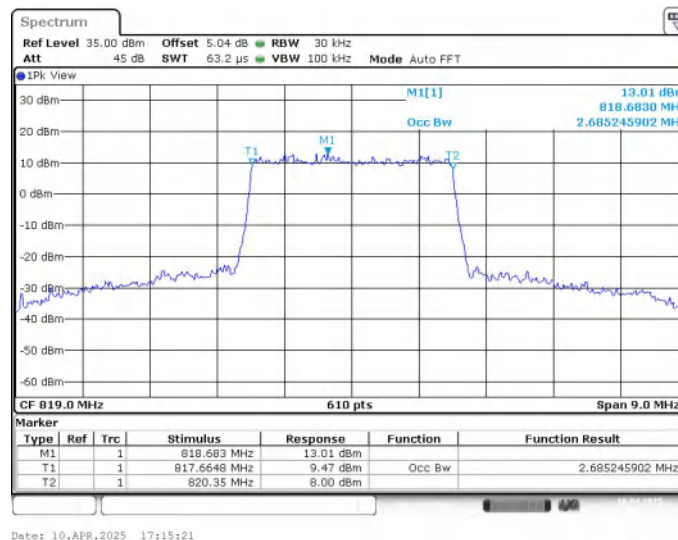
LTE band 26_Part90,3MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
819	2.700	2.685

LTE band 26 , 3MHz Bandwidth,MID,QPSK (99% BW)



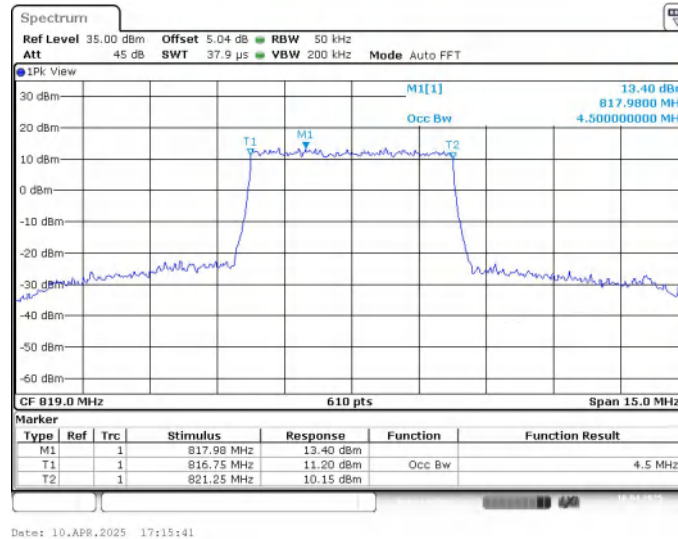
LTE band 26 , 3MHz Bandwidth,MID,16QAM (99% BW)



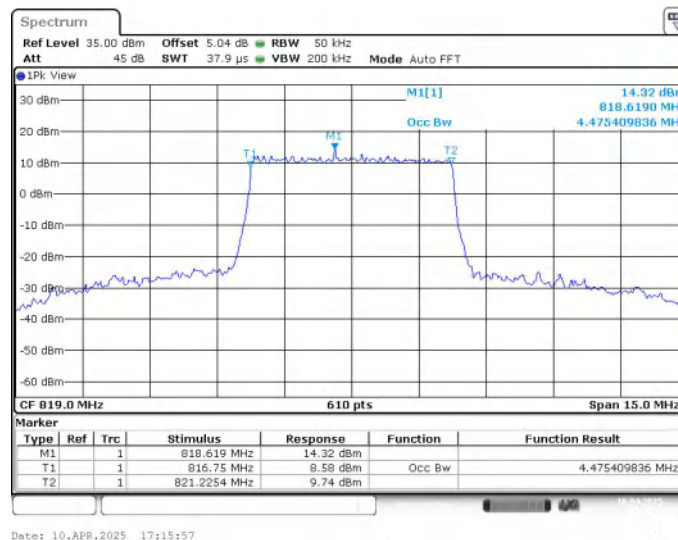
LTE band 26_Part90,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
819	4.500	4.475

LTE band 26 , 5MHz Bandwidth,MID,QPSK (99% BW)



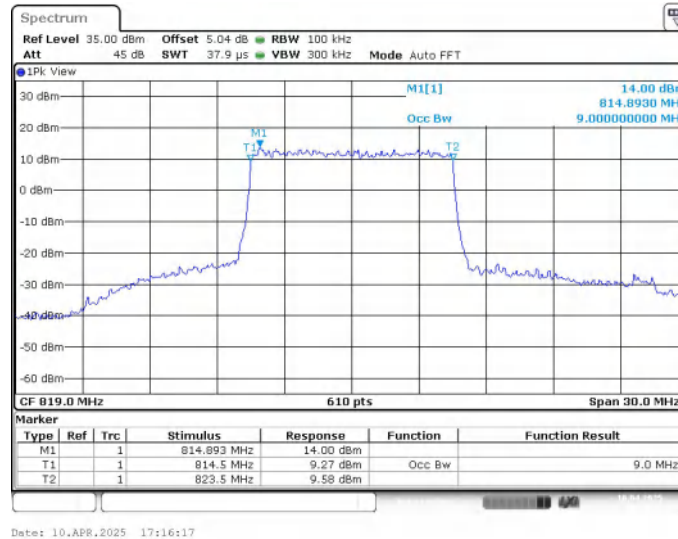
LTE band 26 , 5MHz Bandwidth,MID,16QAM (99% BW)



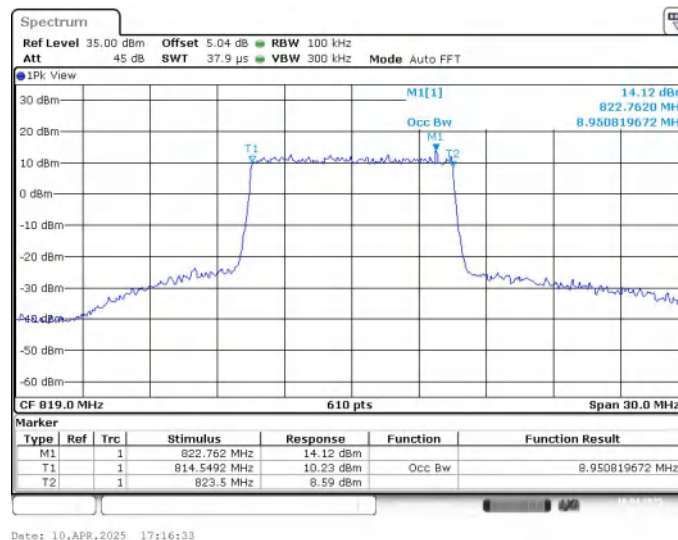
LTE band 26_Part90,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
819	9.000	8.951

LTE band 26 , 10MHz Bandwidth,MID,QPSK (99% BW)



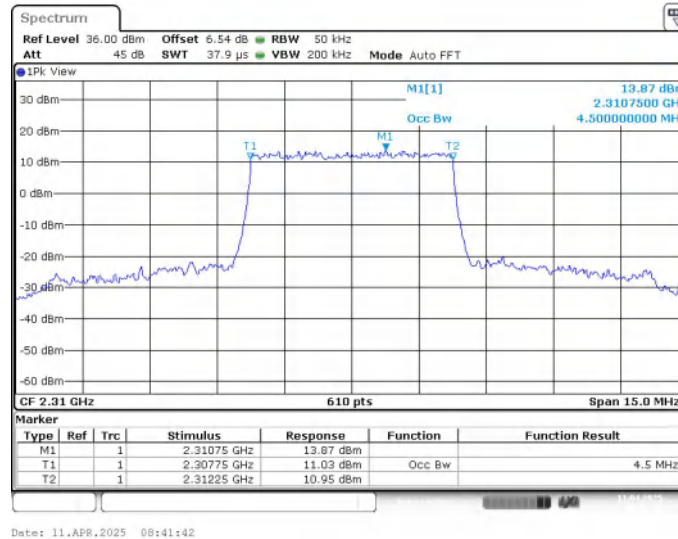
LTE band 26 , 10MHz Bandwidth,MID,16QAM (99% BW)



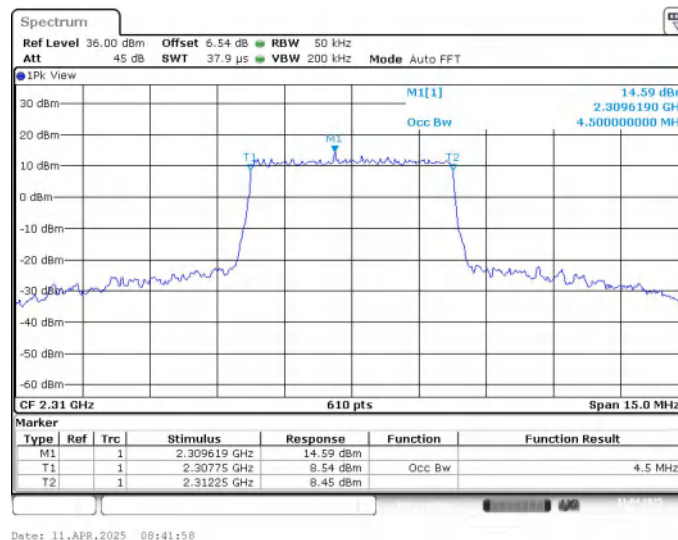
LTE band 30,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
2310	4.500	4.500

LTE band 30 , 5MHz Bandwidth,MID,QPSK (99% BW)



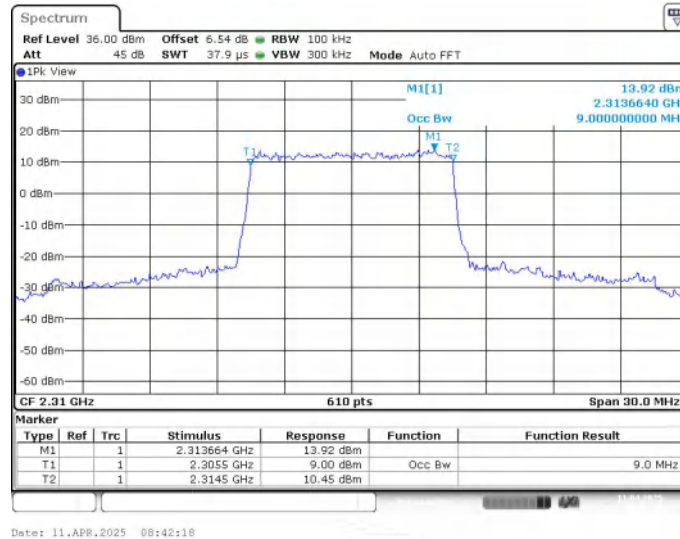
LTE band 30 , 5MHz Bandwidth,MID,16QAM (99% BW)



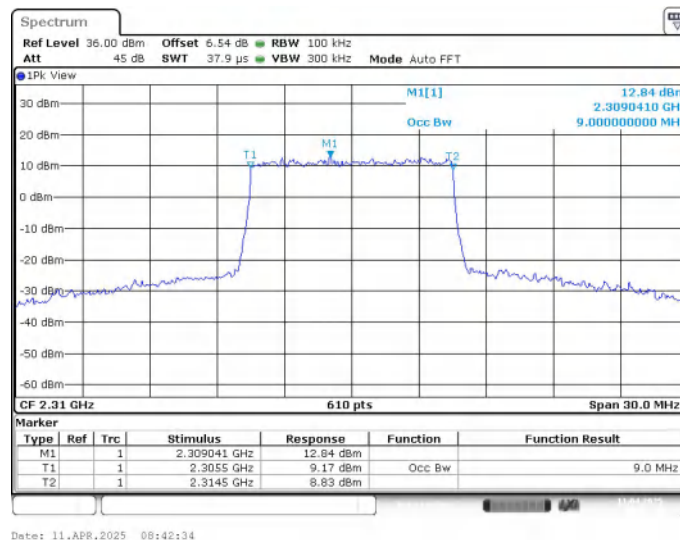
LTE band 30,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
2310	9.000	9.000

LTE band 30 , 10MHz Bandwidth,MID,QPSK (99% BW)



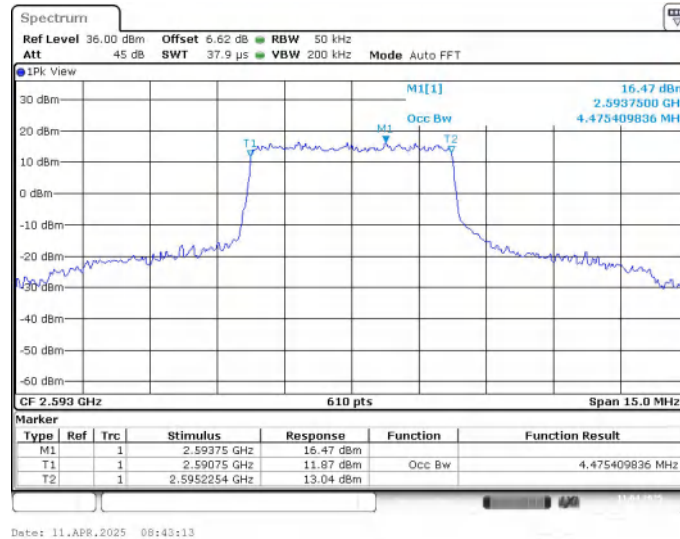
LTE band 30 , 10MHz Bandwidth,MID,16QAM (99% BW)



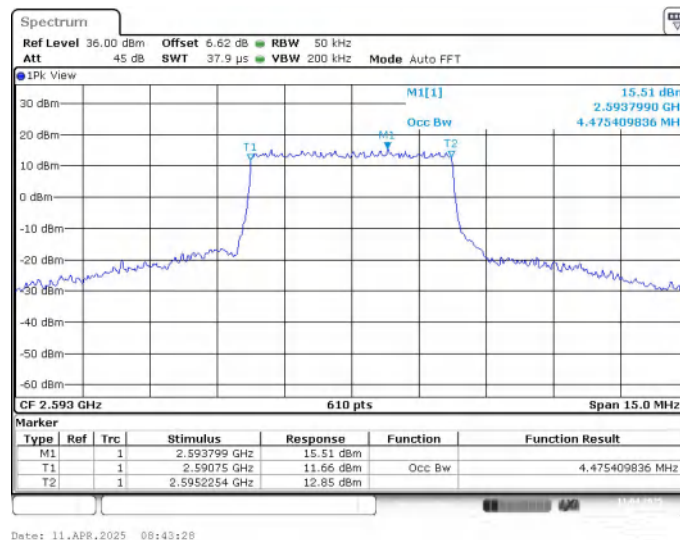
LTE band 41,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
2593	4.475	4.475

LTE band 41 , 5MHz Bandwidth,MID,QPSK (99% BW)



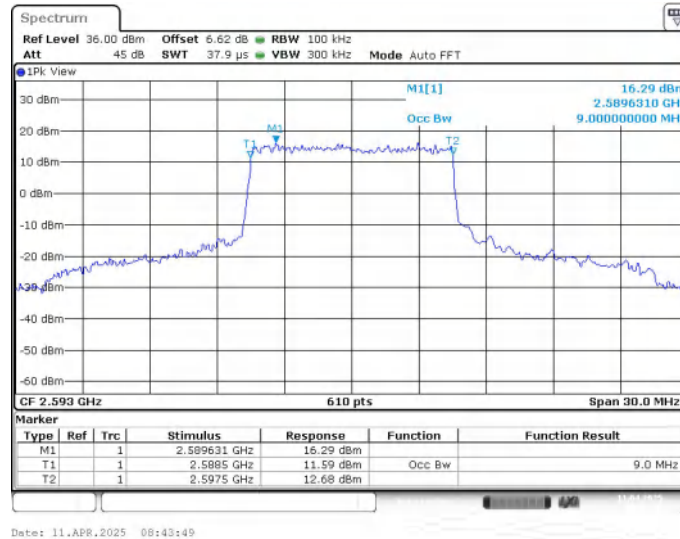
LTE band 41 , 5MHz Bandwidth,MID,16QAM (99% BW)



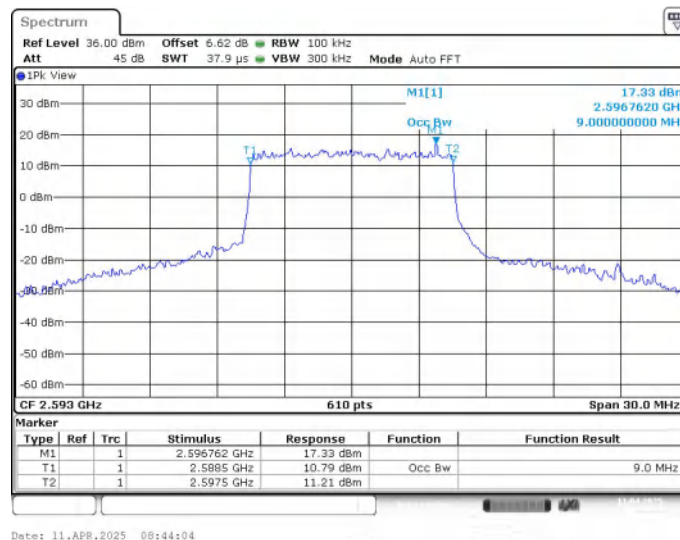
LTE band 41,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
2593	9.000	9.000

LTE band 41 , 10MHz Bandwidth,MID,QPSK (99% BW)



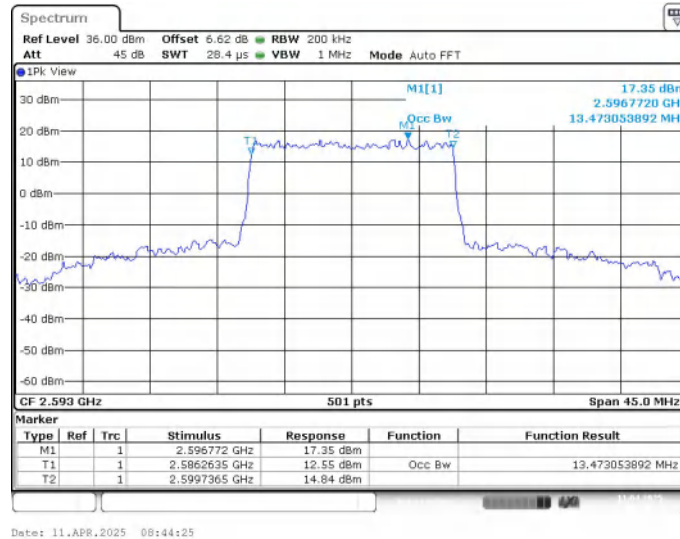
LTE band 41 , 10MHz Bandwidth,MID,16QAM (99% BW)



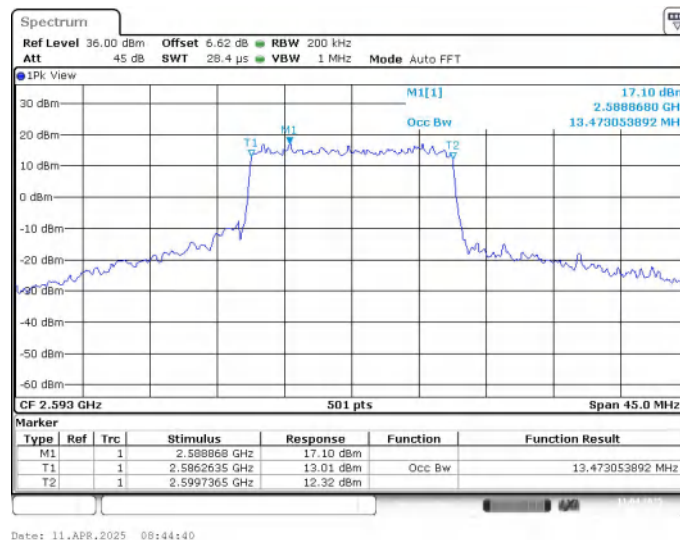
LTE band 41,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
2593	13.473	13.473

LTE band 41 , 15MHz Bandwidth,MID,QPSK (99% BW)



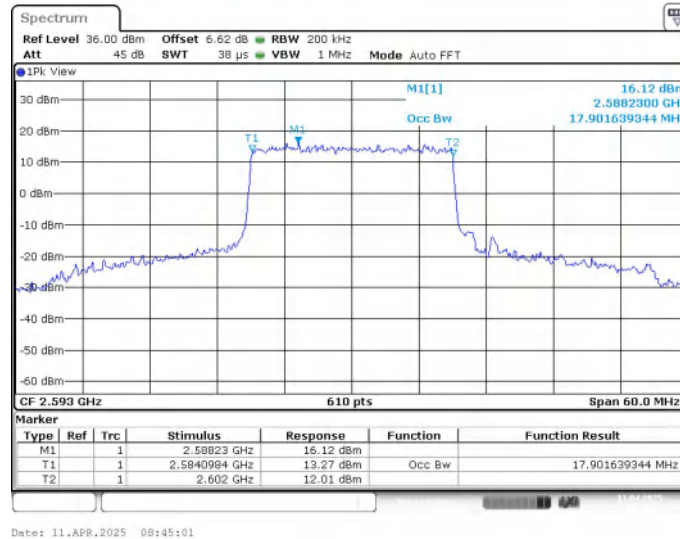
LTE band 41 , 15MHz Bandwidth,MID,16QAM (99% BW)



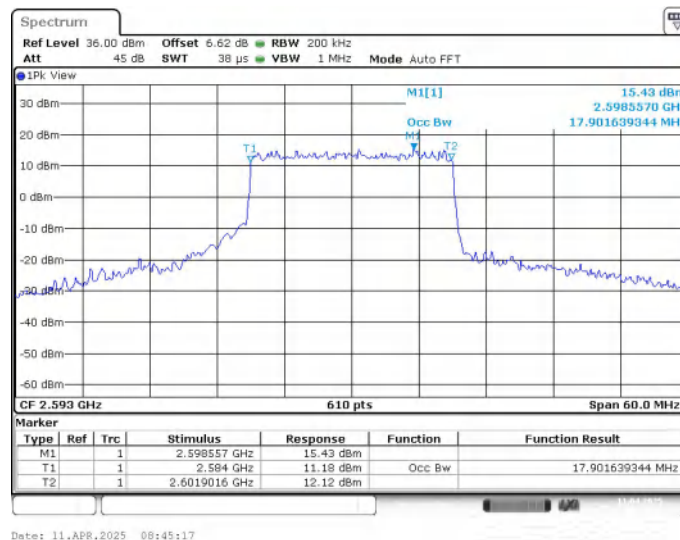
LTE band 41,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
2593	17.902	17.902

LTE band 41 , 20MHz Bandwidth,MID,QPSK (99% BW)



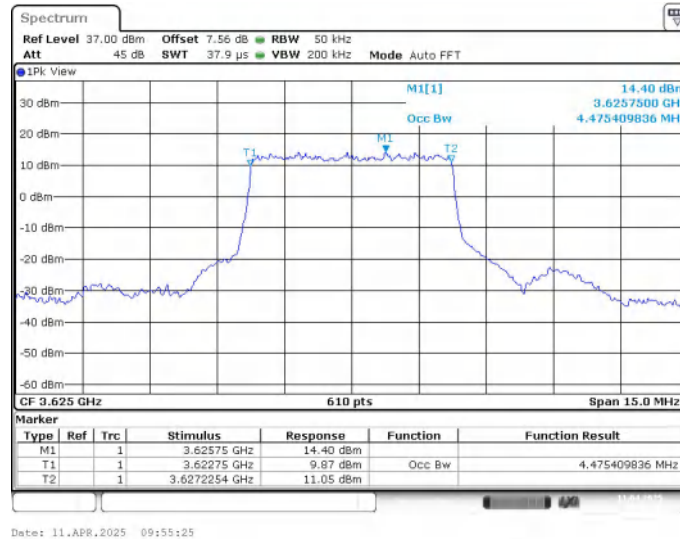
LTE band 41 , 20MHz Bandwidth,MID,16QAM (99% BW)



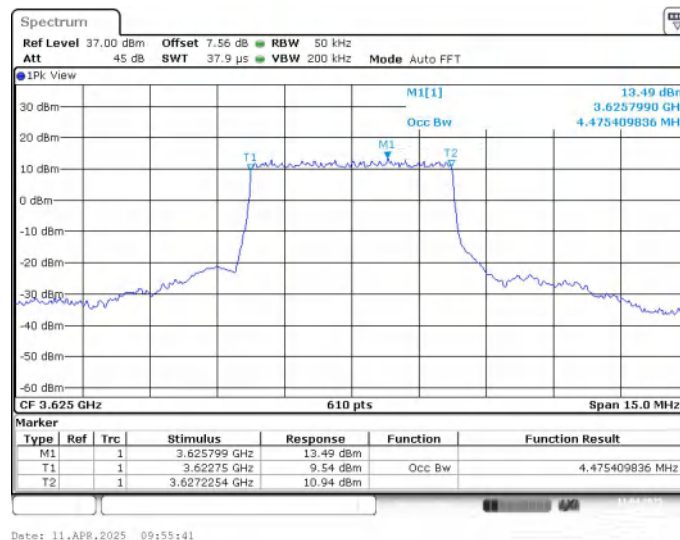
LTE band 48,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
3625	4.475	4.475

LTE band 48 , 5MHz Bandwidth,MID,QPSK (99% BW)



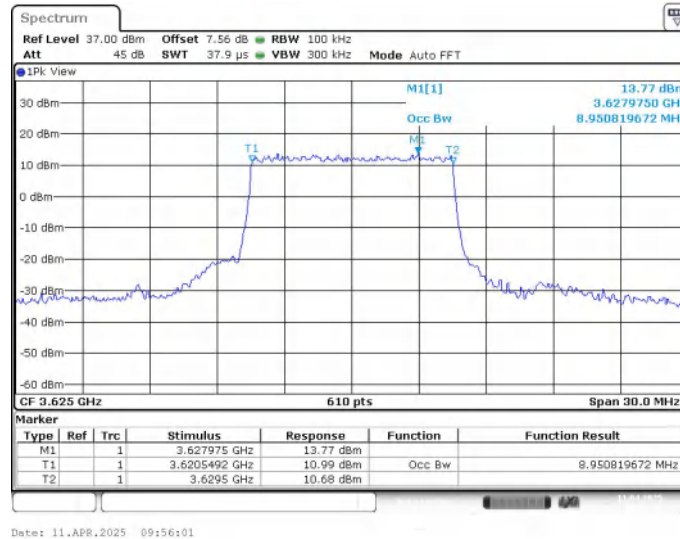
LTE band 48 , 5MHz Bandwidth,MID,16QAM (99% BW)



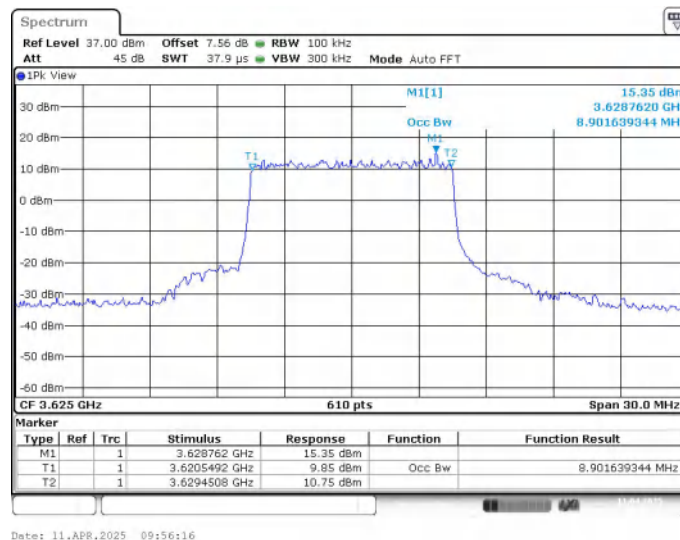
LTE band 48,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
3625	8.951	8.902

LTE band 48 , 10MHz Bandwidth,MID,QPSK (99% BW)



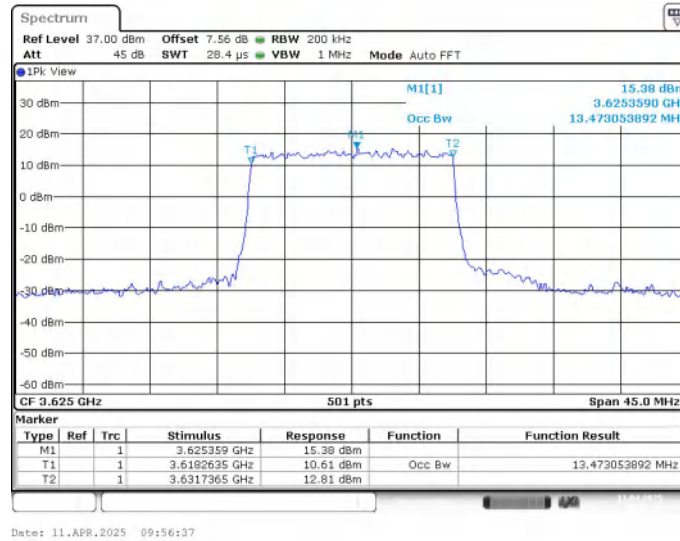
LTE band 48 , 10MHz Bandwidth,MID,16QAM (99% BW)



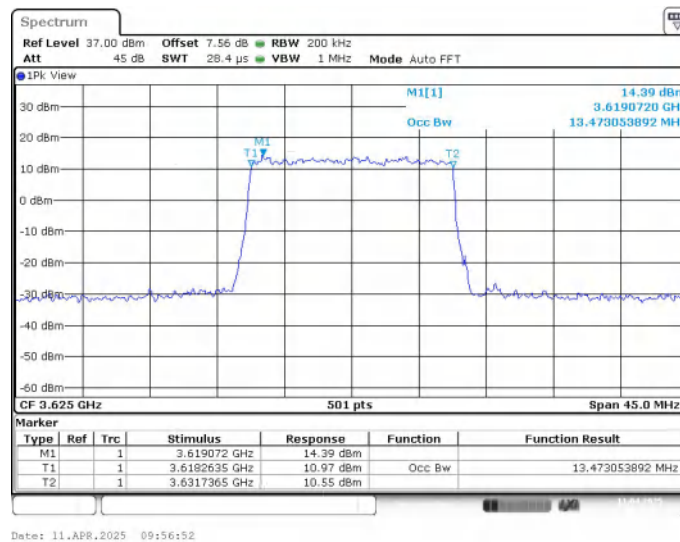
LTE band 48,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
3625	13.473	13.473

LTE band 48 , 15MHz Bandwidth,MID,QPSK (99% BW)



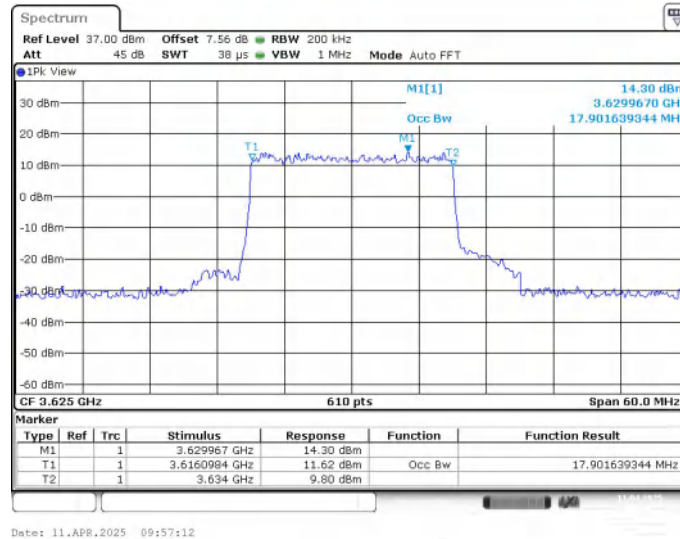
LTE band 48 , 15MHz Bandwidth,MID,16QAM (99% BW)



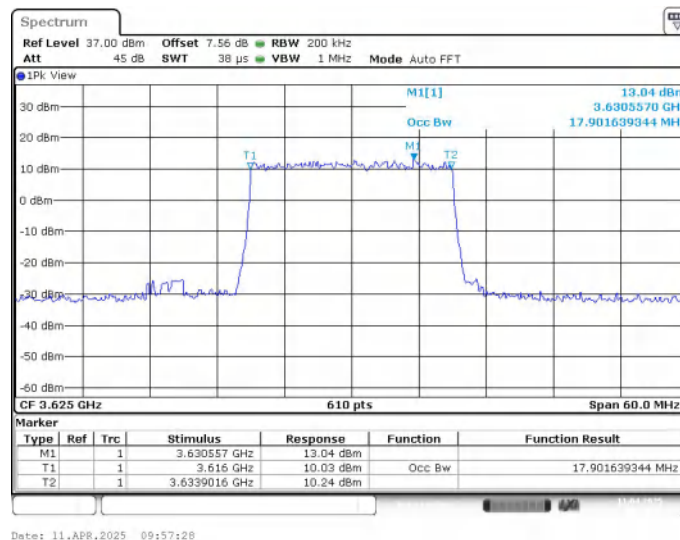
LTE band 48,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
3625	17.902	17.902

LTE band 48 , 20MHz Bandwidth,MID,QPSK (99% BW)



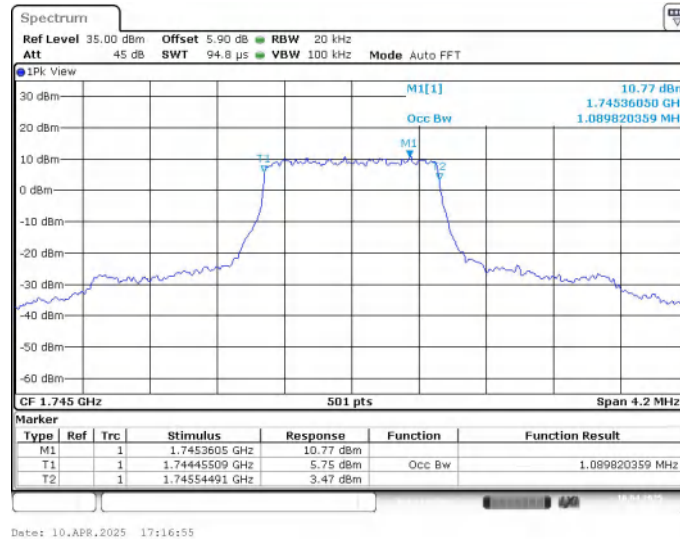
LTE band 48 , 20MHz Bandwidth,MID,16QAM (99% BW)



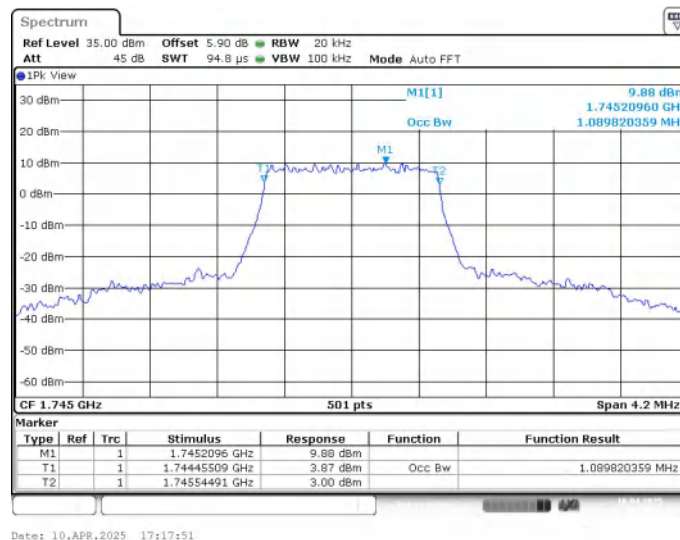
LTE band 66,1.4MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1745	1.090	1.090

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



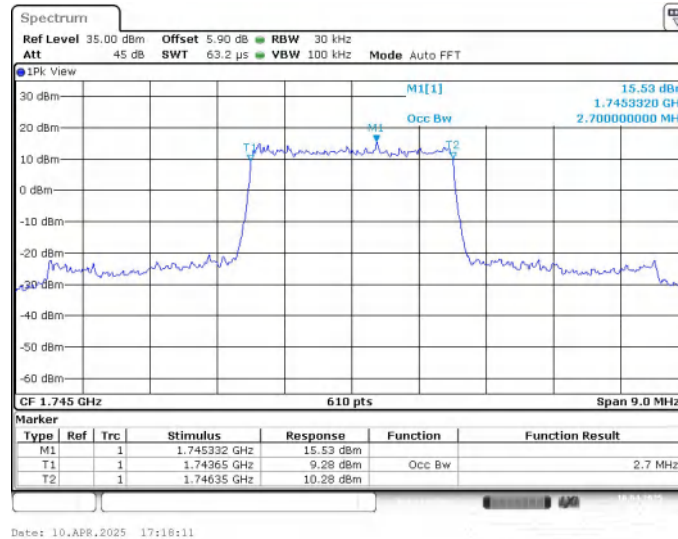
LTE band 66 , 1.4MHz Bandwidth,MID,16QAM (99% BW)



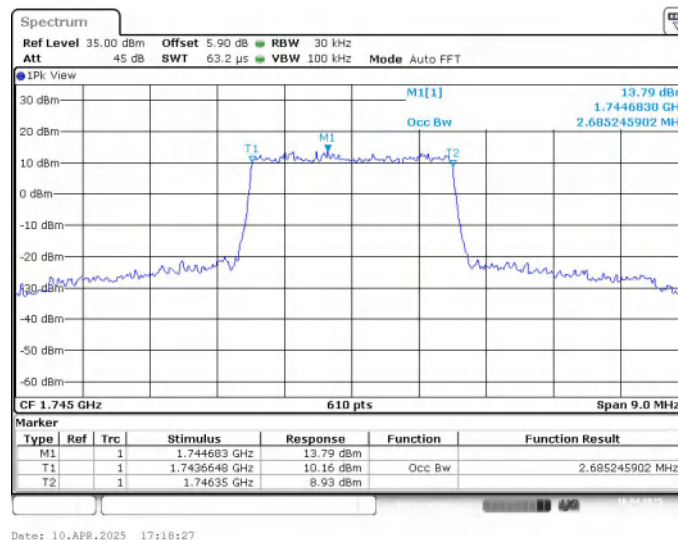
LTE band 66,3MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1745	2.700	2.685

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



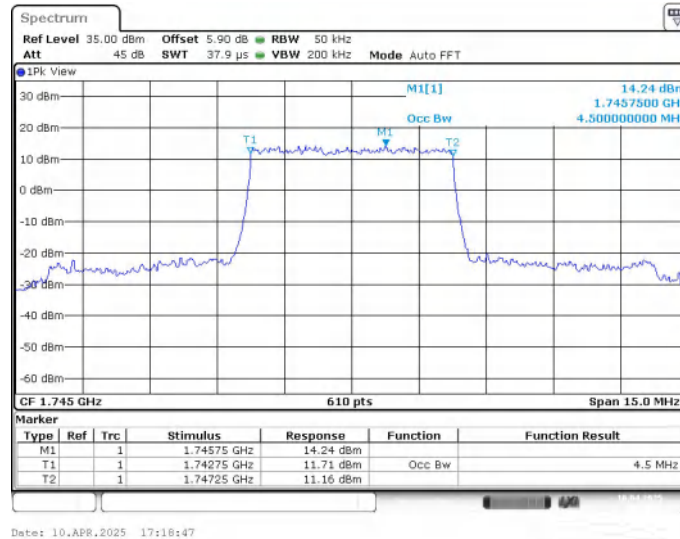
LTE band 66 , 3MHz Bandwidth,MID,16QAM (99% BW)



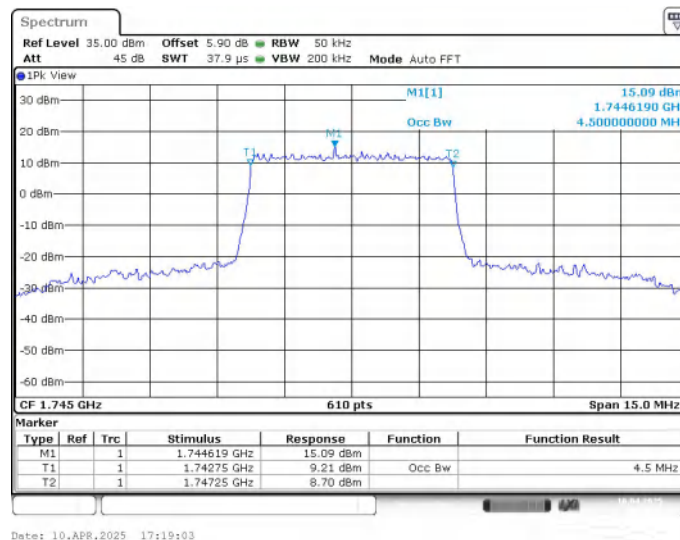
LTE band 66,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1745	4.500	4.500

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



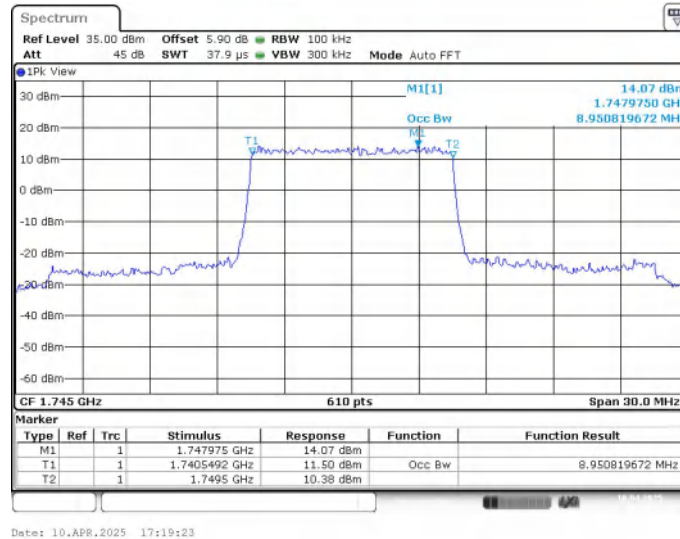
LTE band 66 , 5MHz Bandwidth,MID,16QAM (99% BW)



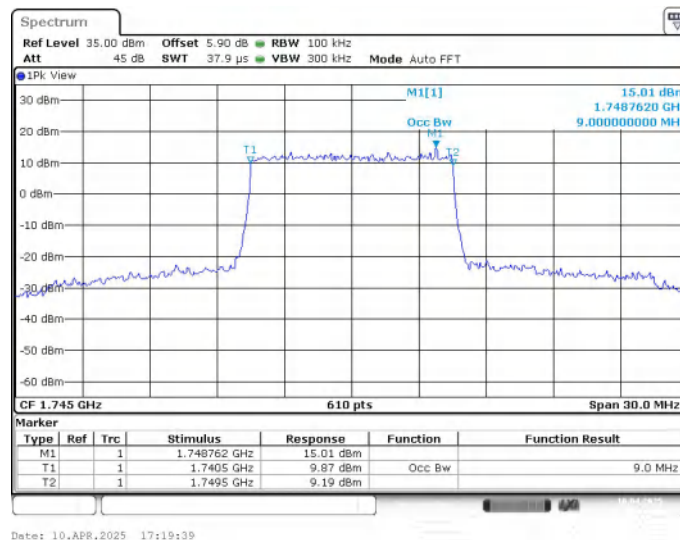
LTE band 66,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1745	8.951	9.000

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



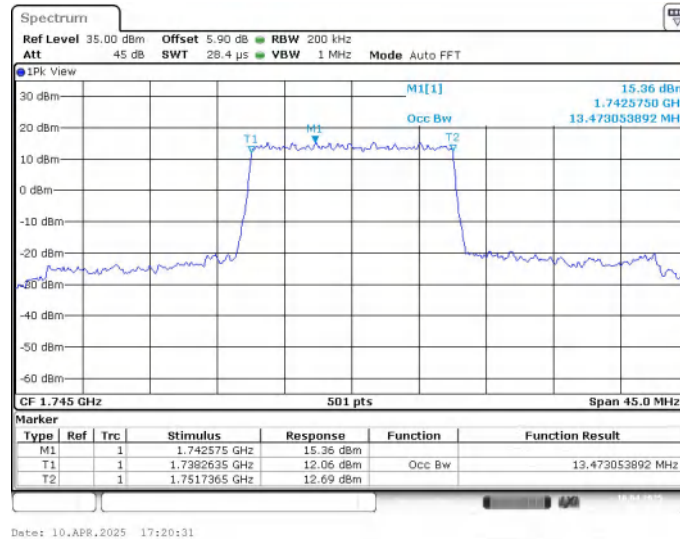
LTE band 66 , 10MHz Bandwidth,MID,16QAM (99% BW)



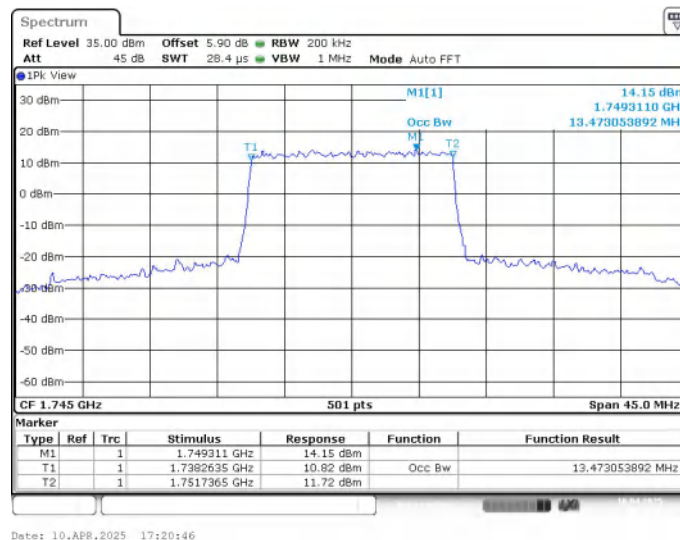
LTE band 66,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1745	13.473	13.473

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



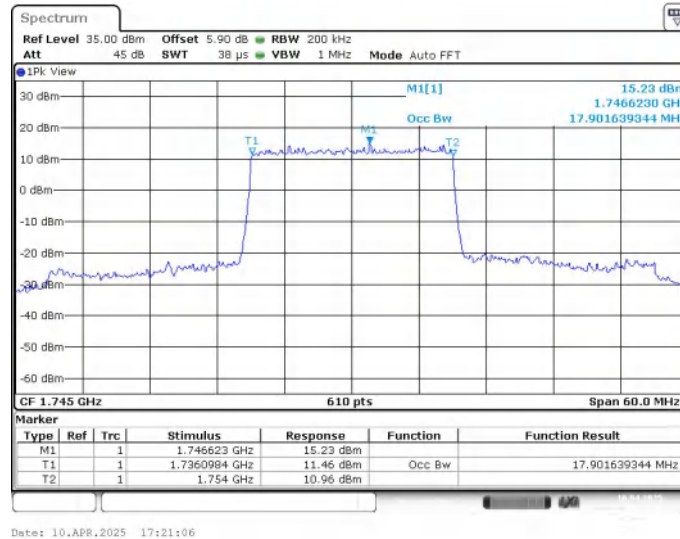
LTE band 66 , 15MHz Bandwidth,MID,16QAM (99% BW)



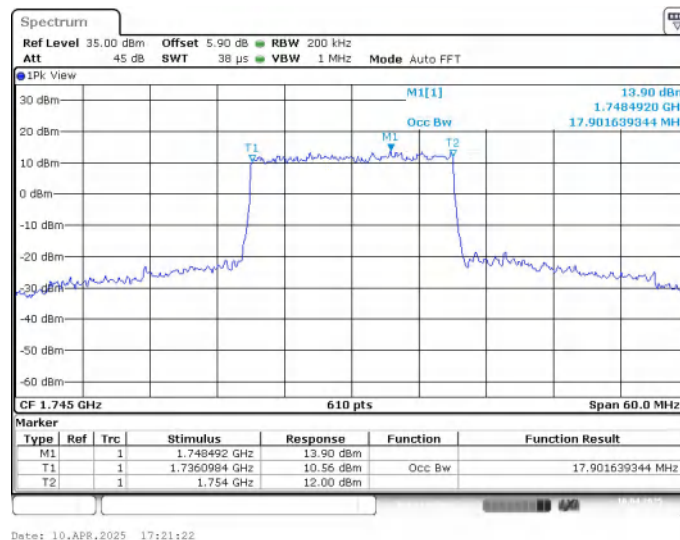
LTE band 66,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1745	17.902	17.902

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



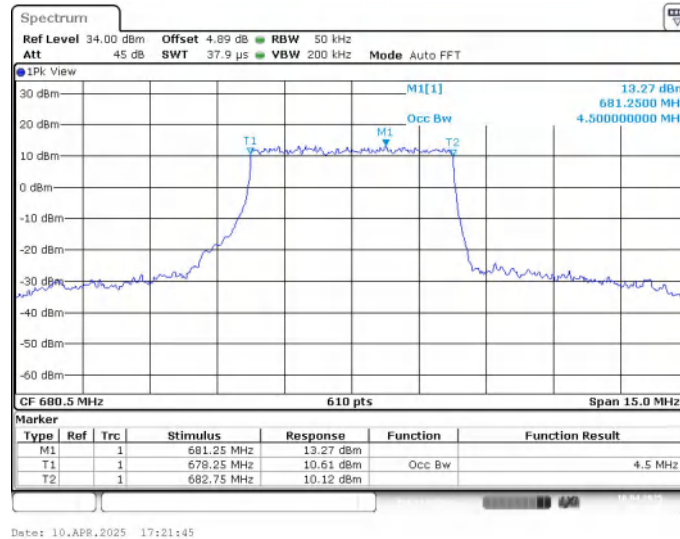
LTE band 66 , 20MHz Bandwidth,MID,16QAM (99% BW)



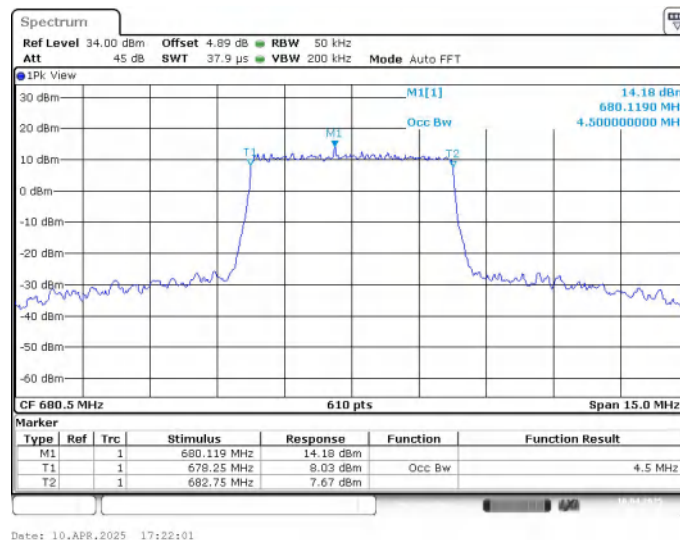
LTE band 71,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
680.5	4.500	4.500

LTE band 71 , 5MHz Bandwidth,MID,QPSK (99% BW)



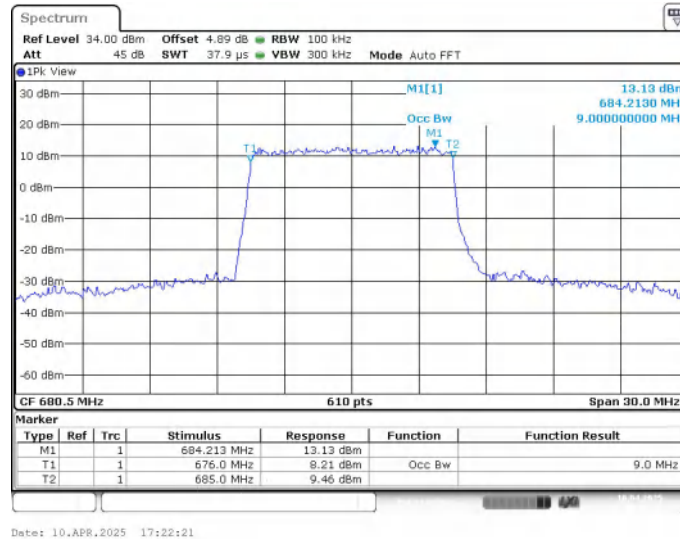
LTE band 71 , 5MHz Bandwidth,MID,16QAM (99% BW)



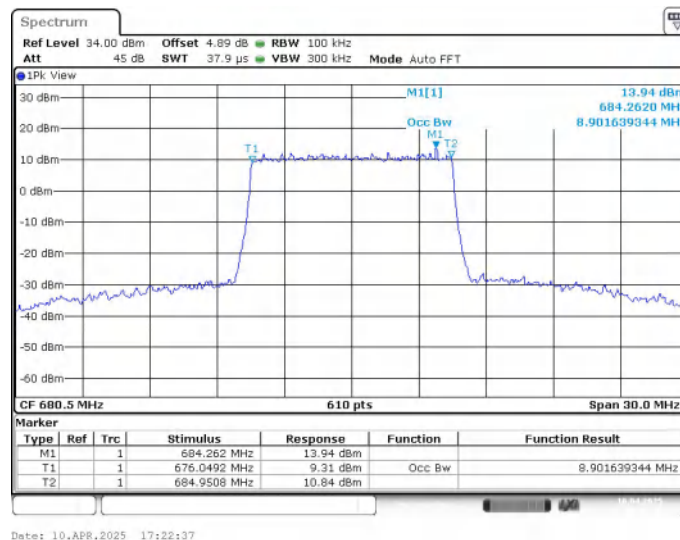
LTE band 71,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
680.5	9.000	8.902

LTE band 71 , 10MHz Bandwidth,MID,QPSK (99% BW)



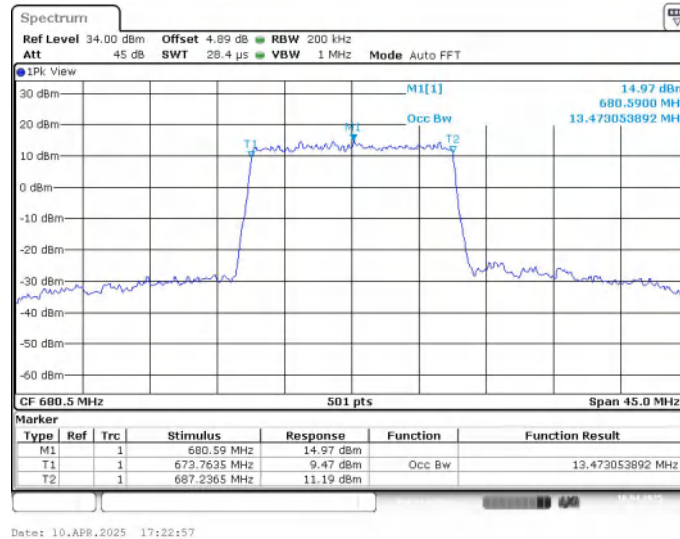
LTE band 71 , 10MHz Bandwidth,MID,16QAM (99% BW)



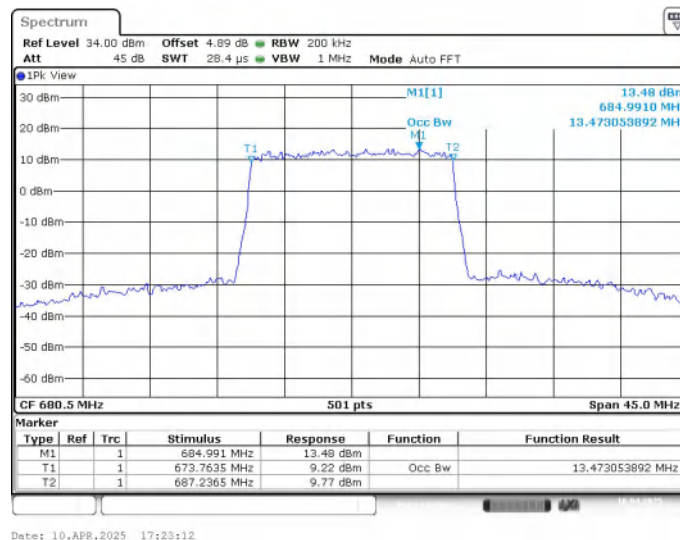
LTE band 71,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
680.5	13.473	13.473

LTE band 71 , 15MHz Bandwidth,MID,QPSK (99% BW)



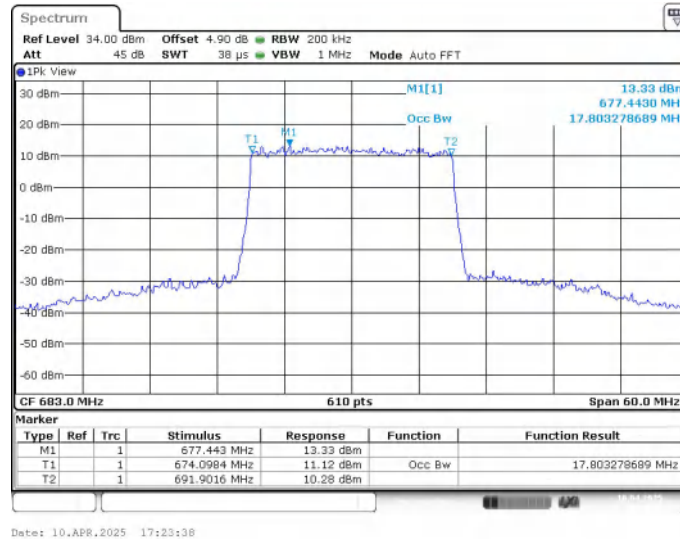
LTE band 71 , 15MHz Bandwidth,MID,16QAM (99% BW)



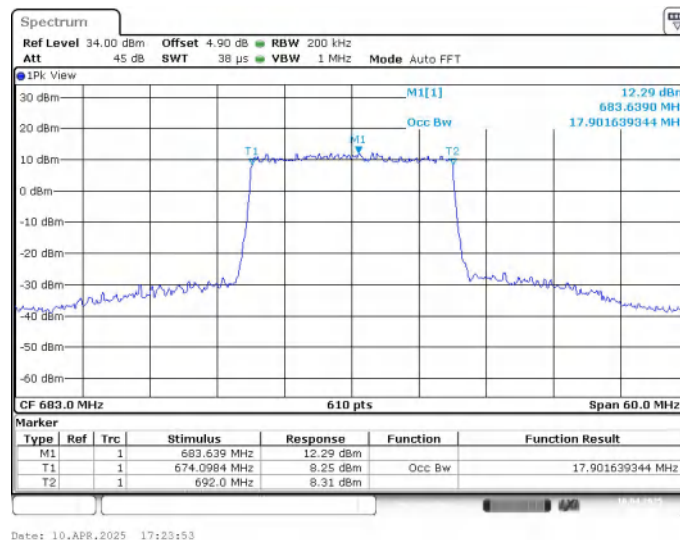
LTE band 71,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
683	17.803	17.902

LTE band 71 , 20MHz Bandwidth,MID,QPSK (99% BW)



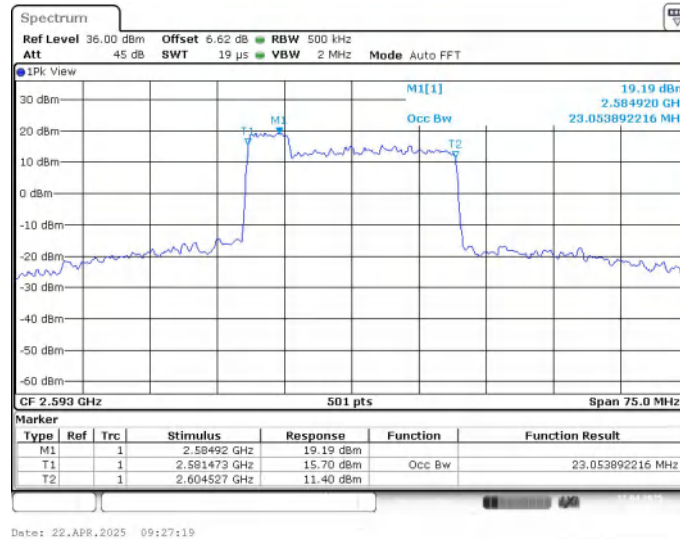
LTE band 71 , 20MHz Bandwidth,MID,16QAM (99% BW)



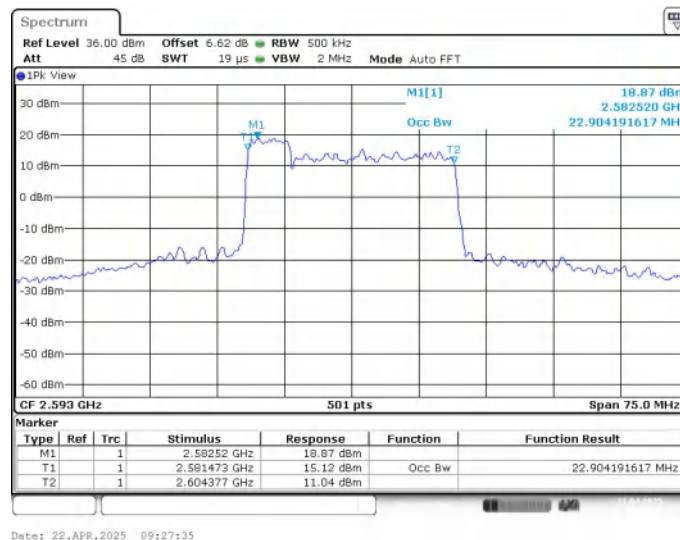
LTE CA band 41C, 5MHz+20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2593.0	23.054	22.904

LTE CA band 41C , 5MHz+20MHz Bandwidth,QPSK (99% BW)



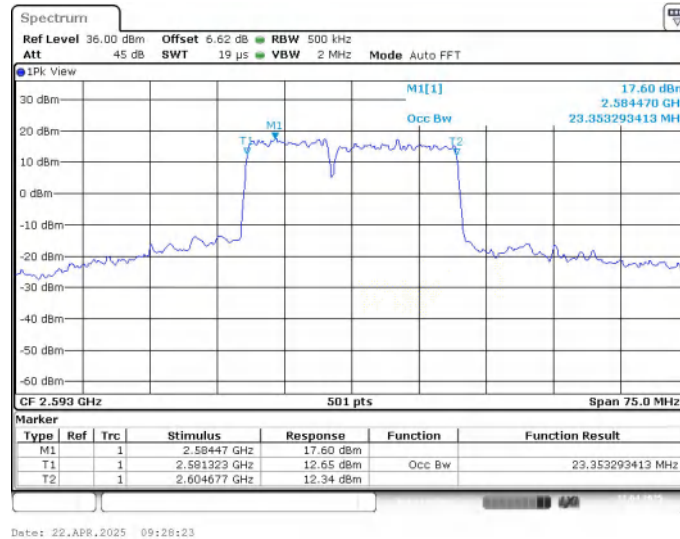
LTE CA band 41C , 5MHz+20MHz Bandwidth,16QAM (99% BW)



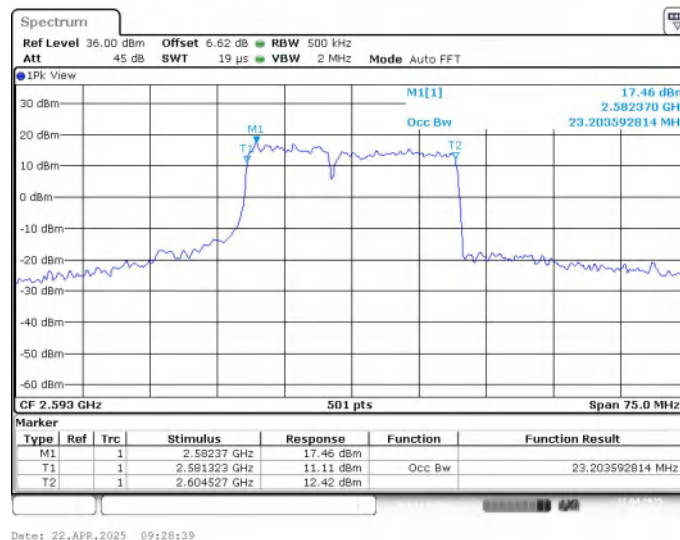
LTE CA band 41C, 10MHz+15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2593.0	23.353	23.204

LTE CA band 41C , 10MHz+15MHz Bandwidth,QPSK (99% BW)



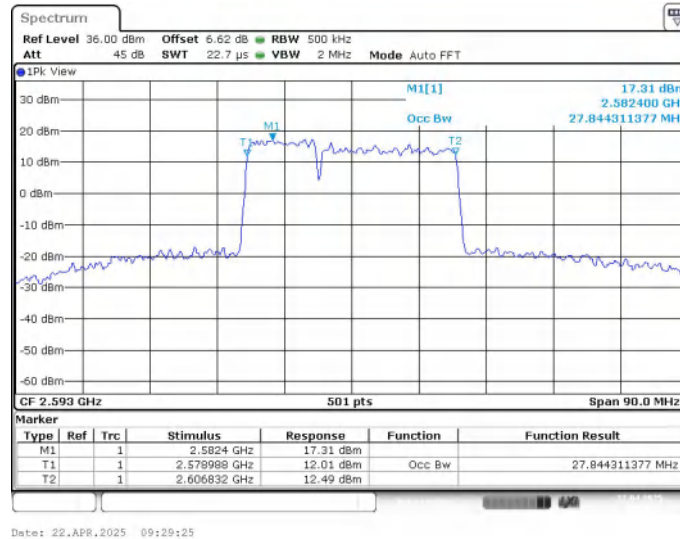
LTE CA band 41C , 10MHz+15MHz Bandwidth,16QAM (99% BW)



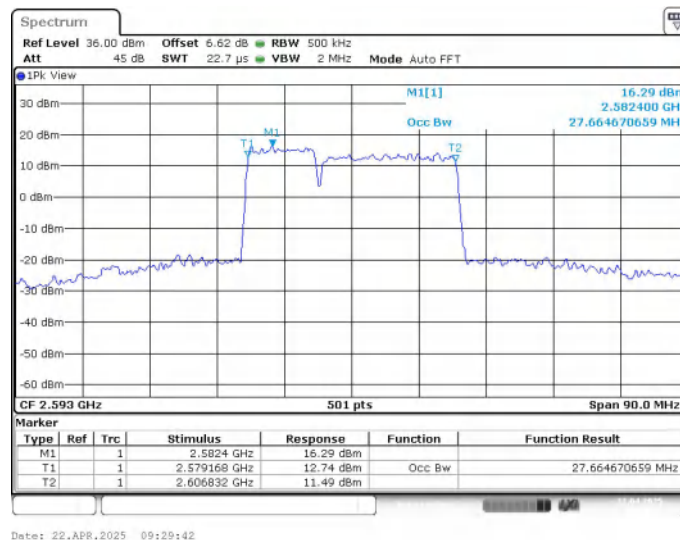
LTE CA band 41C, 10MHz+20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2593.0	27.844	27.665

LTE CA band 41C , 10MHz+20MHz Bandwidth,QPSK (99% BW)



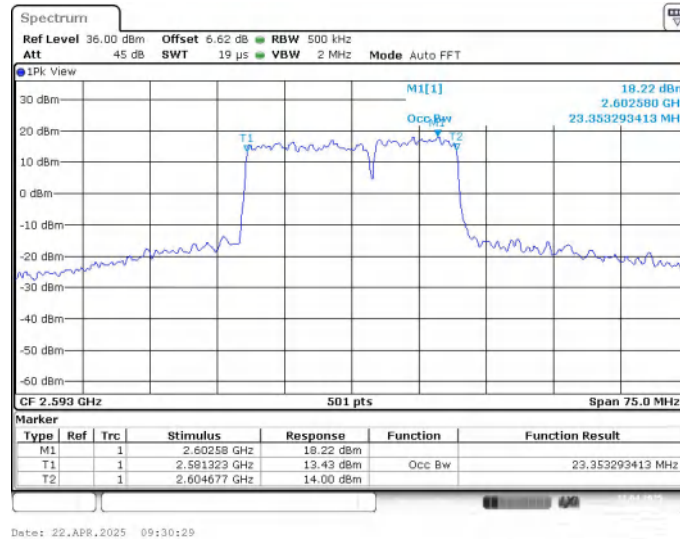
LTE CA band 41C , 10MHz+20MHz Bandwidth,16QAM (99% BW)



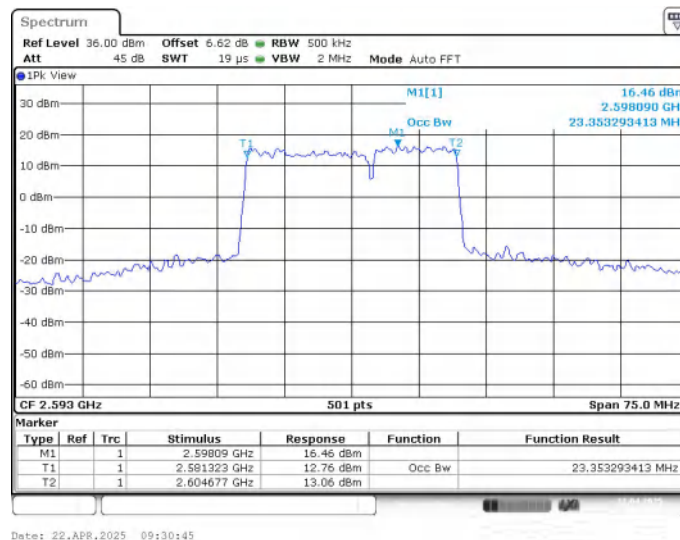
LTE CA band 41C, 15MHz+10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2593.0	23.353	23.353

LTE CA band 41C , 15MHz+10MHz Bandwidth,QPSK (99% BW)



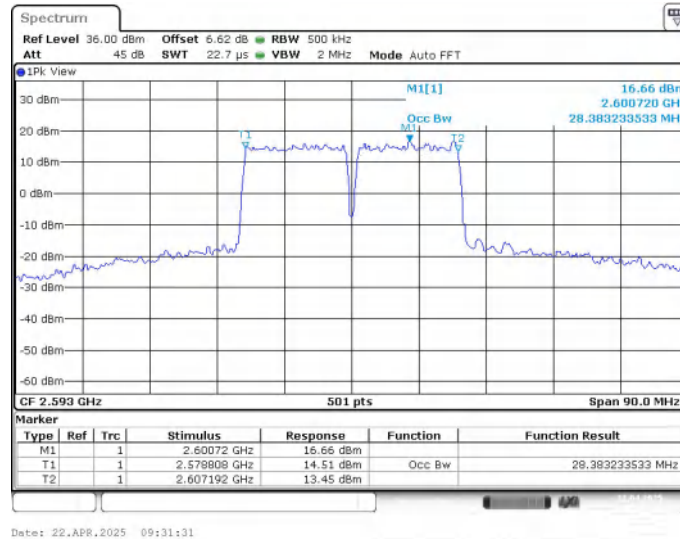
LTE CA band 41C , 15MHz+10MHz Bandwidth,16QAM (99% BW)



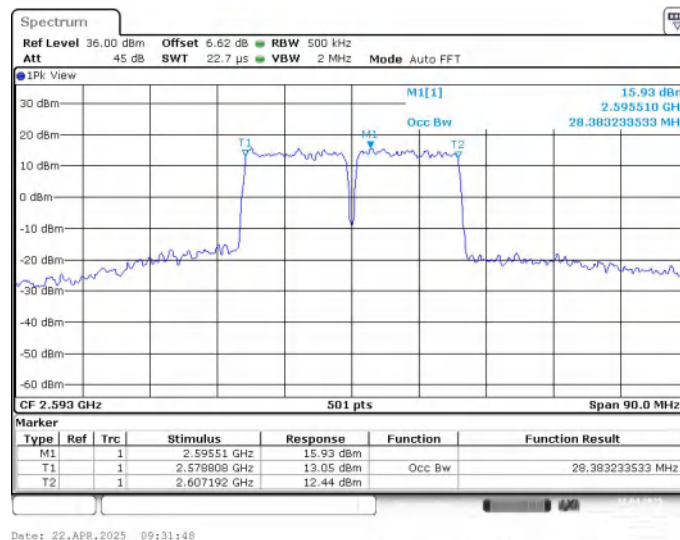
LTE CA band 41C, 15MHz+15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2593.0	28.383	28.383

LTE CA band 41C , 15MHz+15MHz Bandwidth,QPSK (99% BW)



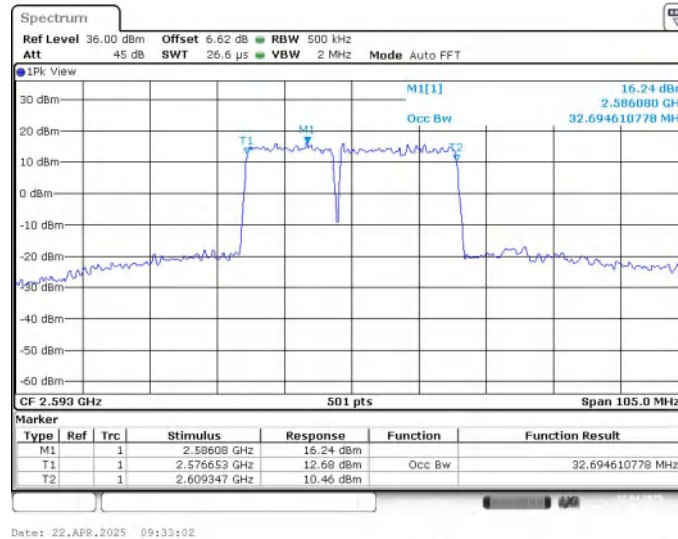
LTE CA band 41C , 15MHz+15MHz Bandwidth,16QAM (99% BW)



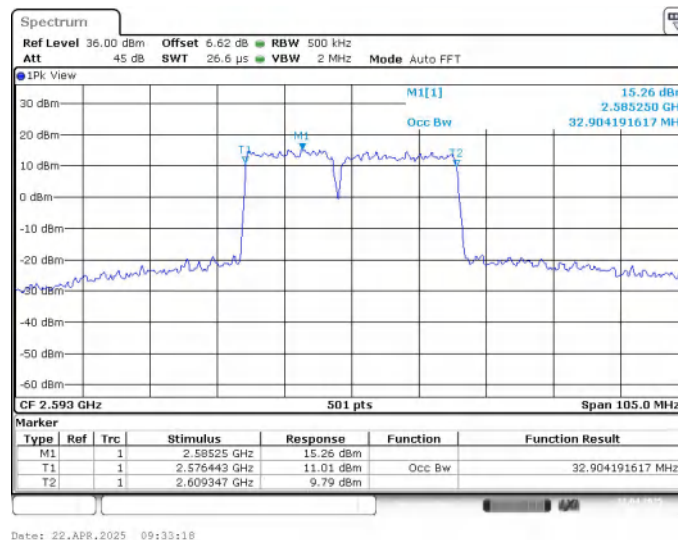
LTE CA band 41C, 15MHz+20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2593.0	32.695	32.904

LTE CA band 41C , 15MHz+20MHz Bandwidth,QPSK (99% BW)



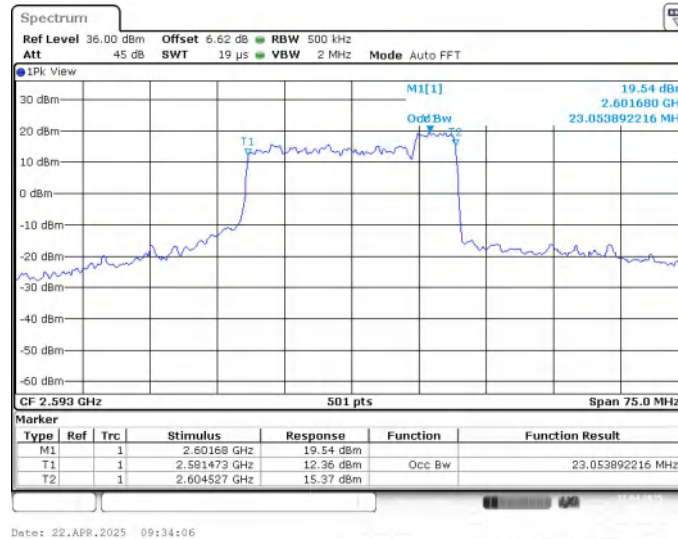
LTE CA band 41C , 15MHz+20MHz Bandwidth,16QAM (99% BW)



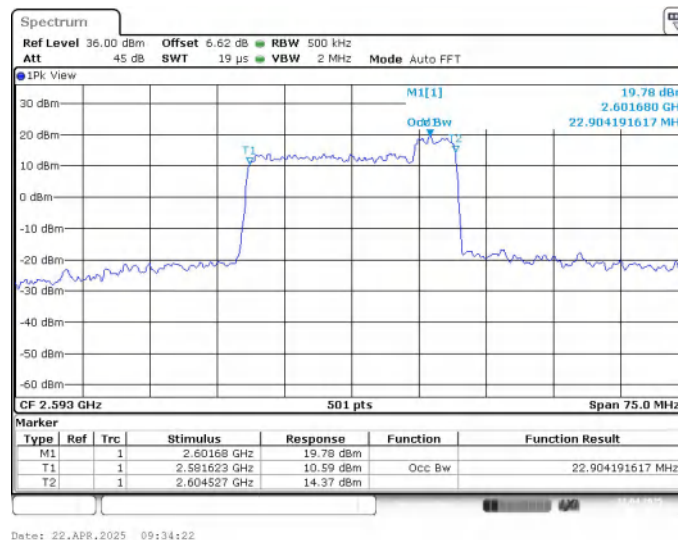
LTE CA band 41C, 20MHz+5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2593.0	23.054	22.904

LTE CA band 41C , 20MHz+5MHz Bandwidth,QPSK (99% BW)



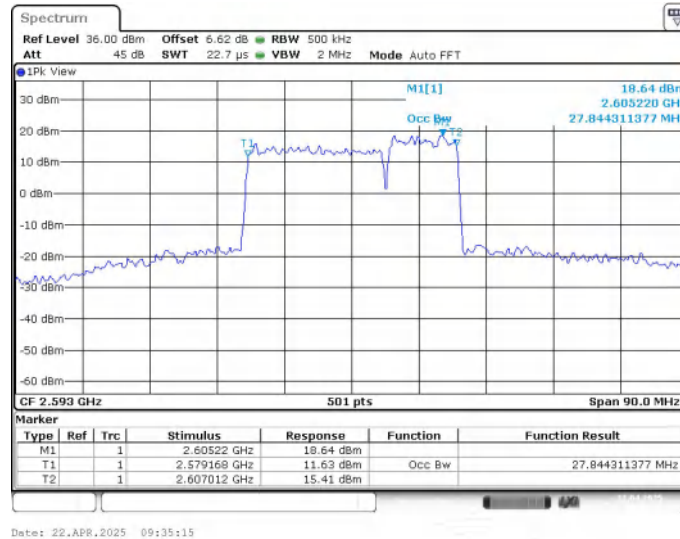
LTE CA band 41C , 20MHz+5MHz Bandwidth,16QAM (99% BW)



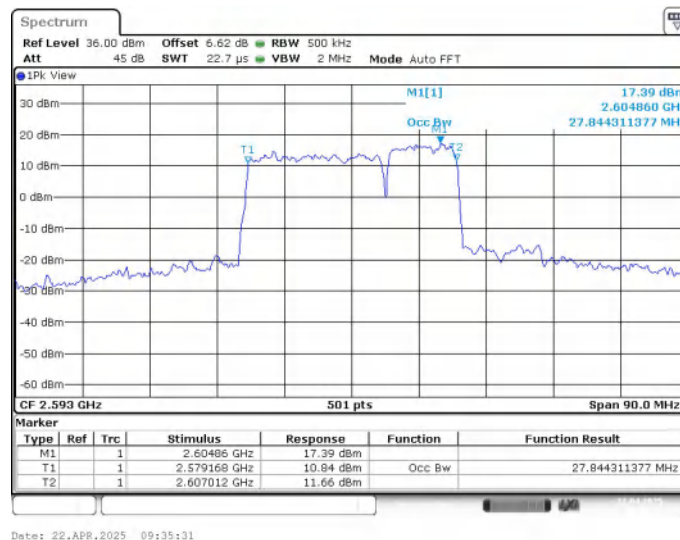
LTE CA band 41C, 20MHz+10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2593.0	27.844	27.844

LTE CA band 41C , 20MHz+10MHz Bandwidth,QPSK (99% BW)



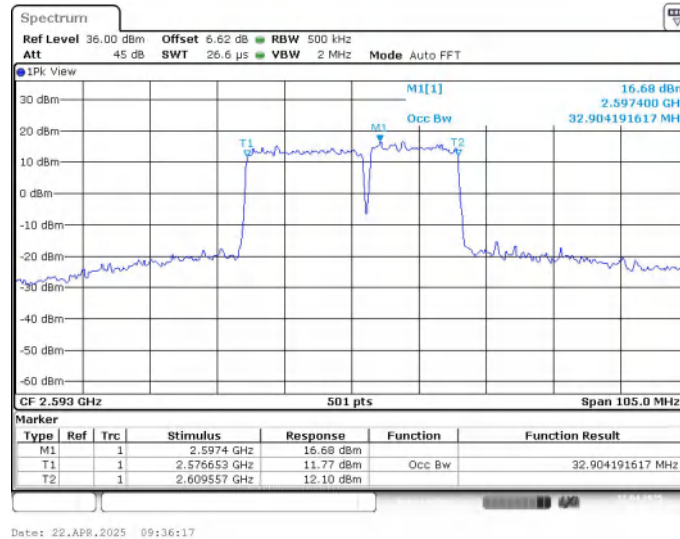
LTE CA band 41C , 20MHz+10MHz Bandwidth,16QAM (99% BW)



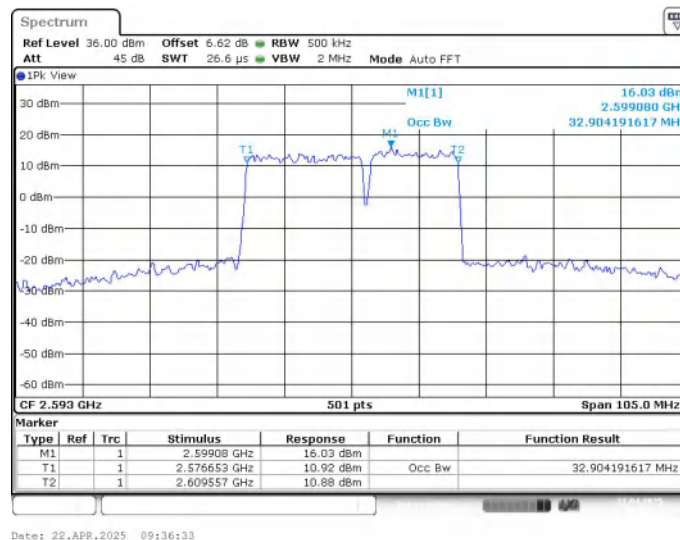
LTE CA band 41C, 20MHz+15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2593.0	32.904	32.904

LTE CA band 41C , 20MHz+15MHz Bandwidth,QPSK (99% BW)



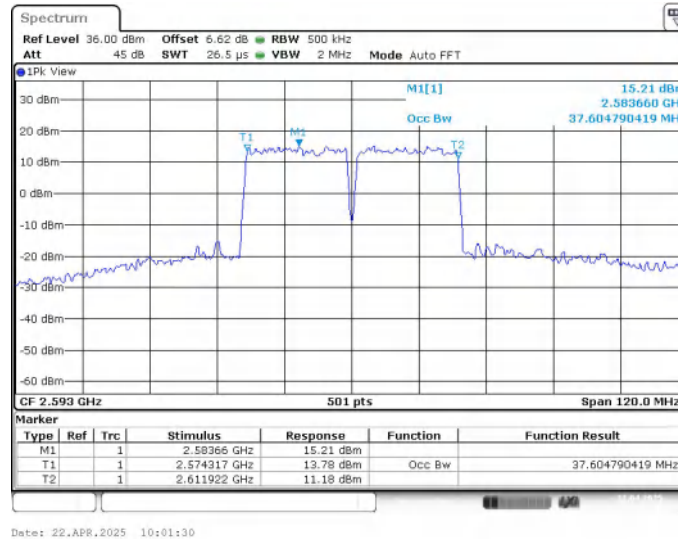
LTE CA band 41C , 20MHz+15MHz Bandwidth,16QAM (99% BW)



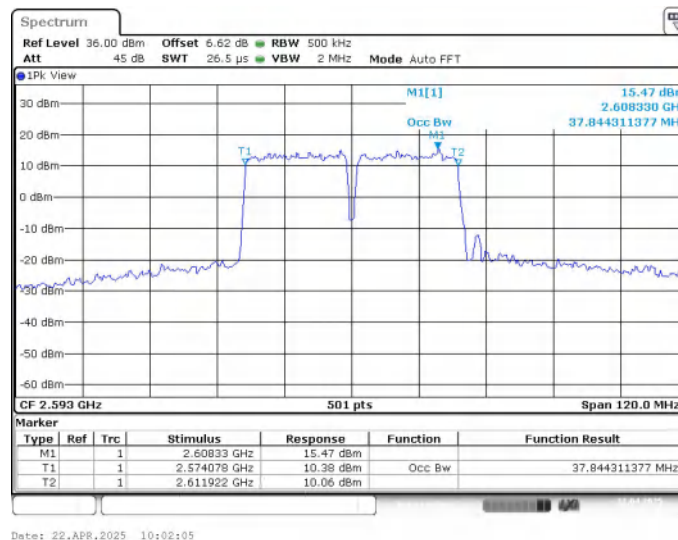
LTE CA band 41C, 20MHz+20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2593.0	37.605	37.844

LTE CA band 41C , 20MHz+20MHz Bandwidth,QPSK (99% BW)



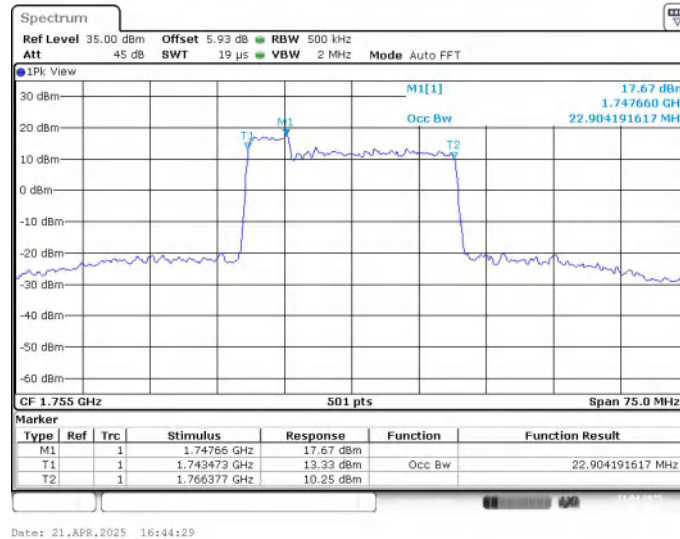
LTE CA band 41C , 20MHz+20MHz Bandwidth,16QAM (99% BW)



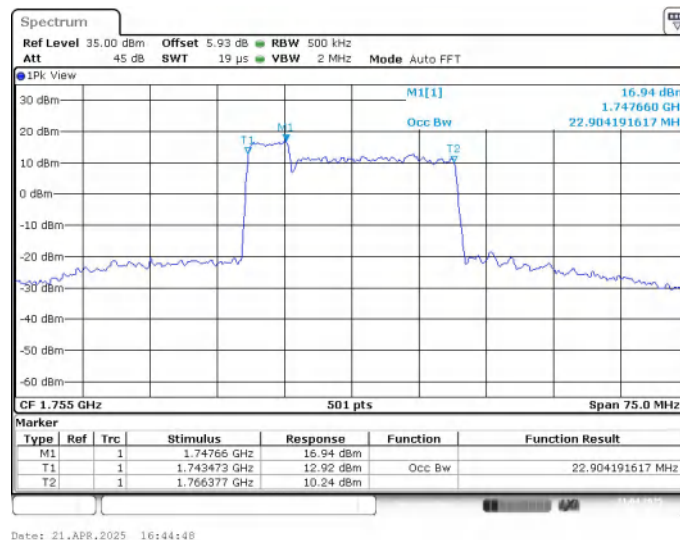
LTE CA band 66C, 5MHz+20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
1755.0	22.904	22.904

LTE CA band 66C , 5MHz+20MHz Bandwidth,QPSK (99% BW)



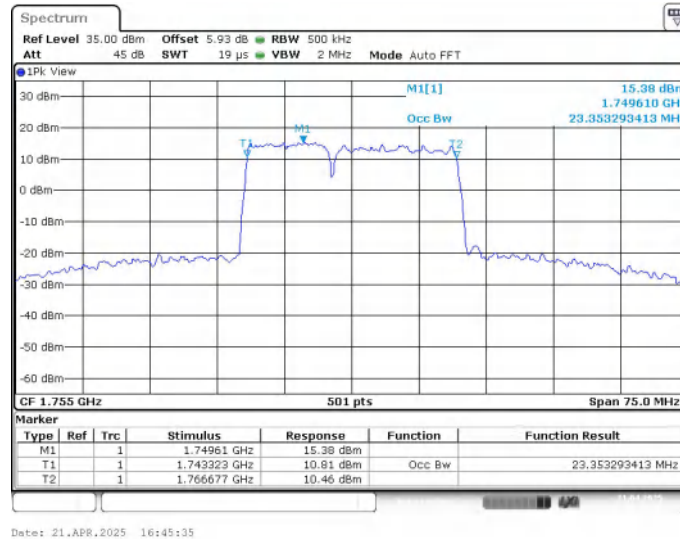
LTE CA band 66C , 5MHz+20MHz Bandwidth,16QAM (99% BW)



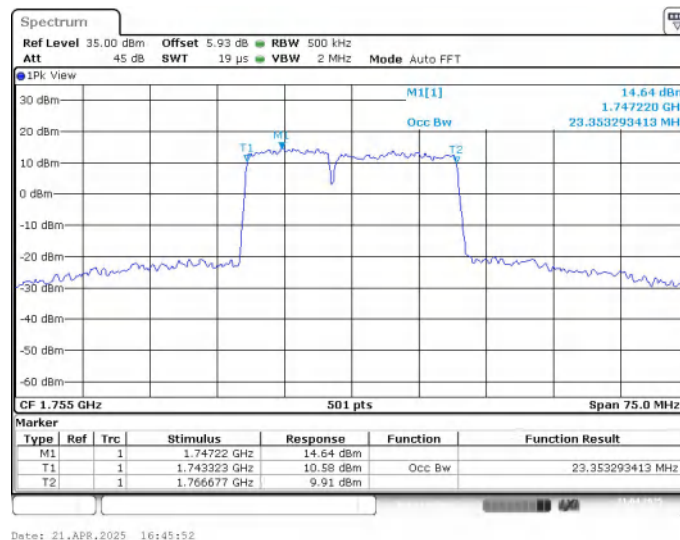
LTE CA band 66C, 10MHz+15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
1755.0	23.353	23.353

LTE CA band 66C , 10MHz+15MHz Bandwidth,QPSK (99% BW)



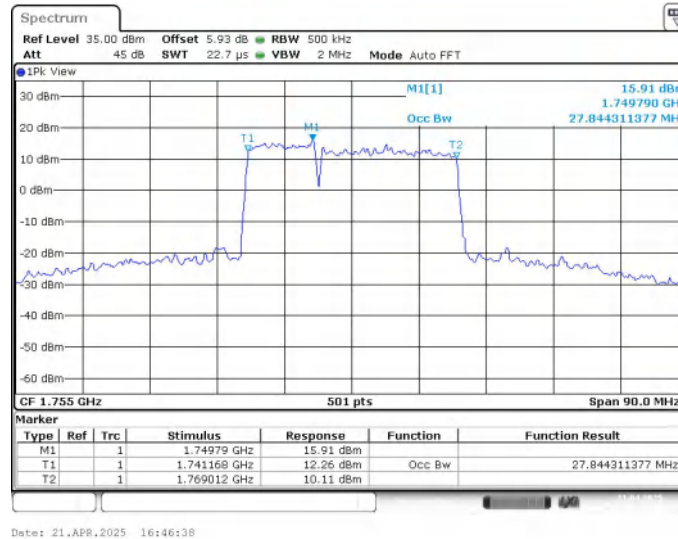
LTE CA band 66C , 10MHz+15MHz Bandwidth,16QAM (99% BW)



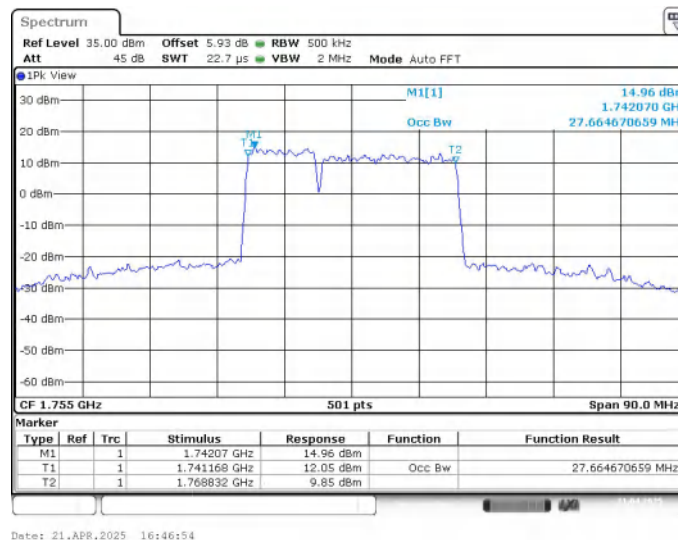
LTE CA band 66C, 10MHz+20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
1755.0	27.844	27.665

LTE CA band 66C , 10MHz+20MHz Bandwidth,QPSK (99% BW)



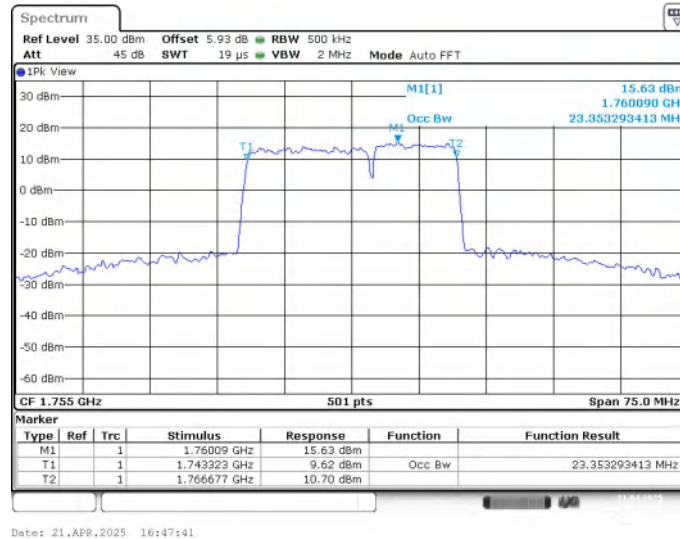
LTE CA band 66C , 10MHz+20MHz Bandwidth,16QAM (99% BW)



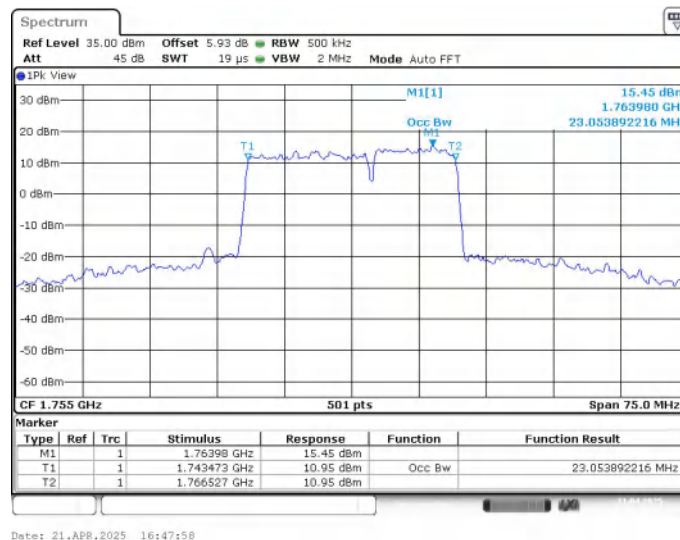
LTE CA band 66C, 15MHz+10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
1755.0	23.353	23.054

LTE CA band 66C , 15MHz+10MHz Bandwidth,QPSK (99% BW)



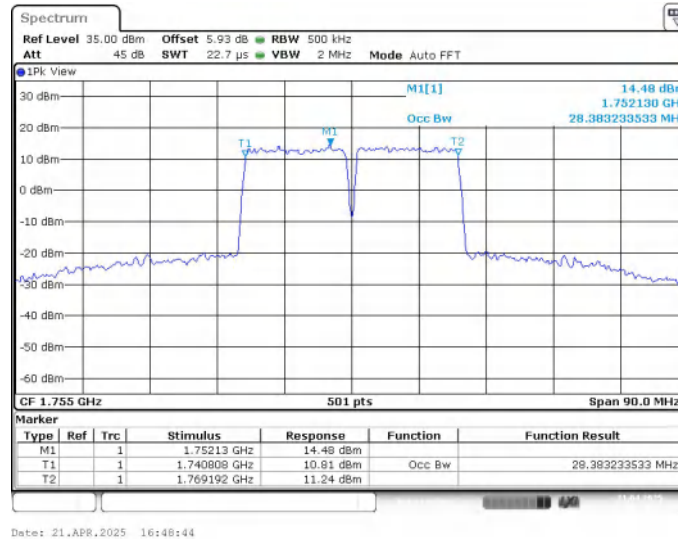
LTE CA band 66C , 15MHz+10MHz Bandwidth,16QAM (99% BW)



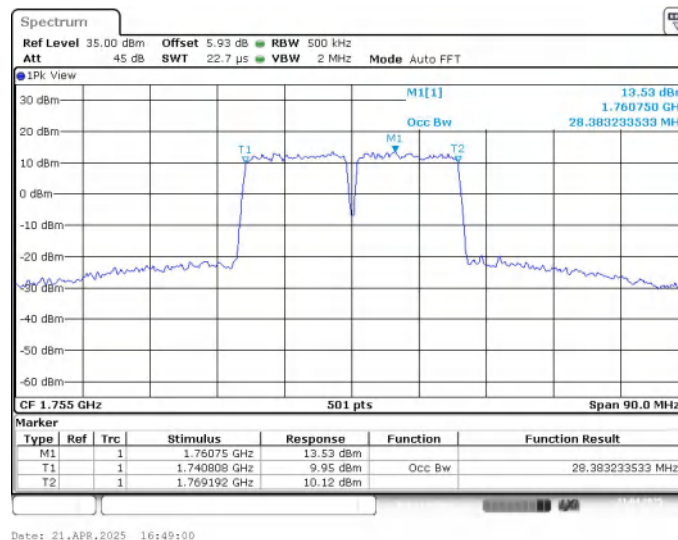
LTE CA band 66C, 15MHz+15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
1755.0	28.383	28.383

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



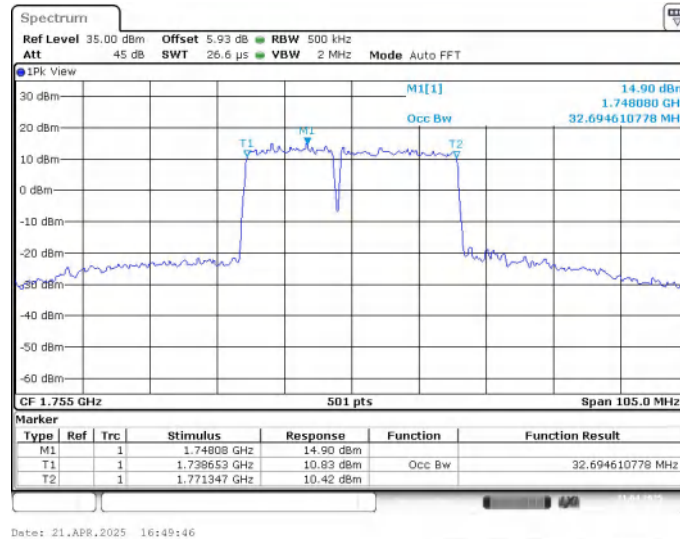
LTE CA band 66C , 15MHz+15MHz Bandwidth,16QAM (99% BW)



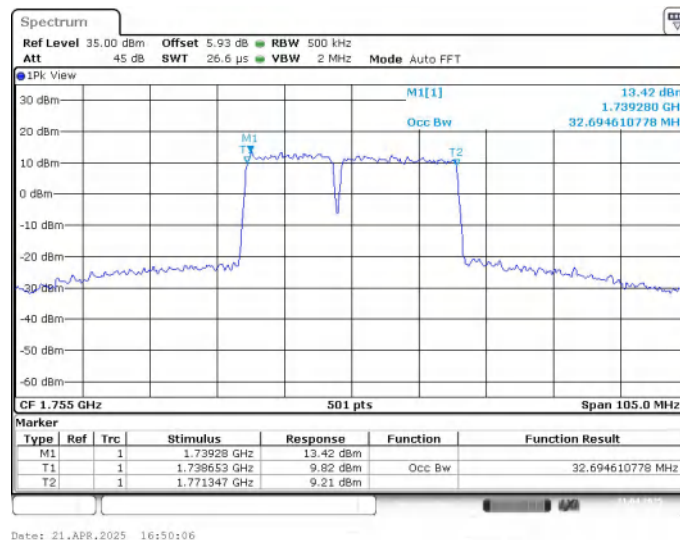
LTE CA band 66C, 15MHz+20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
1755.0	32.695	32.695

LTE CA band 66C , 15MHz+20MHz Bandwidth,QPSK (99% BW)



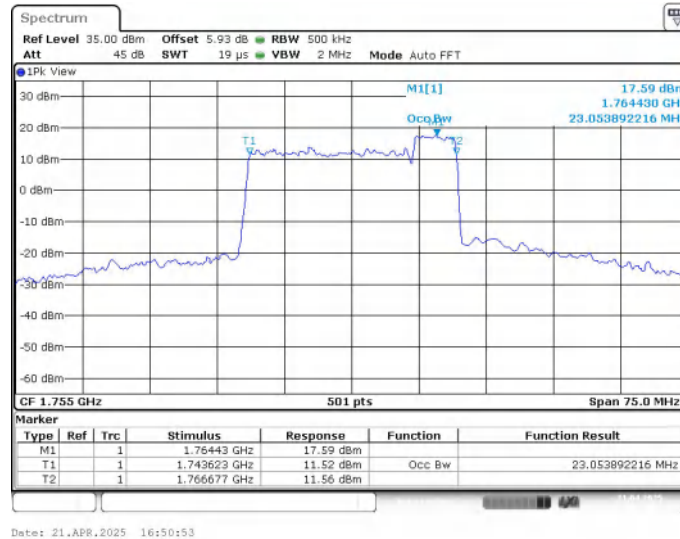
LTE CA band 66C , 15MHz+20MHz Bandwidth,16QAM (99% BW)



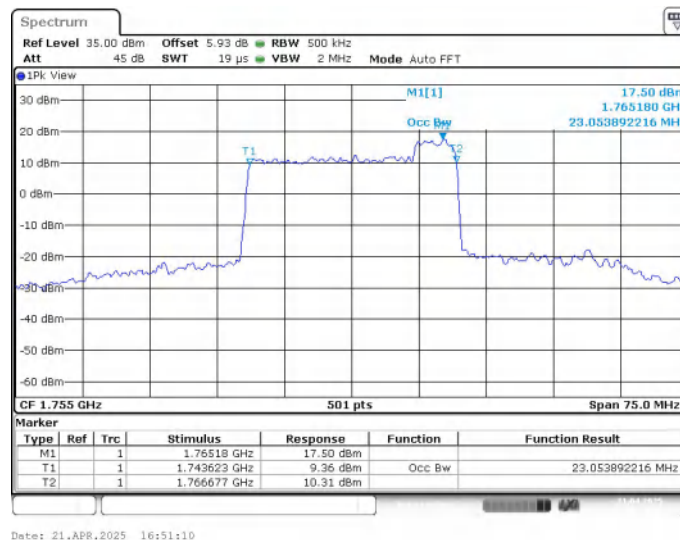
LTE CA band 66C, 20MHz+5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
1755.0	23.054	23.054

LTE CA band 66C , 20MHz+5MHz Bandwidth,QPSK (99% BW)



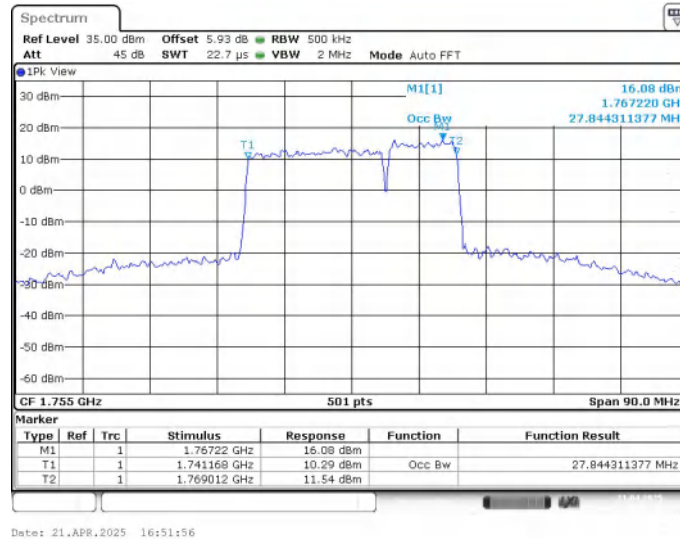
LTE CA band 66C , 20MHz+5MHz Bandwidth,16QAM (99% BW)



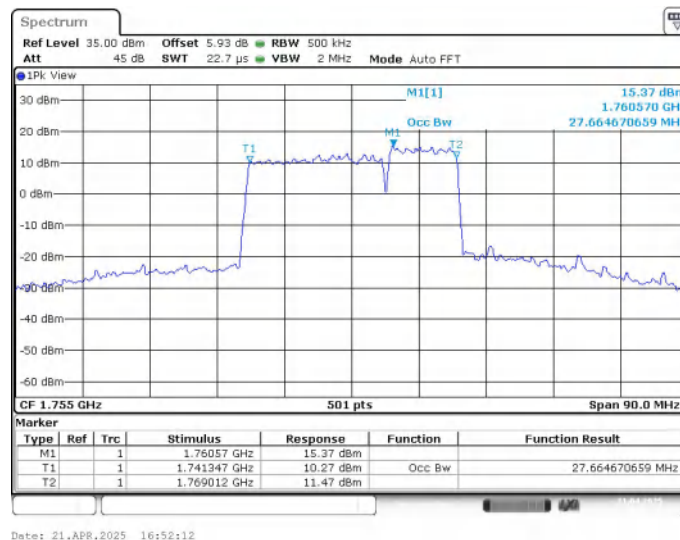
LTE CA band 66C, 20MHz+10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
1755.0	27.844	27.665

LTE CA band 66C , 20MHz+10MHz Bandwidth,QPSK (99% BW)



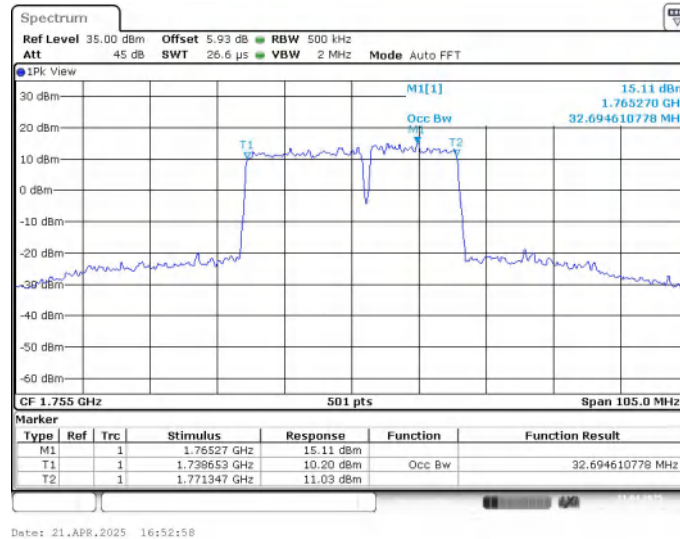
LTE CA band 66C , 20MHz+10MHz Bandwidth,16QAM (99% BW)



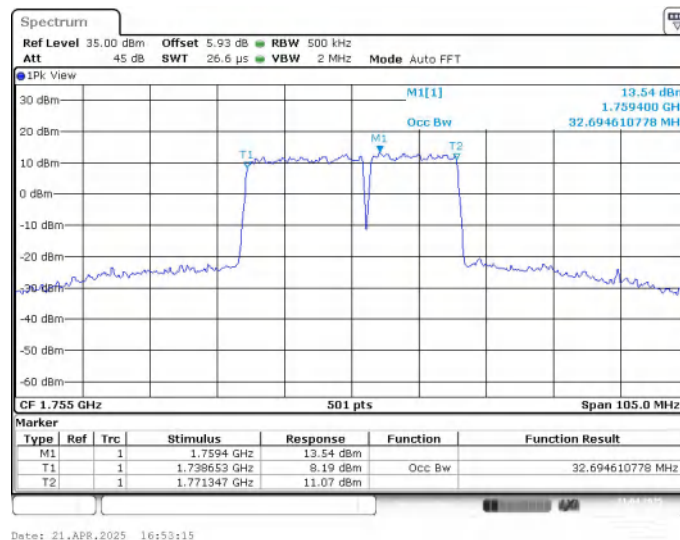
LTE CA band 66C, 20MHz+15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
1755.0	32.695	32.695

LTE CA band 66C , 20MHz+15MHz Bandwidth,QPSK (99% BW)



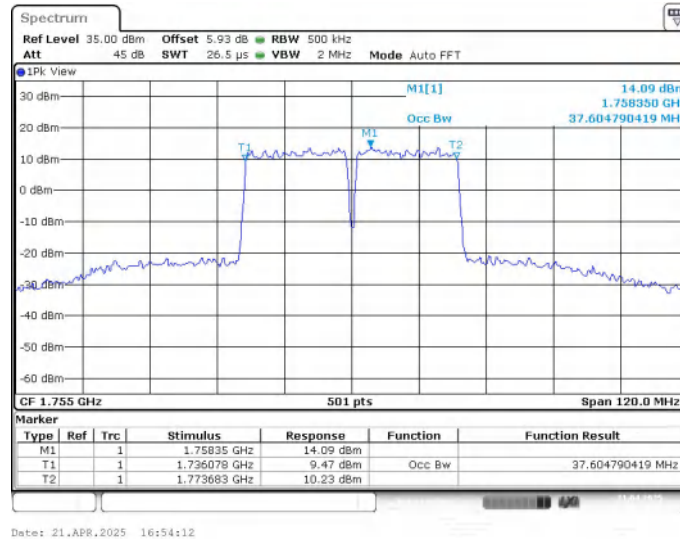
LTE CA band 66C , 20MHz+15MHz Bandwidth,16QAM (99% BW)



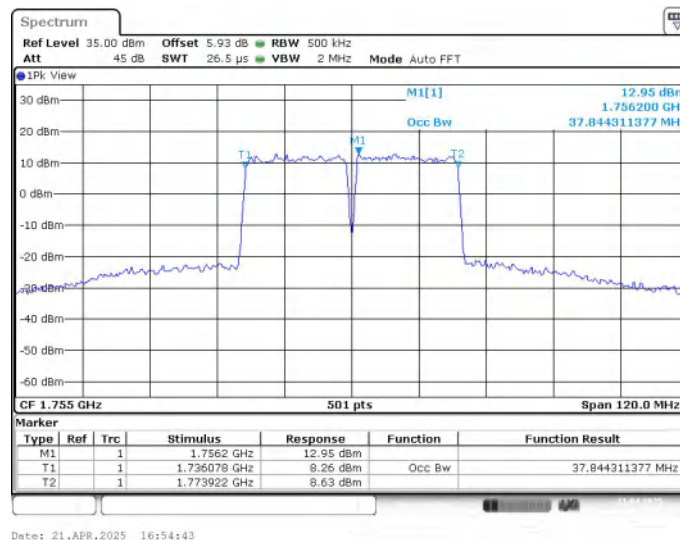
LTE CA band 66C, 20MHz+20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
1755.0	37.605	37.844

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



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



A.5 Emission Bandwidth

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

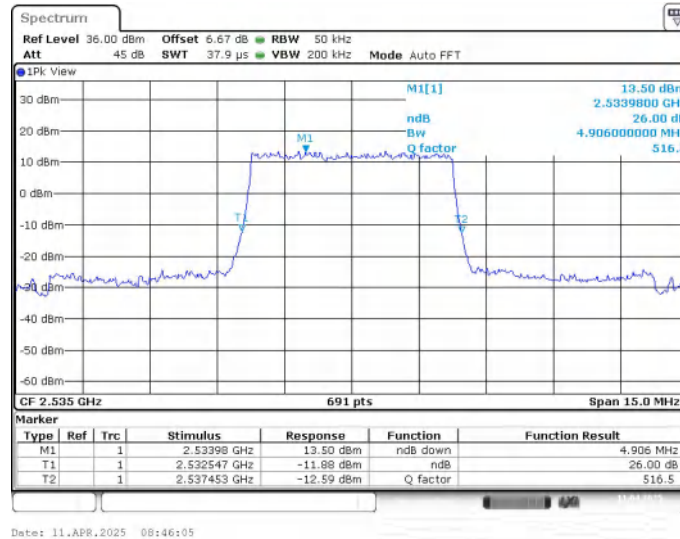
The measurement method is from ANSI C63.26:

- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be wide enough to see sufficient roll off of the signal to make the measurement.
- b) The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set $\geq 3 \times \text{RBW}$.
- c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation.
- d) The dynamic range of the spectrum analyzer at the selected RBW shall be more than 10 dB below the target “-X dB” requirement, i.e., if the requirement calls for measuring the -26 dB OBW, the spectrum analyzer noise floor at the selected RBW shall be at least 36 dB below the reference level.
- e) Set spectrum analyzer detection mode to peak, and the trace mode to max hold.

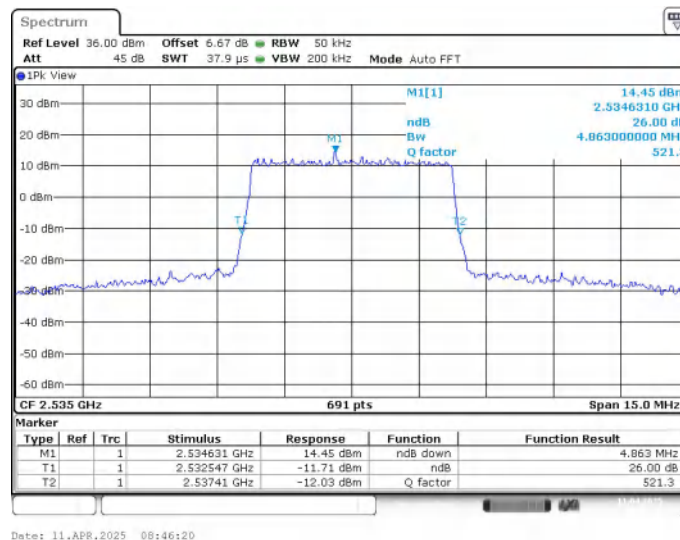
LTE band 7,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
2535	4.906	4.863

LTE band 7 , 5MHz Bandwidth,MID,QPSK (-26dBc BW)



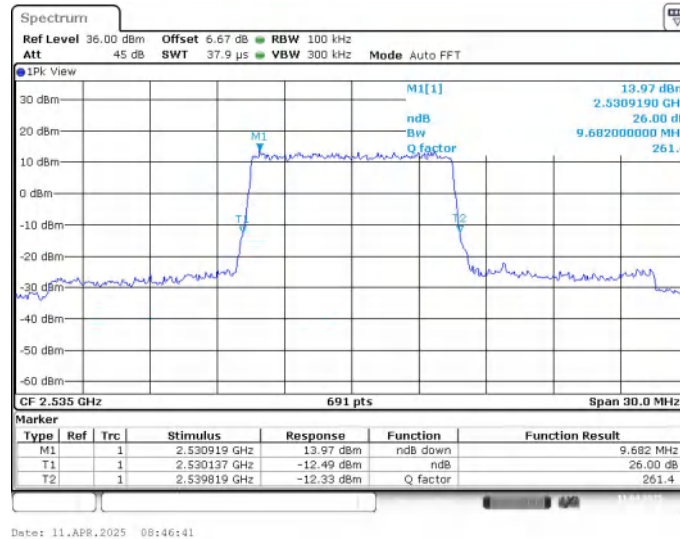
LTE band 7 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)



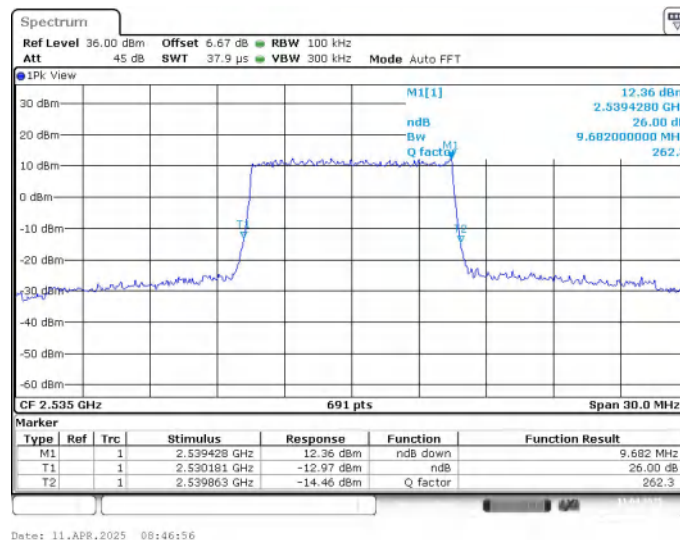
LTE band 7,10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
2535	9.682	9.682

LTE band 7 , 10MHz Bandwidth,MID,QPSK (-26dBc BW)



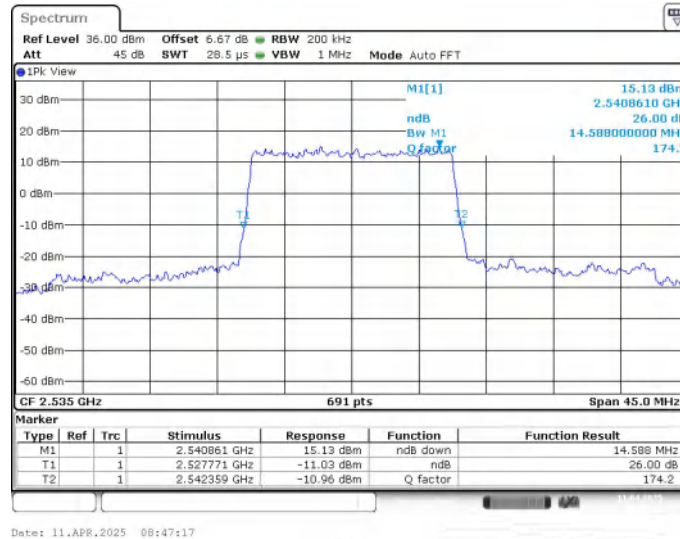
LTE band 7 , 10MHz Bandwidth,MID,16QAM (-26dBc BW)



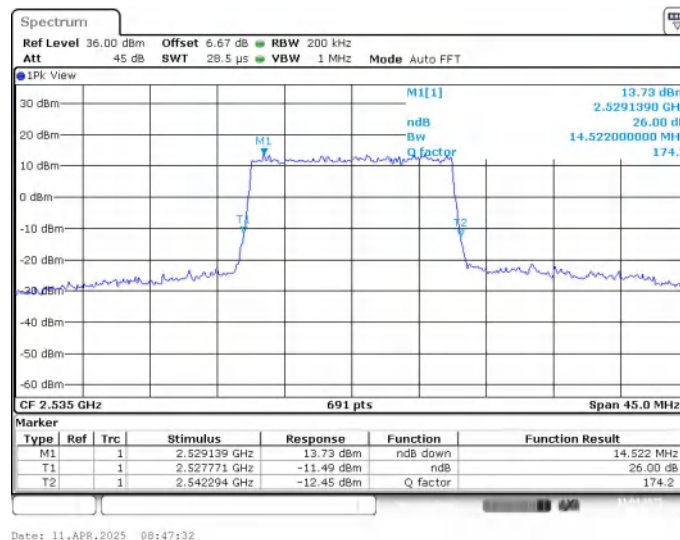
LTE band 7,15MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
2535	14.588	14.522

LTE band 7 , 15MHz Bandwidth,MID,QPSK (-26dBc BW)



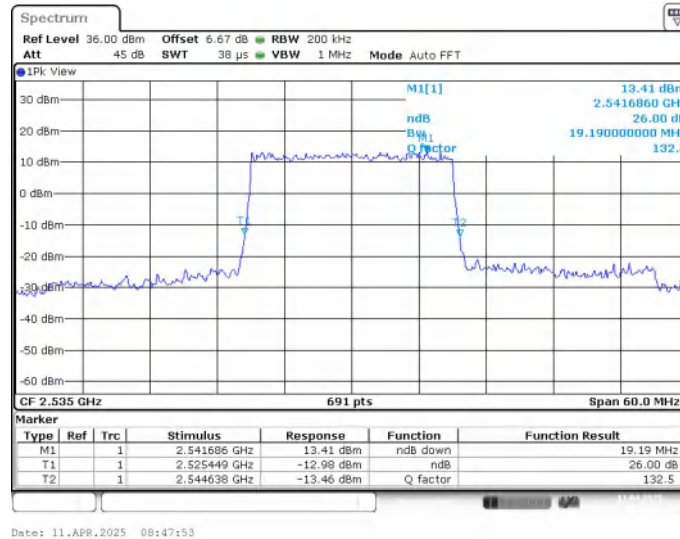
LTE band 7 , 15MHz Bandwidth,MID,16QAM (-26dBc BW)



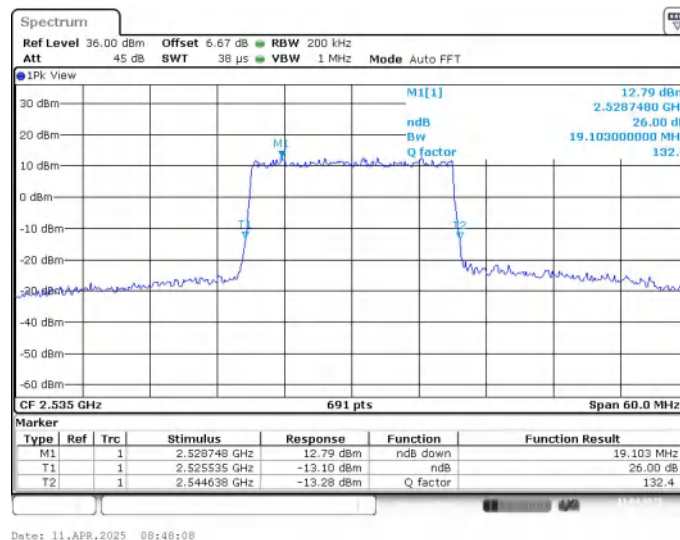
LTE band 7,20MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
2535	19.190	19.103

LTE band 7 , 20MHz Bandwidth,MID,QPSK (-26dBc BW)



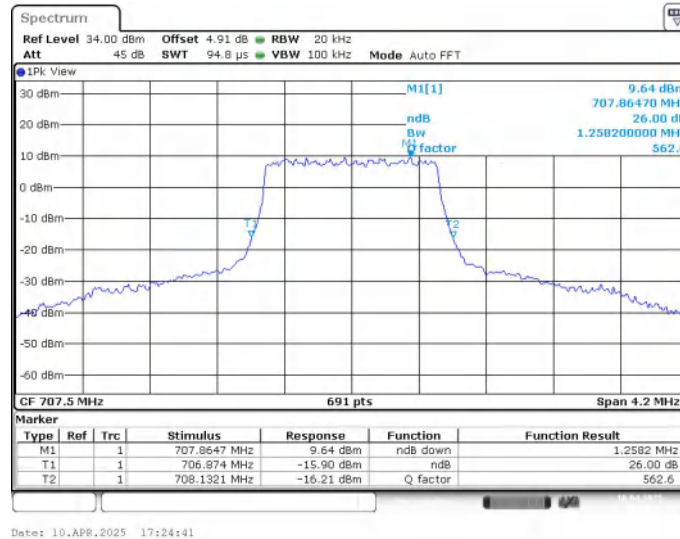
LTE band 7 , 20MHz Bandwidth,MID,16QAM (-26dBc BW)



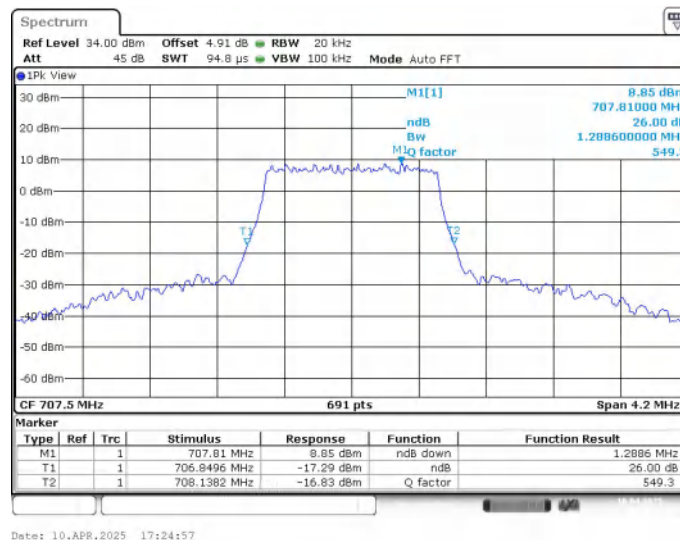
LTE band 12,1.4MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
707.5	1.258	1.289

LTE band 12 , 1.4MHz Bandwidth,MID,QPSK (-26dBc BW)



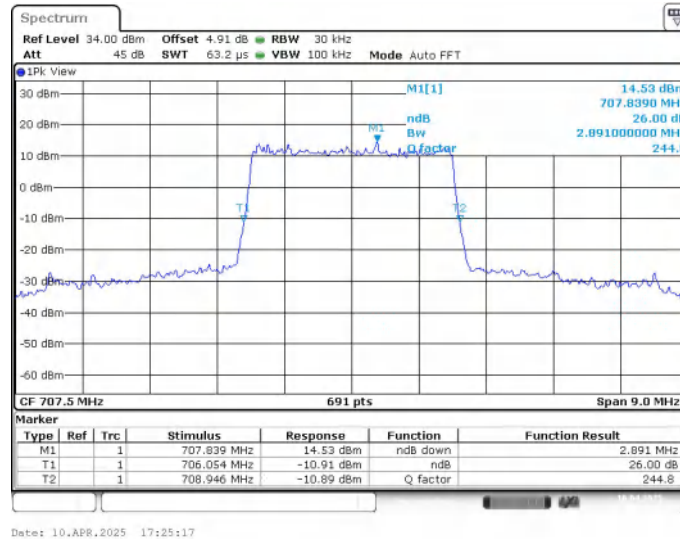
LTE band 12 , 1.4MHz Bandwidth,MID,16QAM (-26dBc BW)



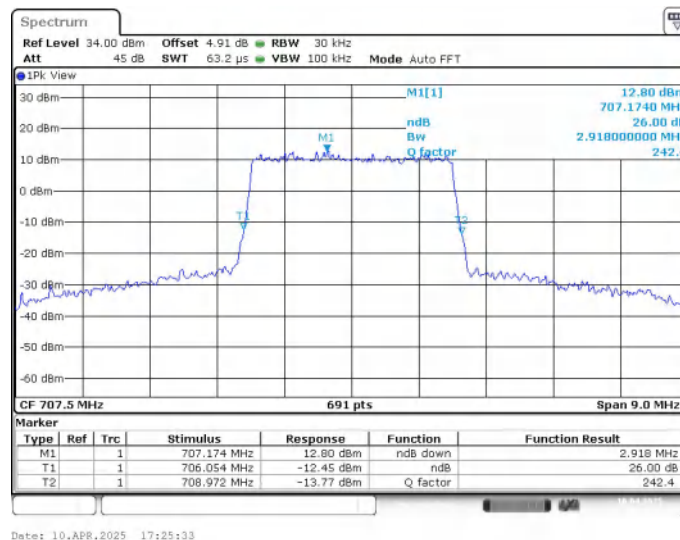
LTE band 12,3MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
707.5	2.891	2.918

LTE band 12 , 3MHz Bandwidth,MID,QPSK (-26dBc BW)



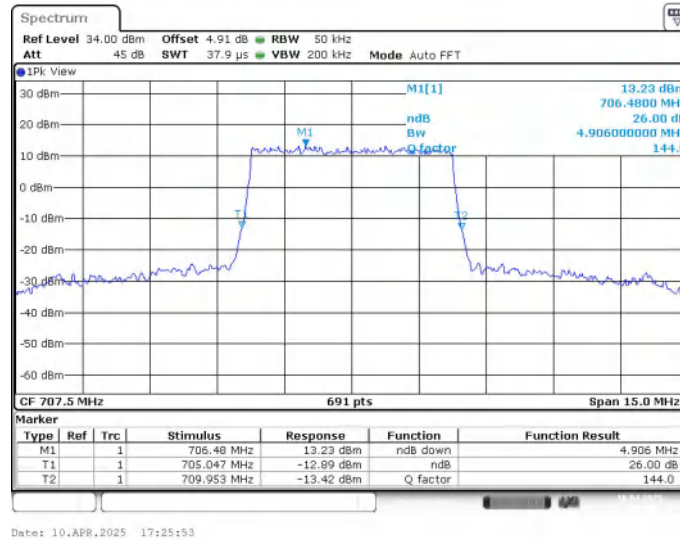
LTE band 12 , 3MHz Bandwidth,MID,16QAM (-26dBc BW)



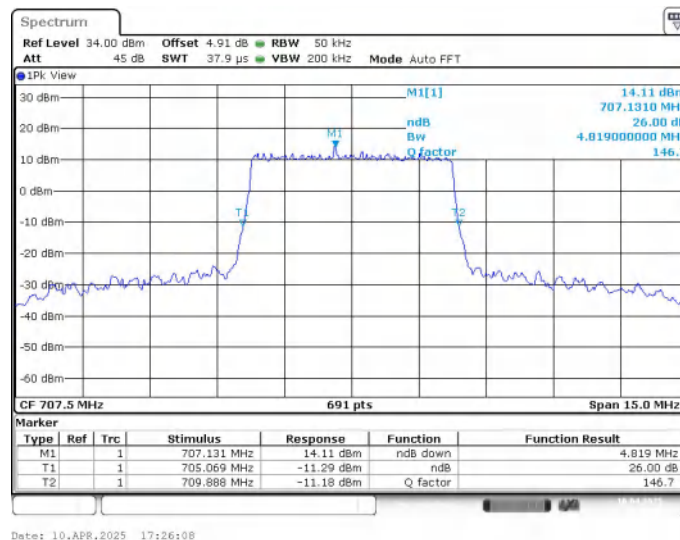
LTE band 12,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
707.5	4.906	4.819

LTE band 12 , 5MHz Bandwidth,MID,QPSK (-26dBc BW)



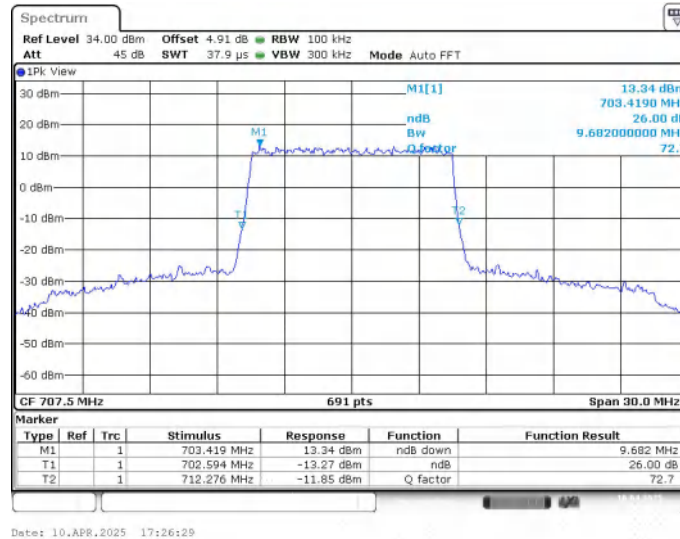
LTE band 12 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)



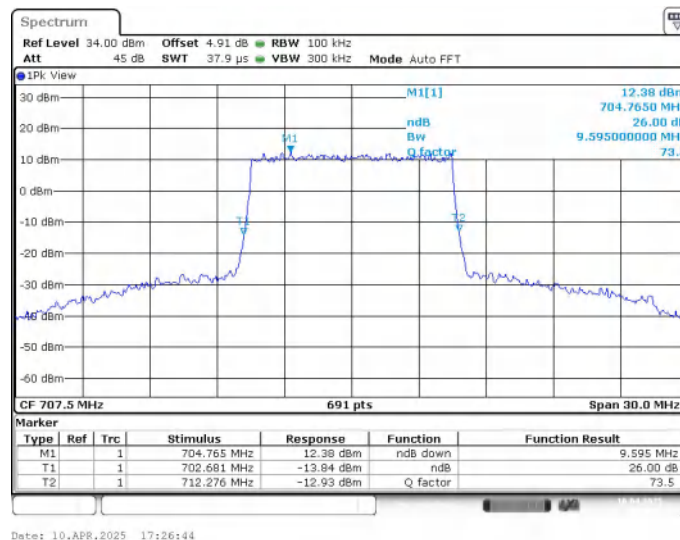
LTE band 12,10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
707.5	9.682	9.595

LTE band 12 , 10MHz Bandwidth,MID,QPSK (-26dBc BW)



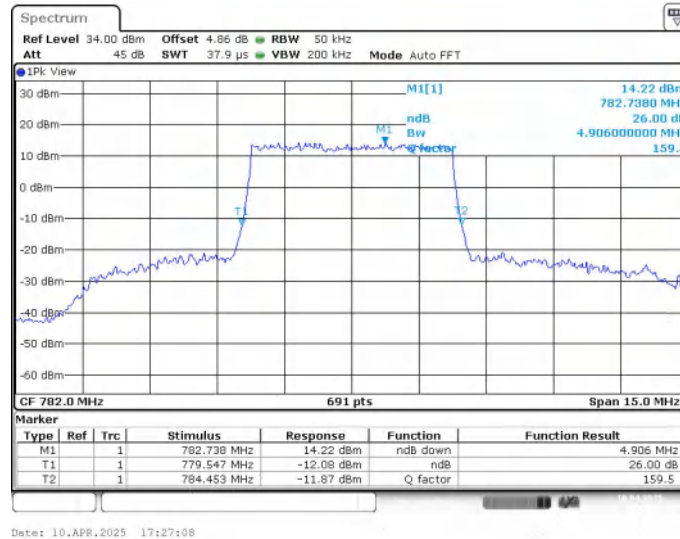
LTE band 12 , 10MHz Bandwidth,MID,16QAM (-26dBc BW)



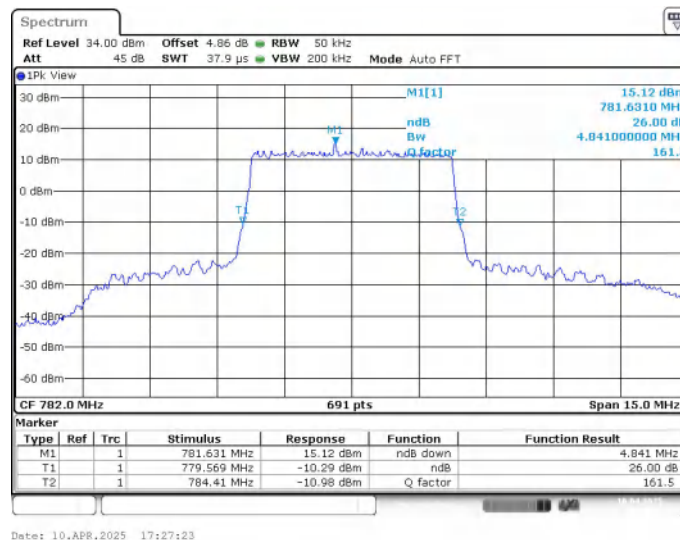
LTE band 13,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
782	4.906	4.841

LTE band 13 , 5MHz Bandwidth,MID,QPSK (-26dBc BW)



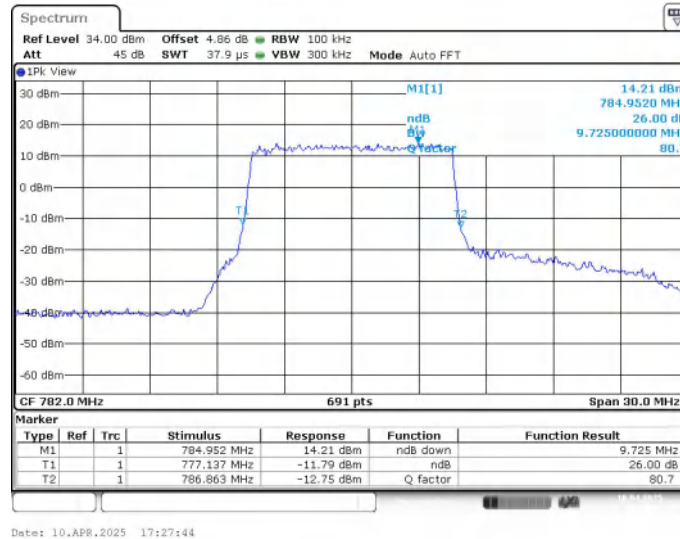
LTE band 13 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)



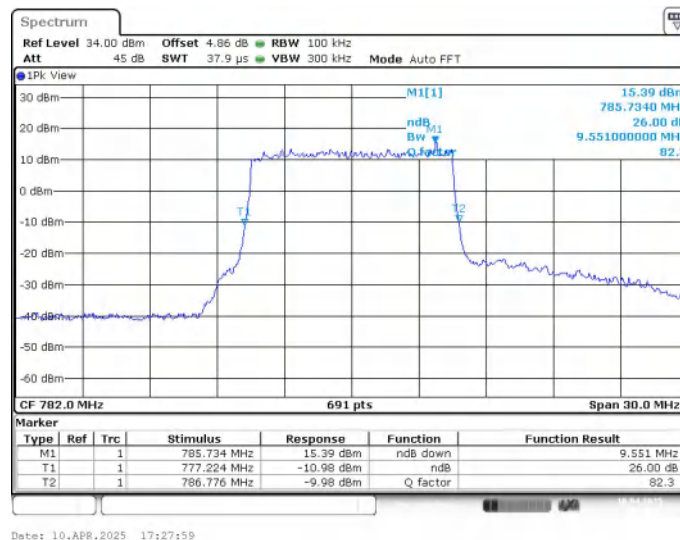
LTE band 13,10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
782	9.725	9.551

LTE band 13 , 10MHz Bandwidth,MID,QPSK (-26dBc BW)



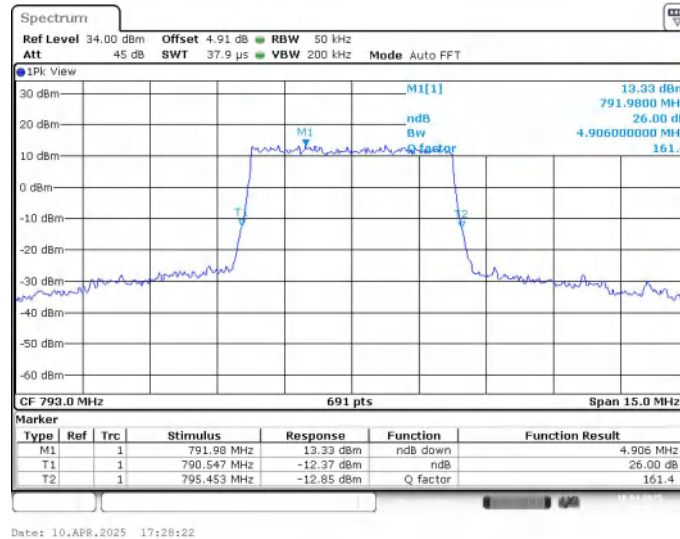
LTE band 13 , 10MHz Bandwidth,MID,16QAM (-26dBc BW)



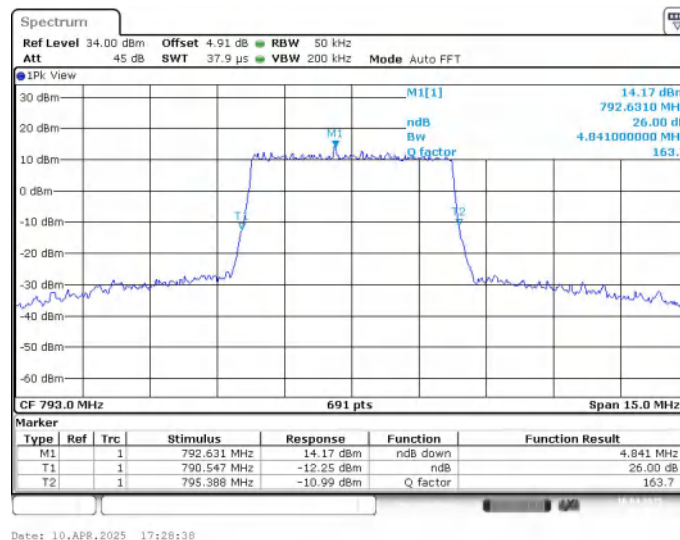
LTE band 14,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
793	4.906	4.841

LTE band 14 , 5MHz Bandwidth,MID,QPSK (-26dBc BW)



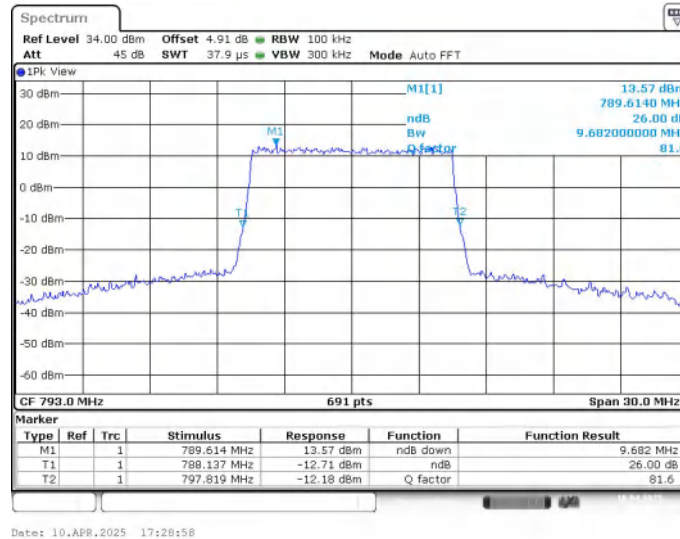
LTE band 14 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)



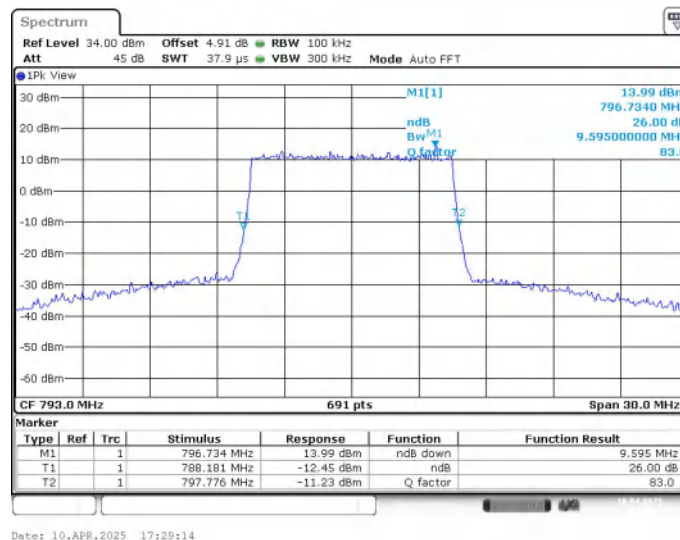
LTE band 14,10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
793	9.682	9.595

LTE band 14 , 10MHz Bandwidth,MID,QPSK (-26dBc BW)



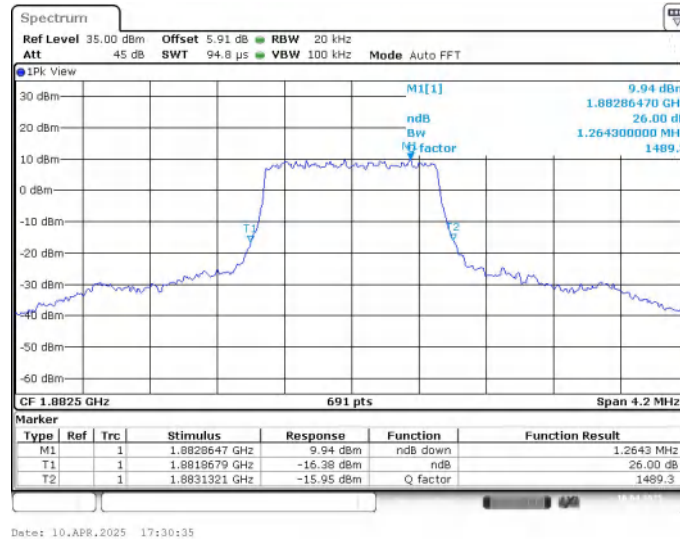
LTE band 14 , 10MHz Bandwidth,MID,16QAM (-26dBc BW)



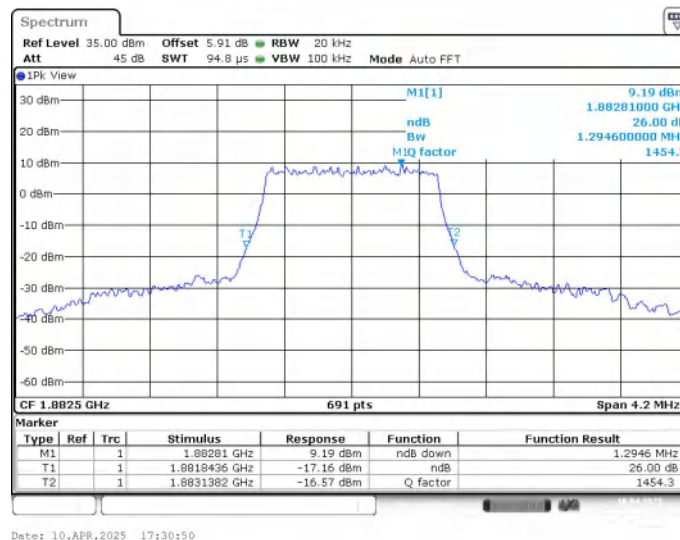
LTE band 25,1.4MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1882.5	1.264	1.295

LTE band 25 , 1.4MHz Bandwidth,MID,QPSK (-26dBc BW)



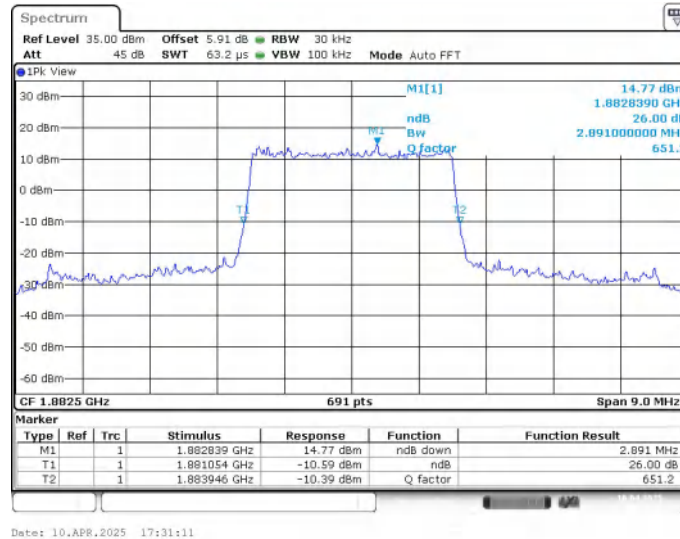
LTE band 25 , 1.4MHz Bandwidth,MID,16QAM (-26dBc BW)



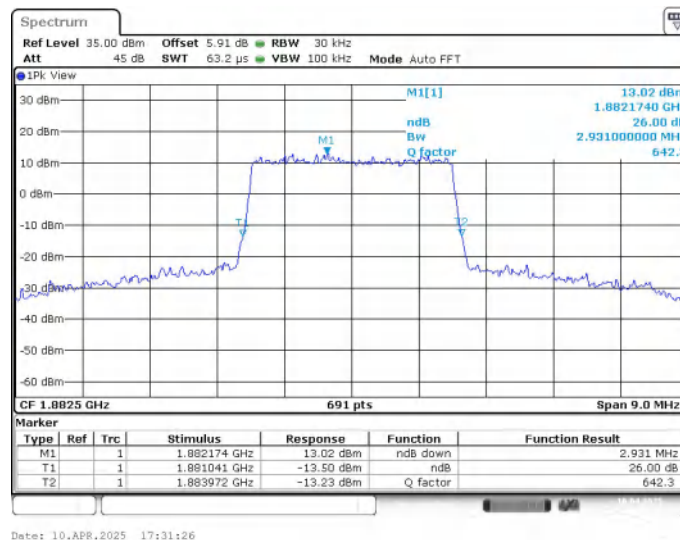
LTE band 25,3MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1882.5	2.891	2.931

LTE band 25 , 3MHz Bandwidth,MID,QPSK (-26dBc BW)



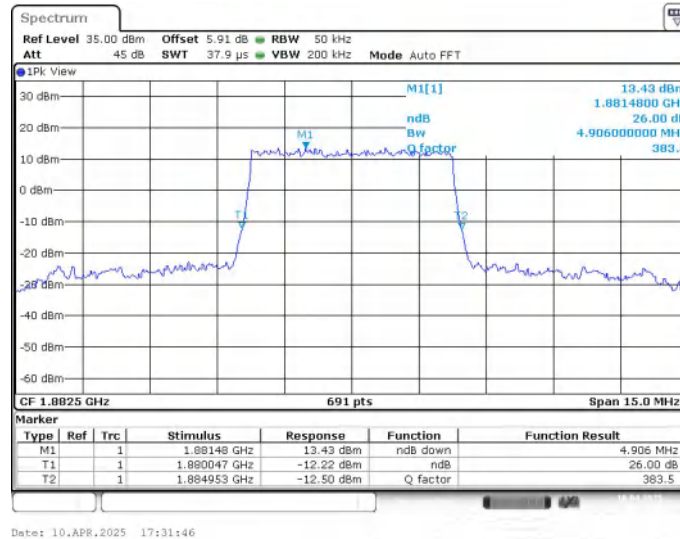
LTE band 25 , 3MHz Bandwidth,MID,16QAM (-26dBc BW)



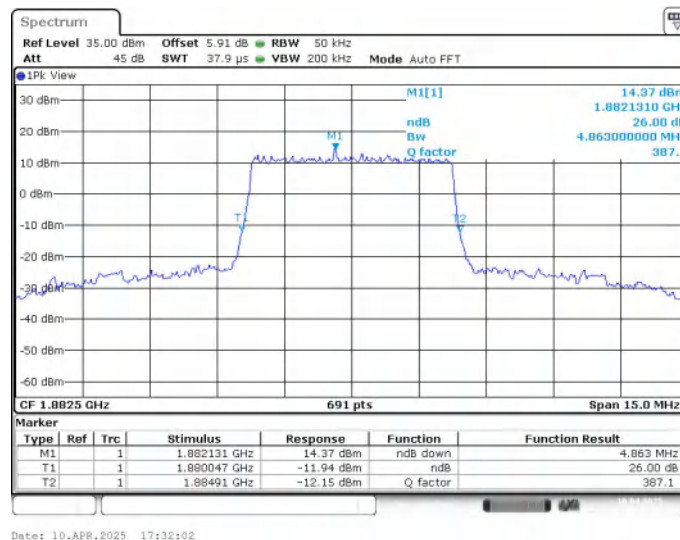
LTE band 25,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1882.5	4.906	4.863

LTE band 25 , 5MHz Bandwidth,MID,QPSK (-26dBc BW)



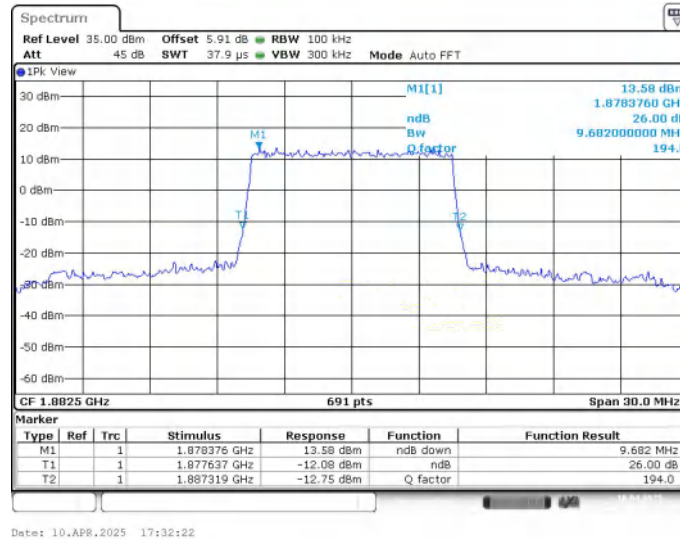
LTE band 25 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)



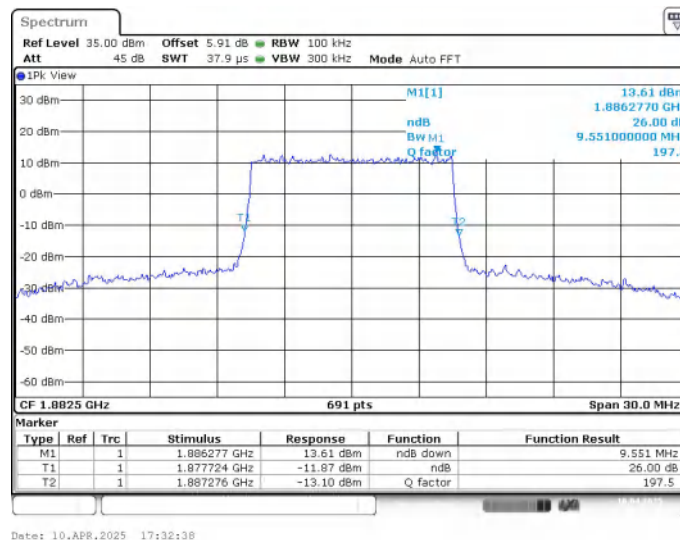
LTE band 25,10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1882.5	9.682	9.551

LTE band 25 , 10MHz Bandwidth,MID,QPSK (-26dBc BW)



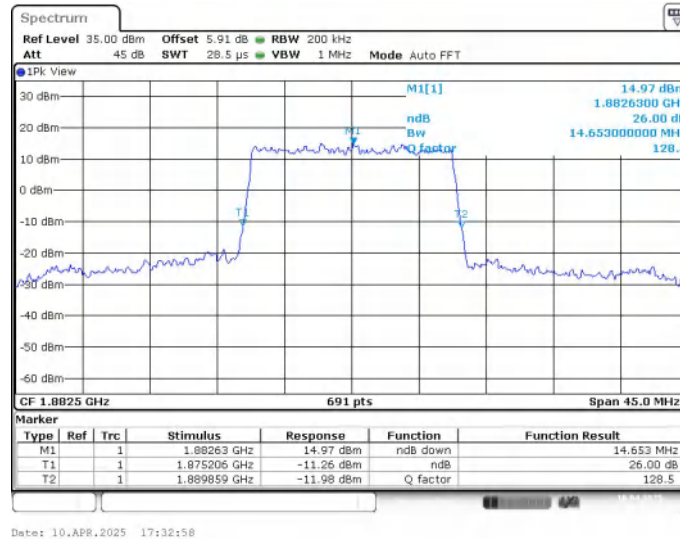
LTE band 25 , 10MHz Bandwidth,MID,16QAM (-26dBc BW)



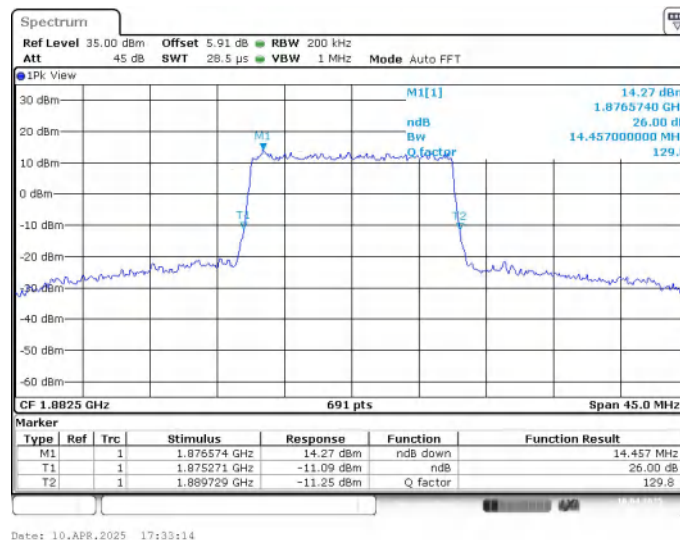
LTE band 25,15MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1882.5	14.653	14.457

LTE band 25 , 15MHz Bandwidth,MID,QPSK (-26dBc BW)



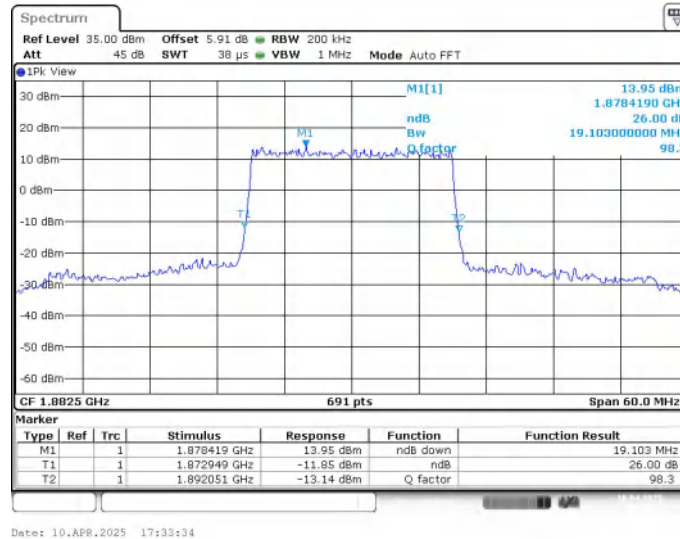
LTE band 25 , 15MHz Bandwidth,MID,16QAM (-26dBc BW)



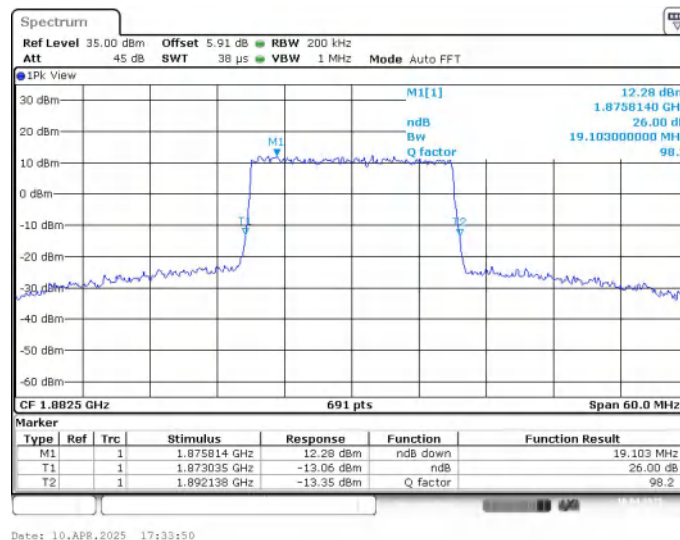
LTE band 25,20MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1882.5	19.103	19.103

LTE band 25 , 20MHz Bandwidth,MID,QPSK (-26dBc BW)



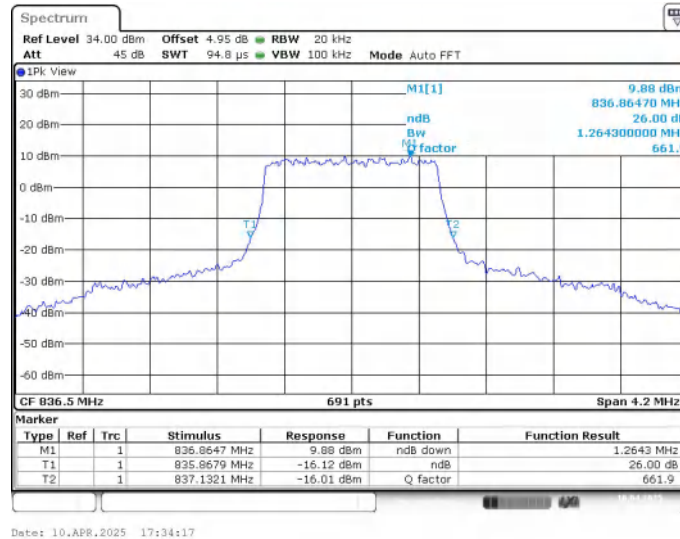
LTE band 25 , 20MHz Bandwidth,MID,16QAM (-26dBc BW)



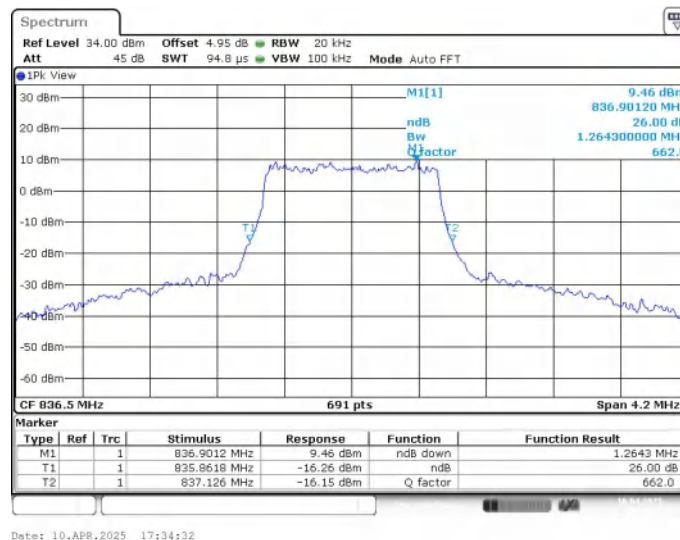
LTE band 26_Part22,1.4MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
836.5	1.264	1.264

LTE band 26 , 1.4MHz Bandwidth,MID,QPSK (-26dBc BW)



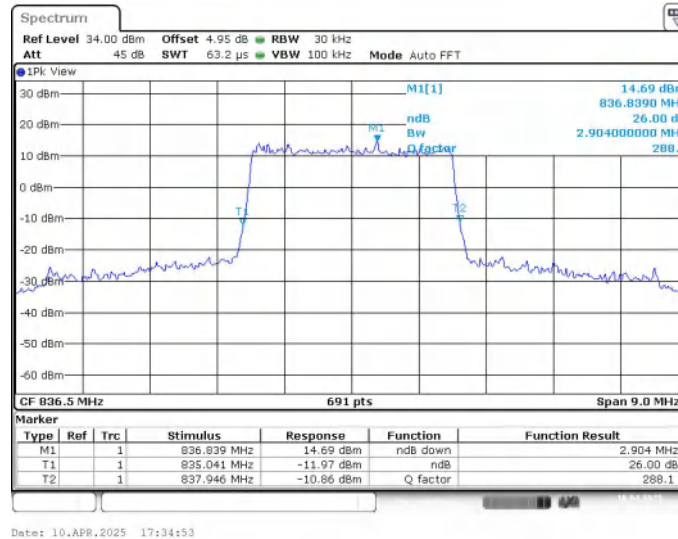
LTE band 26 , 1.4MHz Bandwidth,MID,16QAM (-26dBc BW)



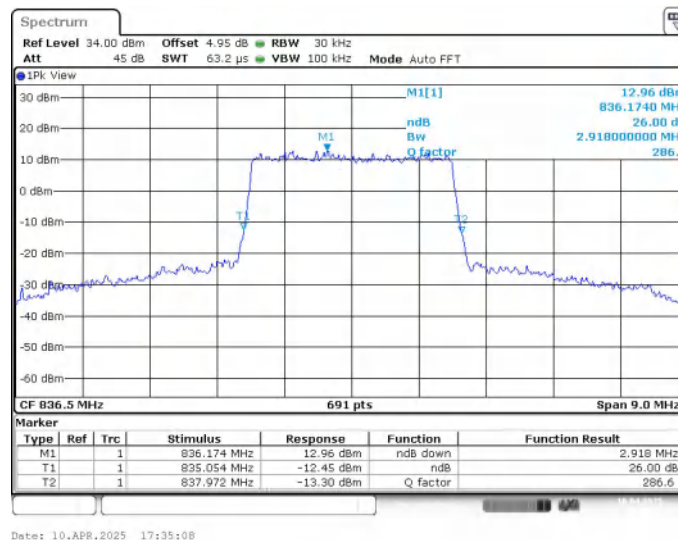
LTE band 26_Part22,3MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
836.5	2.904	2.918

LTE band 26 , 3MHz Bandwidth,MID,QPSK (-26dBc BW)



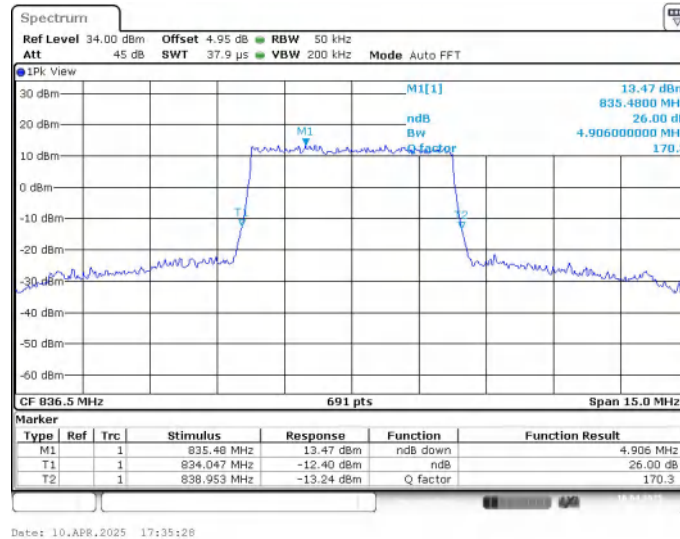
LTE band 26 , 3MHz Bandwidth,MID,16QAM (-26dBc BW)



LTE band 26_Part22,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
836.5	4.906	4.863

LTE band 26 , 5MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 26 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)

