TEST REPORT

No. I23Z60483-WMD03

for

OnePlus Technology (Shenzhen) Co., Ltd.

Mobile Phone

Model Name: CPH2551

FCC ID: 2ABZ2-AA541

with

Hardware Version: 11

Software Version: OxygenOS 13.2

Issued Date: 2023-07-12

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.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S.Government.

Test Laboratory:

CTTL, Telecommunication Technology Labs, CAICT

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

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I23Z60483-WMD03	Rev.0	1st edition	2023-06-29
I23Z60483-WMD03	Rev.1	Updated statement in chapter 5	2023-07-12

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

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1. Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM (NVLAP) with lab code 600118-0 and is also an FCC accredited test laboratory (CN5017), and ISED accredited test laboratory (ISED#: 24849). The detail accreditation scope can be found on NVLAP 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: 2023-03-16

Testing End Date: 2023-06-25

1.5. Signature

Dong Yuan

(Prepared this test report)

Zhou Yu

(Reviewed this test report)

Zhao Hui Lin

Deputy Director of the laboratory

(Approved this test report)

2. Client Information

2.1. Applicant Information

Company Name:	OnePlus Technology (Shenzhen) Co., Ltd.
Address /Post:	18C02, 18C03, 18C04 and 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen
Contact:	Ariel Cheng
Email:	ariel.cheng@oneplus.com
Telephone:	(86)76986076999

2.2. Manufacturer Information

Company Name:	OnePlus Technology (Shenzhen) Co., Ltd.
Address /Post:	18C02, 18C03, 18C04 and 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen
Contact:	Ariel Cheng
Email:	ariel.cheng@oneplus.com
Telephone:	(86)76986076999

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

3.1. About EUT

Description	Mobile Phone
Model Name	CPH2551
FCC ID	2ABZ2-AA541
Antenna	Embedded
LTE Band	1/2/3/4/5/7/8/12/13/17/18/19/20/25/26/28/30/32 /38/39/40/41/46/48/66/71
Output power	26.29 dBm maximum EIRP measured for LTE B41
Extreme vol. Limits	3.4VDC to 4.5VDC (nominal: 3.91VDC)
Extreme temp. Tolerance	0°C to +35°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
UT05a	868147060023538/ 868147060023520	11	OxygenOS 13.2	2023-03-15
UT32a	868147060030236/ 868147060030228	11	OxygenOS 13.2	2023-04-24
UT13a	868147060021813/ 868147060021805	11	OxygenOS 13.2	2023-03-15
UT16a	868147060020435/ 868147060020427	11	OxygenOS 13.2	2023-03-15
UT109a	868147060029972/ 868147060029964	11	OxygenOS 13.2	2023-05-16

*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
AE2	Battery

AE1

Model	BLPA01
Manufacturer	Sunwoda Electronic Co., Ltd
Capacitance	3295mAh

AE2

Model	BLPA03
Manufacturer	Sunwoda Electronic Co., Ltd
Capacitance	1510mAh

*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	10-1-21 Edition
FCC Part 22	PUBLIC MOBILE SERVICES	10-1-21 Edition
FCC Part 27	MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES	10-1-21 Edition
FCC Part 90	PRIVATE LAND MOBILE RADIO SERVICES	10-1-21 Edition
FCC Part 96	CITIZENS BROADBAND RADIO SERVICE	10-1-21 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 5

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	22.913	P
2	Emission Limit	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 7

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	27.50	P
2	Emission Limit	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	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	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 25 (2)

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	24.232	P
2	Emission Limit	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(814MHz~824MHz)

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	90.635	P
2	Emission Limit	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(824MHz~849MHz) (5)

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	22.913	P
2	Emission Limit	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	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	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	NA	NA
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	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	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.

LTE Band 25, Band 66, Band 26, Band 12, Band 41and Band 41C overlaps the entire frequency range of LTE Band 2, Band 4, Band 5, Band 17, Band 38 and Band 38C. Therefore, test data provided in this report covers Band 2, Band 4, Band 5, Band 17, Band 38, Band 38C as well as Band 25, Band 66, Band 26, Band 12, Band41, Band 41C.
LTE Band 41 is tested by power class 2.
LTE Band 48 is tested by power class 3.

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. Only the antennas with the worst value were shown, which are Band 7-ANT2, Band 12-ANT0, Band 13-ANT0, Band 25-ANT2, Band 26-ANT0, Band 30-ANT4, Band 41-ANT2, Band 48-ANT2, Band 66-ANT2, Band 71-ANT0, Band 5B-ANT0, Band 7C-ANT2, Band 41C-ANT2, Band 48C-ANT2, Band 66C-ANT2.

6. Test Equipment Utilized

Description	Type	Series Number	Manufacture	Cal Due Date	Calibration Interval
Wideband Radio Communication Tester	CMW500	159082	R&S	2024-01-09	1 year
Spectrum Analyzer	FSU	200030	R&S	2024-05-25	1 year
Signal&Spectrum Analyzer	FSW	104038	R&S	2023-06-20	1 year
Climate Chamber	SH-242	93008556	ESPEC	2023-12-23	3 years
Test Receiver	FSV40	101047	R&S	2023-07-09	1 Year
EMI Antenna	VULB9163	9163-482	Schwarzbeck	2023-11-28	1 Year
EMI Antenna	LB-7180-NF	J203001300005	A-INFO	2024-05-25	1 Year
EMI Antenna	LB-180400-25-C-KF	J211060826	A-INFO	2024-03-02	1 Year
EMI Antenna	3115	00167252	ETS-Lindgren	2024-01-28	1 Year
EMI Antenna	3116	2663	ETS-Lindgren	2023-11-22	1 Year
Signal Generator	N5183A	MY49060052	Agilent	2023-07-19	1 Year
Universal Radio Communication Tester	CMW500	143008	R&S	2024-01-03	1 Year
Universal Radio Communication Tester	MT8821C	62724459649	Anritsu	2024-08-12	2 Years

※Note: The Antenna with series number of J203001300005 and Spectrum Analyzer with series number of 200030 have been calibrated during the test, and the calibration validity date filled in the above table is the latest one.

※Note: The Signal&Spectrum Analyzer with series number of 104038 did not exceed the CAL.DUE.DATE when used.

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	24.59	23.82	22.63	19.67
		2535.0	24.71	23.87	22.74	19.81
		2502.5	24.78	23.81	22.94	19.88
	1 RB low	2567.5	24.58	23.75	22.95	19.64
		2535.0	24.66	23.92	22.98	19.85
		2502.5	24.72	23.88	22.94	19.77
	50% RB mid	2567.5	23.59	22.74	21.62	19.61
		2535.0	23.71	22.66	21.71	19.78
		2502.5	23.74	22.84	21.71	19.77
	100% RB	2567.5	23.58	22.63	21.61	19.60
		2535.0	23.68	22.71	21.72	19.75
		2502.5	23.76	22.76	21.77	19.76
10MHz	1 RB high	2565.0	24.57	23.64	22.82	19.72
		2535.0	24.70	23.89	22.83	19.84
		2505.0	24.73	23.94	22.91	19.89
	1 RB low	2565.0	24.57	23.69	22.83	19.72
		2535.0	24.65	23.79	22.66	19.77
		2505.0	24.76	23.84	22.87	19.86
	50% RB mid	2565.0	23.62	22.66	21.64	19.66
		2535.0	23.73	22.79	21.76	19.78
		2505.0	23.80	22.82	21.77	19.75
	100% RB	2565.0	23.63	22.65	21.63	19.63
		2535.0	23.74	22.72	21.73	19.72

		2505.0	23.79	22.79	21.80	19.77
15MHz	1 RB high	2562.5	24.37	23.63	22.58	19.65
		2535.0	24.53	23.56	22.84	19.77
		2507.5	24.47	23.65	22.70	19.73
	1 RB low	2562.5	24.36	23.62	22.79	19.64
		2535.0	24.42	23.52	23.06	19.45
		2507.5	24.49	23.59	22.70	19.62
	50% RB mid	2562.5	23.50	22.54	21.50	19.51
		2535.0	23.58	22.61	21.61	19.60
		2507.5	23.63	22.65	21.62	19.65
	100% RB	2562.5	23.50	22.52	21.53	19.51
		2535.0	23.47	22.54	21.54	19.49
		2507.5	23.61	22.66	21.63	19.64
20MHz	1 RB high	2560.0	24.42	23.59	22.60	19.78
		2535.0	24.55	23.71	22.75	19.89
		2510.0	24.51	23.72	22.65	19.74
	1 RB low	2560.0	24.41	23.77	22.31	19.80
		2535.0	24.39	23.55	22.46	19.70
		2510.0	24.46	23.66	22.82	19.64
	50% RB mid	2560.0	23.51	22.56	21.53	19.54
		2535.0	23.63	22.62	21.60	19.64
		2510.0	23.65	22.66	21.62	19.66
	100% RB	2560.0	23.51	22.51	21.53	19.51
		2535.0	23.54	22.55	21.50	19.53
		2510.0	23.64	22.64	21.63	19.62

LTE band 12

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	715.3	25.09	24.38	23.31	20.36
		707.5	24.90	24.42	23.34	20.38
		699.7	24.92	24.27	23.26	20.31
	1 RB low	715.3	24.96	24.45	23.02	20.10
		707.5	24.97	24.40	23.49	20.51
		699.7	25.08	24.46	23.30	20.35
	50% RB mid	715.3	25.04	24.24	23.23	20.29
		707.5	24.89	24.14	23.05	20.13
		699.7	25.06	24.26	23.19	20.25
	100% RB	715.3	23.99	23.01	22.14	20.07
		707.5	23.90	23.05	22.05	19.99
		699.7	24.00	23.10	22.17	20.10
3MHz	1 RB high	714.5	24.87	24.39	23.33	20.37
		707.5	24.95	24.22	23.16	20.23
		700.5	25.06	24.43	23.46	20.49
	1 RB low	714.5	25.02	24.42	23.16	20.23
		707.5	24.86	24.32	23.25	20.31
		700.5	24.87	24.29	23.17	20.24
	50% RB mid	714.5	24.09	23.16	22.16	20.09
		707.5	24.07	23.17	22.12	20.05
		700.5	24.13	23.17	22.14	20.07
	100% RB	714.5	23.99	23.01	22.19	20.11
		707.5	23.98	22.98	22.11	20.04
		700.5	24.07	23.11	22.26	20.18
5MHz	1 RB high	713.5	24.95	24.26	23.44	20.47
		707.5	24.92	24.35	23.18	20.24
		701.5	24.99	24.37	23.45	20.48
	1 RB low	713.5	25.06	24.41	23.33	20.37
		707.5	25.03	24.23	23.45	20.48
		701.5	25.03	24.33	23.25	20.31
	50% RB mid	713.5	24.08	23.13	22.09	20.02
		707.5	23.96	23.05	22.16	20.09
		701.5	24.14	23.20	22.26	20.18
	100% RB	713.5	24.02	23.13	22.09	20.02
		707.5	24.08	23.01	22.07	20.03
		701.5	24.11	23.10	22.07	20.00
10MHz	1 RB high	711.0	24.93	24.28	23.52	20.54
		707.5	24.97	24.38	23.20	20.26
		704.0	24.97	24.39	23.37	20.41
	1 RB low	711.0	25.04	24.23	23.23	20.29

		707.5	25.05	24.48	23.40	20.44
		704.0	24.97	24.55	23.43	20.46
	50% RB mid	711.0	24.08	23.03	22.24	20.16
		707.5	23.94	22.98	22.12	20.05
		704.0	24.13	23.06	22.23	20.15
	100% RB	711.0	24.12	23.13	22.11	20.04
		707.5	23.93	23.05	22.10	20.03
		704.0	24.04	23.10	22.13	20.06

LTE band 13

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	784.5	23.51	22.54	21.67	18.49
		782.0	23.41	22.55	21.58	18.42
		779.5	23.31	22.59	21.58	18.42
	1 RB low	784.5	23.62	22.61	21.60	18.43
		782.0	23.53	22.65	21.69	18.51
		779.5	23.56	22.59	21.58	18.53
	50% RB mid	784.5	22.55	21.62	20.58	18.62
		782.0	22.57	21.63	20.62	18.66
		779.5	22.69	21.53	20.69	18.59
	100% RB	784.5	22.51	21.52	20.50	18.55
		782.0	22.52	21.57	20.56	18.60
		779.5	22.62	21.59	20.62	18.66
10MHz	1 RB high	782.0	23.45	22.45	21.72	18.54
	1 RB low	782.0	23.63	22.64	21.70	18.52
	50% RB mid	782.0	22.53	21.53	20.59	18.63
	100% RB	782.0	22.49	21.56	20.44	18.49

LTE band 25

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	1914.3	24.63	23.74	22.82	19.76
		1882.5	24.63	23.79	22.81	19.77
		1850.7	24.78	23.81	22.73	19.83
	1 RB low	1914.3	24.62	23.77	22.37	19.72
		1882.5	24.62	23.73	22.67	19.69
		1850.7	24.64	23.78	22.70	19.70
	50% RB mid	1914.3	24.62	23.82	22.80	19.74
		1882.5	24.58	23.83	22.74	19.66
		1850.7	24.66	23.85	22.76	19.76
	100% RB	1914.3	23.60	22.74	21.58	19.71
		1882.5	23.62	22.74	21.66	19.57
		1850.7	23.67	22.76	21.69	19.70
3MHz	1 RB high	1913.5	24.62	23.80	22.74	19.70
		1882.5	24.61	23.79	22.86	19.78
		1851.5	24.66	23.77	22.89	19.73
	1 RB low	1913.5	24.64	23.78	22.41	19.74
		1882.5	24.60	23.81	22.80	19.74
		1851.5	24.67	23.86	22.95	19.82
	50% RB mid	1913.5	23.67	22.64	21.71	19.65
		1882.5	23.63	22.75	21.70	19.74
		1851.5	23.70	22.82	21.76	19.79
	100% RB	1913.5	23.59	22.61	21.63	19.60
		1882.5	23.63	22.69	21.68	19.68
		1851.5	23.68	22.72	21.75	19.71
5MHz	1 RB high	1912.5	24.65	23.75	22.84	19.79
		1882.5	24.65	23.84	22.60	19.77
		1852.5	24.70	23.85	22.84	19.82
	1 RB low	1912.5	24.65	23.82	23.02	19.67
		1882.5	24.60	23.77	22.73	19.77
		1852.5	24.66	23.76	23.00	19.78
	50% RB mid	1912.5	23.66	22.77	21.70	19.75
		1882.5	23.64	22.72	21.85	19.73
		1852.5	23.68	22.72	21.76	19.78
	100% RB	1912.5	23.67	22.69	21.69	19.69
		1882.5	23.64	22.68	21.71	19.67
		1852.5	23.70	22.69	21.73	19.77
10MHz	1 RB high	1910.0	24.62	23.67	22.76	19.80
		1882.5	24.63	23.81	22.84	19.77
		1855.0	24.61	23.81	22.80	19.76
	1 RB low	1910.0	24.65	23.81	22.50	19.69

		1882.5	24.62	23.78	22.78	19.74
		1855.0	24.65	23.71	22.88	19.72
	50% RB mid	1910.0	23.68	22.60	21.65	19.69
		1882.5	23.65	22.73	21.72	19.74
		1855.0	23.71	22.71	21.75	19.80
	100% RB	1910.0	23.60	22.62	21.60	19.63
		1882.5	23.66	22.65	21.69	19.72
		1855.0	23.71	22.69	21.71	19.78
15MHz	1 RB high	1907.5	24.46	23.55	22.76	19.67
		1882.5	24.35	23.48	22.64	19.65
		1857.5	24.51	23.67	22.80	19.67
	1 RB low	1907.5	24.48	23.60	22.91	19.46
		1882.5	24.41	23.52	22.78	19.45
		1857.5	24.53	23.60	22.67	19.61
	50% RB mid	1907.5	23.56	22.50	21.55	19.49
		1882.5	23.52	22.55	21.55	19.59
		1857.5	23.56	22.58	21.57	19.63
	100% RB	1907.5	23.52	22.59	21.55	19.63
		1882.5	23.51	22.54	21.57	19.60
		1857.5	23.54	22.57	21.61	19.64
20MHz	1 RB high	1905.0	24.44	23.59	22.68	19.94
		1882.5	24.42	23.62	22.70	19.72
		1860.0	24.40	23.65	22.55	19.84
	1 RB low	1905.0	24.50	23.77	22.55	19.80
		1882.5	24.38	23.64	22.58	19.75
		1860.0	24.43	23.69	22.49	19.79
	50% RB mid	1905.0	23.54	22.51	21.55	19.55
		1882.5	23.49	22.57	21.49	19.59
		1860.0	23.55	22.63	21.59	19.66
	100% RB	1905.0	23.54	22.52	21.50	19.54
		1882.5	23.54	22.54	21.54	19.58
		1860.0	23.58	22.59	21.59	19.63

LTE band 26(814MHz~824MHz)

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	823.3	25.09	24.22	23.17	20.24
		819.0	25.10	24.24	23.23	20.07
		814.7	25.07	24.25	22.99	20.07
	1 RB low	823.3	25.00	24.16	23.47	20.06
		819.0	25.01	24.14	23.01	20.07
		814.7	25.06	24.22	23.39	20.16
	50% RB mid	823.3	25.09	24.28	23.26	20.21
		819.0	25.06	24.27	23.19	20.23
		814.7	25.04	24.28	23.17	20.16
	100% RB	823.3	24.08	23.16	22.05	20.06
		819.0	24.07	23.14	22.14	20.15
		814.7	24.04	23.12	22.03	20.03
3MHz	1 RB high	822.5	25.03	24.17	23.26	20.17
		819.0	24.99	24.12	23.23	20.11
		815.5	25.03	24.18	23.26	20.18
	1 RB low	822.5	25.03	24.19	22.91	20.11
		819.0	24.99	24.12	23.24	20.04
		815.5	25.03	24.24	23.26	20.10
	50% RB mid	822.5	24.08	23.17	22.13	20.13
		819.0	24.08	23.18	22.12	20.13
		815.5	24.05	23.13	22.13	20.13
	100% RB	822.5	24.09	23.09	22.15	20.10
		819.0	24.05	23.07	22.11	20.07
		815.5	24.06	23.11	22.11	20.08
5MHz	1 RB high	821.5	25.13	24.32	23.10	20.28
		819.0	25.10	24.26	23.20	20.24
		816.5	25.16	24.34	23.14	20.19
	1 RB low	821.5	25.12	24.29	23.23	20.13
		819.0	25.11	24.24	23.19	20.18
		816.5	25.10	24.23	23.09	20.12
	50% RB mid	821.5	24.10	23.16	22.25	20.17
		819.0	24.14	23.15	22.13	20.17
		816.5	24.09	23.21	22.04	20.14
	100% RB	821.5	24.12	23.12	22.18	20.12
		819.0	24.11	23.10	22.16	20.11
		816.5	24.10	23.10	22.12	20.10
10MHz	1 RB high	819.0	25.06	24.31	23.23	20.20
	1 RB low	819.0	25.14	24.24	22.86	19.45
	50% RB mid	819.0	24.11	23.19	22.17	20.14
	100% RB	819.0	24.11	23.03	22.15	20.15

LTE band 26(824MHz~849MHz)

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	848.3	25.02	24.11	23.35	20.07
		836.5	25.09	24.13	23.40	20.22
		824.7	25.13	24.18	23.32	20.09
	1 RB low	848.3	25.02	24.09	23.16	20.12
		836.5	25.02	24.21	23.21	20.28
		824.7	24.99	24.18	23.42	20.01
	50% RB mid	848.3	25.02	24.26	23.14	20.11
		836.5	25.13	24.20	23.15	20.06
		824.7	25.10	24.30	23.25	20.13
	100% RB	848.3	24.01	23.12	22.20	20.07
		836.5	24.03	23.11	21.97	20.03
		824.7	24.10	23.15	22.12	20.12
3MHz	1 RB high	847.5	24.93	24.05	23.18	20.17
		836.5	24.99	24.18	23.38	20.15
		825.5	25.02	24.23	23.36	20.18
	1 RB low	847.5	24.91	24.12	22.97	20.06
		836.5	25.03	24.17	23.38	20.09
		825.5	25.12	24.22	23.31	20.21
	50% RB mid	847.5	24.04	23.15	22.00	20.07
		836.5	24.10	23.13	22.14	20.13
		825.5	24.11	23.19	22.14	20.18
	100% RB	847.5	24.01	23.06	22.07	20.07
		836.5	24.05	23.08	22.04	20.02
		825.5	24.10	23.15	22.12	20.08
5MHz	1 RB high	846.5	25.04	24.27	23.17	20.32
		836.5	25.16	24.29	23.15	20.20
		826.5	25.15	24.34	23.29	20.25
	1 RB low	846.5	25.05	24.22	23.06	20.18
		836.5	25.15	24.34	23.27	20.21
		826.5	25.15	24.29	23.31	20.16
	50% RB mid	846.5	24.06	23.20	22.08	20.10
		836.5	24.14	23.10	22.16	20.13
		826.5	24.14	23.22	22.14	20.17
	100% RB	846.5	24.07	23.10	22.05	20.06
		836.5	24.07	23.08	22.09	20.09
		826.5	24.14	23.17	22.17	20.16
10MHz	1 RB high	844.0	25.04	24.20	23.36	20.18
		836.5	25.10	24.19	23.39	20.23
		829.0	25.13	24.29	23.31	20.30
	1 RB low	844.0	25.10	24.34	23.25	20.07

		836.5	25.13	24.23	23.16	20.25
		829.0	25.10	24.32	22.98	20.15
	50% RB mid	844.0	24.09	23.12	22.08	20.12
		836.5	24.17	23.08	22.19	20.18
		829.0	24.12	23.22	22.18	20.19
	100% RB	844.0	24.11	23.10	22.12	20.10
		836.5	24.07	23.07	22.08	20.08
		829.0	24.15	23.14	22.18	20.17
15MHz	1 RB high	841.5	24.77	23.88	22.97	20.02
		836.5	24.81	23.89	23.14	20.16
		831.5	24.84	24.00	23.09	20.10
	1 RB low	841.5	24.89	24.18	22.90	20.03
		836.5	24.97	23.97	23.23	19.99
		831.5	24.87	23.99	23.05	19.93
	50% RB mid	841.5	23.96	22.88	21.99	19.93
		836.5	23.98	22.93	21.98	19.94
		831.5	24.00	22.97	22.02	19.96
	100% RB	841.5	23.89	22.91	21.94	19.97
		836.5	23.91	22.91	21.93	19.97
		831.5	23.92	22.97	21.92	19.93

LTE band 30

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	2312.5	23.88	23.20	21.73	18.72
		2310.0	23.75	23.11	21.74	18.73
		2307.5	23.83	23.12	21.80	18.79
	1 RB low	2312.5	23.80	23.19	21.71	18.70
		2310.0	23.78	23.26	21.77	18.76
		2307.5	23.81	23.03	21.48	18.86
	50% RB mid	2312.5	22.93	21.93	20.74	18.77
		2310.0	22.91	22.01	20.61	18.65
		2307.5	22.93	22.02	20.71	18.74
	100% RB	2312.5	22.89	22.01	20.71	18.74
		2310.0	22.90	21.92	20.62	18.66
		2307.5	22.91	21.96	20.59	18.64
10MHz	1 RB high	2310.0	24.04	23.43	21.76	18.75
	1 RB low	2310.0	24.06	23.44	21.69	18.89
	50% RB mid	2310.0	23.05	22.11	20.80	18.82
	100% RB	2310.0	23.04	21.97	20.65	18.68

LTE band 41

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	2687.5	26.40	25.59	24.84	21.69
		2593.0	26.43	25.66	24.67	21.56
		2498.5	26.44	25.50	24.57	21.63
	1 RB low	2687.5	26.59	25.76	24.48	21.68
		2593.0	26.36	25.61	24.91	21.48
		2498.5	26.36	25.51	24.53	21.50
	50% RB mid	2687.5	25.61	24.71	23.61	21.62
		2593.0	25.42	24.49	23.45	21.48
		2498.5	25.43	24.52	23.50	21.51
	100% RB	2687.5	25.59	24.62	23.61	21.59
		2593.0	25.42	24.42	23.45	21.48
		2498.5	24.44	23.44	23.44	21.45
10MHz	1 RB high	2685.0	26.25	25.50	24.64	21.72
		2593.0	26.40	25.55	24.57	21.45
		2501.0	26.36	25.59	24.52	21.48
	1 RB low	2685.0	26.51	25.74	24.98	21.66
		2593.0	26.34	25.46	24.55	21.46
		2501.0	26.35	25.59	24.56	21.49
	50% RB mid	2685.0	25.62	24.61	23.67	21.57
		2593.0	25.49	24.52	23.49	21.50
		2501.0	25.46	24.51	23.47	21.50
	100% RB	2685.0	25.57	24.55	23.55	21.57
		2593.0	25.45	24.48	23.44	21.49
		2501.0	25.46	24.46	23.48	21.47
15MHz	1 RB high	2682.5	26.37	25.53	24.75	21.53
		2593.0	26.29	25.34	24.51	21.67
		2503.5	26.15	25.35	24.48	21.37
	1 RB low	2682.5	26.44	25.61	24.75	21.66
		2593.0	26.21	25.43	24.56	21.39
		2503.5	26.11	25.30	24.46	21.39
	50% RB mid	2682.5	25.49	24.45	23.49	21.43
		2593.0	25.32	24.34	23.31	21.33
		2503.5	25.28	24.30	23.29	21.35
	100% RB	2682.5	25.37	24.42	23.42	21.44
		2593.0	25.29	24.32	23.32	21.31
		2503.5	25.28	24.30	23.30	21.32
20MHz	1 RB high	2680.0	26.34	25.57	24.77	21.68
		2593.0	26.33	25.60	24.46	21.57
		2506.0	26.23	25.51	24.45	21.53
	1 RB low	2680.0	26.45	25.74	24.69	21.71

		2593.0	26.31	25.52	24.38	21.40
		2506.0	26.15	25.45	24.22	21.42
	50% RB mid	2680.0	25.50	24.48	23.51	21.44
		2593.0	25.33	24.33	23.34	21.36
		2506.0	25.30	24.33	23.29	21.33
	100% RB	2680.0	25.45	24.45	23.45	21.48
		2593.0	25.30	24.30	23.30	21.34
		2506.0	25.29	24.32	23.31	21.34

LTE band 48

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	3697.5	23.37	22.63	21.68	18.48
		3625.0	23.78	23.04	22.08	18.99
		3552.5	23.58	22.73	21.66	18.81
	1 RB low	3697.5	23.40	22.63	21.25	18.56
		3625.0	23.74	22.98	22.03	18.95
		3552.5	23.53	22.73	21.54	18.78
	50% RB mid	3697.5	22.39	21.46	20.40	18.45
		3625.0	22.81	21.88	20.83	18.90
		3552.5	22.65	21.73	20.76	18.73
	100% RB	3697.5	22.37	21.35	20.36	18.38
		3625.0	22.82	21.85	20.83	18.86
		3552.5	22.63	21.66	20.67	18.67
10MHz	1 RB high	3695.0	23.34	22.64	21.45	18.51
		3625.0	23.82	23.03	21.95	18.89
		3555.0	23.61	22.79	21.75	18.68
	1 RB low	3695.0	23.46	22.73	21.52	18.49
		3625.0	23.78	22.90	21.95	18.97
		3555.0	23.63	22.80	21.89	18.74
	50% RB mid	3695.0	22.41	21.48	20.40	18.45
		3625.0	22.85	21.90	20.85	18.86
		3555.0	22.59	21.71	20.59	18.70
	100% RB	3695.0	22.44	21.44	20.43	18.41
		3625.0	22.83	21.85	20.83	18.86
		3555.0	22.56	21.58	20.60	18.57
15MHz	1 RB high	3692.5	23.23	22.24	21.30	18.45
		3625.0	23.56	22.85	21.72	18.90
		3557.5	23.44	22.59	21.75	18.65
	1 RB low	3692.5	23.32	22.54	21.28	18.53
		3625.0	23.58	22.86	21.45	18.79
		3557.5	23.38	22.52	21.64	18.61
	50% RB mid	3692.5	22.28	21.36	20.28	18.31
		3625.0	22.71	21.72	20.72	18.71
		3557.5	22.49	21.51	20.50	18.48
	100% RB	3692.5	22.34	21.32	20.28	18.34
		3625.0	22.68	21.72	20.70	18.73
		3557.5	22.45	21.45	20.44	18.48
20MHz	1 RB high	3690.0	23.30	22.55	21.38	18.52
		3625.0	23.61	22.92	21.64	18.91

		3560.0	23.44	22.70	21.61	18.60
	1 RB low	3690.0	23.40	22.58	21.33	18.69
		3625.0	23.65	22.85	21.71	18.86
		3560.0	23.46	22.66	21.58	18.71
	50% RB mid	3690.0	22.33	21.38	20.29	18.41
		3625.0	22.73	21.75	20.71	18.75
		3560.0	22.53	21.56	20.53	18.58
	100% RB	3690.0	22.35	21.37	20.34	18.33
		3625.0	22.70	21.75	20.69	18.75
		3560.0	22.54	21.56	20.53	18.59

LTE band 66

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	1779.3	24.60	23.76	22.82	19.62
		1745.0	24.62	23.74	22.73	19.75
		1710.7	24.54	23.55	22.53	19.65
	1 RB low	1779.3	24.59	23.72	22.52	19.66
		1745.0	24.56	23.81	22.76	19.61
		1710.7	24.55	23.59	22.74	19.64
	50% RB mid	1779.3	24.61	23.77	22.67	19.58
		1745.0	24.53	23.77	22.67	19.70
		1710.7	24.52	23.73	22.59	19.66
	100% RB	1779.3	23.60	22.59	21.62	19.60
		1745.0	23.61	22.70	21.63	19.64
		1710.7	23.53	22.56	21.69	19.61
3MHz	1 RB high	1778.5	24.54	23.72	22.75	19.65
		1745.0	24.55	23.67	22.73	19.78
		1711.5	24.48	23.66	22.74	19.68
	1 RB low	1778.5	24.54	23.67	22.39	19.68
		1745.0	24.52	23.70	22.54	19.60
		1711.5	24.51	23.69	22.75	19.68
	50% RB mid	1778.5	23.60	22.63	21.64	19.59
		1745.0	23.61	22.72	21.64	19.64
		1711.5	23.58	22.68	21.63	19.70
	100% RB	1778.5	23.50	22.57	21.51	19.55
		1745.0	23.53	22.54	21.56	19.55
		1711.5	23.57	22.62	21.65	19.60
5MHz	1 RB high	1777.5	24.58	23.81	22.66	19.66
		1745.0	24.57	23.77	22.58	19.74
		1712.5	24.54	23.77	22.45	19.63
	1 RB low	1777.5	24.55	23.75	22.79	19.62
		1745.0	24.50	23.68	22.45	19.70
		1712.5	24.52	23.67	23.04	19.60
	50% RB mid	1777.5	23.58	22.67	21.61	19.66
		1745.0	23.62	22.63	21.65	19.58
		1712.5	23.56	22.72	21.61	19.63
	100% RB	1777.5	23.59	22.64	21.62	19.61
		1745.0	23.55	22.58	21.55	19.57
		1712.5	23.54	22.59	21.58	19.58
10MHz	1 RB high	1775.0	24.58	23.67	22.79	19.75
		1745.0	24.59	23.81	22.73	19.80
		1715.0	24.52	23.71	22.70	19.72
	1 RB low	1775.0	24.61	23.76	22.76	19.59

		1745.0	24.53	23.78	22.72	19.72
		1715.0	24.52	23.66	22.56	19.61
	50% RB mid	1775.0	23.59	22.54	21.64	19.54
		1745.0	23.65	22.58	21.67	19.63
		1715.0	23.60	22.64	21.60	19.59
	100% RB	1775.0	23.54	22.55	21.55	19.55
		1745.0	23.57	22.56	21.54	19.55
		1715.0	23.58	22.61	21.59	19.58
15MHz	1 RB high	1772.5	24.32	23.55	22.67	19.57
		1745.0	24.47	23.69	22.74	19.63
		1717.5	24.41	23.57	22.66	19.59
	1 RB low	1772.5	24.44	23.54	22.57	19.50
		1745.0	24.37	23.60	22.76	19.52
		1717.5	24.36	23.46	22.75	19.32
	50% RB mid	1772.5	23.51	22.42	21.52	19.41
		1745.0	23.51	22.47	21.50	19.42
		1717.5	23.45	22.45	21.43	19.41
	100% RB	1772.5	23.37	22.39	21.42	19.44
		1745.0	23.37	22.46	21.38	19.44
		1717.5	23.41	22.46	21.46	19.42
20MHz	1 RB high	1770.0	24.37	23.61	22.60	19.76
		1745.0	24.48	23.63	22.67	19.75
		1720.0	24.46	23.76	22.66	19.70
	1 RB low	1770.0	24.34	23.66	22.78	19.67
		1745.0	24.40	23.68	22.80	19.59
		1720.0	24.42	23.57	22.58	19.54
	50% RB mid	1770.0	23.50	22.52	21.50	19.51
		1745.0	23.54	22.49	21.50	19.45
		1720.0	23.46	22.50	21.47	19.47
	100% RB	1770.0	23.51	22.53	21.47	19.50
		1745.0	23.44	22.42	21.38	19.43
		1720.0	23.44	22.46	21.45	19.44

LTE band 71

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	695.5	23.96	23.28	22.39	19.11
		680.5	24.05	23.35	22.32	19.05
		665.5	24.10	23.35	22.50	19.21
	1 RB low	695.5	24.06	23.32	22.31	19.04
		680.5	24.12	23.46	22.34	19.07
		665.5	23.49	22.65	21.54	18.39
	50% RB mid	695.5	23.07	22.09	21.28	19.14
		680.5	23.11	22.26	21.20	19.07
		665.5	23.25	22.41	21.35	19.20
	100% RB	695.5	23.01	21.97	21.04	18.92
		680.5	23.18	22.16	21.23	19.09
		665.5	23.24	22.25	21.29	19.15
10MHz	1 RB high	693.0	24.05	23.47	22.20	18.95
		680.5	23.99	23.47	22.25	18.99
		668.0	22.80	22.20	21.10	18.01
	1 RB low	693.0	23.47	22.86	21.81	18.62
		680.5	24.30	23.51	21.72	18.54
		668.0	23.78	23.18	21.77	18.58
	50% RB mid	693.0	23.11	22.13	21.18	19.05
		680.5	23.08	22.21	21.19	19.06
		668.0	23.18	22.27	21.33	19.18
	100% RB	693.0	23.09	22.10	21.17	19.04
		680.5	23.08	22.05	21.27	19.13
		668.0	23.36	22.05	21.30	19.16
15MHz	1 RB high	690.5	23.86	22.99	22.12	18.88
		680.5	23.38	23.06	21.86	18.66
		670.5	23.97	23.46	22.20	18.95
	1 RB low	690.5	23.98	23.18	22.09	18.86
		680.5	23.75	23.05	21.97	18.75
		670.5	24.16	23.38	22.15	18.91
	50% RB mid	690.5	22.97	21.93	21.05	18.93
		680.5	23.06	21.98	21.04	18.92
		670.5	22.65	21.76	20.90	18.80
	100% RB	690.5	23.05	22.01	20.91	18.81
		680.5	22.99	22.04	21.20	19.07
		670.5	23.25	22.16	21.35	19.20
20MHz	1 RB high	688.0	24.04	23.38	21.92	18.71
		680.5	23.84	23.36	22.00	18.78
		673.0	23.82	23.29	22.48	19.19
	1 RB low	688.0	24.05	22.84	22.38	19.10

		680.5	23.97	23.49	22.36	19.09
		673.0	24.37	23.56	22.33	19.06
	50% RB mid	688.0	22.96	22.02	21.12	18.99
		680.5	23.04	22.04	21.10	18.98
		673.0	22.89	22.22	21.25	19.11
	100% RB	688.0	23.07	21.99	21.13	19.00
		680.5	23.13	22.11	21.01	18.90
		673.0	22.87	22.15	21.27	19.13

LTE CA band 5B

Bandwidth	Frequency(MHz)	Frequency(MHz)	Modulation	PCC RB		SCC RB		Conducted Power(dBm)
				Size	Offset	Size	Offset	
3MHz/5MHz	834.1	838	QPSK	1	14	1	0	24.49
			QPSK	15	0	25	0	24.54
			16QAM	1	14	1	0	23.51
			16QAM	15	0	25	0	24.00
			64QAM	1	14	1	0	22.67
			64QAM	15	0	25	0	23.04
			256QAM	1	14	1	0	21.56
			256QAM	15	0	25	0	22.19
5MHz/3MHz	835	838.9	QPSK	1	24	1	0	24.55
			QPSK	25	0	15	0	24.59
			16QAM	1	24	1	0	24.15
			16QAM	25	0	15	0	24.07
			64QAM	1	24	1	0	23.18
			64QAM	25	0	15	0	23.17
			256QAM	1	24	1	0	22.24
			256QAM	25	0	15	0	22.35
5MHz/10MHz	831.8	839	QPSK	1	24	1	0	24.36
			QPSK	25	0	50	0	22.44
			16QAM	1	24	1	0	23.38
			16QAM	25	0	50	0	21.40
			64QAM	1	24	1	0	22.21
			64QAM	25	0	50	0	21.43
			256QAM	1	24	1	0	19.39
			256QAM	25	0	50	0	19.40
10MHz/5MHz	834	841.2	QPSK	1	49	1	0	24.27
			QPSK	50	0	25	0	22.43
			16QAM	1	49	1	0	23.30
			16QAM	50	0	25	0	21.45
			64QAM	1	49	1	0	22.40
			64QAM	50	0	25	0	21.44
			256QAM	1	49	1	0	19.31
			256QAM	50	0	25	0	19.42
10MHz/10MHz	831.6	841.5	QPSK	1	49	1	0	24.29
			QPSK	50	0	50	0	22.30
			16QAM	1	49	1	0	23.29
			16QAM	50	0	50	0	21.43
			64QAM	1	49	1	0	22.29
			64QAM	50	0	50	0	21.43
			256QAM	1	49	1	0	19.25

			256QAM	50	0	50	0	19.41

LTE CA band 7C

Bandwidth	Frequency(MHz)	Frequency(MHz)	Modulation	PCC RB		SCC RB		Conducted Power(dBm)
				Size	Offset	Size	Offset	
10MHz/20MHz	2525.6	2540	QPSK	1	49	1	0	23.94
			QPSK	50	0	100	0	22.04
			16QAM	1	49	1	0	22.91
			16QAM	50	0	100	0	20.99
			64QAM	1	49	1	0	22.02
			64QAM	50	0	100	0	19.81
			256QAM	1	49	1	0	18.90
			256QAM	50	0	100	0	19.01
15MHz/10MHz	2530.1	2542.1	QPSK	1	74	1	0	24.03
			QPSK	75	0	50	0	22.05
			16QAM	1	74	1	0	22.91
			16QAM	75	0	50	0	21.11
			64QAM	1	74	1	0	21.20
			64QAM	75	0	50	0	19.44
			256QAM	1	74	1	0	18.93
			256QAM	75	0	50	0	18.92
15MHz/15MHz	2527.5	2542.5	QPSK	1	74	1	0	24.04
			QPSK	75	0	75	0	22.06
			16QAM	1	74	1	0	22.87
			16QAM	75	0	75	0	21.11
			64QAM	1	74	1	0	21.48
			64QAM	75	0	75	0	19.69
			256QAM	1	74	1	0	18.97
			256QAM	75	0	75	0	19.09
15MHz/20MHz	2525.3	2542.4	QPSK	1	74	1	0	24.00
			QPSK	75	0	100	0	22.04
			16QAM	1	74	1	0	22.89
			16QAM	75	0	100	0	21.10
			64QAM	1	74	1	0	21.81
			64QAM	75	0	100	0	19.78
			256QAM	1	74	1	0	18.93
			256QAM	75	0	100	0	19.01
20MHz/10MHz	2530.1	2544.5	QPSK	1	99	1	0	24.03
			QPSK	100	0	50	0	22.06
			16QAM	1	99	1	0	22.96
			16QAM	100	0	50	0	21.05
			64QAM	1	99	1	0	20.84
			64QAM	100	0	50	0	19.95
			256QAM	1	99	1	0	18.90

			256QAM	100	0	50	0	18.67
20MHz/15MHz	2527.6	2544.7	QPSK	1	99	1	0	23.99
			QPSK	100	0	75	0	22.08
			16QAM	1	99	1	0	23.01
			16QAM	100	0	75	0	21.07
			64QAM	1	99	1	0	20.99
			64QAM	100	0	75	0	20.23
			256QAM	1	99	1	0	18.92
			256QAM	100	0	75	0	19.08
20MHz/20MHz	2525.1	2544.9	QPSK	1	99	1	0	24.00
			QPSK	100	0	100	0	22.01
			16QAM	1	99	1	0	23.05
			16QAM	100	0	100	0	21.08
			64QAM	1	99	1	0	21.18
			64QAM	100	0	100	0	20.00
			256QAM	1	99	1	0	18.90
			256QAM	100	0	100	0	19.07

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	24.35
			QPSK	25	0	100	0	22.38
			16QAM	1	24	1	0	23.36
			16QAM	25	0	100	0	21.35
			64QAM	1	24	1	0	22.32
			64QAM	25	0	100	0	21.36
			256QAM	1	24	1	0	19.35
			256QAM	25	0	100	0	19.37
10MHz/15MHz	2585.9	2597.9	QPSK	1	49	1	0	24.27
			QPSK	50	0	75	0	22.38
			16QAM	1	49	1	0	23.28
			16QAM	50	0	75	0	21.38
			64QAM	1	49	1	0	22.29
			64QAM	50	0	75	0	21.37
			256QAM	1	49	1	0	19.25
			256QAM	50	0	75	0	19.39
10MHz/20MHz	2583.6	2598	QPSK	1	49	1	0	24.32
			QPSK	50	0	100	0	22.38
			16QAM	1	49	1	0	23.29
			16QAM	50	0	100	0	21.38
			64QAM	1	49	1	0	22.41
			64QAM	50	0	100	0	21.38
			256QAM	1	49	1	0	19.31
			256QAM	50	0	100	0	19.41
15MHz/10MHz	2588.1	2600.1	QPSK	1	74	1	0	24.31
			QPSK	75	0	50	0	22.40
			16QAM	1	74	1	0	23.21
			16QAM	75	0	50	0	21.38
			64QAM	1	74	1	0	22.29
			64QAM	75	0	50	0	21.39
			256QAM	1	74	1	0	19.31
			256QAM	75	0	50	0	19.42
15MHz/15MHz	2585.5	2600.5	QPSK	1	74	1	0	24.30
			QPSK	75	0	75	0	22.39
			16QAM	1	74	1	0	23.24
			16QAM	75	0	75	0	21.38
			64QAM	1	74	1	0	22.40
			64QAM	75	0	75	0	21.38
			256QAM	1	74	1	0	19.24

			256QAM	75	0	75	0	19.38
15MHz/20MHz	2583.3	2600.4	QPSK	1	74	1	0	24.28
			QPSK	75	0	100	0	22.39
			16QAM	1	74	1	0	23.26
			16QAM	75	0	100	0	21.40
			64QAM	1	74	1	0	22.41
			64QAM	75	0	100	0	21.38
			256QAM	1	74	1	0	19.24
			256QAM	75	0	100	0	19.38
20MHz/5MHz	2590.5	2602.2	QPSK	1	99	1	0	24.35
			QPSK	100	0	25	0	22.41
			16QAM	1	99	1	0	23.33
			16QAM	100	0	25	0	21.37
			64QAM	1	99	1	0	22.34
			64QAM	100	0	25	0	21.38
			256QAM	1	99	1	0	19.33
			256QAM	100	0	25	0	19.41
20MHz/10MHz	2588.1	2602.5	QPSK	1	99	1	0	24.31
			QPSK	100	0	50	0	22.42
			16QAM	1	99	1	0	23.33
			16QAM	100	0	50	0	21.40
			64QAM	1	99	1	0	22.33
			64QAM	100	0	50	0	21.41
			256QAM	1	99	1	0	19.37
			256QAM	100	0	50	0	19.43
20MHz/15MHz	2585.6	2602.7	QPSK	1	99	1	0	24.30
			QPSK	100	0	75	0	22.41
			16QAM	1	99	1	0	23.33
			16QAM	100	0	75	0	21.42
			64QAM	1	99	1	0	22.31
			64QAM	100	0	75	0	21.42
			256QAM	1	99	1	0	19.30
			256QAM	100	0	75	0	19.43
20MHz/20MHz	2583.1	2602.9	QPSK	1	99	1	0	24.34
			QPSK	100	0	100	0	22.43
			16QAM	1	99	1	0	23.29
			16QAM	100	0	100	0	21.41
			64QAM	1	99	1	0	22.25
			64QAM	100	0	100	0	21.41
			256QAM	1	99	1	0	19.41
			256QAM	100	0	100	0	19.46

LTE CA band 48C

Bandwidth	Frequency(MHz)	Frequency(MHz)	Modulation	PCC RB		SCC RB		Conducted Power(dBm)
				Size	Offset	Size	Offset	
5MHz/20MHz	3615.8	3627.5	QPSK	1	24	1	0	23.81
			QPSK	25	0	100	0	21.85
			16QAM	1	24	1	0	22.75
			16QAM	25	0	100	0	20.85
			64QAM	1	24	1	0	21.50
			64QAM	25	0	100	0	20.84
			256QAM	1	24	1	0	18.72
			256QAM	25	0	100	0	18.85
10MHz/20MHz	3615.6	3630	QPSK	1	49	1	0	23.72
			QPSK	50	0	100	0	21.88
			16QAM	1	49	1	0	22.66
			16QAM	50	0	100	0	20.88
			64QAM	1	49	1	0	21.55
			64QAM	50	0	100	0	20.85
			256QAM	1	49	1	0	18.65
			256QAM	50	0	100	0	18.87
15MHz/20MHz	3615.3	3632.4	QPSK	1	74	1	0	23.75
			QPSK	75	0	100	0	21.89
			16QAM	1	74	1	0	22.67
			16QAM	75	0	100	0	20.88
			64QAM	1	74	1	0	21.47
			64QAM	75	0	100	0	20.86
			256QAM	1	74	1	0	18.64
			256QAM	75	0	100	0	18.86
20MHz/5MHz	3622.5	3634.2	QPSK	1	99	1	0	23.72
			QPSK	100	0	25	0	21.88
			16QAM	1	99	1	0	22.74
			16QAM	100	0	25	0	20.87
			64QAM	1	99	1	0	21.53
			64QAM	100	0	25	0	20.85
			256QAM	1	99	1	0	18.85
			256QAM	100	0	25	0	18.84
20MHz/10MHz	3620.1	3634.5	QPSK	1	99	1	0	23.77
			QPSK	100	0	50	0	21.87
			16QAM	1	99	1	0	22.73
			16QAM	100	0	50	0	20.90
			64QAM	1	99	1	0	21.45
			64QAM	100	0	50	0	20.90
			256QAM	1	99	1	0	18.70

			256QAM	100	0	50	0	18.87
20MHz/15MHz	3617.6	3634.7	QPSK	1	99	1	0	23.76
			QPSK	100	0	75	0	21.88
			16QAM	1	99	1	0	22.61
			16QAM	100	0	75	0	20.88
			64QAM	1	99	1	0	21.48
			64QAM	100	0	75	0	20.84
			256QAM	1	99	1	0	18.64
			256QAM	100	0	75	0	18.88
20MHz/20MHz	3615.1	3634.9	QPSK	1	99	1	0	23.74
			QPSK	100	0	100	0	21.89
			16QAM	1	99	1	0	22.62
			16QAM	100	0	100	0	20.88
			64QAM	1	99	1	0	21.49
			64QAM	100	0	100	0	20.88
			256QAM	1	99	1	0	18.70
			256QAM	100	0	100	0	18.86

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	24.08
			QPSK	25	0	100	0	22.13
			16QAM	1	24	1	0	23.13
			16QAM	25	0	100	0	21.15
			64QAM	1	24	1	0	22.13
			64QAM	25	0	100	0	21.13
			256QAM	1	24	1	0	19.10
			256QAM	25	0	100	0	19.11
10MHz/15MHz	1747.9	1759.9	QPSK	1	49	1	0	24.07
			QPSK	50	0	75	0	22.14
			16QAM	1	49	1	0	23.03
			16QAM	50	0	75	0	21.13
			64QAM	1	49	1	0	22.08
			64QAM	50	0	75	0	21.12
			256QAM	1	49	1	0	18.96
			256QAM	50	0	75	0	19.12
10MHz/20MHz	1745.6	1760	QPSK	1	49	1	0	24.09
			QPSK	50	0	100	0	22.14
			16QAM	1	49	1	0	22.99
			16QAM	50	0	100	0	21.13
			64QAM	1	49	1	0	22.13
			64QAM	50	0	100	0	21.14
			256QAM	1	49	1	0	19.01
			256QAM	50	0	100	0	19.12
15MHz/10MHz	1750.1	1762.1	QPSK	1	74	1	0	24.06
			QPSK	75	0	50	0	22.13
			16QAM	1	74	1	0	22.95
			16QAM	75	0	50	0	21.13
			64QAM	1	74	1	0	22.08
			64QAM	75	0	50	0	21.14
			256QAM	1	74	1	0	18.98
			256QAM	75	0	50	0	19.12
15MHz/15MHz	1747.5	1762.5	QPSK	1	74	1	0	24.03
			QPSK	75	0	75	0	22.17
			16QAM	1	74	1	0	22.96
			16QAM	75	0	75	0	21.17
			64QAM	1	74	1	0	22.03
			64QAM	75	0	75	0	21.19
			256QAM	1	74	1	0	19.03

			256QAM	75	0	75	0	19.15
15MHz/20MHz	1745.3	1762.4	QPSK	1	74	1	0	24.04
			QPSK	75	0	100	0	22.16
			16QAM	1	74	1	0	23.02
			16QAM	75	0	100	0	21.17
			64QAM	1	74	1	0	22.11
			64QAM	75	0	100	0	21.18
			256QAM	1	74	1	0	19.00
			256QAM	75	0	100	0	19.15
20MHz/5MHz	1752.5	1764.2	QPSK	1	99	1	0	24.08
			QPSK	100	0	25	0	22.18
			16QAM	1	99	1	0	22.91
			16QAM	100	0	25	0	21.17
			64QAM	1	99	1	0	22.12
			64QAM	100	0	25	0	21.19
			256QAM	1	99	1	0	19.05
			256QAM	100	0	25	0	19.17
20MHz/10MHz	1750.1	1764.5	QPSK	1	99	1	0	24.06
			QPSK	100	0	50	0	22.18
			16QAM	1	99	1	0	23.07
			16QAM	100	0	50	0	21.17
			64QAM	1	99	1	0	22.06
			64QAM	100	0	50	0	21.17
			256QAM	1	99	1	0	19.05
			256QAM	100	0	50	0	19.19
20MHz/15MHz	1747.6	1764.7	QPSK	1	99	1	0	24.08
			QPSK	100	0	75	0	22.18
			16QAM	1	99	1	0	22.97
			16QAM	100	0	75	0	21.17
			64QAM	1	99	1	0	22.15
			64QAM	100	0	75	0	21.18
			256QAM	1	99	1	0	18.97
			256QAM	100	0	75	0	19.16
20MHz/20MHz	1745.1	1764.9	QPSK	1	99	1	0	24.07
			QPSK	100	0	100	0	22.20
			16QAM	1	99	1	0	22.97
			16QAM	100	0	100	0	21.17
			64QAM	1	99	1	0	22.04
			64QAM	100	0	100	0	21.20
			256QAM	1	99	1	0	19.01
			256QAM	100	0	100	0	19.18

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 38/41: 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 2/25: Part 24.232(c) specifies "Mobile and portable stations are limited to 2 watts EIRP".

LTE Band 26(814MHz~824MHz): Part 90.635(b) specifies "The maximum output power of the transmitter for mobile stations is 100 watts".

FDD Band 5/26(824MHz~849MHz): Part 22.913(a) specifies "The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 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 4/66: Part 27.50(d)(4) specifies "Fixed, mobile, and portable(handheld) stations operating in the 1710–1755 MHz band and mobile and portable stations operating in the 1695–1710 MHz and 1755–1780 MHz bands are limited to 1 watt EIRP".

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:

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

where;

- $\mathbf{ERP\ or\ EIRP}$ = effective radiated power or equivalent isotropically radiated power(expressed in the same units as P_T.
- $\mathbf{P_T}$ = transmitter output power, in this report the unit express as dBm;
- $\mathbf{G_T}$ = gain of the transmitting antenna, in dBd(ERP) or dBi(EIRP);
- $\mathbf{L_C}$ = 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 on the maximum antenna gain relationship by applying the following equation:

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

Note: The worst cases are selected according to the conducted output power , and all antenna ports met the requirement of radiated output power after detailed examination. 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: ≤33dBm(2W)

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				EIRP(dBm)(Gt-Lc =0)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	2567.5	24.59	23.82	22.63	19.67	24.59	23.82	22.63	19.67
		2535.0	24.71	23.87	22.74	19.81	24.71	23.87	22.74	19.81
		2502.5	24.78	23.81	22.94	19.88	24.78	23.81	22.94	19.88
	1 RB low	2567.5	24.58	23.75	22.95	19.64	24.58	23.75	22.95	19.64
		2535.0	24.66	23.92	22.98	19.85	24.66	23.92	22.98	19.85
		2502.5	24.72	23.88	22.94	19.77	24.72	23.88	22.94	19.77
	50% RB mid	2567.5	23.59	22.74	21.62	19.61	23.59	22.74	21.62	19.61
		2535.0	23.71	22.66	21.71	19.78	23.71	22.66	21.71	19.78
		2502.5	23.74	22.84	21.71	19.77	23.74	22.84	21.71	19.77
	100% RB	2567.5	23.58	22.63	21.61	19.60	23.58	22.63	21.61	19.60
		2535.0	23.68	22.71	21.72	19.75	23.68	22.71	21.72	19.75
		2502.5	23.76	22.76	21.77	19.76	23.76	22.76	21.77	19.76
10MHz	1 RB high	2565.0	24.57	23.64	22.82	19.72	24.57	23.64	22.82	19.72
		2535.0	24.70	23.89	22.83	19.84	24.70	23.89	22.83	19.84
		2505.0	24.73	23.94	22.91	19.89	24.73	23.94	22.91	19.89
	1 RB low	2565.0	24.57	23.69	22.83	19.72	24.57	23.69	22.83	19.72
		2535.0	24.65	23.79	22.66	19.77	24.65	23.79	22.66	19.77
		2505.0	24.76	23.84	22.87	19.86	24.76	23.84	22.87	19.86
	50% RB mid	2565.0	23.62	22.66	21.64	19.66	23.62	22.66	21.64	19.66
		2535.0	23.73	22.79	21.76	19.78	23.73	22.79	21.76	19.78
		2505.0	23.80	22.82	21.77	19.75	23.80	22.82	21.77	19.75
	100% RB	2565.0	23.63	22.65	21.63	19.63	23.63	22.65	21.63	19.63
		2535.0	23.74	22.72	21.73	19.72	23.74	22.72	21.73	19.72
		2505.0	23.79	22.79	21.80	19.77	23.79	22.79	21.80	19.77
15MHz	1 RB high	2562.5	24.37	23.63	22.58	19.65	24.37	23.63	22.58	19.65
		2535.0	24.53	23.56	22.84	19.77	24.53	23.56	22.84	19.77
		2507.5	24.47	23.65	22.70	19.73	24.47	23.65	22.70	19.73
	1 RB low	2562.5	24.36	23.62	22.79	19.64	24.36	23.62	22.79	19.64
		2535.0	24.42	23.52	23.06	19.45	24.42	23.52	23.06	19.45
		2507.5	24.49	23.59	22.70	19.62	24.49	23.59	22.70	19.62
	50% RB mid	2562.5	23.50	22.54	21.50	19.51	23.50	22.54	21.50	19.51
		2535.0	23.58	22.61	21.61	19.60	23.58	22.61	21.61	19.60
		2507.5	23.63	22.65	21.62	19.65	23.63	22.65	21.62	19.65
	100% RB	2562.5	23.50	22.52	21.53	19.51	23.50	22.52	21.53	19.51
		2535.0	23.47	22.54	21.54	19.49	23.47	22.54	21.54	19.49
		2507.5	23.61	22.66	21.63	19.64	23.61	22.66	21.63	19.64
20MHz	1 RB	2560.0	24.42	23.59	22.60	19.78	24.42	23.59	22.60	19.78

	high	2535.0	24.55	23.71	22.75	19.89	24.55	23.71	22.75	19.89
		2510.0	24.51	23.72	22.65	19.74	24.51	23.72	22.65	19.74
	1 RB low	2560.0	24.41	23.77	22.31	19.80	24.41	23.77	22.31	19.80
		2535.0	24.39	23.55	22.46	19.70	24.39	23.55	22.46	19.70
		2510.0	24.46	23.66	22.82	19.64	24.46	23.66	22.82	19.64
	50% RB mid	2560.0	23.51	22.56	21.53	19.54	23.51	22.56	21.53	19.54
		2535.0	23.63	22.62	21.60	19.64	23.63	22.62	21.60	19.64
		2510.0	23.65	22.66	21.62	19.66	23.65	22.66	21.62	19.66
	100% RB	2560.0	23.51	22.51	21.53	19.51	23.51	22.51	21.53	19.51
		2535.0	23.54	22.55	21.50	19.53	23.54	22.55	21.50	19.53
		2510.0	23.64	22.64	21.63	19.62	23.64	22.64	21.63	19.62

LTE Band 12-ERP

Limits: ≤34.77dBm(3W)

Bandwidth	RB size/offset	Frequency	Conducted Power(dBm)				ERP(dBm)(Gt-Lc =-6.5)			
		(MHz)	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	715.3	25.09	24.38	23.31	20.36	16.44	15.73	14.66	14.66
		707.5	24.90	24.42	23.34	20.38	16.25	15.77	14.69	14.69
		699.7	24.92	24.27	23.26	20.31	16.27	15.62	14.61	14.61
	1 RB low	715.3	24.96	24.45	23.02	20.10	16.31	15.80	14.37	14.37
		707.5	24.97	24.40	23.49	20.51	16.32	15.75	14.84	14.84
		699.7	25.08	24.46	23.30	20.35	16.43	15.81	14.65	14.65
	50% RB mid	715.3	25.04	24.24	23.23	20.29	16.39	15.59	14.58	14.58
		707.5	24.89	24.14	23.05	20.13	16.24	15.49	14.40	14.40
		699.7	25.06	24.26	23.19	20.25	16.41	15.61	14.54	14.54
	100% RB	715.3	23.99	23.01	22.14	20.07	15.34	14.36	13.49	13.49
		707.5	23.90	23.05	22.05	19.99	15.25	14.40	13.40	13.40
		699.7	24.00	23.10	22.17	20.10	15.35	14.45	13.52	13.52
3MHz	1 RB high	714.5	24.87	24.39	23.33	20.37	16.22	15.74	14.68	14.68
		707.5	24.95	24.22	23.16	20.23	16.30	15.57	14.51	14.51
		700.5	25.06	24.43	23.46	20.49	16.41	15.78	14.81	14.81
	1 RB low	714.5	25.02	24.42	23.16	20.23	16.37	15.77	14.51	14.51
		707.5	24.86	24.32	23.25	20.31	16.21	15.67	14.60	14.60
		700.5	24.87	24.29	23.17	20.24	16.22	15.64	14.52	14.52
	50% RB mid	714.5	24.09	23.16	22.16	20.09	15.44	14.51	13.51	13.51
		707.5	24.07	23.17	22.12	20.05	15.42	14.52	13.47	13.47
		700.5	24.13	23.17	22.14	20.07	15.48	14.52	13.49	13.49
	100% RB	714.5	23.99	23.01	22.19	20.11	15.34	14.36	13.54	13.54
		707.5	23.98	22.98	22.11	20.04	15.33	14.33	13.46	13.46
		700.5	24.07	23.11	22.26	20.18	15.42	14.46	13.61	13.61
5MHz	1 RB high	713.5	24.95	24.26	23.44	20.47	16.30	15.61	14.79	14.79
		707.5	24.92	24.35	23.18	20.24	16.27	15.70	14.53	14.53
		701.5	24.99	24.37	23.45	20.48	16.34	15.72	14.80	14.80
	1 RB low	713.5	25.06	24.41	23.33	20.37	16.41	15.76	14.68	14.68
		707.5	25.03	24.23	23.45	20.48	16.38	15.58	14.80	14.80
		701.5	25.03	24.33	23.25	20.31	16.38	15.68	14.60	14.60
	50% RB mid	713.5	24.08	23.13	22.09	20.02	15.43	14.48	13.44	13.44
		707.5	23.96	23.05	22.16	20.09	15.31	14.40	13.51	13.51
		701.5	24.14	23.20	22.26	20.18	15.49	14.55	13.61	13.61
	100% RB	713.5	24.02	23.13	22.09	20.02	15.37	14.48	13.44	13.44
		707.5	24.08	23.01	22.07	20.03	15.43	14.36	13.42	13.42
		701.5	24.11	23.10	22.07	20.00	15.46	14.45	13.42	13.42
10MHz	1 RB high	711.0	24.93	24.28	23.52	20.54	16.28	15.63	14.87	14.87
		707.5	24.97	24.38	23.20	20.26	16.32	15.73	14.55	14.55

		704.0	24.97	24.39	23.37	20.41	16.32	15.74	14.72	14.72
	1 RB low	711.0	25.04	24.23	23.23	20.29	16.39	15.58	14.58	14.58
		707.5	25.05	24.48	23.40	20.44	16.40	15.83	14.75	14.75
		704.0	24.97	24.55	23.43	20.46	16.32	15.90	14.78	14.78
	50% RB mid	711.0	24.08	23.03	22.24	20.16	15.43	14.38	13.59	13.59
		707.5	23.94	22.98	22.12	20.05	15.29	14.33	13.47	13.47
		704.0	24.13	23.06	22.23	20.15	15.48	14.41	13.58	13.58
	100% RB	711.0	24.12	23.13	22.11	20.04	15.47	14.48	13.46	13.46
		707.5	23.93	23.05	22.10	20.03	15.28	14.40	13.45	13.45
		704.0	24.04	23.10	22.13	20.06	15.39	14.45	13.48	13.48

LTE Band 13-ERP

Limits: ≤34.77dBm(3W)

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				ERP(dBm)(Gt-Lc =-7.1)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	784.5	23.51	22.54	21.67	18.49	14.26	13.29	12.42	12.42
		782.0	23.41	22.55	21.58	18.42	14.16	13.30	12.33	12.33
		779.5	23.31	22.59	21.58	18.42	14.06	13.34	12.33	12.33
	1 RB low	784.5	23.62	22.61	21.60	18.43	14.37	13.36	12.35	12.35
		782.0	23.53	22.65	21.69	18.51	14.28	13.40	12.44	12.44
		779.5	23.56	22.59	21.58	18.53	14.31	13.34	12.33	12.33
	50% RB mid	784.5	22.55	21.62	20.58	18.62	13.30	12.37	11.33	11.33
		782.0	22.57	21.63	20.62	18.66	13.32	12.38	11.37	11.37
		779.5	22.69	21.53	20.69	18.59	13.44	12.28	11.44	11.44
	100% RB	784.5	22.51	21.52	20.50	18.55	13.26	12.27	11.25	11.25
		782.0	22.52	21.57	20.56	18.60	13.27	12.32	11.31	11.31
		779.5	22.62	21.59	20.62	18.66	13.37	12.34	11.37	11.37
10MHz	1 RB high	782.0	23.45	22.45	21.72	18.54	14.20	13.20	12.47	12.47
	1 RB low	782.0	23.63	22.64	21.70	18.52	14.38	13.39	12.45	12.45
	50% RB mid	782.0	22.53	21.53	20.59	18.63	13.28	12.28	11.34	11.34
	100% RB	782.0	22.49	21.56	20.44	18.49	13.24	12.31	11.19	11.19

LTE Band 25-EIRP

Limits: ≤33dBm(2W)

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				EIRP(dBm)(Gt-Lc =-1)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	1914.3	24.63	23.74	22.82	19.76	23.63	22.74	21.82	18.76
		1882.5	24.63	23.79	22.81	19.77	23.63	22.79	21.81	18.77
		1850.7	24.78	23.81	22.73	19.83	23.78	22.81	21.73	18.83
	1 RB low	1914.3	24.62	23.77	22.37	19.72	23.62	22.77	21.37	18.72
		1882.5	24.62	23.73	22.67	19.69	23.62	22.73	21.67	18.69
		1850.7	24.64	23.78	22.70	19.70	23.64	22.78	21.70	18.70
	50% RB mid	1914.3	24.62	23.82	22.80	19.74	23.62	22.82	21.80	18.74
		1882.5	24.58	23.83	22.74	19.66	23.58	22.83	21.74	18.66
		1850.7	24.66	23.85	22.76	19.76	23.66	22.85	21.76	18.76
	100% RB	1914.3	23.60	22.74	21.58	19.71	22.60	21.74	20.58	18.71
		1882.5	23.62	22.74	21.66	19.57	22.62	21.74	20.66	18.57
		1850.7	23.67	22.76	21.69	19.70	22.67	21.76	20.69	18.70
3MHz	1 RB high	1913.5	24.62	23.80	22.74	19.70	23.62	22.80	21.74	18.70
		1882.5	24.61	23.79	22.86	19.78	23.61	22.79	21.86	18.78
		1851.5	24.66	23.77	22.89	19.73	23.66	22.77	21.89	18.73
	1 RB low	1913.5	24.64	23.78	22.41	19.74	23.64	22.78	21.41	18.74
		1882.5	24.60	23.81	22.80	19.74	23.60	22.81	21.80	18.74
		1851.5	24.67	23.86	22.95	19.82	23.67	22.86	21.95	18.82
	50% RB mid	1913.5	23.67	22.64	21.71	19.65	22.67	21.64	20.71	18.65
		1882.5	23.63	22.75	21.70	19.74	22.63	21.75	20.70	18.74
		1851.5	23.70	22.82	21.76	19.79	22.70	21.82	20.76	18.79
	100% RB	1913.5	23.59	22.61	21.63	19.60	22.59	21.61	20.63	18.60
		1882.5	23.63	22.69	21.68	19.68	22.63	21.69	20.68	18.68
		1851.5	23.68	22.72	21.75	19.71	22.68	21.72	20.75	18.71
5MHz	1 RB high	1912.5	24.65	23.75	22.84	19.79	23.65	22.75	21.84	18.79
		1882.5	24.65	23.84	22.60	19.77	23.65	22.84	21.60	18.77
		1852.5	24.70	23.85	22.84	19.82	23.70	22.85	21.84	18.82
	1 RB low	1912.5	24.65	23.82	23.02	19.67	23.65	22.82	22.02	18.67
		1882.5	24.60	23.77	22.73	19.77	23.60	22.77	21.73	18.77
		1852.5	24.66	23.76	23.00	19.78	23.66	22.76	22.00	18.78
	50% RB mid	1912.5	23.66	22.77	21.70	19.75	22.66	21.77	20.70	18.75
		1882.5	23.64	22.72	21.85	19.73	22.64	21.72	20.85	18.73
		1852.5	23.68	22.72	21.76	19.78	22.68	21.72	20.76	18.78
	100% RB	1912.5	23.67	22.69	21.69	19.69	22.67	21.69	20.69	18.69
		1882.5	23.64	22.68	21.71	19.67	22.64	21.68	20.71	18.67
		1852.5	23.70	22.69	21.73	19.77	22.70	21.69	20.73	18.77
10MHz	1 RB high	1910.0	24.62	23.67	22.76	19.80	23.62	22.67	21.76	18.80
		1882.5	24.63	23.81	22.84	19.77	23.63	22.81	21.84	18.77

		1855.0	24.61	23.81	22.80	19.76	23.61	22.81	21.80	18.76
	1 RB low	1910.0	24.65	23.81	22.50	19.69	23.65	22.81	21.50	18.69
		1882.5	24.62	23.78	22.78	19.74	23.62	22.78	21.78	18.74
		1855.0	24.65	23.71	22.88	19.72	23.65	22.71	21.88	18.72
	50% RB mid	1910.0	23.68	22.60	21.65	19.69	22.68	21.60	20.65	18.69
		1882.5	23.65	22.73	21.72	19.74	22.65	21.73	20.72	18.74
		1855.0	23.71	22.71	21.75	19.80	22.71	21.71	20.75	18.80
	100% RB	1910.0	23.60	22.62	21.60	19.63	22.60	21.62	20.60	18.63
		1882.5	23.66	22.65	21.69	19.72	22.66	21.65	20.69	18.72
		1855.0	23.71	22.69	21.71	19.78	22.71	21.69	20.71	18.78
15MHz	1 RB high	1907.5	24.46	23.55	22.76	19.67	23.46	22.55	21.76	18.67
		1882.5	24.35	23.48	22.64	19.65	23.35	22.48	21.64	18.65
		1857.5	24.51	23.67	22.80	19.67	23.51	22.67	21.80	18.67
	1 RB low	1907.5	24.48	23.60	22.91	19.46	23.48	22.60	21.91	18.46
		1882.5	24.41	23.52	22.78	19.45	23.41	22.52	21.78	18.45
		1857.5	24.53	23.60	22.67	19.61	23.53	22.60	21.67	18.61
	50% RB mid	1907.5	23.56	22.50	21.55	19.49	22.56	21.50	20.55	18.49
		1882.5	23.52	22.55	21.55	19.59	22.52	21.55	20.55	18.59
		1857.5	23.56	22.58	21.57	19.63	22.56	21.58	20.57	18.63
	100% RB	1907.5	23.52	22.59	21.55	19.63	22.52	21.59	20.55	18.63
		1882.5	23.51	22.54	21.57	19.60	22.51	21.54	20.57	18.60
		1857.5	23.54	22.57	21.61	19.64	22.54	21.57	20.61	18.64
20MHz	1 RB high	1905.0	24.44	23.59	22.68	19.94	23.44	22.59	21.68	18.94
		1882.5	24.42	23.62	22.70	19.72	23.42	22.62	21.70	18.72
		1860.0	24.40	23.65	22.55	19.84	23.40	22.65	21.55	18.84
	1 RB low	1905.0	24.50	23.77	22.55	19.80	23.50	22.77	21.55	18.80
		1882.5	24.38	23.64	22.58	19.75	23.38	22.64	21.58	18.75
		1860.0	24.43	23.69	22.49	19.79	23.43	22.69	21.49	18.79
	50% RB mid	1905.0	23.54	22.51	21.55	19.55	22.54	21.51	20.55	18.55
		1882.5	23.49	22.57	21.49	19.59	22.49	21.57	20.49	18.59
		1860.0	23.55	22.63	21.59	19.66	22.55	21.63	20.59	18.66
	100% RB	1905.0	23.54	22.52	21.50	19.54	22.54	21.52	20.50	18.54
		1882.5	23.54	22.54	21.54	19.58	22.54	21.54	20.54	18.58
		1860.0	23.58	22.59	21.59	19.63	22.58	21.59	20.59	18.63

LTE Band 26(814MHz~824MHz)-ERP

Limits: ≤50dBm(100W)

Bandwidth	RB size/offset	Frequency	Conducted Power(dBm)				ERP(dBm)(Gt-Lc =-7.1)			
		(MHz)	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	823.3	25.09	24.22	23.17	20.24	15.84	14.97	13.92	13.92
		819.0	25.10	24.24	23.23	20.07	15.85	14.99	13.98	13.98
		814.7	25.07	24.25	22.99	20.07	15.82	15.00	13.74	13.74
	1 RB low	823.3	25.00	24.16	23.47	20.06	15.75	14.91	14.22	14.22
		819.0	25.01	24.14	23.01	20.07	15.76	14.89	13.76	13.76
		814.7	25.06	24.22	23.39	20.16	15.81	14.97	14.14	14.14
	50% RB mid	823.3	25.09	24.28	23.26	20.21	15.84	15.03	14.01	14.01
		819.0	25.06	24.27	23.19	20.23	15.81	15.02	13.94	13.94
		814.7	25.04	24.28	23.17	20.16	15.79	15.03	13.92	13.92
	100% RB	823.3	24.08	23.16	22.05	20.06	14.83	13.91	12.80	12.80
		819.0	24.07	23.14	22.14	20.15	14.82	13.89	12.89	12.89
		814.7	24.04	23.12	22.03	20.03	14.79	13.87	12.78	12.78
3MHz	1 RB high	822.5	25.03	24.17	23.26	20.17	15.78	14.92	14.01	14.01
		819.0	24.99	24.12	23.23	20.11	15.74	14.87	13.98	13.98
		815.5	25.03	24.18	23.26	20.18	15.78	14.93	14.01	14.01
	1 RB low	822.5	25.03	24.19	22.91	20.11	15.78	14.94	13.66	13.66
		819.0	24.99	24.12	23.24	20.04	15.74	14.87	13.99	13.99
		815.5	25.03	24.24	23.26	20.10	15.78	14.99	14.01	14.01
	50% RB mid	822.5	24.08	23.17	22.13	20.13	14.83	13.92	12.88	12.88
		819.0	24.08	23.18	22.12	20.13	14.83	13.93	12.87	12.87
		815.5	24.05	23.13	22.13	20.13	14.80	13.88	12.88	12.88
	100% RB	822.5	24.09	23.09	22.15	20.10	14.84	13.84	12.90	12.90
		819.0	24.05	23.07	22.11	20.07	14.80	13.82	12.86	12.86
		815.5	24.06	23.11	22.11	20.08	14.81	13.86	12.86	12.86
5MHz	1 RB high	821.5	25.13	24.32	23.10	20.28	15.88	15.07	13.85	13.85
		819.0	25.10	24.26	23.20	20.24	15.85	15.01	13.95	13.95
		816.5	25.16	24.34	23.14	20.19	15.91	15.09	13.89	13.89
	1 RB low	821.5	25.12	24.29	23.23	20.13	15.87	15.04	13.98	13.98
		819.0	25.11	24.24	23.19	20.18	15.86	14.99	13.94	13.94
		816.5	25.10	24.23	23.09	20.12	15.85	14.98	13.84	13.84
	50% RB mid	821.5	24.10	23.16	22.25	20.17	14.85	13.91	13.00	13.00
		819.0	24.14	23.15	22.13	20.17	14.89	13.90	12.88	12.88
		816.5	24.09	23.21	22.04	20.14	14.84	13.96	12.79	12.79
	100% RB	821.5	24.12	23.12	22.18	20.12	14.87	13.87	12.93	12.93
		819.0	24.11	23.10	22.16	20.11	14.86	13.85	12.91	12.91
		816.5	24.10	23.10	22.12	20.10	14.85	13.85	12.87	12.87
10MHz	1 RB high	819.0	25.06	24.31	23.23	20.20	15.81	15.06	13.98	13.98
	1 RB low	819.0	25.14	24.24	22.86	19.45	15.89	14.99	13.61	13.61

	50% RB mid	819.0	24.11	23.19	22.17	20.14	14.86	13.94	12.92	12.92
	100% RB	819.0	24.11	23.03	22.15	20.15	14.86	13.78	12.90	12.90

LTE Band 26(824MHz-849MHz）-ERP

Limits: ≤38.45dBm(7W)

Bandwidth	RB size/offset	Frequency	Conducted Power(dBm)				ERP(dBm)(Gt-Lc =-7.1)			
		(MHz)	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	848.3	25.02	24.11	23.35	20.07	15.77	14.86	14.10	14.10
		836.5	25.09	24.13	23.40	20.22	15.84	14.88	14.15	14.15
		824.7	25.13	24.18	23.32	20.09	15.88	14.93	14.07	14.07
	1 RB low	848.3	25.02	24.09	23.16	20.12	15.77	14.84	13.91	13.91
		836.5	25.02	24.21	23.21	20.28	15.77	14.96	13.96	13.96
		824.7	24.99	24.18	23.42	20.01	15.74	14.93	14.17	14.17
	50% RB mid	848.3	25.02	24.26	23.14	20.11	15.77	15.01	13.89	13.89
		836.5	25.13	24.20	23.15	20.06	15.88	14.95	13.90	13.90
		824.7	25.10	24.30	23.25	20.13	15.85	15.05	14.00	14.00
	100% RB	848.3	24.01	23.12	22.20	20.07	14.76	13.87	12.95	12.95
		836.5	24.03	23.11	21.97	20.03	14.78	13.86	12.72	12.72
		824.7	24.10	23.15	22.12	20.12	14.85	13.90	12.87	12.87
3MHz	1 RB high	847.5	24.93	24.05	23.18	20.17	15.68	14.80	13.93	13.93
		836.5	24.99	24.18	23.38	20.15	15.74	14.93	14.13	14.13
		825.5	25.02	24.23	23.36	20.18	15.77	14.98	14.11	14.11
	1 RB low	847.5	24.91	24.12	22.97	20.06	15.66	14.87	13.72	13.72
		836.5	25.03	24.17	23.38	20.09	15.78	14.92	14.13	14.13
		825.5	25.12	24.22	23.31	20.21	15.87	14.97	14.06	14.06
	50% RB mid	847.5	24.04	23.15	22.00	20.07	14.79	13.90	12.75	12.75
		836.5	24.10	23.13	22.14	20.13	14.85	13.88	12.89	12.89
		825.5	24.11	23.19	22.14	20.18	14.86	13.94	12.89	12.89
	100% RB	847.5	24.01	23.06	22.07	20.07	14.76	13.81	12.82	12.82
		836.5	24.05	23.08	22.04	20.02	14.80	13.83	12.79	12.79
		825.5	24.10	23.15	22.12	20.08	14.85	13.90	12.87	12.87
5MHz	1 RB high	846.5	25.04	24.27	23.17	20.32	15.79	15.02	13.92	13.92
		836.5	25.16	24.29	23.15	20.20	15.91	15.04	13.90	13.90
		826.5	25.15	24.34	23.29	20.25	15.90	15.09	14.04	14.04
	1 RB low	846.5	25.05	24.22	23.06	20.18	15.80	14.97	13.81	13.81
		836.5	25.15	24.34	23.27	20.21	15.90	15.09	14.02	14.02
		826.5	25.15	24.29	23.31	20.16	15.90	15.04	14.06	14.06
	50% RB mid	846.5	24.06	23.20	22.08	20.10	14.81	13.95	12.83	12.83
		836.5	24.14	23.10	22.16	20.13	14.89	13.85	12.91	12.91
		826.5	24.14	23.22	22.14	20.17	14.89	13.97	12.89	12.89
	100% RB	846.5	24.07	23.10	22.05	20.06	14.82	13.85	12.80	12.80
		836.5	24.07	23.08	22.09	20.09	14.82	13.83	12.84	12.84
		826.5	24.14	23.17	22.17	20.16	14.89	13.92	12.92	12.92
10MHz	1 RB high	844.0	25.04	24.20	23.36	20.18	15.79	14.95	14.11	14.11
		836.5	25.10	24.19	23.39	20.23	15.85	14.94	14.14	14.14

		829.0	25.13	24.29	23.31	20.30	15.88	15.04	14.06	14.06
	1 RB low	844.0	25.10	24.34	23.25	20.07	15.85	15.09	14.00	14.00
		836.5	25.13	24.23	23.16	20.25	15.88	14.98	13.91	13.91
		829.0	25.10	24.32	22.98	20.15	15.85	15.07	13.73	13.73
	50% RB mid	844.0	24.09	23.12	22.08	20.12	14.84	13.87	12.83	12.83
		836.5	24.17	23.08	22.19	20.18	14.92	13.83	12.94	12.94
		829.0	24.12	23.22	22.18	20.19	14.87	13.97	12.93	12.93
	100% RB	844.0	24.11	23.10	22.12	20.10	14.86	13.85	12.87	12.87
		836.5	24.07	23.07	22.08	20.08	14.82	13.82	12.83	12.83
		829.0	24.15	23.14	22.18	20.17	14.90	13.89	12.93	12.93
15MHz	1 RB high	841.5	24.77	23.88	22.97	20.02	15.52	14.63	13.72	13.72
		836.5	24.81	23.89	23.14	20.16	15.56	14.64	13.89	13.89
		831.5	24.84	24.00	23.09	20.10	15.59	14.75	13.84	13.84
	1 RB low	841.5	24.89	24.18	22.90	20.03	15.64	14.93	13.65	13.65
		836.5	24.97	23.97	23.23	19.99	15.72	14.72	13.98	13.98
		831.5	24.87	23.99	23.05	19.93	15.62	14.74	13.80	13.80
	50% RB mid	841.5	23.96	22.88	21.99	19.93	14.71	13.63	12.74	12.74
		836.5	23.98	22.93	21.98	19.94	14.73	13.68	12.73	12.73
		831.5	24.00	22.97	22.02	19.96	14.75	13.72	12.77	12.77
	100% RB	841.5	23.89	22.91	21.94	19.97	14.64	13.66	12.69	12.69
		836.5	23.91	22.91	21.93	19.97	14.66	13.66	12.68	12.68
		831.5	23.92	22.97	21.92	19.93	14.67	13.72	12.67	12.67

LTE Band30

Limits:≤24dBm/5MHz

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm/5MHz)				EIRP(dBm/5MHz) (GT – LC =0.30)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	2312.5	23.49	22.75	21.69	18.65	23.79	23.05	21.99	18.95
		2310	23.29	22.66	21.64	18.61	23.59	22.96	21.94	18.91
		2307.5	23.21	22.69	21.61	18.63	23.51	22.99	21.91	18.93
	1 RB low	2312.5	23.42	22.66	21.54	18.56	23.72	22.96	21.84	18.86
		2310	23.27	22.91	21.51	18.47	23.57	23.21	21.81	18.77
		2307.5	23.32	22.91	21.69	18.51	23.62	23.21	21.99	18.81
	100% RB	2312.5	21.71	20.79	19.74	17.73	22.01	21.09	20.04	18.03
		2310	21.62	20.54	19.59	17.71	21.92	20.84	19.89	18.01
		2307.5	21.62	20.65	19.66	17.66	21.92	20.95	19.96	17.96
10MHz	1 RB high	2310	23.43	22.47	21.77	18.71	23.73	22.77	22.07	19.01
	1 RB low	2310	23.37	22.86	21.89	18.59	23.67	23.16	22.19	18.89
	100% RB	2310	19.95	18.93	17.91	16.03	20.25	19.23	18.21	16.33

LTE Band 41-EIRP

Limits: ≤33dBm(2W)

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				EIRP(dBm)(Gt-Lc =-0.3)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	2687.5	26.40	25.59	24.84	21.69	26.10	25.29	24.54	21.39
		2593.0	26.43	25.66	24.67	21.56	26.13	25.36	24.37	21.26
		2498.5	26.44	25.50	24.57	21.63	26.14	25.20	24.27	21.33
	1 RB low	2687.5	26.59	25.76	24.48	21.68	26.29	25.46	24.18	21.38
		2593.0	26.36	25.61	24.91	21.48	26.06	25.31	24.61	21.18
		2498.5	26.36	25.51	24.53	21.50	26.06	25.21	24.23	21.20
	50% RB mid	2687.5	25.61	24.71	23.61	21.62	25.31	24.41	23.31	21.32
		2593.0	25.42	24.49	23.45	21.48	25.12	24.19	23.15	21.18
		2498.5	25.43	24.52	23.50	21.51	25.13	24.22	23.20	21.21
	100% RB	2687.5	25.59	24.62	23.61	21.59	25.29	24.32	23.31	21.29
		2593.0	25.42	24.42	23.45	21.48	25.12	24.12	23.15	21.18
		2498.5	24.44	23.44	23.44	21.45	24.14	23.14	23.14	21.15
10MHz	1 RB high	2685.0	26.25	25.50	24.64	21.72	25.95	25.20	24.34	21.42
		2593.0	26.40	25.55	24.57	21.45	26.10	25.25	24.27	21.15
		2501.0	26.36	25.59	24.52	21.48	26.06	25.29	24.22	21.18
	1 RB low	2685.0	26.51	25.74	24.98	21.66	26.21	25.44	24.68	21.36
		2593.0	26.34	25.46	24.55	21.46	26.04	25.16	24.25	21.16
		2501.0	26.35	25.59	24.56	21.49	26.05	25.29	24.26	21.19
	50% RB mid	2685.0	25.62	24.61	23.67	21.57	25.32	24.31	23.37	21.27
		2593.0	25.49	24.52	23.49	21.50	25.19	24.22	23.19	21.20
		2501.0	25.46	24.51	23.47	21.50	25.16	24.21	23.17	21.20
	100% RB	2685.0	25.57	24.55	23.55	21.57	25.27	24.25	23.25	21.27
		2593.0	25.45	24.48	23.44	21.49	25.15	24.18	23.14	21.19
		2501.0	25.46	24.46	23.48	21.47	25.16	24.16	23.18	21.17
15MHz	1 RB high	2682.5	26.37	25.53	24.75	21.53	26.07	25.23	24.45	21.23
		2593.0	26.29	25.34	24.51	21.67	25.99	25.04	24.21	21.37
		2503.5	26.15	25.35	24.48	21.37	25.85	25.05	24.18	21.07
	1 RB low	2682.5	26.44	25.61	24.75	21.66	26.14	25.31	24.45	21.36
		2593.0	26.21	25.43	24.56	21.39	25.91	25.13	24.26	21.09
		2503.5	26.11	25.30	24.46	21.39	25.81	25.00	24.16	21.09
	50% RB mid	2682.5	25.49	24.45	23.49	21.43	25.19	24.15	23.19	21.13
		2593.0	25.32	24.34	23.31	21.33	25.02	24.04	23.01	21.03
		2503.5	25.28	24.30	23.29	21.35	24.98	24.00	22.99	21.05
	100% RB	2682.5	25.37	24.42	23.42	21.44	25.07	24.12	23.12	21.14
		2593.0	25.29	24.32	23.32	21.31	24.99	24.02	23.02	21.01
		2503.5	25.28	24.30	23.30	21.32	24.98	24.00	23.00	21.02
20MHz	1 RB high	2680.0	26.34	25.57	24.77	21.68	26.04	25.27	24.47	21.38
		2593.0	26.33	25.60	24.46	21.57	26.03	25.30	24.16	21.27

		2506.0	26.23	25.51	24.45	21.53	25.93	25.21	24.15	21.23
	1 RB low	2680.0	26.45	25.74	24.69	21.71	26.15	25.44	24.39	21.41
		2593.0	26.31	25.52	24.38	21.40	26.01	25.22	24.08	21.10
		2506.0	26.15	25.45	24.22	21.42	25.85	25.15	23.92	21.12
	50% RB mid	2680.0	25.50	24.48	23.51	21.44	25.20	24.18	23.21	21.14
		2593.0	25.33	24.33	23.34	21.36	25.03	24.03	23.04	21.06
		2506.0	25.30	24.33	23.29	21.33	25.00	24.03	22.99	21.03
	100% RB	2680.0	25.45	24.45	23.45	21.48	25.15	24.15	23.15	21.18
		2593.0	25.30	24.30	23.30	21.34	25.00	24.00	23.00	21.04
		2506.0	25.29	24.32	23.31	21.34	24.99	24.02	23.01	21.04

LTE Band 48-EIRP

Limits: ≤23dBm/10MHz

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm/10MHz)				EIRP(dBm/10MHz) (GT – LC =-4.5)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	3697.5	23.94	23.17	22.21	19.33	19.44	18.67	17.71	14.83
		3625	24.73	24.11	22.91	19.93	20.23	19.61	18.41	15.43
		3552.5	24.11	23.48	22.54	19.62	19.61	18.98	18.04	15.12
	1 RB low	3697.5	23.84	23.21	22.18	19.11	19.34	18.71	17.68	14.61
		3625	24.74	24.15	22.89	19.92	20.24	19.65	18.39	15.42
		3552.5	24.13	23.45	22.51	19.53	19.63	18.95	18.01	15.03
	100% RB	3697.5	22.76	21.71	20.78	18.78	18.26	17.21	16.28	14.28
		3625	23.59	22.01	21.58	19.65	19.09	17.51	17.08	15.15
		3552.5	23.03	22.18	21.11	19.03	18.53	17.68	16.61	14.53
10MHz	1 RB high	3695	24.16	23.28	22.26	19.36	19.66	18.78	17.76	14.86
		3625	25.01	24.13	23.11	19.91	20.51	19.63	18.61	15.41
		3555	24.39	23.89	22.72	19.51	19.89	19.39	18.22	15.01
	1 RB low	3695	24.07	23.01	22.04	18.96	19.57	18.51	17.54	14.46
		3625	25.04	24.06	23.17	19.86	20.54	19.56	18.67	15.36
		3555	24.37	23.55	22.83	19.56	19.87	19.05	18.33	15.06
	100% RB	3695	22.16	21.21	20.22	18.29	17.66	16.71	15.72	13.79
		3625	23.04	22.05	21.01	19.13	18.54	17.55	16.51	14.63
		3555	22.57	21.59	20.63	18.62	18.07	17.09	16.13	14.12
15MHz	1 RB high	3692.5	23.92	22.99	21.78	19.04	19.42	18.49	17.28	14.54
		3625	24.85	23.43	22.53	19.52	20.35	18.93	18.03	15.02
		3557.5	24.44	23.52	22.71	19.45	19.94	19.02	18.21	14.95
	1 RB low	3692.5	24.12	22.71	21.92	18.85	19.62	18.21	17.42	14.35
		3625	24.72	23.78	22.81	19.77	20.22	19.28	18.31	15.27
		3557.5	24.52	23.42	22.41	19.26	20.02	18.92	17.91	14.76
	100% RB	3692.5	21.26	20.26	19.15	17.18	16.76	15.76	14.65	12.68
		3625	22.03	21.01	20.03	18.08	17.53	16.51	15.53	13.58
		3557.5	21.74	20.71	19.72	17.72	17.24	16.21	15.22	13.22
20MHz	1 RB high	3690	24.17	23.16	22.02	19.14	19.67	18.66	17.52	14.64
		3625	24.74	23.61	22.57	19.55	20.24	19.11	18.07	15.05
		3560	24.67	23.47	22.52	19.71	20.17	18.97	18.02	15.21
	1 RB low	3690	23.81	22.87	21.61	18.68	19.31	18.37	17.11	14.18
		3625	24.78	23.61	22.77	19.73	20.28	19.11	18.27	15.23
		3560	24.61	23.51	22.28	19.22	20.11	19.01	17.78	14.72
	100% RB	3690	20.32	19.34	18.38	16.33	15.82	14.84	13.88	11.83
		3625	21.16	20.15	19.21	17.16	16.66	15.65	14.71	12.66
		3560	20.85	19.85	18.86	16.81	16.35	15.35	14.36	12.31

LTE Band 66-EIRP

Limits: ≤30dBm(1W)

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				EIRP(dBm)(Gt-Lc =-0.7)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	1779.3	24.60	23.76	22.82	19.62	23.90	23.06	22.12	18.92
		1745.0	24.62	23.74	22.73	19.75	23.92	23.04	22.03	19.05
		1710.7	24.54	23.55	22.53	19.65	23.84	22.85	21.83	18.95
	1 RB low	1779.3	24.59	23.72	22.52	19.66	23.89	23.02	21.82	18.96
		1745.0	24.56	23.81	22.76	19.61	23.86	23.11	22.06	18.91
		1710.7	24.55	23.59	22.74	19.64	23.85	22.89	22.04	18.94
	50% RB mid	1779.3	24.61	23.77	22.67	19.58	23.91	23.07	21.97	18.88
		1745.0	24.53	23.77	22.67	19.70	23.83	23.07	21.97	19.00
		1710.7	24.52	23.73	22.59	19.66	23.82	23.03	21.89	18.96
	100% RB	1779.3	23.60	22.59	21.62	19.60	22.90	21.89	20.92	18.90
		1745.0	23.61	22.70	21.63	19.64	22.91	22.00	20.93	18.94
		1710.7	23.53	22.56	21.69	19.61	22.83	21.86	20.99	18.91
3MHz	1 RB high	1778.5	24.54	23.72	22.75	19.65	23.84	23.02	22.05	18.95
		1745.0	24.55	23.67	22.73	19.78	23.85	22.97	22.03	19.08
		1711.5	24.48	23.66	22.74	19.68	23.78	22.96	22.04	18.98
	1 RB low	1778.5	24.54	23.67	22.39	19.68	23.84	22.97	21.69	18.98
		1745.0	24.52	23.70	22.54	19.60	23.82	23.00	21.84	18.90
		1711.5	24.51	23.69	22.75	19.68	23.81	22.99	22.05	18.98
	50% RB mid	1778.5	23.60	22.63	21.64	19.59	22.90	21.93	20.94	18.89
		1745.0	23.61	22.72	21.64	19.64	22.91	22.02	20.94	18.94
		1711.5	23.58	22.68	21.63	19.70	22.88	21.98	20.93	19.00
	100% RB	1778.5	23.50	22.57	21.51	19.55	22.80	21.87	20.81	18.85
		1745.0	23.53	22.54	21.56	19.55	22.83	21.84	20.86	18.85
		1711.5	23.57	22.62	21.65	19.60	22.87	21.92	20.95	18.90
5MHz	1 RB high	1777.5	24.58	23.81	22.66	19.66	23.88	23.11	21.96	18.96
		1745.0	24.57	23.77	22.58	19.74	23.87	23.07	21.88	19.04
		1712.5	24.54	23.77	22.45	19.63	23.84	23.07	21.75	18.93
	1 RB low	1777.5	24.55	23.75	22.79	19.62	23.85	23.05	22.09	18.92
		1745.0	24.50	23.68	22.45	19.70	23.80	22.98	21.75	19.00
		1712.5	24.52	23.67	23.04	19.60	23.82	22.97	22.34	18.90
	50% RB mid	1777.5	23.58	22.67	21.61	19.66	22.88	21.97	20.91	18.96
		1745.0	23.62	22.63	21.65	19.58	22.92	21.93	20.95	18.88
		1712.5	23.56	22.72	21.61	19.63	22.86	22.02	20.91	18.93
	100% RB	1777.5	23.59	22.64	21.62	19.61	22.89	21.94	20.92	18.91
		1745.0	23.55	22.58	21.55	19.57	22.85	21.88	20.85	18.87
		1712.5	23.54	22.59	21.58	19.58	22.84	21.89	20.88	18.88
10MHz	1 RB high	1775.0	24.58	23.67	22.79	19.75	23.88	22.97	22.09	19.05
		1745.0	24.59	23.81	22.73	19.80	23.89	23.11	22.03	19.10

		1715.0	24.52	23.71	22.70	19.72	23.82	23.01	22.00	19.02
	1 RB low	1775.0	24.61	23.76	22.76	19.59	23.91	23.06	22.06	18.89
		1745.0	24.53	23.78	22.72	19.72	23.83	23.08	22.02	19.02
		1715.0	24.52	23.66	22.56	19.61	23.82	22.96	21.86	18.91
	50% RB mid	1775.0	23.59	22.54	21.64	19.54	22.89	21.84	20.94	18.84
		1745.0	23.65	22.58	21.67	19.63	22.95	21.88	20.97	18.93
		1715.0	23.60	22.64	21.60	19.59	22.90	21.94	20.90	18.89
	100% RB	1775.0	23.54	22.55	21.55	19.55	22.84	21.85	20.85	18.85
		1745.0	23.57	22.56	21.54	19.55	22.87	21.86	20.84	18.85
		1715.0	23.58	22.61	21.59	19.58	22.88	21.91	20.89	18.88
15MHz	1 RB high	1772.5	24.32	23.55	22.67	19.57	23.62	22.85	21.97	18.87
		1745.0	24.47	23.69	22.74	19.63	23.77	22.99	22.04	18.93
		1717.5	24.41	23.57	22.66	19.59	23.71	22.87	21.96	18.89
	1 RB low	1772.5	24.44	23.54	22.57	19.50	23.74	22.84	21.87	18.80
		1745.0	24.37	23.60	22.76	19.52	23.67	22.90	22.06	18.82
		1717.5	24.36	23.46	22.75	19.32	23.66	22.76	22.05	18.62
	50% RB mid	1772.5	23.51	22.42	21.52	19.41	22.81	21.72	20.82	18.71
		1745.0	23.51	22.47	21.50	19.42	22.81	21.77	20.80	18.72
		1717.5	23.45	22.45	21.43	19.41	22.75	21.75	20.73	18.71
	100% RB	1772.5	23.37	22.39	21.42	19.44	22.67	21.69	20.72	18.74
		1745.0	23.37	22.46	21.38	19.44	22.67	21.76	20.68	18.74
		1717.5	23.41	22.46	21.46	19.42	22.71	21.76	20.76	18.72
20MHz	1 RB high	1770.0	24.37	23.61	22.60	19.76	23.67	22.91	21.90	19.06
		1745.0	24.48	23.63	22.67	19.75	23.78	22.93	21.97	19.05
		1720.0	24.46	23.76	22.66	19.70	23.76	23.06	21.96	19.00
	1 RB low	1770.0	24.34	23.66	22.78	19.67	23.64	22.96	22.08	18.97
		1745.0	24.40	23.68	22.80	19.59	23.70	22.98	22.10	18.89
		1720.0	24.42	23.57	22.58	19.54	23.72	22.87	21.88	18.84
	50% RB mid	1770.0	23.50	22.52	21.50	19.51	22.80	21.82	20.80	18.81
		1745.0	23.54	22.49	21.50	19.45	22.84	21.79	20.80	18.75
		1720.0	23.46	22.50	21.47	19.47	22.76	21.80	20.77	18.77
	100% RB	1770.0	23.51	22.53	21.47	19.50	22.81	21.83	20.77	18.80
		1745.0	23.44	22.42	21.38	19.43	22.74	21.72	20.68	18.73
		1720.0	23.44	22.46	21.45	19.44	22.74	21.76	20.75	18.74

LTE Band 71-ERP

Limits: ≤34.77dBm(3W)

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				ERP(dBm)(Gt-Lc =-7.5)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	695.5	23.96	23.28	22.39	19.11	14.31	13.63	12.74	12.74
		680.5	24.05	23.35	22.32	19.05	14.40	13.70	12.67	12.67
		665.5	24.10	23.35	22.50	19.21	14.45	13.70	12.85	12.85
	1 RB low	695.5	24.06	23.32	22.31	19.04	14.41	13.67	12.66	12.66
		680.5	24.12	23.46	22.34	19.07	14.47	13.81	12.69	12.69
		665.5	23.49	22.65	21.54	18.39	13.84	13.00	11.89	11.89
	50% RB mid	695.5	23.07	22.09	21.28	19.14	13.42	12.44	11.63	11.63
		680.5	23.11	22.26	21.20	19.07	13.46	12.61	11.55	11.55
		665.5	23.25	22.41	21.35	19.20	13.60	12.76	11.70	11.70
	100% RB	695.5	23.01	21.97	21.04	18.92	13.36	12.32	11.39	11.39
		680.5	23.18	22.16	21.23	19.09	13.53	12.51	11.58	11.58
		665.5	23.24	22.25	21.29	19.15	13.59	12.60	11.64	11.64
10MHz	1 RB high	693.0	24.05	23.47	22.20	18.95	14.40	13.82	12.55	12.55
		680.5	23.99	23.47	22.25	18.99	14.34	13.82	12.60	12.60
		668.0	22.80	22.20	21.10	18.01	13.15	12.55	11.45	11.45
	1 RB low	693.0	23.47	22.86	21.81	18.62	13.82	13.21	12.16	12.16
		680.5	24.30	23.51	21.72	18.54	14.65	13.86	12.07	12.07
		668.0	23.78	23.18	21.77	18.58	14.13	13.53	12.12	12.12
	50% RB mid	693.0	23.11	22.13	21.18	19.05	13.46	12.48	11.53	11.53
		680.5	23.08	22.21	21.19	19.06	13.43	12.56	11.54	11.54
		668.0	23.18	22.27	21.33	19.18	13.53	12.62	11.68	11.68
	100% RB	693.0	23.09	22.10	21.17	19.04	13.44	12.45	11.52	11.52
		680.5	23.08	22.05	21.27	19.13	13.43	12.40	11.62	11.62
		668.0	23.36	22.05	21.30	19.16	13.71	12.40	11.65	11.65
15MHz	1 RB high	690.5	23.86	22.99	22.12	18.88	14.21	13.34	12.47	12.47
		680.5	23.38	23.06	21.86	18.66	13.73	13.41	12.21	12.21
		670.5	23.97	23.46	22.20	18.95	14.32	13.81	12.55	12.55
	1 RB low	690.5	23.98	23.18	22.09	18.86	14.33	13.53	12.44	12.44
		680.5	23.75	23.05	21.97	18.75	14.10	13.40	12.32	12.32
		670.5	24.16	23.38	22.15	18.91	14.51	13.73	12.50	12.50
	50% RB mid	690.5	22.97	21.93	21.05	18.93	13.32	12.28	11.40	11.40
		680.5	23.06	21.98	21.04	18.92	13.41	12.33	11.39	11.39
		670.5	22.65	21.76	20.90	18.80	13.00	12.11	11.25	11.25
	100% RB	690.5	23.05	22.01	20.91	18.81	13.40	12.36	11.26	11.26
		680.5	22.99	22.04	21.20	19.07	13.34	12.39	11.55	11.55
		670.5	23.25	22.16	21.35	19.20	13.60	12.51	11.70	11.70
20MHz	1 RB high	688.0	24.04	23.38	21.92	18.71	14.39	13.73	12.27	12.27
		680.5	23.84	23.36	22.00	18.78	14.19	13.71	12.35	12.35

		673.0	23.82	23.29	22.48	19.19	14.17	13.64	12.83	12.83
	1 RB low	688.0	24.05	22.84	22.38	19.10	14.40	13.19	12.73	12.73
		680.5	23.97	23.49	22.36	19.09	14.32	13.84	12.71	12.71
		673.0	24.37	23.56	22.33	19.06	14.72	13.91	12.68	12.68
	50% RB mid	688.0	22.96	22.02	21.12	18.99	13.31	12.37	11.47	11.47
		680.5	23.04	22.04	21.10	18.98	13.39	12.39	11.45	11.45
		673.0	22.89	22.22	21.25	19.11	13.24	12.57	11.60	11.60
	100% RB	688.0	23.07	21.99	21.13	19.00	13.42	12.34	11.48	11.48
		680.5	23.13	22.11	21.01	18.90	13.48	12.46	11.36	11.36
		673.0	22.87	22.15	21.27	19.13	13.22	12.50	11.62	11.62

LTE CA band 5B

Bandwidth	Frequency (MHz)	Frequency (MHz)	Modulation	PCC RB		SCC RB		Conducted Power(dBm)	ERP(dBm)(Gt-Lc =-7.1)
				Size	Offset	Size	Offset		
3MHz/5MHz	834.1	838	QPSK	1	14	1	0	24.49	15.24
			QPSK	15	0	25	0	24.54	15.29
			16QAM	1	14	1	0	23.51	14.26
			16QAM	15	0	25	0	24.00	14.75
			64QAM	1	14	1	0	22.67	13.42
			64QAM	15	0	25	0	23.04	13.79
			256QAM	1	14	1	0	21.56	12.31
			256QAM	15	0	25	0	22.19	12.94
5MHz/3MHz	835	838.9	QPSK	1	24	1	0	24.55	15.30
			QPSK	25	0	15	0	24.59	15.34
			16QAM	1	24	1	0	24.15	14.90
			16QAM	25	0	15	0	24.07	14.82
			64QAM	1	24	1	0	23.18	13.93
			64QAM	25	0	15	0	23.17	13.92
			256QAM	1	24	1	0	22.24	12.99
			256QAM	25	0	15	0	22.35	13.10
5MHz/10MHz	831.8	839	QPSK	1	24	1	0	24.36	15.11
			QPSK	25	0	50	0	22.44	13.19
			16QAM	1	24	1	0	23.38	14.13
			16QAM	25	0	50	0	21.40	12.15
			64QAM	1	24	1	0	22.21	12.96
			64QAM	25	0	50	0	21.43	12.18
			256QAM	1	24	1	0	19.39	10.14
			256QAM	25	0	50	0	19.40	10.15
10MHz/5MHz	834	841.2	QPSK	1	49	1	0	24.27	15.02
			QPSK	50	0	25	0	22.43	13.18
			16QAM	1	49	1	0	23.30	14.05
			16QAM	50	0	25	0	21.45	12.20
			64QAM	1	49	1	0	22.40	13.15
			64QAM	50	0	25	0	21.44	12.19
			256QAM	1	49	1	0	19.31	10.06
			256QAM	50	0	25	0	19.42	10.17
10MHz/10MHz	831.6	841.5	QPSK	1	49	1	0	24.29	15.04
			QPSK	50	0	50	0	22.30	13.05
			16QAM	1	49	1	0	23.29	14.04
			16QAM	50	0	50	0	21.43	12.18
			64QAM	1	49	1	0	22.29	13.04
			64QAM	50	0	50	0	21.43	12.18
			256QAM	1	49	1	0	19.25	10.00

			256QAM	50	0	50	0	19.41	10.16

LTE CA band 7C

Bandwidth	Frequency (MHz)	Frequency (MHz)	Modulation	PCC RB		SCC RB		Conducted Power(dBm)	EIRP(dBm) (Gt-Lc =0)
				Size	Offset	Size	Offset		
10MHz/20MHz	2525.6	2540	QPSK	1	49	1	0	23.94	23.94
			QPSK	50	0	100	0	22.04	22.04
			16QAM	1	49	1	0	22.91	22.91
			16QAM	50	0	100	0	20.99	20.99
			64QAM	1	49	1	0	22.02	22.02
			64QAM	50	0	100	0	19.81	19.81
			256QAM	1	49	1	0	18.90	18.90
			256QAM	50	0	100	0	19.01	19.01
15MHz/10MHz	2530.1	2542.1	QPSK	1	74	1	0	24.03	24.03
			QPSK	75	0	50	0	22.05	22.05
			16QAM	1	74	1	0	22.91	22.91
			16QAM	75	0	50	0	21.11	21.11
			64QAM	1	74	1	0	21.20	21.20
			64QAM	75	0	50	0	19.44	19.44
			256QAM	1	74	1	0	18.93	18.93
			256QAM	75	0	50	0	18.92	18.92
15MHz/15MHz	2527.5	2542.5	QPSK	1	74	1	0	24.04	24.04
			QPSK	75	0	75	0	22.06	22.06
			16QAM	1	74	1	0	22.87	22.87
			16QAM	75	0	75	0	21.11	21.11
			64QAM	1	74	1	0	21.48	21.48
			64QAM	75	0	75	0	19.69	19.69
			256QAM	1	74	1	0	18.97	18.97
			256QAM	75	0	75	0	19.09	19.09
15MHz/20MHz	2525.3	2542.4	QPSK	1	74	1	0	24.00	24.00
			QPSK	75	0	100	0	22.04	22.04
			16QAM	1	74	1	0	22.89	22.89
			16QAM	75	0	100	0	21.10	21.10
			64QAM	1	74	1	0	21.81	21.81
			64QAM	75	0	100	0	19.78	19.78
			256QAM	1	74	1	0	18.93	18.93
			256QAM	75	0	100	0	19.01	19.01
20MHz/10MHz	2530.1	2544.5	QPSK	1	99	1	0	24.03	24.03
			QPSK	100	0	50	0	22.06	22.06
			16QAM	1	99	1	0	22.96	22.96
			16QAM	100	0	50	0	21.05	21.05
			64QAM	1	99	1	0	20.84	20.84
			64QAM	100	0	50	0	19.95	19.95
			256QAM	1	99	1	0	18.90	18.90

			256QAM	100	0	50	0	18.67	18.67
20MHz/15MHz	2527.6	2544.7	QPSK	1	99	1	0	23.99	23.99
			QPSK	100	0	75	0	22.08	22.08
			16QAM	1	99	1	0	23.01	23.01
			16QAM	100	0	75	0	21.07	21.07
			64QAM	1	99	1	0	20.99	20.99
			64QAM	100	0	75	0	20.23	20.23
			256QAM	1	99	1	0	18.92	18.92
			256QAM	100	0	75	0	19.08	19.08
20MHz/20MHz	2525.1	2544.9	QPSK	1	99	1	0	24.00	24.00
			QPSK	100	0	100	0	22.01	22.01
			16QAM	1	99	1	0	23.05	23.05
			16QAM	100	0	100	0	21.08	21.08
			64QAM	1	99	1	0	21.18	21.18
			64QAM	100	0	100	0	20.00	20.00
			256QAM	1	99	1	0	18.90	18.90
			256QAM	100	0	100	0	19.07	19.07

LTE CA band 41C

Bandwidth	Frequency (MHz)	Frequency (MHz)	Modulation	PCC RB		SCC RB		Conducted Power(dBm)	EIRP(dBm) (Gt-Lc =-0.3)
				Size	Offset	Size	Offset		
5MHz/20MHz	2583.8	2595.5	QPSK	1	24	1	0	24.35	24.05
			QPSK	25	0	100	0	22.38	22.08
			16QAM	1	24	1	0	23.36	23.06
			16QAM	25	0	100	0	21.35	21.05
			64QAM	1	24	1	0	22.32	22.02
			64QAM	25	0	100	0	21.36	21.06
			256QAM	1	24	1	0	19.35	19.05
			256QAM	25	0	100	0	19.37	19.07
10MHz/15MHz	2585.9	2597.9	QPSK	1	49	1	0	24.27	23.97
			QPSK	50	0	75	0	22.38	22.08
			16QAM	1	49	1	0	23.28	22.98
			16QAM	50	0	75	0	21.38	21.08
			64QAM	1	49	1	0	22.29	21.99
			64QAM	50	0	75	0	21.37	21.07
			256QAM	1	49	1	0	19.25	18.95
			256QAM	50	0	75	0	19.39	19.09
10MHz/20MHz	2583.6	2598	QPSK	1	49	1	0	24.32	24.02
			QPSK	50	0	100	0	22.38	22.08
			16QAM	1	49	1	0	23.29	22.99
			16QAM	50	0	100	0	21.38	21.08
			64QAM	1	49	1	0	22.41	22.11
			64QAM	50	0	100	0	21.38	21.08
			256QAM	1	49	1	0	19.31	19.01
			256QAM	50	0	100	0	19.41	19.11
15MHz/10MHz	2588.1	2600.1	QPSK	1	74	1	0	24.31	24.01
			QPSK	75	0	50	0	22.40	22.10
			16QAM	1	74	1	0	23.21	22.91
			16QAM	75	0	50	0	21.38	21.08
			64QAM	1	74	1	0	22.29	21.99
			64QAM	75	0	50	0	21.39	21.09
			256QAM	1	74	1	0	19.31	19.01
			256QAM	75	0	50	0	19.42	19.12
15MHz/15MHz	2585.5	2600.5	QPSK	1	74	1	0	24.30	24.00
			QPSK	75	0	75	0	22.39	22.09
			16QAM	1	74	1	0	23.24	22.94
			16QAM	75	0	75	0	21.38	21.08
			64QAM	1	74	1	0	22.40	22.10
			64QAM	75	0	75	0	21.38	21.08
			256QAM	1	74	1	0	19.24	18.94

			256QAM	75	0	75	0	19.38	19.08
15MHz/20MHz	2583.3	2600.4	QPSK	1	74	1	0	24.28	23.98
			QPSK	75	0	100	0	22.39	22.09
			16QAM	1	74	1	0	23.26	22.96
			16QAM	75	0	100	0	21.40	21.10
			64QAM	1	74	1	0	22.41	22.11
			64QAM	75	0	100	0	21.38	21.08
			256QAM	1	74	1	0	19.24	18.94
			256QAM	75	0	100	0	19.38	19.08
20MHz/5MHz	2590.5	2602.2	QPSK	1	99	1	0	24.35	24.05
			QPSK	100	0	25	0	22.41	22.11
			16QAM	1	99	1	0	23.33	23.03
			16QAM	100	0	25	0	21.37	21.07
			64QAM	1	99	1	0	22.34	22.04
			64QAM	100	0	25	0	21.38	21.08
			256QAM	1	99	1	0	19.33	19.03
			256QAM	100	0	25	0	19.41	19.11
20MHz/10MHz	2588.1	2602.5	QPSK	1	99	1	0	24.31	24.01
			QPSK	100	0	50	0	22.42	22.12
			16QAM	1	99	1	0	23.33	23.03
			16QAM	100	0	50	0	21.40	21.10
			64QAM	1	99	1	0	22.33	22.03
			64QAM	100	0	50	0	21.41	21.11
			256QAM	1	99	1	0	19.37	19.07
			256QAM	100	0	50	0	19.43	19.13
20MHz/15MHz	2585.6	2602.7	QPSK	1	99	1	0	24.30	24.00
			QPSK	100	0	75	0	22.41	22.11
			16QAM	1	99	1	0	23.33	23.03
			16QAM	100	0	75	0	21.42	21.12
			64QAM	1	99	1	0	22.31	22.01
			64QAM	100	0	75	0	21.42	21.12
			256QAM	1	99	1	0	19.30	19.00
			256QAM	100	0	75	0	19.43	19.13
20MHz/20MHz	2583.1	2602.9	QPSK	1	99	1	0	24.34	24.04
			QPSK	100	0	100	0	22.43	22.13
			16QAM	1	99	1	0	23.29	22.99
			16QAM	100	0	100	0	21.41	21.11
			64QAM	1	99	1	0	22.25	21.95
			64QAM	100	0	100	0	21.41	21.11
			256QAM	1	99	1	0	19.41	19.11
			256QAM	100	0	100	0	19.46	19.16

LTE CA band 48C

Bandwidth	Frequency (MHz)	Frequency (MHz)	Modulation	PCC RB		SCC RB		Conducted Power (dBm/10MHz)	EIRP (dBm/10MHz) (GT – LC = -4.5)
				Size	Offset	Size	Offset		
5MHz/20MHz	3615.8	3627.5	QPSK	1	24	1	0	26.09	21.59
				25	0	100	0	22.88	18.38
			16QAM	1	24	1	0	25.38	20.88
				25	0	100	0	21.96	17.46
			64QAM	1	24	1	0	23.55	19.05
				25	0	100	0	21.90	17.40
			256QAM	1	24	1	0	21.36	16.86
				25	0	100	0	19.93	15.43
20MHz/5MHz	3622.5	3634.2	QPSK	1	99	1	0	26.11	21.61
				100	0	25	0	20.69	16.19
			16QAM	1	99	1	0	25.54	21.04
				100	0	25	0	19.65	15.15
			64QAM	1	99	1	0	23.52	19.02
				100	0	25	0	19.64	15.14
			256QAM	1	99	1	0	21.41	16.91
				100	0	25	0	17.68	13.18
10MHz/20MHz	3615.6	3630	QPSK	1	49	1	0	26.15	21.65
				50	0	100	0	22.22	17.72
			16QAM	1	49	1	0	25.47	20.97
				50	0	100	0	21.29	16.79
			64QAM	1	49	1	0	24.02	19.52
				50	0	100	0	21.20	16.70
			256QAM	1	49	1	0	21.54	17.04
				50	0	100	0	19.30	14.80
20MHz/10MHz	3620.1	3634.5	QPSK	1	99	1	0	26.11	21.61
				100	0	50	0	20.63	16.13
			16QAM	1	99	1	0	25.45	20.95
				100	0	50	0	19.64	15.14
			64QAM	1	99	1	0	23.65	19.15
				100	0	50	0	19.64	15.14
			256QAM	1	99	1	0	21.42	16.92
				100	0	50	0	17.62	13.12
15MHz/20MHz	3615.3	3632.4	QPSK	1	74	1	0	26.13	21.63
				75	0	100	0	21.34	16.84
			16QAM	1	74	1	0	25.50	21.00
				75	0	100	0	20.36	15.86
			64QAM	1	74	1	0	23.66	19.16
				75	0	100	0	20.34	15.84

			256QAM	1	74	1	0	21.39	16.89
				75	0	100	0	18.34	13.84
20MHz/15MHz	3617.6	3634.7	QPSK	1	99	1	0	26.13	21.63
				100	0	75	0	20.53	16.03
			16QAM	1	99	1	0	25.70	21.20
				100	0	75	0	19.50	15.00
			64QAM	1	99	1	0	23.67	19.17
				100	0	75	0	19.49	14.99
			256QAM	1	99	1	0	21.33	16.83
				100	0	75	0	17.55	13.05
20MHz/20MHz	3615.1	3634.9	QPSK	1	99	1	0	26.11	21.61
				100	0	100	0	20.96	16.46
			16QAM	1	99	1	0	25.49	20.99
				100	0	100	0	19.95	15.45
			64QAM	1	99	1	0	23.68	19.18
				100	0	100	0	19.93	15.43
			256QAM	1	99	1	0	21.31	16.81
				100	0	100	0	17.88	13.38

LTE CA band 66C

Bandwidth	Frequency (MHz)	Frequency (MHz)	Modulation	PCC RB		SCC RB		Conducted Power(dBm)	EIRP(dBm) (Gt-Lc =-0.7)
				Size	Offset	Size	Offset		
5MHz/20MHz	1745.8	1757.5	QPSK	1	24	1	0	24.08	23.38
			QPSK	25	0	100	0	22.13	21.43
			16QAM	1	24	1	0	23.13	22.43
			16QAM	25	0	100	0	21.15	20.45
			64QAM	1	24	1	0	22.13	21.43
			64QAM	25	0	100	0	21.13	20.43
			256QAM	1	24	1	0	19.10	18.40
			256QAM	25	0	100	0	19.11	18.41
10MHz/15MHz	1747.9	1759.9	QPSK	1	49	1	0	24.07	23.37
			QPSK	50	0	75	0	22.14	21.44
			16QAM	1	49	1	0	23.03	22.33
			16QAM	50	0	75	0	21.13	20.43
			64QAM	1	49	1	0	22.08	21.38
			64QAM	50	0	75	0	21.12	20.42
			256QAM	1	49	1	0	18.96	18.26
			256QAM	50	0	75	0	19.12	18.42
10MHz/20MHz	1745.6	1760	QPSK	1	49	1	0	24.09	23.39
			QPSK	50	0	100	0	22.14	21.44
			16QAM	1	49	1	0	22.99	22.29
			16QAM	50	0	100	0	21.13	20.43
			64QAM	1	49	1	0	22.13	21.43
			64QAM	50	0	100	0	21.14	20.44
			256QAM	1	49	1	0	19.01	18.31
			256QAM	50	0	100	0	19.12	18.42
15MHz/10MHz	1750.1	1762.1	QPSK	1	74	1	0	24.06	23.36
			QPSK	75	0	50	0	22.13	21.43
			16QAM	1	74	1	0	22.95	22.25
			16QAM	75	0	50	0	21.13	20.43
			64QAM	1	74	1	0	22.08	21.38
			64QAM	75	0	50	0	21.14	20.44
			256QAM	1	74	1	0	18.98	18.28
			256QAM	75	0	50	0	19.12	18.42
15MHz/15MHz	1747.5	1762.5	QPSK	1	74	1	0	24.03	23.33
			QPSK	75	0	75	0	22.17	21.47
			16QAM	1	74	1	0	22.96	22.26
			16QAM	75	0	75	0	21.17	20.47
			64QAM	1	74	1	0	22.03	21.33
			64QAM	75	0	75	0	21.19	20.49
			256QAM	1	74	1	0	19.03	18.33

			256QAM	75	0	75	0	19.15	18.45
15MHz/20MHz	1745.3	1762.4	QPSK	1	74	1	0	24.04	23.34
			QPSK	75	0	100	0	22.16	21.46
			16QAM	1	74	1	0	23.02	22.32
			16QAM	75	0	100	0	21.17	20.47
			64QAM	1	74	1	0	22.11	21.41
			64QAM	75	0	100	0	21.18	20.48
			256QAM	1	74	1	0	19.00	18.30
			256QAM	75	0	100	0	19.15	18.45
20MHz/5MHz	1752.5	1764.2	QPSK	1	99	1	0	24.08	23.38
			QPSK	100	0	25	0	22.18	21.48
			16QAM	1	99	1	0	22.91	22.21
			16QAM	100	0	25	0	21.17	20.47
			64QAM	1	99	1	0	22.12	21.42
			64QAM	100	0	25	0	21.19	20.49
			256QAM	1	99	1	0	19.05	18.35
			256QAM	100	0	25	0	19.17	18.47
20MHz/10MHz	1750.1	1764.5	QPSK	1	99	1	0	24.06	23.36
			QPSK	100	0	50	0	22.18	21.48
			16QAM	1	99	1	0	23.07	22.37
			16QAM	100	0	50	0	21.17	20.47
			64QAM	1	99	1	0	22.06	21.36
			64QAM	100	0	50	0	21.17	20.47
			256QAM	1	99	1	0	19.05	18.35
			256QAM	100	0	50	0	19.19	18.49
20MHz/15MHz	1747.6	1764.7	QPSK	1	99	1	0	24.08	23.38
			QPSK	100	0	75	0	22.18	21.48
			16QAM	1	99	1	0	22.97	22.27
			16QAM	100	0	75	0	21.17	20.47
			64QAM	1	99	1	0	22.15	21.45
			64QAM	100	0	75	0	21.18	20.48
			256QAM	1	99	1	0	18.97	18.27
			256QAM	100	0	75	0	19.16	18.46
20MHz/20MHz	1745.1	1764.9	QPSK	1	99	1	0	24.07	23.37
			QPSK	100	0	100	0	22.20	21.50
			16QAM	1	99	1	0	22.97	22.27
			16QAM	100	0	100	0	21.17	20.47
			64QAM	1	99	1	0	22.04	21.34
			64QAM	100	0	100	0	21.20	20.50
			256QAM	1	99	1	0	19.01	18.31
			256QAM	100	0	100	0	19.18	18.48

Note: Expanded measurement uncertainty is U = 0.578 dB, k = 2.

A.2 Emission Limit

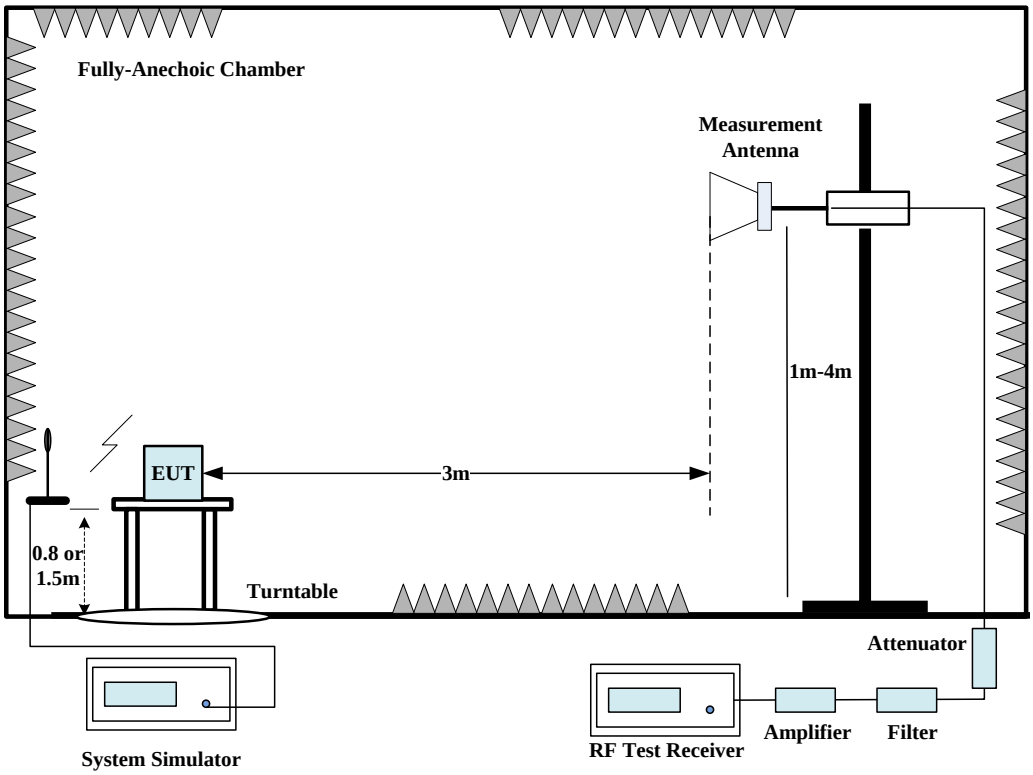
A.2.1 Measurement Method

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

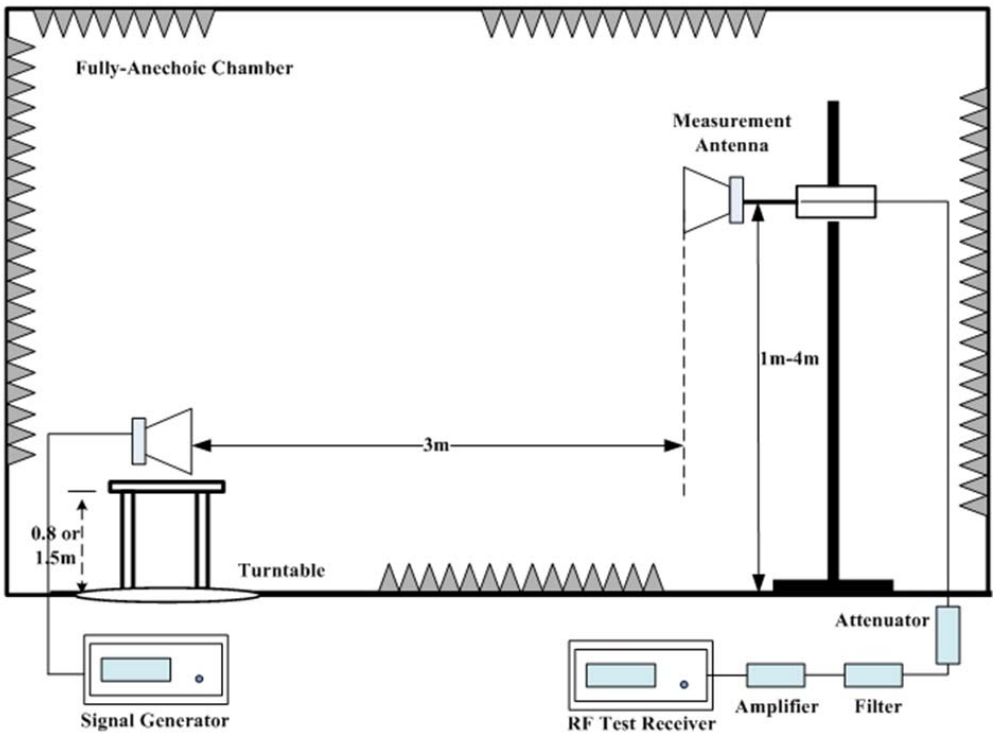
The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment, which is the transmitted carrier. The resolution bandwidth is set 1MHz. The spectrum was scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and 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 -2.15dBi.

A.2.2 Measurement Limit

FDD Band 7/TDD Band 38/41: 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 that 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 12/17/71: 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 2/25: Part 24.238 specify 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 26(814MHz~824MHz): 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 116Log10(f/6.1) decibels or 50 + 10 Log10(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 + 10Log10(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 5/26(824MHz~849MHz): Part 22.917 specify 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 2337MHz; 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 2300MHz, 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 4/66: Part 27.53(h) specify 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

LTE Band 7, 5 MHz, QPSK, Channel 20775

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5005.02	-60.81	6.59	11.31	-56.09	-25.00	31.09	H
7518.01	-55.86	8.32	10.30	-53.88	-25.00	28.88	H
9998.01	-54.81	9.18	11.90	-52.09	-25.00	27.09	H
12510.01	-52.42	10.20	13.30	-49.32	-25.00	24.32	V
14996.00	-52.49	11.21	14.48	-49.22	-25.00	24.22	V
17517.00	-45.20	12.79	13.05	-44.94	-25.00	19.94	V

LTE Band 7, 5 MHz, QPSK, Channel 21100

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5078.02	-61.75	6.71	11.46	-57.00	-25.00	32.00	V
7596.01	-55.20	7.99	10.39	-52.80	-25.00	27.80	V
10133.01	-53.40	9.41	12.00	-50.81	-25.00	25.81	V
12693.01	-53.94	10.31	13.11	-51.14	-25.00	26.14	H
15222.00	-54.16	11.37	14.92	-50.61	-25.00	25.61	V
17750.00	-46.81	12.46	13.55	-45.72	-25.00	20.72	V

LTE Band 7, 5 MHz, QPSK, Channel 21425

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5123.02	-61.30	6.84	11.55	-56.59	-25.00	31.59	H
7689.01	-55.13	8.38	10.66	-52.85	-25.00	27.85	V
10286.01	-53.00	9.60	12.00	-50.60	-25.00	25.60	H
12842.01	-53.16	10.66	12.86	-50.96	-25.00	25.96	V
15398.00	-54.06	11.39	15.10	-50.35	-25.00	25.35	V
17966.00	-46.38	12.89	13.40	-45.87	-25.00	20.87	H

LTE Band 12, 1.4MHz, QPSK, Channel 23017

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1330.01	-58.80	3.15	7.18	2.15	-56.92	-13.00	43.92	H
2000.01	-51.56	4.05	7.60	2.15	-50.16	-13.00	37.16	H
2689.00	-48.21	4.78	9.80	2.15	-45.34	-13.00	32.34	H
3336.02	-64.67	5.31	10.47	2.15	-61.66	-13.00	48.66	V
4018.02	-61.12	6.05	10.40	2.15	-58.92	-13.00	45.92	V
4693.02	-60.63	6.50	11.19	2.15	-58.09	-13.00	45.09	H

LTE Band 12, 1.4MHz, QPSK, Channel 23095

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1425.01	-58.42	3.27	7.85	2.15	-55.99	-13.00	42.99	H
2129.00	-52.81	4.22	8.31	2.15	-50.87	-13.00	37.87	H
2819.00	-49.92	4.94	10.58	2.15	-46.43	-13.00	33.43	H
3525.02	-63.83	5.57	10.60	2.15	-60.95	-13.00	47.95	V
4259.02	-60.68	6.23	10.64	2.15	-58.42	-13.00	45.42	V
4963.01	-60.21	6.67	11.23	2.15	-57.80	-13.00	44.80	V

LTE Band 12, 1.4MHz, QPSK, Channel 23173

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1440.01	-57.38	3.29	7.88	2.15	-54.94	-13.00	41.94	H
2153.00	-47.31	4.25	8.65	2.15	-45.06	-13.00	32.06	V
2865.00	-49.90	4.96	10.73	2.15	-46.28	-13.00	33.28	H
3581.02	-64.21	6.14	10.60	2.15	-61.90	-13.00	48.90	V
4301.02	-60.24	6.19	10.81	2.15	-57.77	-13.00	44.77	H
4995.01	-59.35	6.61	11.29	2.15	-56.82	-13.00	43.82	H

LTE Band 13, 5MHz, QPSK, Channel 23205

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1560.09	-70.37	3.47	9.10	0.00	-66.89	-40.00	26.89	H
2335.53	-53.50	4.44	10.07	2.15	-50.02	-13.00	37.02	H
3115.52	-63.58	5.37	10.24	2.15	-60.86	-13.00	47.86	H
3894.52	-62.57	6.11	10.40	2.15	-60.43	-13.00	47.43	H
4680.02	-60.78	6.49	11.16	2.15	-58.26	-13.00	45.26	H
5458.51	-59.64	6.90	11.28	2.15	-57.41	-13.00	44.41	V

LTE Band 13, 5MHz, QPSK, Channel 23230

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1567.41	-70.73	3.48	9.17	0.00	-67.19	-40.00	27.19	H
2346.01	-52.69	4.45	10.09	2.15	-49.20	-13.00	36.20	H
3123.02	-64.02	5.40	10.21	2.15	-61.36	-13.00	48.36	V
3914.02	-63.18	6.12	10.37	2.15	-61.08	-13.00	48.08	H
4688.52	-61.11	6.50	11.18	2.15	-58.58	-13.00	45.58	V
5473.01	-58.67	6.96	11.25	2.15	-56.53	-13.00	43.53	V

LTE Band 13, 5MHz, QPSK, Channel 23255

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1578.22	-70.70	3.49	9.28	0.00	-67.06	-40.00	27.06	H
2341.05	-52.37	4.45	10.08	2.15	-48.89	-13.00	35.89	H
3127.02	-63.44	5.40	10.19	2.15	-60.80	-13.00	47.80	V
3930.02	-61.59	6.12	10.34	2.15	-59.52	-13.00	46.52	H
4707.52	-60.65	6.51	11.23	2.15	-58.08	-13.00	45.08	H
5502.51	-58.75	7.07	11.20	2.15	-56.77	-13.00	43.77	V

LTE Band 25, 1.4MHz, QPSK, Channel 26047

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3701.02	-61.15	6.42	10.50	-57.07	-13.00	44.07	H
5553.02	-41.79	7.18	11.20	-37.77	-13.00	24.77	H
7656.01	-53.79	8.23	10.52	-51.50	-13.00	38.50	V
9405.01	-52.89	9.06	11.61	-50.34	-13.00	37.34	V
10923.01	-52.09	9.72	12.37	-49.44	-13.00	36.44	V
13345.01	-51.67	10.57	12.51	-49.73	-13.00	36.73	H

LTE Band 25, 1.4MHz, QPSK, Channel 26365

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3715.02	-63.66	6.39	10.44	-59.61	-13.00	46.61	V
5649.02	-47.15	7.27	11.20	-43.22	-13.00	30.22	H
7512.01	-55.04	8.34	10.30	-53.08	-13.00	40.08	V
9399.01	-53.64	9.04	11.60	-51.08	-13.00	38.08	V
11292.01	-52.37	9.95	12.80	-49.52	-13.00	36.52	H
13178.01	-52.38	10.59	12.62	-50.35	-13.00	37.35	H

LTE Band 25, 1.4MHz, QPSK, Channel 26683

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3791.02	-64.36	6.17	10.30	-60.23	-13.00	47.23	V
5744.02	-51.42	7.27	11.11	-47.58	-13.00	34.58	H
7618.01	-55.06	8.05	10.44	-52.67	-13.00	39.67	H
9555.01	-54.23	9.34	11.90	-51.67	-13.00	38.67	V
11467.01	-52.97	9.90	12.70	-50.17	-13.00	37.17	H
13419.01	-52.15	10.58	12.42	-50.31	-13.00	37.31	H

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

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1640.01	-58.63	3.56	9.50	2.15	-54.84	-13.00	41.84	H
2483.00	-50.83	4.61	10.27	2.15	-47.32	-13.00	34.32	V
3282.02	-63.66	5.28	10.36	2.15	-60.73	-13.00	47.73	V
4122.02	-61.76	6.04	10.40	2.15	-59.55	-13.00	46.55	H
4945.01	-60.09	6.70	11.22	2.15	-57.72	-13.00	44.72	H
5755.01	-58.01	7.26	11.09	2.15	-56.33	-13.00	43.33	V

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

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1692.01	-58.67	3.59	9.58	2.15	-54.83	-13.00	41.83	V
2527.00	-49.90	4.65	10.15	2.15	-46.55	-13.00	33.55	H
3364.02	-64.20	5.33	10.50	2.15	-61.18	-13.00	48.18	H
4184.02	-59.75	6.17	10.47	2.15	-57.60	-13.00	44.60	V
5018.01	-60.11	6.57	11.34	2.15	-57.49	-13.00	44.49	H
5864.01	-58.41	7.28	10.72	2.15	-57.12	-13.00	44.12	H

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

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1705.01	-59.19	3.60	9.62	2.15	-55.32	-13.00	42.32	V
2539.00	-50.41	4.66	10.12	2.15	-47.10	-13.00	34.10	H
3409.02	-63.74	5.37	10.48	2.15	-60.78	-13.00	47.78	H
4256.02	-60.41	6.23	10.62	2.15	-58.17	-13.00	45.17	V
5083.01	-59.39	6.72	11.47	2.15	-56.79	-13.00	43.79	V
5955.01	-57.85	7.47	10.49	2.15	-56.98	-13.00	43.98	H

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

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1639.01	-59.00	3.56	9.50	2.15	-55.21	-13.00	42.21	H
2440.00	-52.53	4.56	10.40	2.15	-48.84	-13.00	35.84	V
3242.02	-63.79	5.27	10.28	2.15	-60.93	-13.00	47.93	V
4063.02	-60.84	6.04	10.40	2.15	-58.63	-13.00	45.63	V
4898.01	-60.66	6.73	11.40	2.15	-58.14	-13.00	45.14	V
5704.01	-57.59	7.29	11.19	2.15	-55.84	-13.00	42.84	V

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

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1631.01	-58.36	3.55	9.50	2.15	-54.56	-13.00	41.56	H
2469.00	-52.35	4.59	10.32	2.15	-48.77	-13.00	35.77	V
3281.02	-63.84	5.28	10.36	2.15	-60.91	-13.00	47.91	V
4103.02	-61.26	6.04	10.40	2.15	-59.05	-13.00	46.05	H
4933.01	-59.58	6.72	11.27	2.15	-57.18	-13.00	44.18	V
5747.01	-57.39	7.27	11.11	2.15	-55.70	-13.00	42.70	V

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

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1651.01	-58.51	3.57	9.50	2.15	-54.73	-13.00	41.73	H
2472.00	-52.58	4.59	10.31	2.15	-49.01	-13.00	36.01	V
3293.02	-64.11	5.29	10.39	2.15	-61.16	-13.00	48.16	V
4121.02	-62.05	6.04	10.40	2.15	-59.84	-13.00	46.84	V
4941.01	-59.65	6.71	11.24	2.15	-57.27	-13.00	44.27	V
5761.01	-58.11	7.25	11.08	2.15	-56.43	-13.00	43.43	V

LTE Band 30, 5MHz, QPSK, Channel 27685

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4606.02	-73.79	6.46	11.28	-68.97	-40.00	28.97	H
6904.01	-68.24	7.75	10.31	-65.68	-40.00	25.68	V
9227.01	-65.68	8.99	11.70	-62.97	-40.00	22.97	V
11536.01	-63.81	9.81	12.74	-60.88	-40.00	20.88	V
13826.01	-61.78	10.66	12.47	-59.97	-40.00	19.97	H
16171.00	-64.24	11.77	15.19	-60.82	-40.00	20.82	V

LTE Band 30, 5MHz, QPSK, Channel 27710

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4600.02	-73.94	6.47	11.30	-69.11	-40.00	29.11	H
6930.01	-67.94	7.76	10.36	-65.34	-40.00	25.34	H
9227.01	-65.60	8.99	11.70	-62.89	-40.00	22.89	H
11543.01	-64.04	9.81	12.74	-61.11	-40.00	21.11	V
13842.01	-62.00	10.69	12.46	-60.23	-40.00	20.23	V
16188.00	-63.83	11.74	15.14	-60.43	-40.00	20.43	V

LTE Band 30, 5MHz, QPSK, Channel 27735

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4621.02	-73.91	6.45	11.22	-69.14	-40.00	29.14	H
6941.01	-68.18	7.84	10.38	-65.64	-40.00	25.64	V
9238.01	-65.55	9.01	11.70	-62.86	-40.00	22.86	H
11548.01	-63.92	9.81	12.75	-60.98	-40.00	20.98	V
13881.01	-61.86	10.77	12.42	-60.21	-40.00	20.21	V
16198.00	-63.34	11.73	15.11	-59.96	-40.00	19.96	V

LTE Band 41, 5MHz, QPSK, Channel 39675

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5186.02	-61.53	6.94	11.67	-56.80	-25.00	31.80	H
7758.01	-55.12	8.35	10.73	-52.74	-25.00	27.74	H
10368.01	-53.95	9.75	12.07	-51.63	-25.00	26.63	H
12972.01	-51.42	10.48	12.73	-49.17	-25.00	24.17	V
15541.00	-54.41	11.51	15.34	-50.58	-25.00	25.58	H
16851.00	-50.76	12.05	14.05	-48.76	-25.00	23.76	V

LTE Band 41, 5MHz, QPSK, Channel 40620

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5191.02	-61.77	6.95	11.68	-57.04	-25.00	32.04	V
7764.01	-55.77	8.34	10.76	-53.35	-25.00	28.35	H
10366.01	-53.29	9.75	12.07	-50.97	-25.00	25.97	H
12970.01	-52.18	10.48	12.73	-49.93	-25.00	24.93	V
15532.00	-53.81	11.52	15.33	-50.00	-25.00	25.00	V
16868.00	-51.08	12.03	14.07	-49.04	-25.00	24.04	V

LTE Band 41, 5MHz, QPSK, Channel 41565

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5186.02	-59.46	6.94	11.67	-54.73	-25.00	29.73	H
7780.01	-52.82	8.31	10.82	-50.31	-25.00	25.31	H
10342.01	-53.49	9.71	12.04	-51.16	-25.00	26.16	H
12989.01	-52.26	10.47	12.71	-50.02	-25.00	25.02	V
15570.00	-54.75	11.50	15.37	-50.88	-25.00	25.88	H
16850.00	-50.85	12.06	14.05	-48.86	-25.00	23.86	V

LTE Band 66, 1.4MHz QPSK, Channel 131979

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3422.02	-64.97	5.38	10.46	-59.89	-13.00	46.89	H
5132.02	-67.93	6.85	11.56	-63.22	-13.00	50.22	H
6855.01	-67.45	7.82	10.39	-64.88	-13.00	51.88	H
8604.01	-65.77	8.49	11.39	-62.87	-13.00	49.87	V
10238.01	-64.15	9.43	12.00	-61.58	-13.00	48.58	H
11923.01	-64.02	10.41	13.12	-61.31	-13.00	48.31	H

LTE Band 66, 1.4MHz, QPSK, Channel 132322

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3490.02	-60.61	5.50	10.56	-55.55	-13.00	42.55	H
5235.02	-60.57	7.00	11.70	-55.87	-13.00	42.87	H
6937.01	-68.20	7.81	10.37	-65.64	-13.00	52.64	V
8695.01	-65.98	8.37	11.30	-63.05	-13.00	50.05	H
10476.01	-64.11	9.69	12.18	-61.62	-13.00	48.62	H
12171.01	-64.29	10.14	13.31	-61.12	-13.00	48.12	H

LTE Band 66, 1.4MHz, QPSK, Channel 132665

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3559.02	-61.57	5.92	10.60	-56.89	-13.00	43.89	H
5339.02	-50.11	6.96	11.52	-45.55	-13.00	32.55	H
7150.01	-66.64	8.18	10.50	-64.32	-13.00	51.32	V
8897.01	-65.04	8.84	11.49	-62.39	-13.00	49.39	H
10724.01	-63.75	9.36	12.12	-60.99	-13.00	47.99	H
12502.01	-63.97	10.18	13.30	-60.85	-13.00	47.85	V

LTE Band 71, 5MHz, QPSK, Channel 133147

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1311.01	-57.30	3.13	7.07	2.15	-55.51	-13.00	42.51	H
2009.00	-52.63	4.08	7.55	2.15	-51.31	-13.00	38.31	H
2687.00	-48.07	4.77	9.80	2.15	-45.19	-13.00	32.19	H
3350.02	-64.15	5.32	10.50	2.15	-61.12	-13.00	48.12	H
4002.02	-60.62	6.07	10.40	2.15	-58.44	-13.00	45.44	V
4687.02	-59.80	6.49	11.17	2.15	-57.27	-13.00	44.27	V

LTE Band 71, 5MHz, QPSK, Channel 133297

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1353.01	-58.68	3.18	7.33	2.15	-56.68	-13.00	43.68	H
2047.00	-53.41	4.14	7.32	2.15	-52.38	-13.00	39.38	H
2723.00	-48.38	4.81	9.94	2.15	-45.40	-13.00	32.40	H
3404.02	-63.86	5.37	10.49	2.15	-60.89	-13.00	47.89	H
4090.02	-60.73	6.04	10.40	2.15	-58.52	-13.00	45.52	H
4763.01	-60.57	6.60	11.40	2.15	-57.92	-13.00	44.92	H

LTE Band 71, 5MHz, QPSK, Channel 133447

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1417.01	-58.72	3.26	7.83	2.15	-56.30	-13.00	43.30	H
2112.00	-53.14	4.20	8.07	2.15	-51.42	-13.00	38.42	V
2794.00	-49.31	4.90	10.45	2.15	-45.91	-13.00	32.91	V
3478.02	-62.77	5.48	10.51	2.15	-59.89	-13.00	46.89	V
4174.02	-60.17	6.15	10.45	2.15	-58.02	-13.00	45.02	V
4841.01	-60.03	6.72	11.40	2.15	-57.50	-13.00	44.50	V

LTE CA band 41C, QPSK, CH39683+39800

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4996.02	-62.07	6.61	11.29	-57.39	-25.00	32.39	V
7496.01	-55.72	8.38	10.29	-53.81	-25.00	28.81	H
9995.01	-54.44	9.18	11.91	-51.71	-25.00	26.71	V
12490.01	-54.18	10.20	13.31	-51.07	-25.00	26.07	V
14991.00	-52.62	11.21	14.46	-49.37	-25.00	24.37	V
17487.00	-45.60	12.69	13.05	-45.24	-25.00	20.24	V

LTE CA band 41C, QPSK, CH40528+40645

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5162.02	-62.67	6.90	11.62	-57.95	-25.00	32.95	V
6465.02	-59.15	7.54	10.77	-55.92	-25.00	30.92	H
9089.01	-54.58	8.96	11.80	-51.74	-25.00	26.74	V
11695.01	-53.07	9.62	12.70	-49.99	-25.00	24.99	V
14271.00	-51.05	10.95	12.77	-49.23	-25.00	24.23	H
16853.00	-50.78	12.05	14.05	-48.78	-25.00	23.78	H

LTE CA band 41C, QPSK, CH41373+41490

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5357.02	-61.27	6.92	11.49	-56.70	-25.00	31.70	H
6698.02	-57.46	7.97	10.30	-55.13	-25.00	30.13	H
10766.01	-52.52	9.47	12.17	-49.82	-25.00	24.82	V
13434.01	-52.12	10.59	12.43	-50.28	-25.00	25.28	V
16110.00	-53.70	11.84	15.37	-50.17	-25.00	25.17	V
17492.00	-45.04	12.71	13.03	-44.72	-25.00	19.72	H

LTE CA band 5B, QPSK, CH20450+20549

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1636.01	-58.49	3.56	9.50	2.15	-54.70	-13.00	41.70	H
3285.02	-64.03	5.28	10.37	2.15	-61.09	-13.00	48.09	V
4113.02	-61.63	6.04	10.40	2.15	-59.42	-13.00	46.42	H
5768.01	-58.46	7.24	11.06	2.15	-56.79	-13.00	43.79	V
6603.01	-56.04	7.81	10.59	2.15	-55.41	-13.00	42.41	H
9062.00	-53.39	9.04	11.80	2.15	-52.78	-13.00	39.78	H

LTE CA band 5B, QPSK, CH20476+20575

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1666.01	-59.27	3.58	9.53	2.15	-55.47	-13.00	42.47	H
2521.00	-50.72	4.65	10.16	2.15	-47.36	-13.00	34.36	H
4182.02	-59.18	6.17	10.46	2.15	-57.04	-13.00	44.04	H
5867.01	-58.58	7.29	10.70	2.15	-57.32	-13.00	44.32	H
7516.01	-53.28	8.33	10.30	2.15	-53.46	-13.00	40.46	H
8364.00	-52.66	8.65	11.40	2.15	-52.06	-13.00	39.06	H

LTE CA band 5B, QPSK, CH20501+20600

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1696.01	-58.57	3.60	9.59	2.15	-54.73	-13.00	41.73	H
2533.00	-49.71	4.66	10.13	2.15	-46.39	-13.00	33.39	V
3391.02	-64.58	5.35	10.50	2.15	-61.58	-13.00	48.58	H
4254.02	-59.11	6.24	10.62	2.15	-56.88	-13.00	43.88	V
5090.01	-59.40	6.74	11.48	2.15	-56.81	-13.00	43.81	H
5950.01	-57.40	7.47	10.50	2.15	-56.52	-13.00	43.52	H

LTE CA band 66C, QPSK, CH132027+132171

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3431.02	-75.10	5.39	10.44	-70.05	-13.00	57.05	H
5134.02	-71.95	6.86	11.57	-67.24	-13.00	54.24	H
6851.01	-67.32	7.82	10.40	-64.74	-13.00	51.74	H
8595.01	-65.49	8.50	11.39	-62.60	-13.00	49.60	V
10226.01	-64.00	9.39	12.00	-61.39	-13.00	48.39	H
11925.01	-63.73	10.40	13.13	-61.00	-13.00	48.00	H

LTE CA band 66C, QPSK, CH132328+132472

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3425.02	-75.86	5.38	10.45	-70.79	-13.00	57.79	H
5131.02	-71.91	6.85	11.56	-67.20	-13.00	54.20	H
6856.01	-67.30	7.82	10.39	-64.73	-13.00	51.73	H
8587.01	-65.52	8.52	11.37	-62.67	-13.00	49.67	H
10237.01	-64.03	9.43	12.00	-61.46	-13.00	48.46	H
11928.01	-63.84	10.39	13.13	-61.10	-13.00	48.10	H

LTE CA band 66C, QPSK, CH132428+132572

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3431.02	-75.91	5.39	10.44	-70.86	-13.00	57.86	H
5135.02	-71.98	6.86	11.57	-67.27	-13.00	54.27	H
6844.01	-67.38	7.83	10.40	-64.81	-13.00	51.81	H
8585.01	-65.37	8.52	11.37	-62.52	-13.00	49.52	H
10238.01	-63.95	9.43	12.00	-61.38	-13.00	48.38	H
11920.01	-63.68	10.43	13.12	-60.99	-13.00	47.99	H

LTE CA band 2A_13A, QPSK, CH18625+23205

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3684.01	-64.01	6.46	10.53	-59.94	-13.00	46.94	V
5557.01	-60.22	7.19	11.20	-56.21	-13.00	43.21	V
7408.01	-54.61	8.14	10.12	-52.63	-13.00	39.63	V
9303.01	-54.86	9.15	11.61	-52.40	-13.00	39.40	H
11109.00	-52.18	9.80	12.71	-49.27	-13.00	36.27	V
12984.00	-52.15	10.47	12.72	-49.90	-13.00	36.90	V

LTE CA band 2A_13A, QPSK, CH18900+23230

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3662.01	-63.27	6.51	10.58	-59.20	-13.00	46.20	H
5497.01	-61.18	7.05	11.21	-57.02	-13.00	44.02	V
7347.01	-54.95	8.11	9.99	-53.07	-13.00	40.07	V
9178.01	-54.02	8.93	11.74	-51.21	-13.00	38.21	V
10993.00	-52.17	9.99	12.58	-49.58	-13.00	36.58	H
12855.00	-51.95	10.62	12.84	-49.73	-13.00	36.73	H

LTE CA band 2A_13A, QPSK, CH19175+23255

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3820.01	-63.15	6.08	10.34	-58.89	-13.00	45.89	H
5713.01	-60.13	7.30	11.17	-56.26	-13.00	43.26	V
7620.01	-55.08	8.06	10.44	-52.70	-13.00	39.70	V
9544.01	-53.29	9.38	11.88	-50.79	-13.00	37.79	H
11426.00	-52.65	10.00	12.70	-49.95	-13.00	36.95	H
13317.00	-51.91	10.58	12.57	-49.92	-13.00	36.92	V

LTE CA band 4A_7A, QPSK, CH20000+20800

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3420.95	-66.10	5.38	10.46	-61.02	-25.00	36.02	H
5147.82	-61.69	6.88	11.60	-56.97	-25.00	31.97	H
6844.23	-57.77	7.83	10.40	-55.20	-25.00	30.20	H
8610.94	-55.53	8.48	11.38	-52.63	-25.00	27.63	H
10299.85	-53.78	9.64	12.00	-51.42	-25.00	26.42	H
12024.85	-53.46	10.12	13.18	-50.40	-25.00	25.40	V

LTE CA band 4A_7A, QPSK, CH20175+21100

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3465.01	-65.63	5.46	10.46	-60.63	-25.00	35.63	H
5197.51	-63.51	6.96	11.70	-58.77	-25.00	33.77	H
6912.19	-58.41	7.74	10.32	-55.83	-25.00	30.83	H
8633.91	-54.67	8.45	11.33	-51.79	-25.00	26.79	H
10374.38	-53.47	9.76	12.07	-51.16	-25.00	26.16	V
12100.79	-51.45	10.34	13.10	-48.69	-25.00	23.69	V

LTE CA band 4A_7A, QPSK, CH20350+21400

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3507.20	-65.43	5.53	10.60	-60.36	-25.00	35.36	H
5257.04	-62.50	7.00	11.69	-57.81	-25.00	32.81	V
7000.32	-56.40	8.30	10.40	-54.30	-25.00	29.30	H
8809.22	-54.71	8.68	11.32	-52.07	-25.00	27.07	V
10534.22	-54.53	9.52	12.20	-51.85	-25.00	26.85	H
12279.38	-54.58	10.01	13.64	-50.95	-25.00	25.95	H

LTE CA band 5A_30A, QPSK, CH20450+27710

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4600.79	-73.12	6.47	11.30	-68.29	-40.00	28.29	H
6930.01	-63.78	7.76	10.36	-61.18	-40.00	21.18	H
9241.41	-64.57	9.02	11.70	-61.89	-40.00	21.89	H
11527.97	-63.14	9.81	12.73	-60.22	-40.00	20.22	V
13852.03	-61.09	10.71	12.45	-59.35	-40.00	19.35	H
16198.59	-62.60	11.73	15.10	-59.23	-40.00	19.23	V

LTE CA band 5A_30A, QPSK, CH20525+27710

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4620.01	-72.80	6.45	11.22	-68.03	-40.00	28.03	H
6930.01	-63.83	7.76	10.36	-61.23	-40.00	21.23	H
9228.29	-64.51	8.99	11.70	-61.80	-40.00	21.80	H
11551.88	-63.24	9.81	12.75	-60.30	-40.00	20.30	V
13839.38	-61.20	10.68	12.46	-59.42	-40.00	19.42	H
16192.97	-62.71	11.74	15.12	-59.33	-40.00	19.33	V

LTE CA band 5A_30A, QPSK, CH20600+27710

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4611.57	-73.00	6.46	11.25	-68.21	-40.00	28.21	H
6930.01	-64.07	7.76	10.36	-61.47	-40.00	21.47	H
9232.04	-64.71	9.00	11.70	-62.01	-40.00	22.01	H
11565.00	-63.18	9.80	12.77	-60.21	-40.00	20.21	V
13865.16	-60.97	10.73	12.43	-59.27	-40.00	19.27	V
16195.31	-62.76	11.73	15.11	-59.38	-40.00	19.38	V

LTE CA band 12A_66A, QPSK, CH23035+132022

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3431.27	-64.31	5.40	10.44	2.15	-61.42	-13.00	48.42	H
5151.58	-60.98	6.88	11.60	2.15	-58.41	-13.00	45.41	H
6867.20	-55.76	7.80	10.37	2.15	-55.34	-13.00	42.34	V
8589.39	-53.70	8.51	11.38	2.15	-52.98	-13.00	39.98	V
10312.51	-52.12	9.66	12.01	2.15	-51.92	-13.00	38.92	H
12022.98	-52.52	10.12	13.18	2.15	-51.61	-13.00	38.61	H

LTE CA band 12A_66A, QPSK, CH23095+132322

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3507.68	-63.87	5.53	10.60	2.15	-60.95	-13.00	47.95	V
5236.89	-60.79	7.00	11.70	2.15	-58.24	-13.00	45.24	H
6986.26	-55.91	8.19	10.40	2.15	-55.85	-13.00	42.85	V
8740.79	-54.35	8.48	11.30	2.15	-53.68	-13.00	40.68	V
10495.79	-50.38	9.66	12.20	2.15	-49.99	-13.00	36.99	H
12233.45	-52.12	10.04	13.50	2.15	-50.81	-13.00	37.81	H

LTE CA band 12A_66A, QPSK,CH23155+132622

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3431.27	-64.31	5.40	10.44	2.15	-61.42	-13.00	48.42	H
5151.58	-60.98	6.88	11.60	2.15	-58.41	-13.00	45.41	H
6867.20	-55.76	7.80	10.37	2.15	-55.34	-13.00	42.34	V
8589.39	-53.70	8.51	11.38	2.15	-52.98	-13.00	39.98	V
10312.51	-52.12	9.66	12.01	2.15	-51.92	-13.00	38.92	H
12022.98	-52.52	10.12	13.18	2.15	-51.61	-13.00	38.61	H

Note 1: Peak EIRP (dBm) = PMea(dBm) - Path Loss(dB) + Antenna Gain(dBi)

Note 2: Only the worst cases were reported.

Note: Expanded measurement uncertainty is U = 5.64 dB, k = 2.

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℃.
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℃ increments from -30℃ to +50℃. 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℃.
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 ℃ decrements from +50℃ to -30℃. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
9. At all temperature levels hold the temperature to +/- 0.5℃ during the measurement procedure.

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

A.3.2 Measurement results

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

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.91	2500.641	2569.391		
50				9.46	0.0037
40				8.54	0.0034
30				9.44	0.0037
10				9.21	0.0036
0				-0.26	0.0001
-10				12.06	0.0048
-20				-0.20	0.0001
-30				0.24	0.0001

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
3.4	20	2500.641	2569.391	-0.59	0.0002
4.5				-0.10	0.0000

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

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.91	699.465	715.519		
50				-5.54	0.0078
40				-0.89	0.0013
30				-1.14	0.0016
10				-6.31	0.0089
0				-5.88	0.0083
-10				0.07	0.0001
-20				-5.39	0.0076
-30				0.44	0.0006

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
3.4	20	699.465	715.519	-5.26	0.0074
4.5				-0.27	0.0004

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

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.91	777.481	786.519		
50				-0.26	0.0003
40				0.37	0.0005
30				-0.80	0.0010
10				-7.51	0.0096
0				-0.63	0.0008
-10				0.14	0.0002
-20				-5.56	0.0071
-30				-5.41	0.0069

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
3.4	20	777.481	786.519	0.44	0.0006
4.5				0.39	0.0005

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

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.91	1850.833	1914.199		
50				1.29	0.0007
40				0.10	0.0001
30				0.66	0.0004
10				-0.53	0.0003
0				0.43	0.0002
-10				-0.50	0.0003
-20				-0.79	0.0004
-30				-2.66	0.0014

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
3.4	20	1850.833	1914.199	-1.93	0.0010
4.5				-0.70	0.0004

LTE Band 26(814MHz~824MHz), 10MHz bandwidth QPSK (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.91	814.385	823.611		
50				0.41	0.0005
40				-1.46	0.0018
30				-1.37	0.0017
10				-0.93	0.0011
0				-6.48	0.0079
-10				-0.84	0.0010
-20				-1.07	0.0013
-30				-0.70	0.0009

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
3.4	20	814.385	823.611	-1.02	0.0012
4.5				-0.40	0.0005

LTE Band 26(824MHz~849MHz), 15MHz bandwidth QPSK (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.91	824.553	848.495		
50				0.56	0.0007
40				1.23	0.0015
30				5.05	0.0060
10				0.04	0.0000
0				0.10	0.0001
-10				0.84	0.0010
-20				-0.11	0.0001
-30				0.89	0.0011

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
3.4	20	824.553	848.495	-0.49	0.0006
4.5				-0.11	0.0001

LTE Band 30, 10MHz bandwidth QPSK (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.91	2305.417	2314.583		
50				2.49	0.0011
40				10.26	0.0044
30				3.78	0.0016
10				1.63	0.0007
0				0.56	0.0002
-10				9.54	0.0041
-20				10.96	0.0047
-30				1.90	0.0008

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
3.4	20	2305.417	2314.583	3.66	0.0016
4.5				3.12	0.0014

LTE Band 41, 20MHz bandwidth QPSK (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.91	2496.417	2689.551		
50				-0.23	0.0001
40				1.03	0.0004
30				0.20	0.0001
10				-1.12	0.0004
0				1.29	0.0005
-10				-1.22	0.0005
-20				0.82	0.0003
-30				12.86	0.0050

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
3.4	20	2496.417	2689.551	11.56	0.0045
4.5				1.65	0.0006

LTE Band 48, 20MHz bandwidth QPSK (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.91	3550.929	3699.103		
50				-2.19	0.0006
40				-1.06	0.0003
30				0.33	0.0001
10				13.63	0.0038
0				-1.65	0.0005
-10				-0.87	0.0002
-20				-2.03	0.0006
-30				0.53	0.0001

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
3.4	20	3550.929	3699.103	0.73	0.0002
4.5				1.06	0.0003

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

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.91	1710.833	1779.231		
50				0.57	0.0003
40				6.94	0.0040
30				-2.13	0.0012
10				0.06	0.0000
0				0.24	0.0001
-10				0.46	0.0003
-20				1.27	0.0007
-30				-3.38	0.0019

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
3.4	20	1710.833	1779.231	6.67	0.0038
4.5				-0.16	0.0001

LTE Band 71, 20MHz bandwidth QPSK (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(℃)	Voltage(V)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.91	663.994	697.006		
50				-0.92	0.0014
40				4.56	0.0067
30				-0.40	0.0006
10				-0.64	0.0009
0				5.15	0.0076
-10				-1.42	0.0021
-20				-0.74	0.0011
-30				-1.40	0.0021

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	F_L(MHz)	F_H(MHz)	Offset(Hz)	Frequency error(ppm)
3.4	20	663.994	697.006	-1.73	0.0025
4.5				-1.10	0.0016

LTE CA band 5B , 10MHz+10MHz bandwidth QPSK(worst case of all bandwidths)

Frequency Error vs Voltage

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.91	824.300	848.720		
50				3.28	0.0039
40				4.91	0.0059
30				5.78	0.0069
10				6.31	0.0075
0				7.15	0.0085
-10				6.90	0.0082
-20				7.72	0.0092
-30				7.64	0.0091

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.4	20	824.300	848.720	8.05	0.0096
4.5				7.58	0.0091

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

Frequency Error vs Voltage

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.91	2500.420	2569.580		
50				7.58	0.0030
40				9.23	0.0036
30				9.64	0.0038
10				10.24	0.0040
0				10.13	0.0040
-10				10.43	0.0041
-20				11.27	0.0044
-30				11.75	0.0046

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.4	20	2500.420	2569.580	12.82	0.0051
4.5				13.18	0.0052

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

Frequency Error vs Voltage

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.91	2496.920	2689.080		
50				3.82	0.0015
40				5.31	0.0020
30				4.03	0.0016
10				4.62	0.0018
0				4.68	0.0018
-10				6.27	0.0024
-20				5.24	0.0020
-30				5.61	0.0022

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.4	20	2496.920	2689.080	6.08	0.0023
4.5				5.88	0.0023

LTE CA band 48C, 20MHz+20MHz bandwidth QPSK(worst case of all bandwidths)

Frequency Error vs Voltage

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.91	3550.380	3699.660		
50				0.53	0.0001
40				1.03	0.0003
30				1.12	0.0003
10				-0.04	0.0000
0				1.09	0.0003
-10				1.25	0.0003
-20				1.32	0.0004
-30				0.83	0.0002

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.4	20	3550.380	3699.660	0.81	0.0002
4.5				1.16	0.0003

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

Frequency Error vs Voltage

Temperature(℃)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.91	1710.320	1779.580		
50				4.71	0.0027
40				7.07	0.0040
30				7.74	0.0044
10				8.05	0.0046
0				9.00	0.0051
-10				8.47	0.0048
-20				8.64	0.0049
-30				9.17	0.0052

Frequency Error vs Voltage

Voltage(V)	Temperature(℃)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.4	20	1710.320	1779.580	8.94	0.0051
4.5				8.91	0.0051

Note: Expanded measurement uncertainty is U = 0.01 PPM, k = 2.

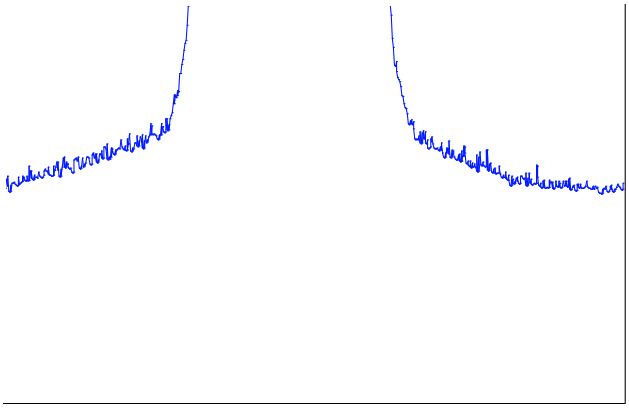
A.4 Occupied Bandwidth

Occupied bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the mid frequencies 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 ≥ 3 × 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%)

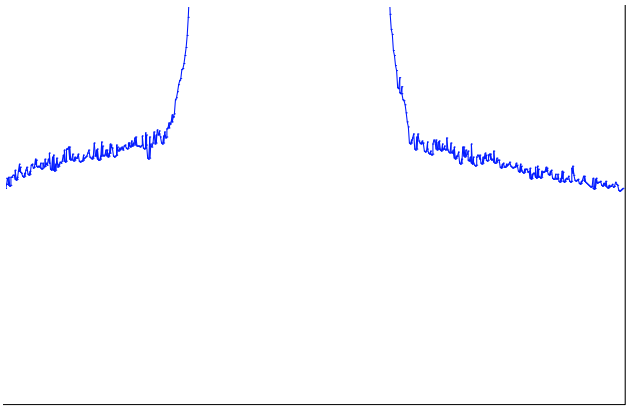
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2535.0	QPSK	16QAM
	4495.19	4495.19

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



Date: 24.MAR.2023 13:30:12

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

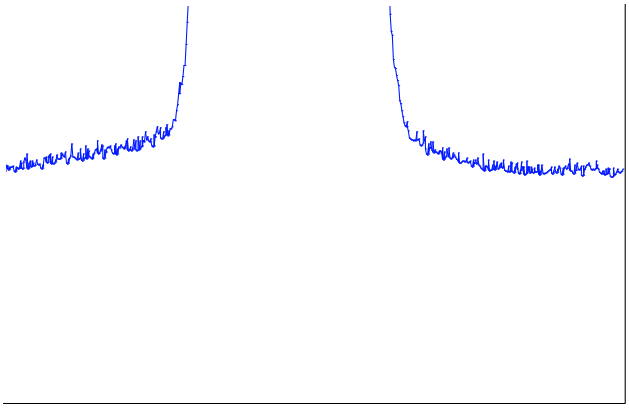


Date: 24.MAR.2023 13:30:52

LTE band 7, 10MHz (99%)

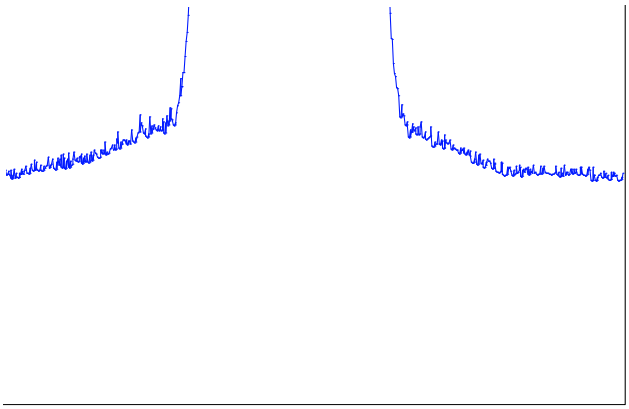
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2535.0	QPSK	16QAM
	9038.46	8990.38

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



Date: 24.MAR.2023 13:31:37

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

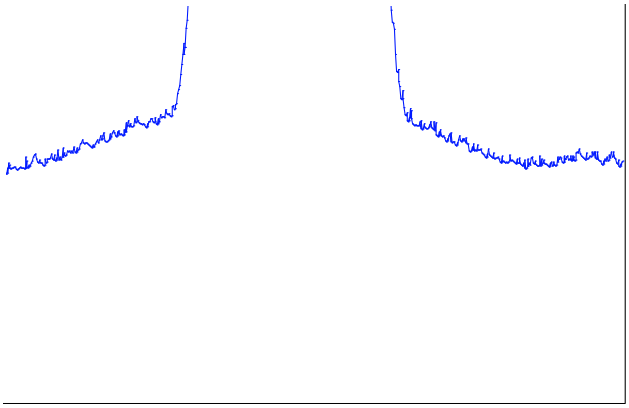


Date: 24.MAR.2023 13:32:18

LTE band 7, 15MHz (99%)

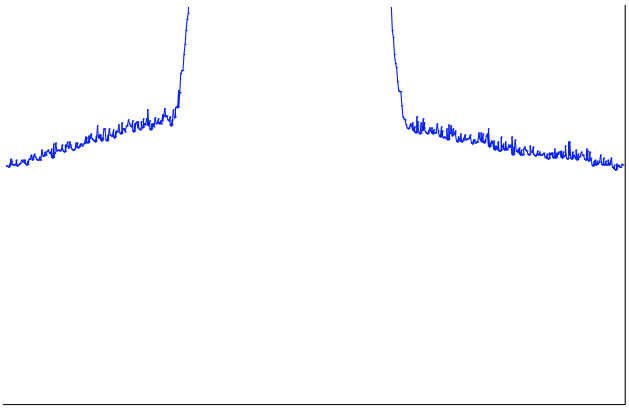
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2535.0	QPSK	16QAM
	13485.58	13485.58

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



Date: 24.MAR.2023 13:33:03

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

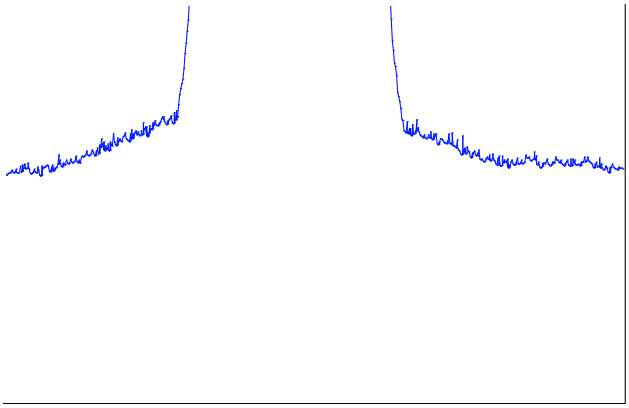


Date: 24.MAR.2023 13:33:43

LTE band 7, 20MHz (99%)

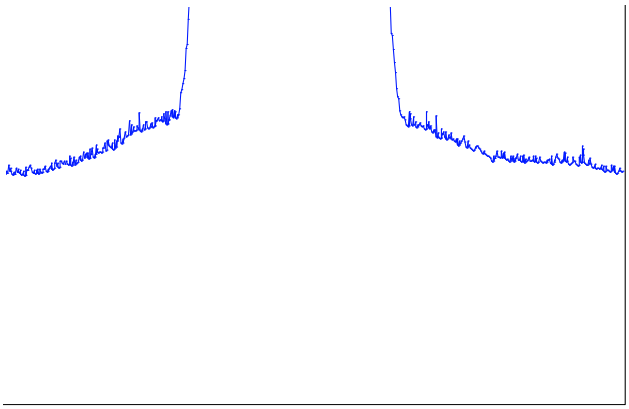
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2535.0	QPSK	16QAM
	17884.62	17884.62

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



Date: 24.MAR.2023 13:34:28

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

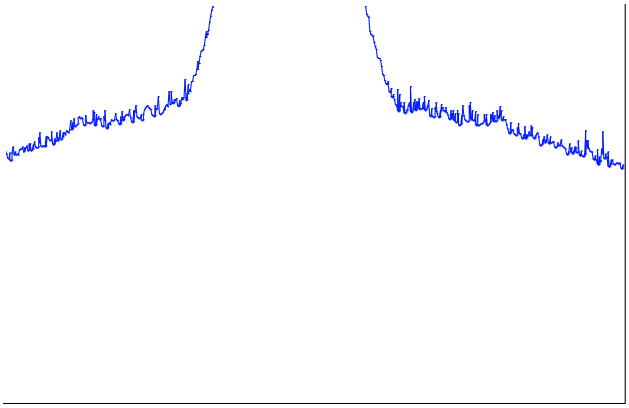


Date: 24.MAR.2023 13:35:08

LTE band 12, 1.4MHz (99%)

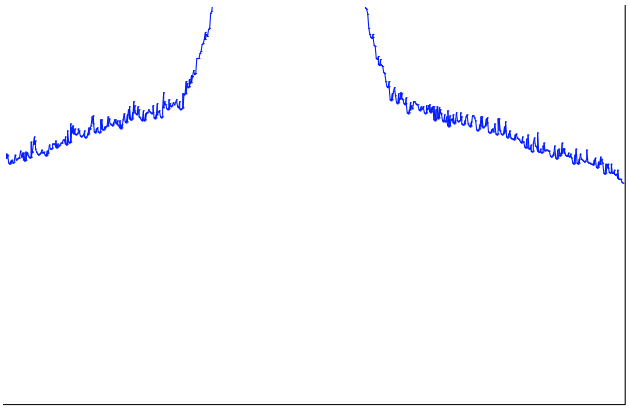
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
707.5	QPSK	16QAM
	1089.74	1105.77

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



Date: 21.MAR.2023 17:10:32

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

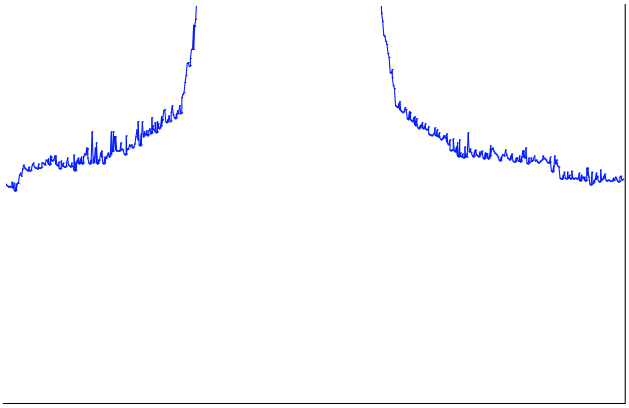


Date: 21.MAR.2023 17:11:12

LTE band 12, 3MHz (99%)

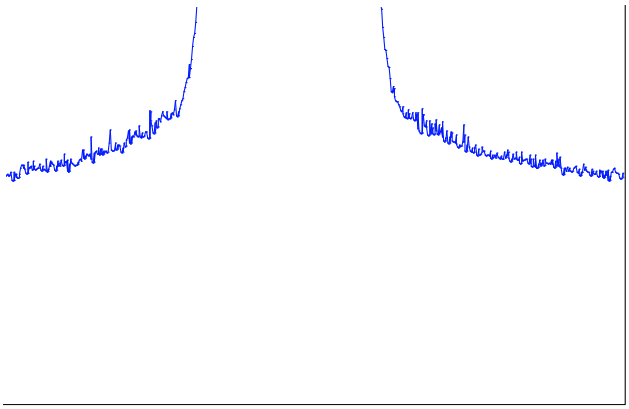
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
707.5	QPSK	16QAM
	2708.33	2692.31

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



Date: 21.MAR.2023 17:11:57

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

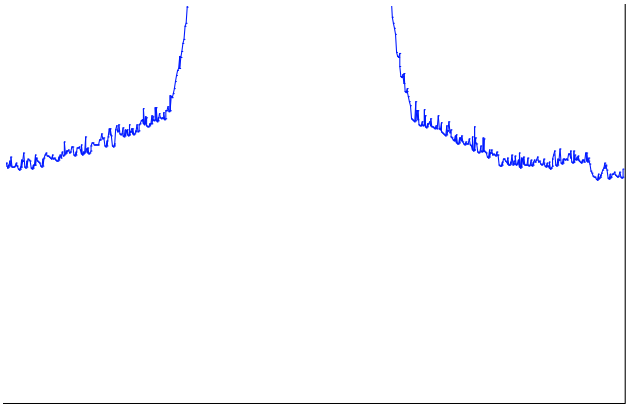


Date: 21.MAR.2023 17:12:37

LTE band 12, 5MHz (99%)

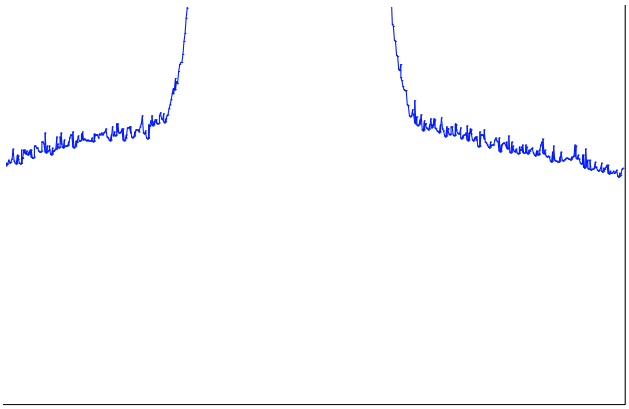
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
707.5	QPSK	16QAM
	4495.19	4495.19

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



Date: 21.MAR.2023 17:13:22

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

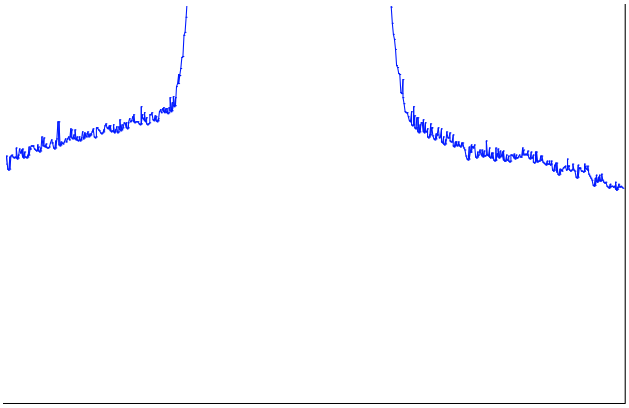


Date: 21.MAR.2023 17:14:03

LTE band 12, 10MHz (99%)

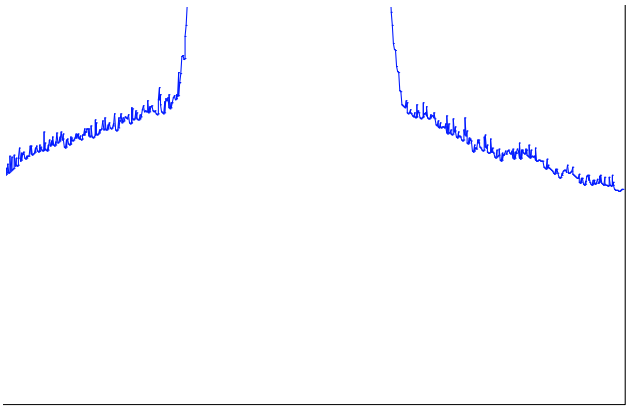
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
707.5	QPSK	16QAM
	8990.38	8990.38

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



Date: 21.MAR.2023 17:14:48

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

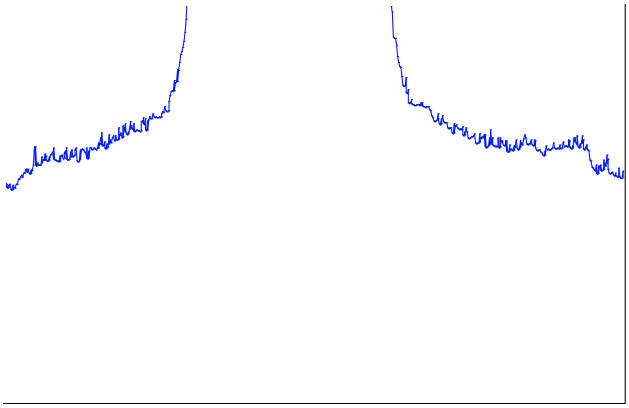


Date: 21.MAR.2023 17:15:28

LTE band 13, 5MHz (99%)

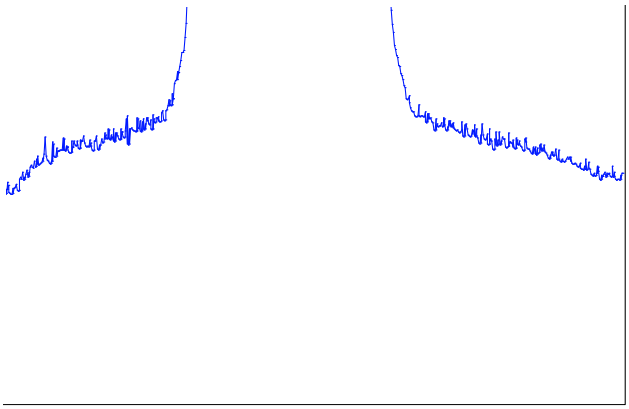
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
782.0	QPSK	16QAM
	4519.23	4495.19

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



Date: 21.MAR.2023 17:16:17

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

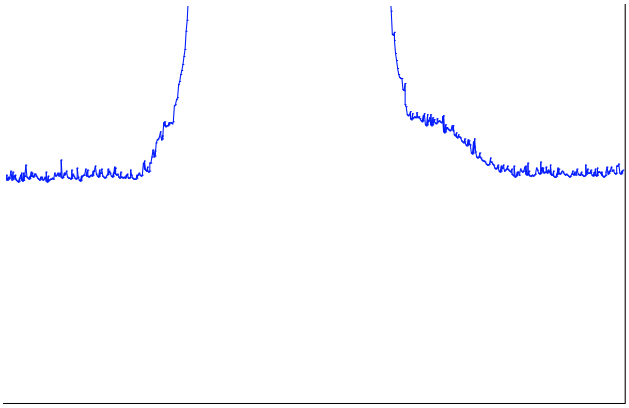


Date: 21.MAR.2023 17:16:58

LTE band 13, 10MHz (99%)

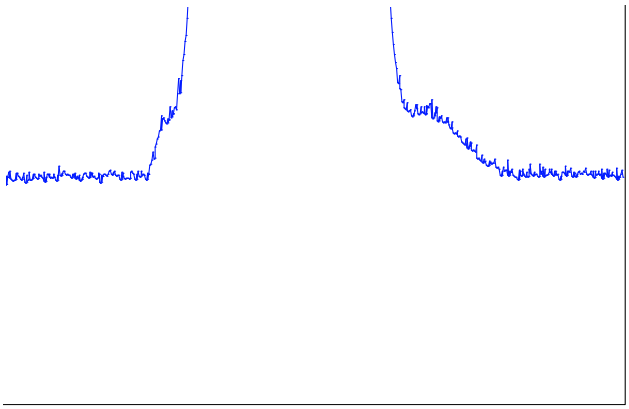
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
782.0	QPSK	16QAM
	8942.31	8990.38

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



Date: 21.MAR.2023 17:17:43

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

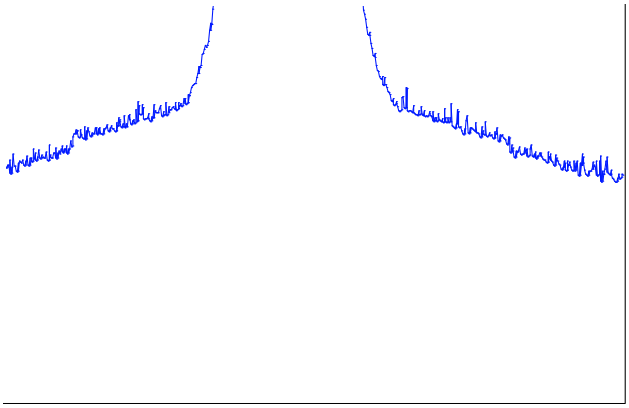


Date: 21.MAR.2023 17:18:23

LTE band 25, 1.4MHz (99%)

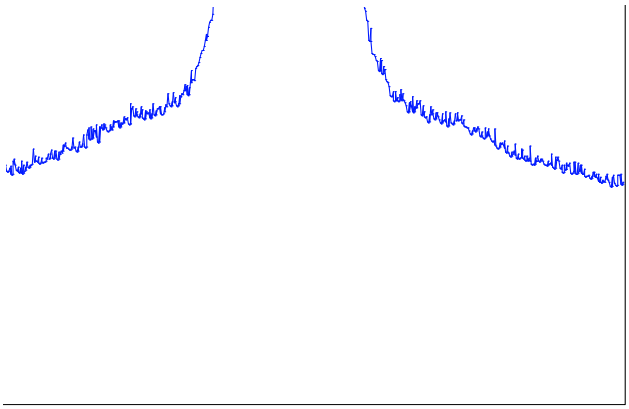
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1882.5	QPSK	16QAM
	1089.74	1097.76

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



Date: 24.MAR.2023 13:35:58

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

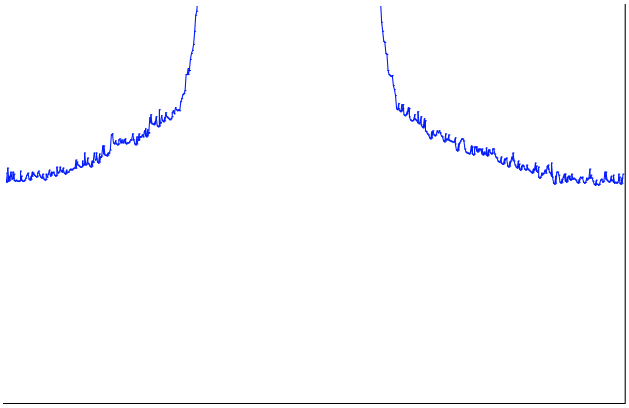


Date: 24.MAR.2023 13:36:38

LTE band 25, 3MHz (99%)

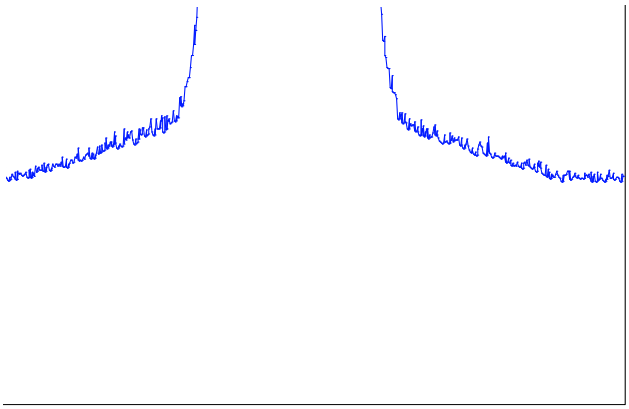
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1882.5	QPSK	16QAM
	2692.31	2692.31

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



Date: 24.MAR.2023 13:37:23

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

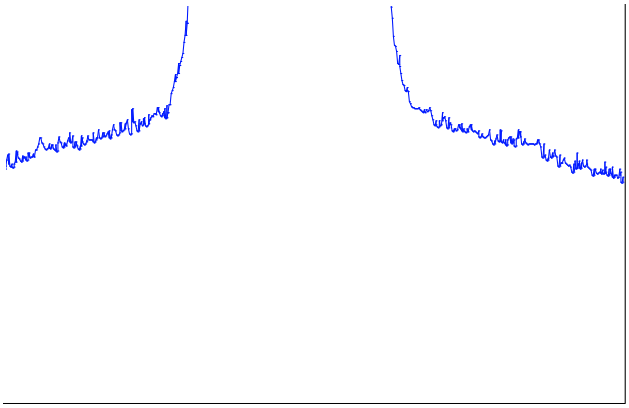


Date: 24.MAR.2023 13:38:03

LTE band 25, 5MHz (99%)

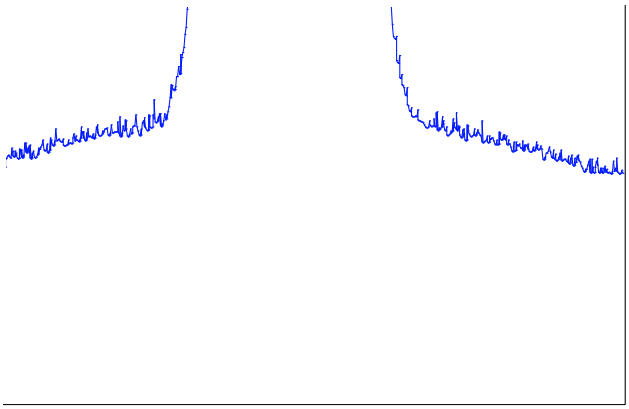
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1882.5	QPSK	16QAM
	4495.19	4519.23

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



Date: 24.MAR.2023 13:38:48

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

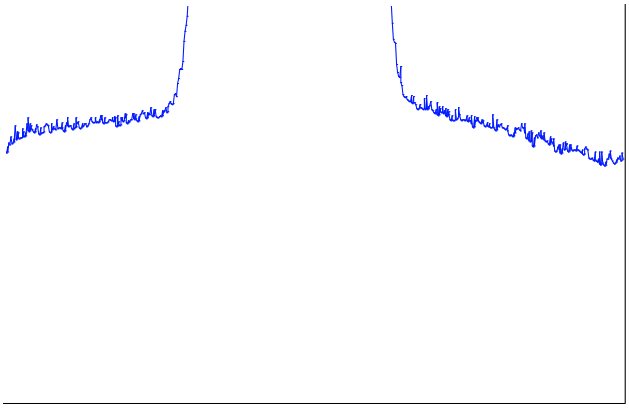


Date: 24.MAR.2023 13:39:28

LTE band 25, 10MHz (99%)

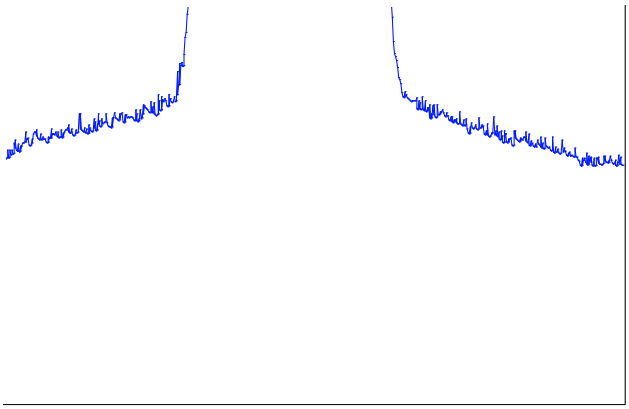
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1882.5	QPSK	16QAM
	8942.31	8990.38

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



Date: 24.MAR.2023 13:40:13

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

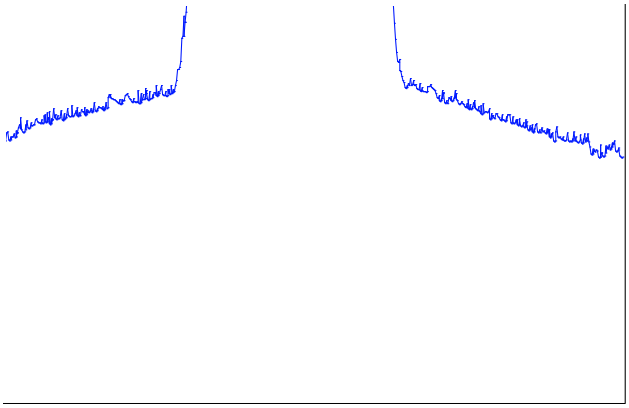


Date: 24.MAR.2023 13:40:53

LTE band 25, 15MHz (99%)

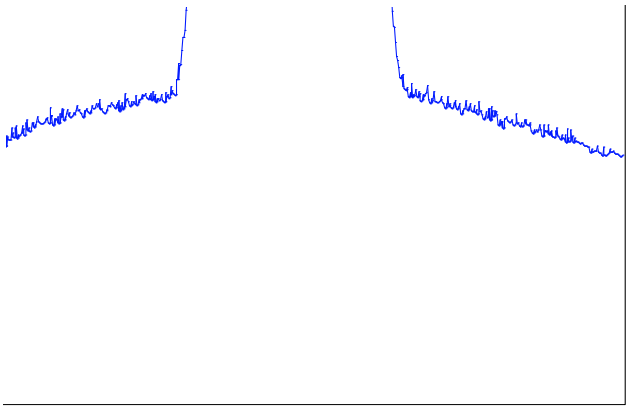
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1882.5	QPSK	16QAM
	13485.58	13485.58

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



Date: 24.MAR.2023 13:41:39

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

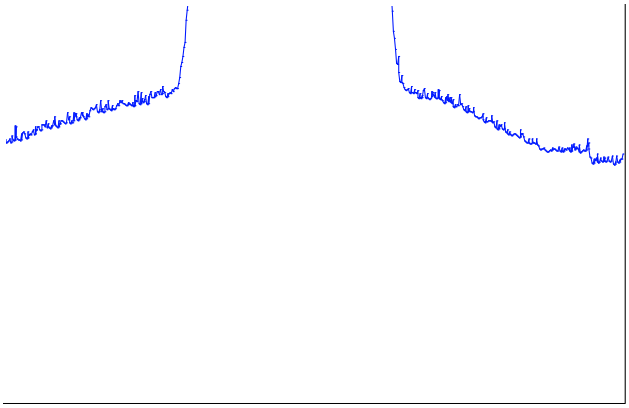


Date: 24.MAR.2023 13:42:19

LTE band 25, 20MHz (99%)

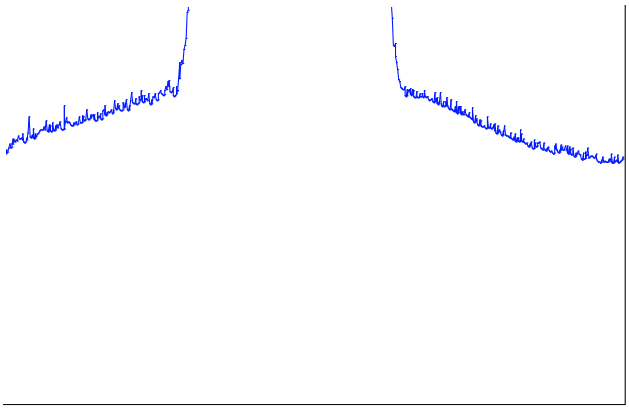
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1882.5	QPSK	16QAM
	17980.77	17980.77

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



Date: 24.MAR.2023 13:43:04

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

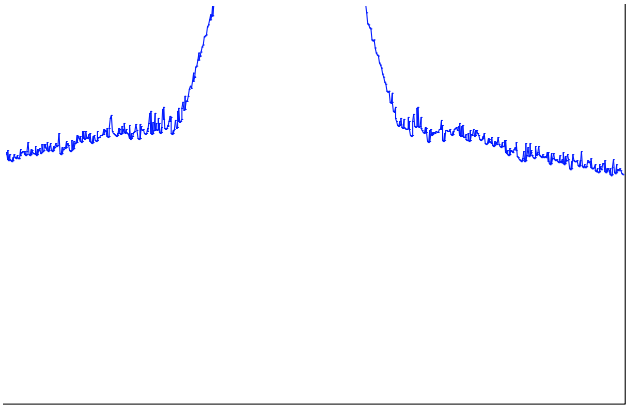


Date: 24.MAR.2023 13:43:44

LTE band 26(814MHz~824MHz), 1.4MHz (99%)

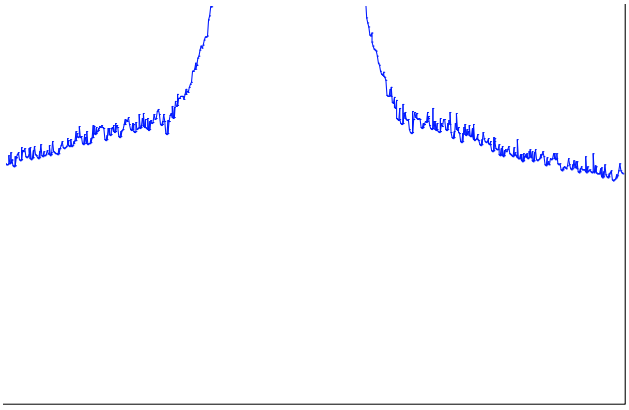
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
819.0	QPSK	16QAM
	1097.76	1097.76

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



Date: 24.MAR.2023 15:39:38

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

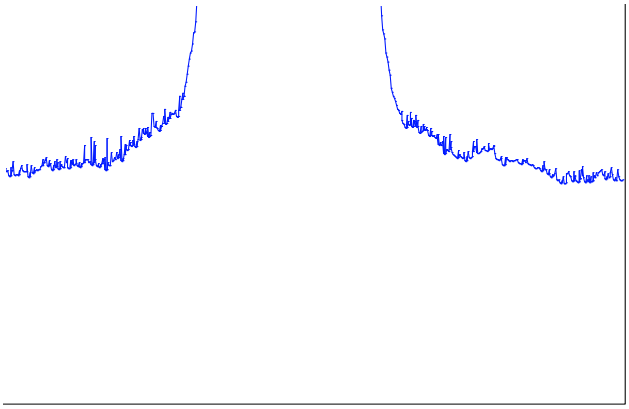


Date: 24.MAR.2023 15:40:18

LTE band 26(814MHz~824MHz), 3MHz (99%)

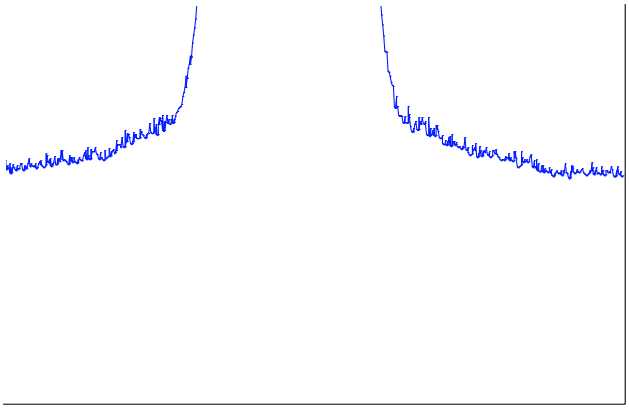
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
819.0	QPSK	16QAM
	2692.31	2708.33

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



Date: 24.MAR.2023 15:41:03

LTE band 26(814MHz~824MHz), 3MHz Bandwidth, 16QAM (99% BW)

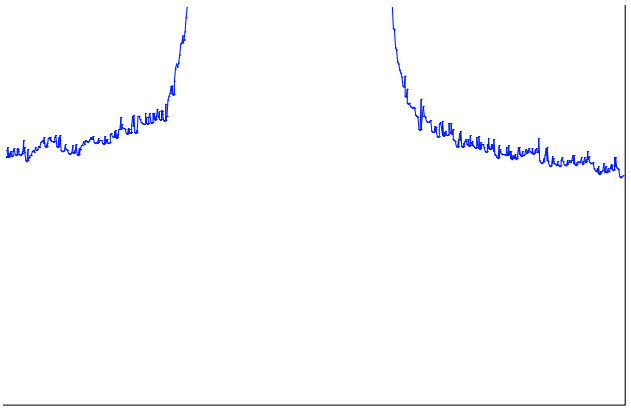


Date: 24.MAR.2023 15:41:44

LTE band 26(814MHz~824MHz), 5MHz (99%)

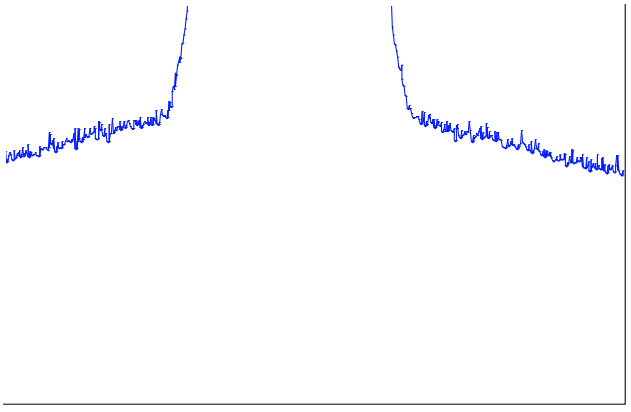
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
819.0	QPSK	16QAM
	4495.19	4471.15

LTE band 26(814MHz~824MHz), 5MHz Bandwidth, QPSK (99% BW)



Date: 24.MAR.2023 15:42:29

LTE band 26(814MHz~824MHz), 5MHz Bandwidth, 16QAM (99% BW)

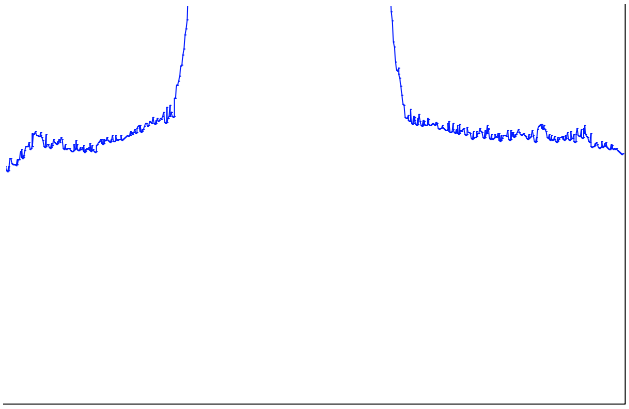


Date: 24.MAR.2023 15:43:09

LTE band 26(814MHz~824MHz), 10MHz (99%)

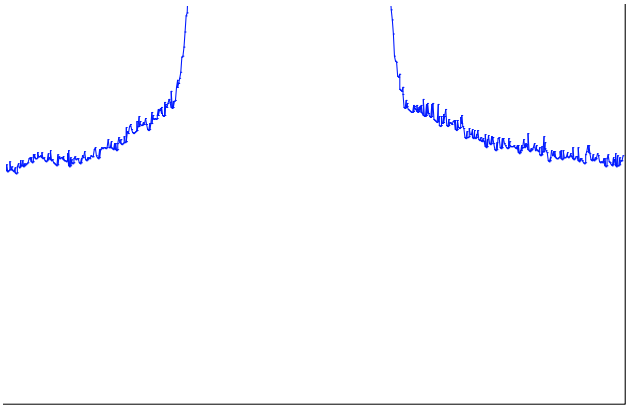
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
819.0	QPSK	16QAM
	8942.31	9038.46

LTE band 26(814MHz~824MHz), 10MHz Bandwidth, QPSK (99% BW)



Date: 24.MAR.2023 15:43:54

LTE band 26(814MHz~824MHz), 10MHz Bandwidth, 16QAM (99% BW)

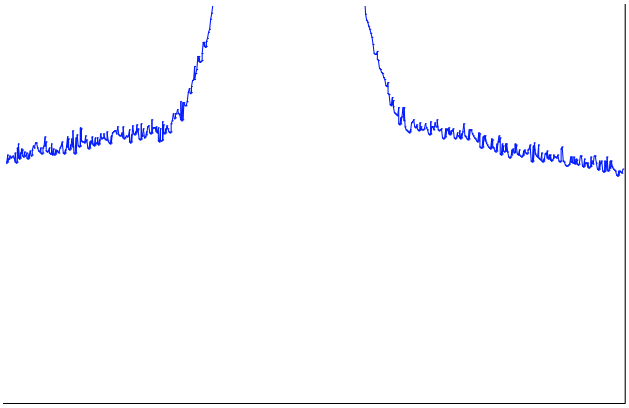


Date: 24.MAR.2023 15:44:34

LTE band 26(824MHz~849MHz), 1.4MHz (99%)

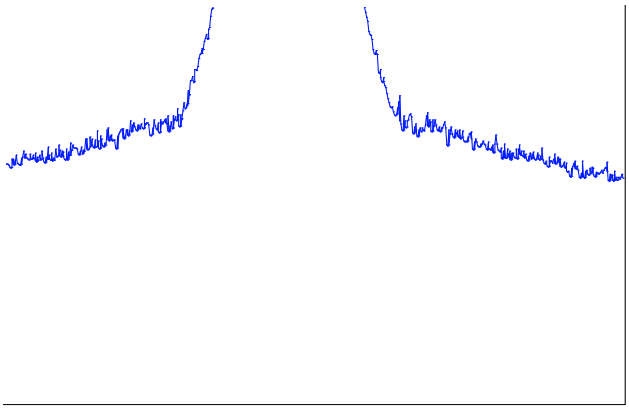
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
836.5	QPSK	16QAM
	1097.76	1097.76

LTE band 26(824MHz~849MHz), 1.4MHz Bandwidth, QPSK (99% BW)



Date: 24.MAR.2023 15:31:13

LTE band 26(824MHz~849MHz), 1.4MHz Bandwidth, 16QAM (99% BW)

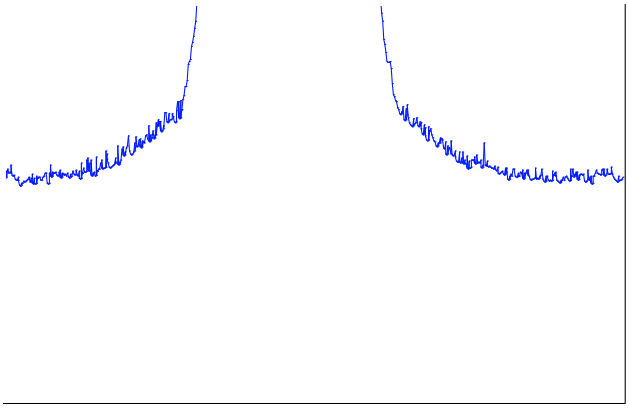


Date: 24.MAR.2023 15:31:53

LTE band 26(824MHz~849MHz), 3MHz (99%)

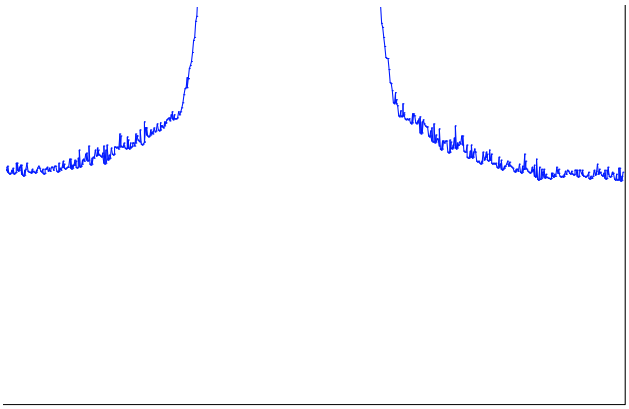
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
836.5	QPSK	16QAM
	2692.31	2708.33

LTE band 26(824MHz~849MHz), 3MHz Bandwidth, QPSK (99% BW)



Date: 24.MAR.2023 15:32:38

LTE band 26(824MHz~849MHz), 3MHz Bandwidth, 16QAM (99% BW)

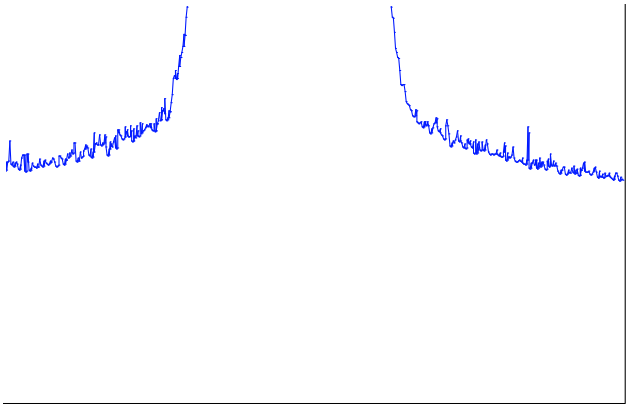


Date: 24.MAR.2023 15:33:18

LTE band 26(824MHz~849MHz), 5MHz (99%)

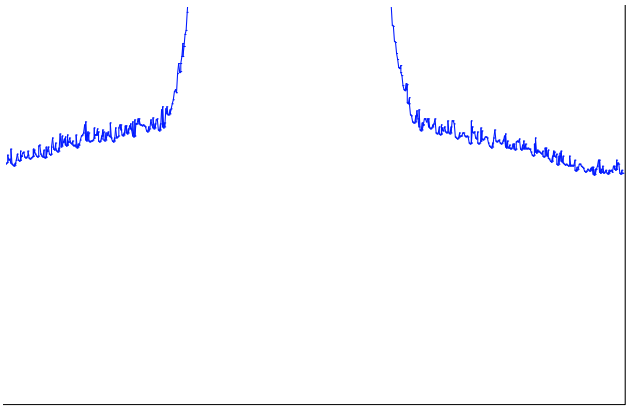
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
836.5	QPSK	16QAM
	4495.19	4495.19

LTE band 26(824MHz~849MHz), 5MHz Bandwidth, QPSK (99% BW)



Date: 24.MAR.2023 15:34:04

LTE band 26(824MHz~849MHz), 5MHz Bandwidth, 16QAM (99% BW)

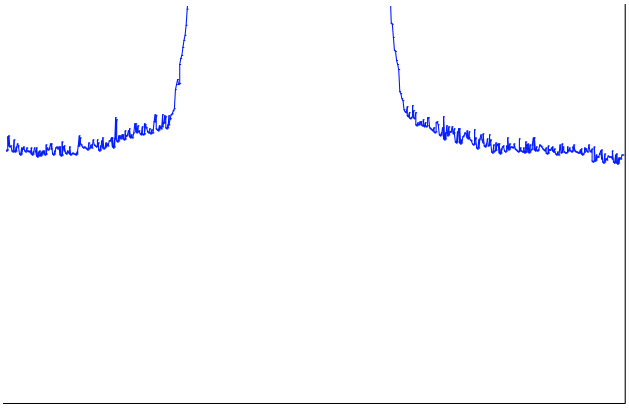


Date: 24.MAR.2023 15:34:44

LTE band 26(824MHz~849MHz), 10MHz (99%)

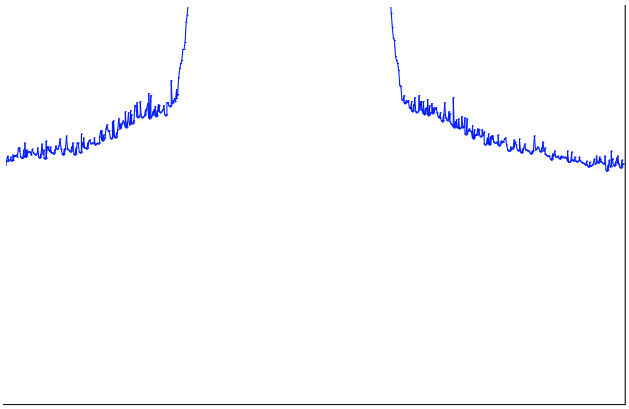
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
836.5	QPSK	16QAM
	8942.31	8942.31

LTE band 26(824MHz~849MHz), 10MHz Bandwidth, QPSK (99% BW)



Date: 24.MAR.2023 15:35:29

LTE band 26(824MHz~849MHz), 10MHz Bandwidth, 16QAM (99% BW)

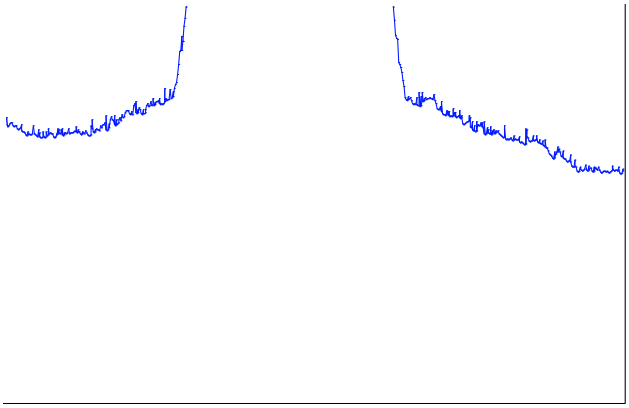


Date: 24.MAR.2023 15:36:09

LTE band 26(824MHz~849MHz), 15MHz (99%)

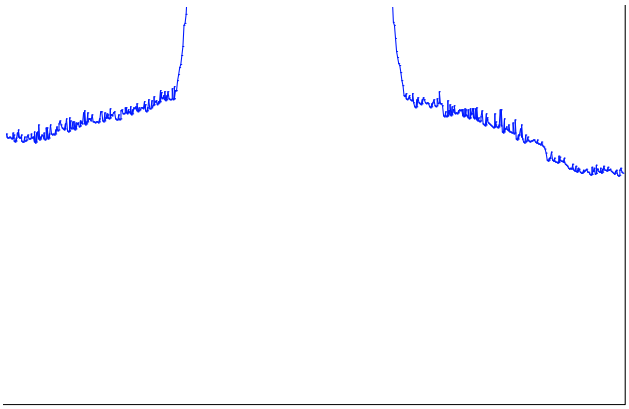
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
836.5	QPSK	16QAM
	13485.58	13485.58

LTE band 26(824MHz~849MHz), 15MHz Bandwidth, QPSK (99% BW)



Date: 24.MAR.2023 15:36:55

LTE band 26(824MHz~849MHz), 15MHz Bandwidth, 16QAM (99% BW)

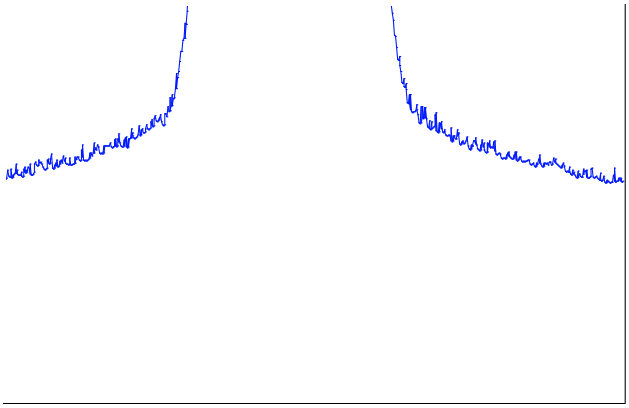


Date: 24.MAR.2023 15:37:35

LTE band 30, 5MHz (99%)

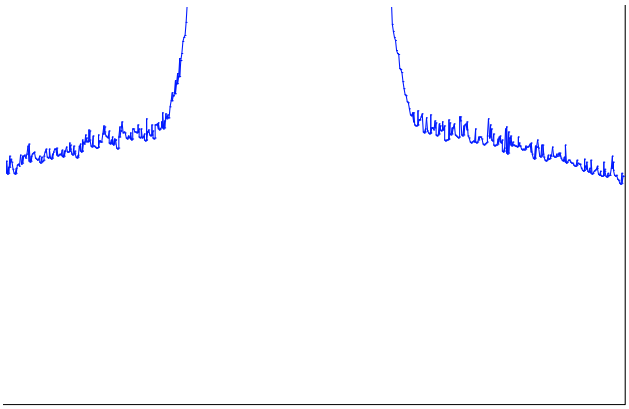
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2310.0	QPSK	16QAM
	4519.23	4519.23

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



Date: 28.MAR.2023 16:07:47

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

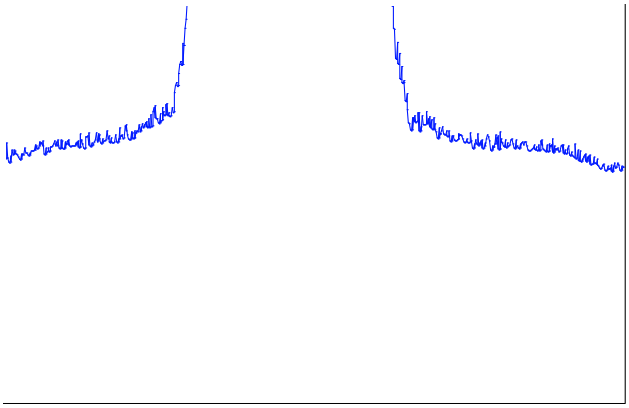


Date: 28.MAR.2023 16:08:27

LTE band 30, 10MHz (99%)

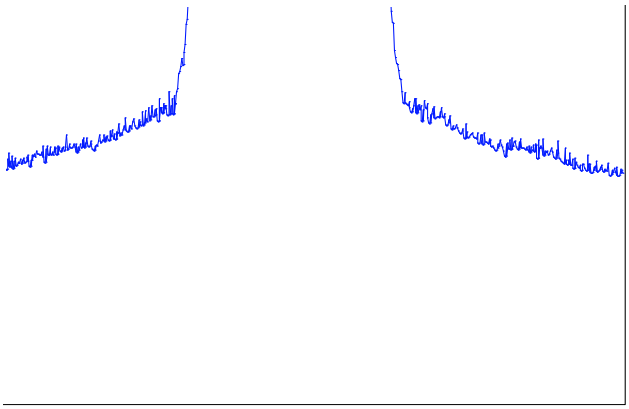
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2310.0	QPSK	16QAM
	8990.38	8990.38

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



Date: 28.MAR.2023 16:09:12

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

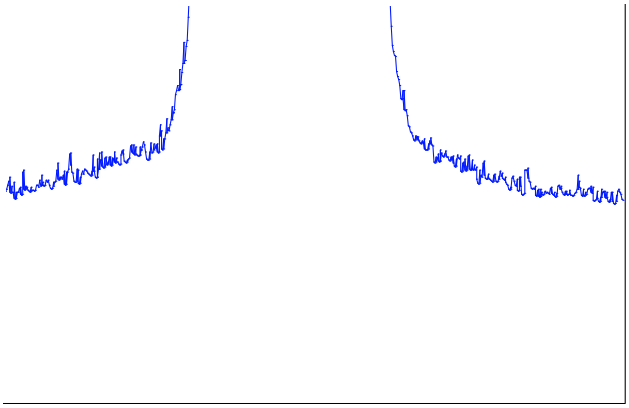


Date: 28.MAR.2023 16:09:52

LTE band 41, 5MHz (99%)

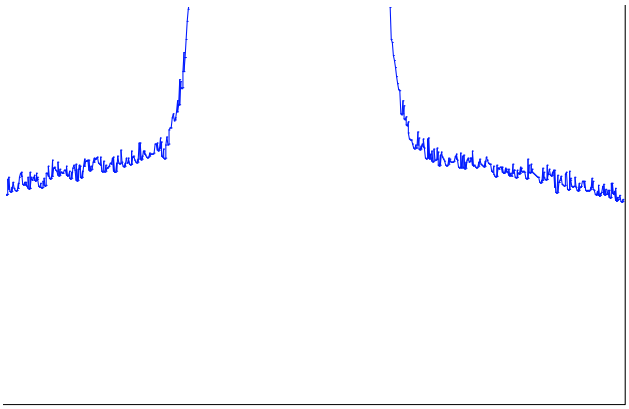
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2593.0	QPSK	16QAM
	4471.15	4471.15

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



Date: 24.MAR.2023 13:53:49

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

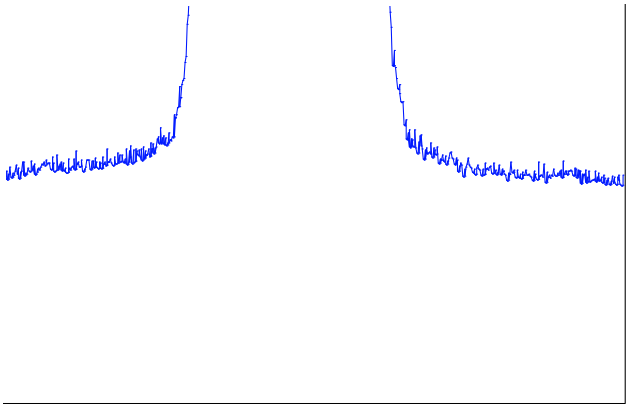


Date: 24.MAR.2023 13:54:29

LTE band 41, 10MHz (99%)

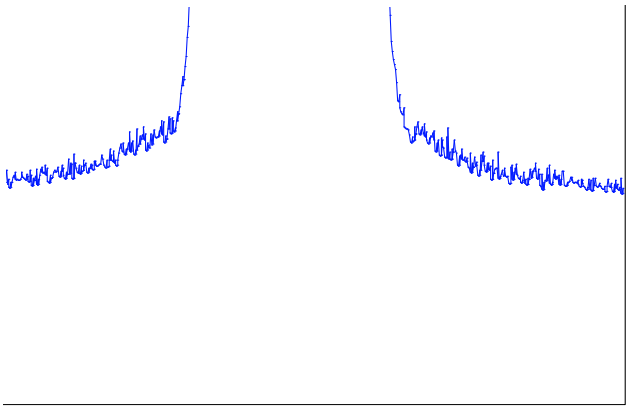
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2593.0	QPSK	16QAM
	8942.31	8990.38

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



Date: 24.MAR.2023 13:55:15

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

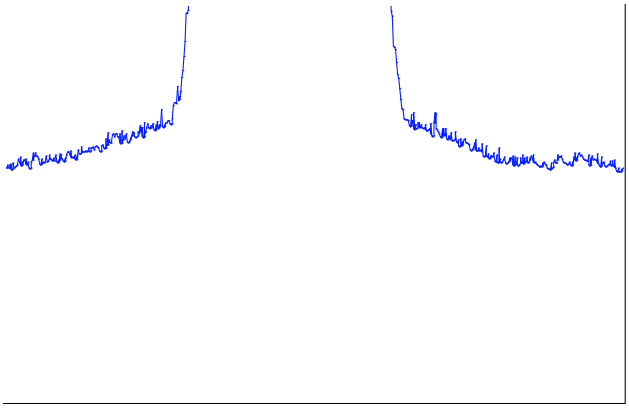


Date: 24.MAR.2023 13:55:55

LTE band 41, 15MHz (99%)

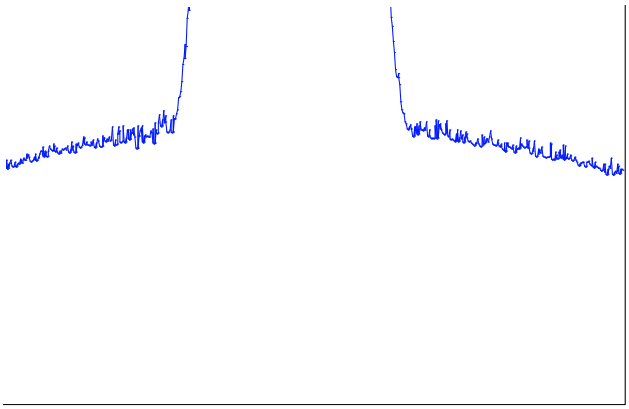
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2593.0	QPSK	16QAM
	13485.58	13485.58

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



Date: 24.MAR.2023 13:56:40

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

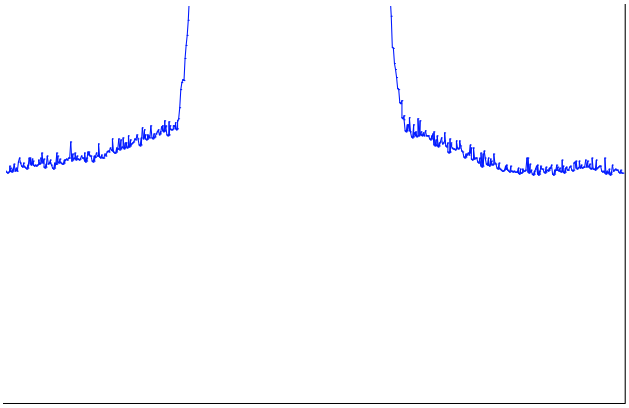


Date: 24.MAR.2023 13:57:20

LTE band 41, 20MHz (99%)

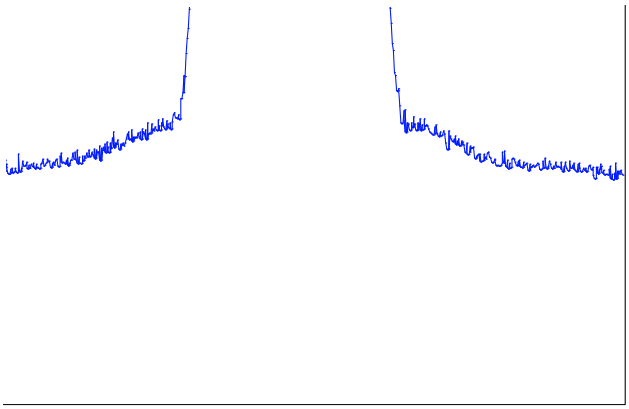
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2593.0	QPSK	16QAM
	17980.77	17884.62

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



Date: 24.MAR.2023 13:58:06

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

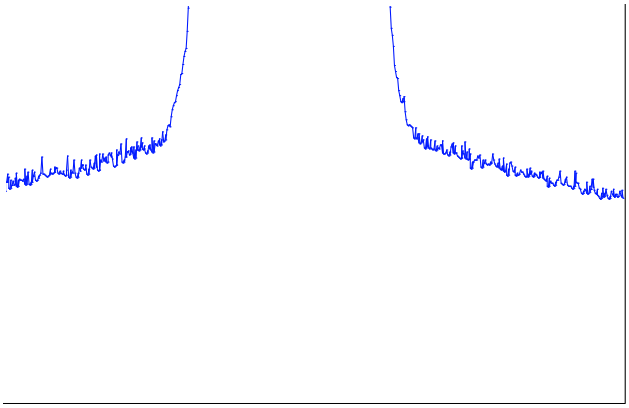


Date: 24.MAR.2023 13:58:46

LTE band 48, 5MHz (99%)

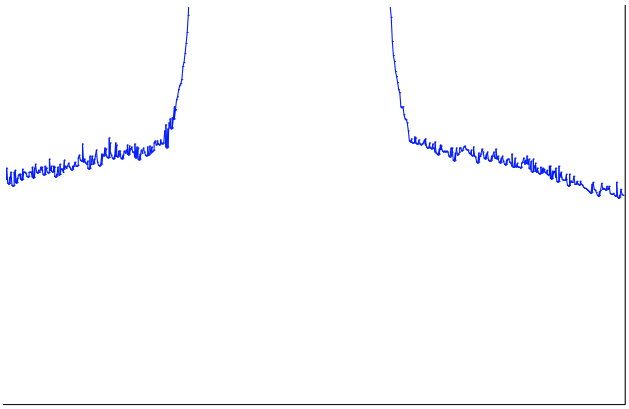
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
3625.0	QPSK	16QAM
	4519.23	4519.23

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



Date: 24.MAR.2023 13:59:36

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

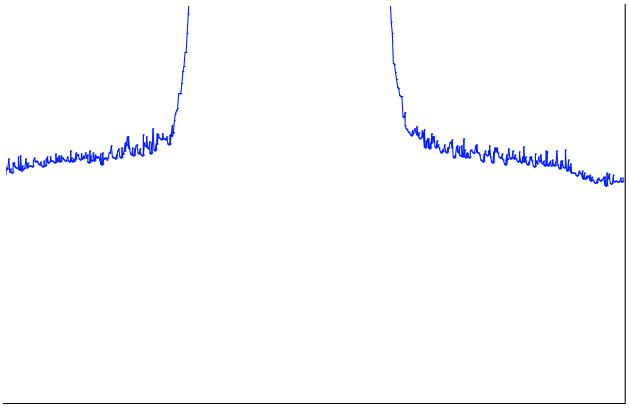


Date: 24.MAR.2023 14:00:16

LTE band 48, 10MHz (99%)

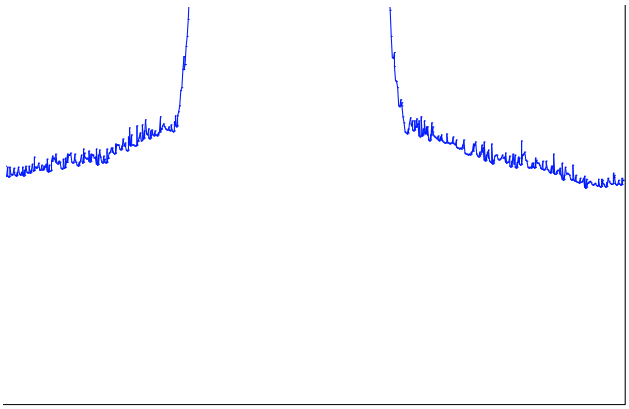
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
3625.0	QPSK	16QAM
	8990.38	8942.31

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



Date: 24.MAR.2023 14:01:02

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

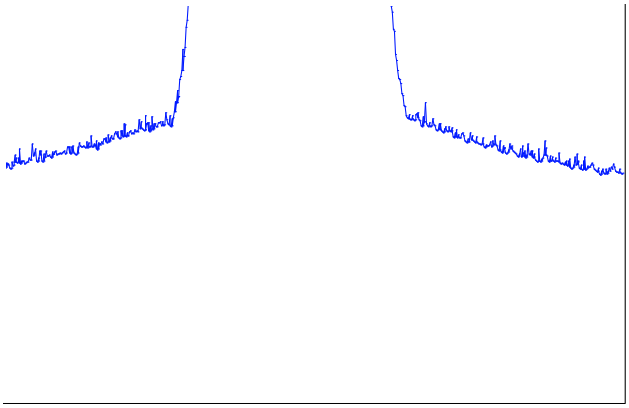


Date: 24.MAR.2023 14:01:42

LTE band 48, 15MHz (99%)

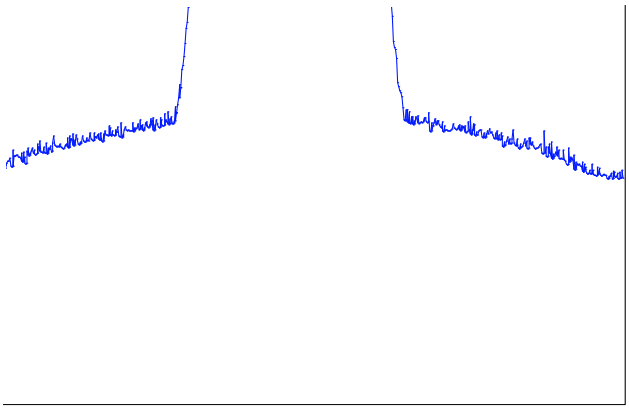
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
3625.0	QPSK	16QAM
	13485.58	13485.58

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



Date: 24.MAR.2023 14:02:27

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

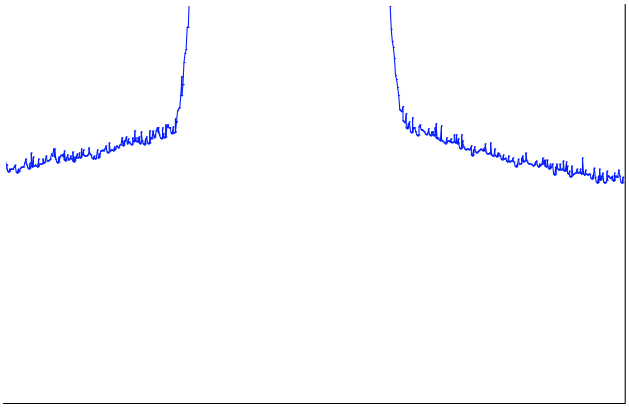


Date: 24.MAR.2023 14:03:08

LTE band 48, 20MHz (99%)

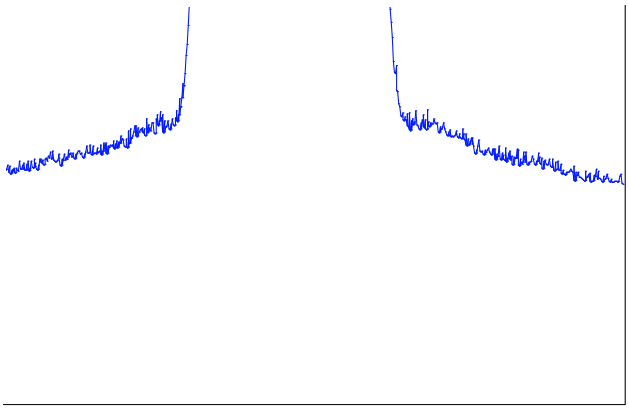
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
3625.0	QPSK	16QAM
	17980.77	17980.77

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



Date: 24.MAR.2023 14:03:53

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

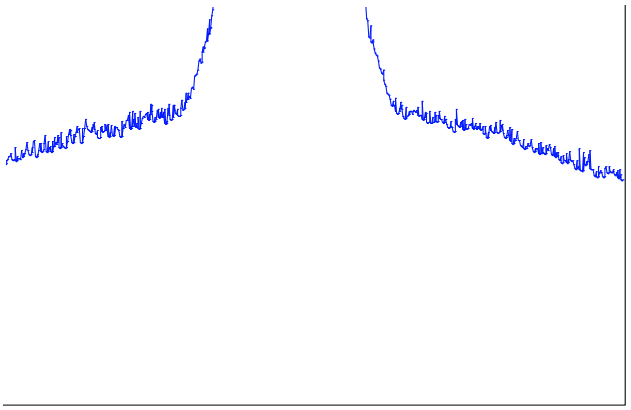


Date: 24.MAR.2023 14:04:33

LTE band 66, 1.4MHz (99%)

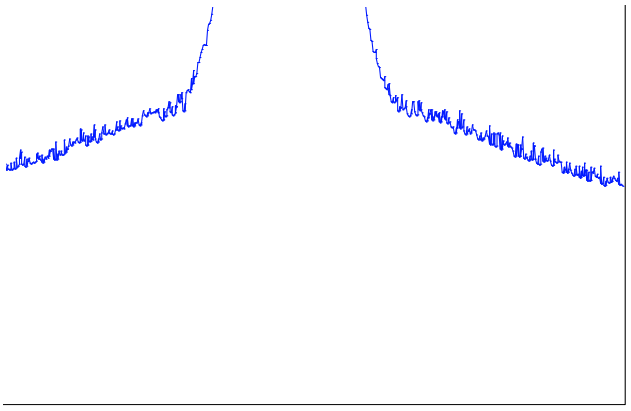
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	1089.74	1097.76

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



Date: 24.MAR.2023 13:44:34

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

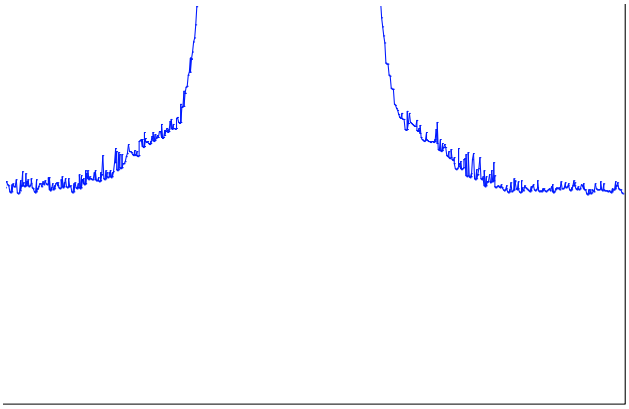


Date: 24.MAR.2023 13:45:14

LTE band 66, 3MHz (99%)

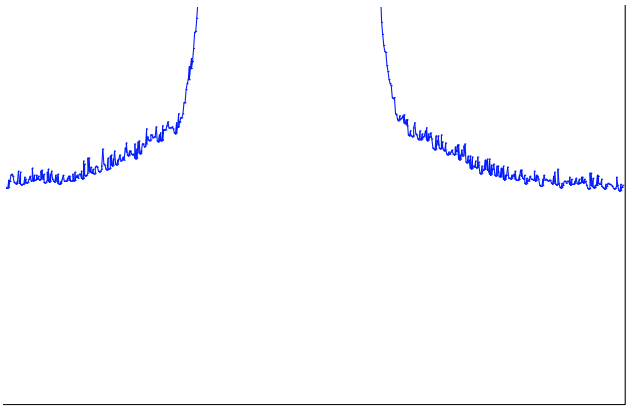
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	2708.33	2708.33

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



Date: 24.MAR.2023 13:45:59

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

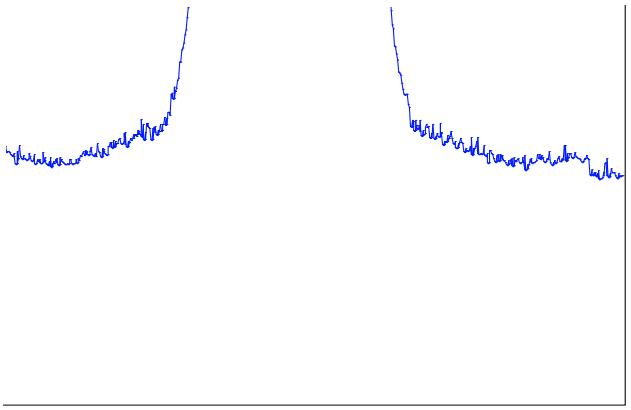


Date: 24.MAR.2023 13:46:39

LTE band 66, 5MHz (99%)

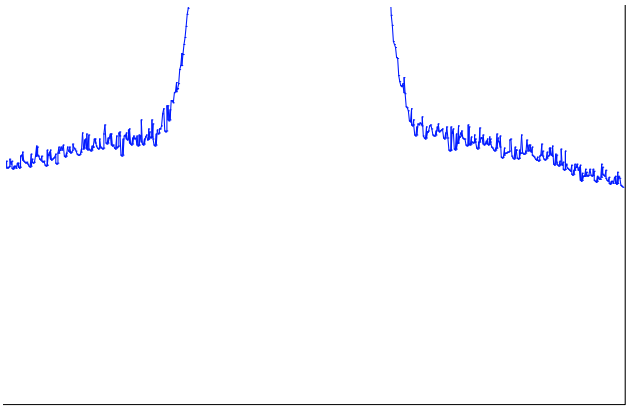
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	4471.15	4495.19

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



Date: 24.MAR.2023 13:47:24

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

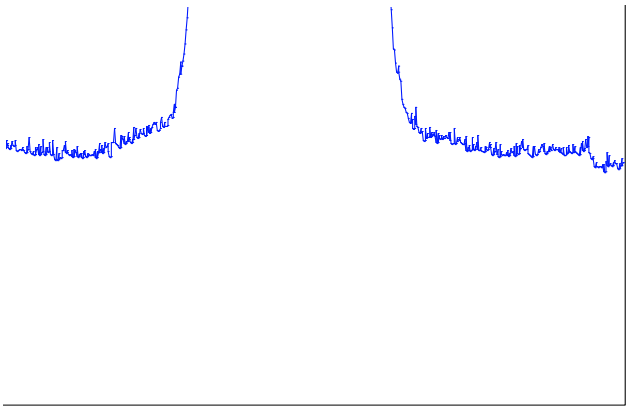


Date: 24.MAR.2023 13:48:04

LTE band 66, 10MHz (99%)

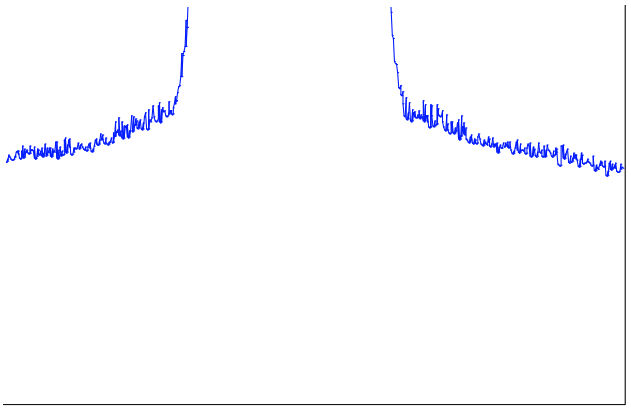
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	8990.38	8990.38

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



Date: 24.MAR.2023 13:48:49

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

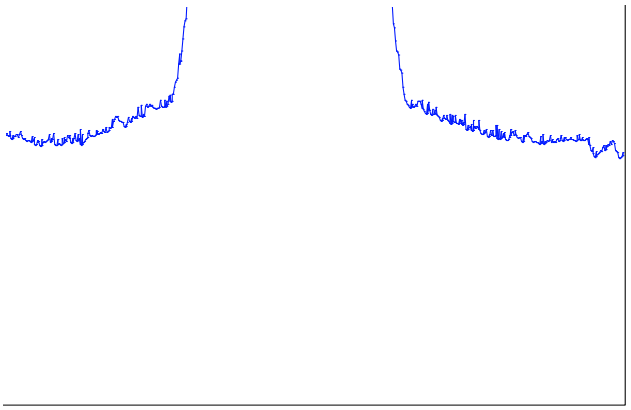


Date: 24.MAR.2023 13:49:29

LTE band 66, 15MHz (99%)

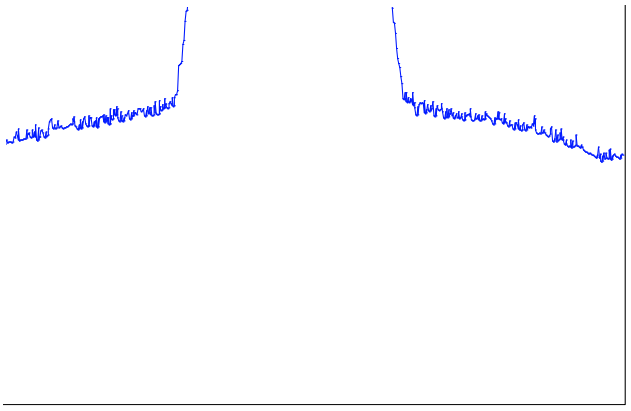
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	13485.58	13485.58

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



Date: 24.MAR.2023 13:50:14

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

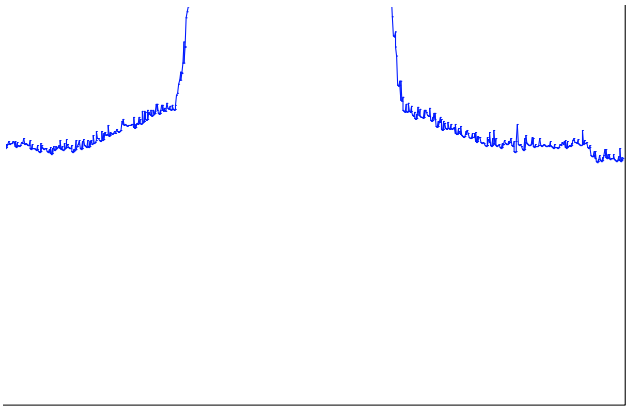


Date: 24.MAR.2023 13:50:55

LTE band 66, 20MHz (99%)

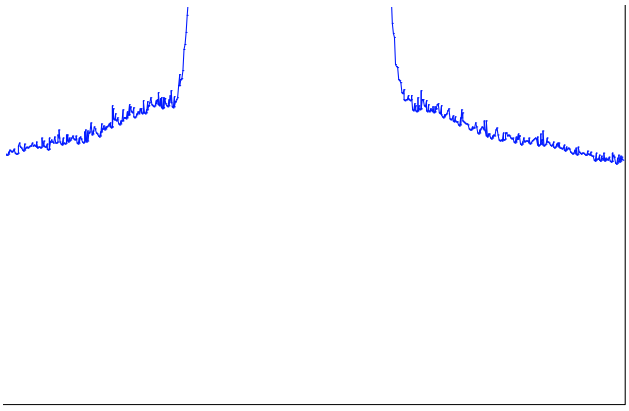
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	17980.77	17980.77

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



Date: 24.MAR.2023 13:51:40

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

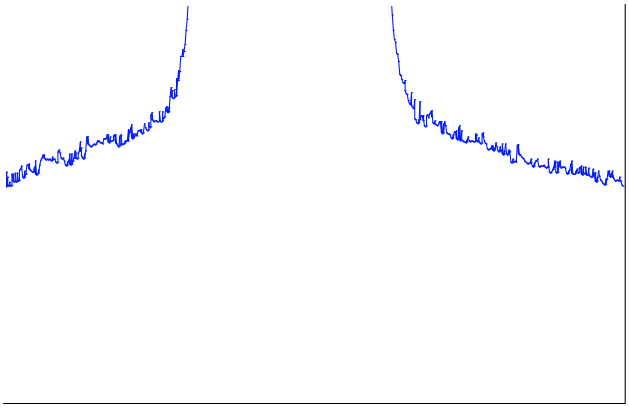


Date: 24.MAR.2023 13:52:20

LTE band 71, 5MHz (99%)

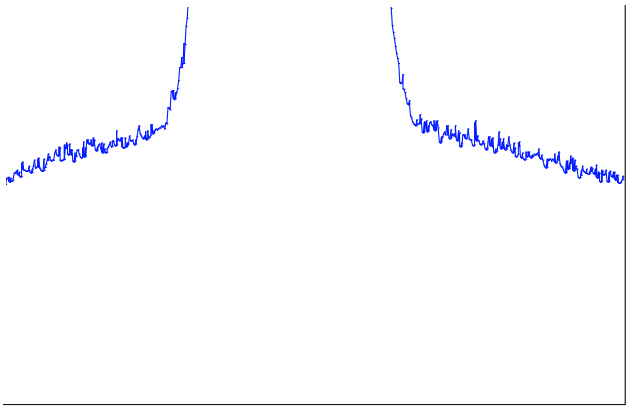
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
680.5	QPSK	16QAM
	4495.19	4495.19

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



Date: 21.MAR.2023 17:03:33

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

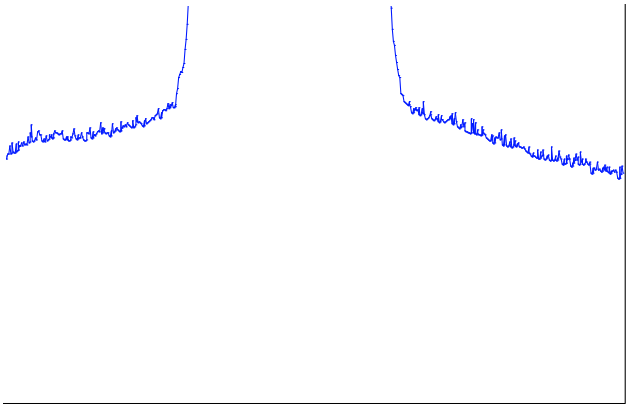


Date: 21.MAR.2023 17:04:13

LTE band 71, 10MHz (99%)

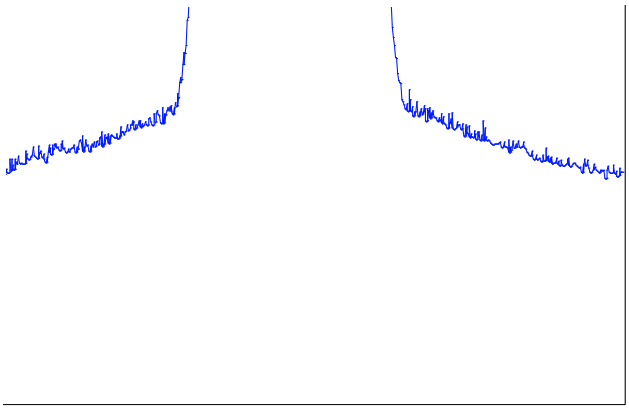
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
680.5	QPSK	16QAM
	8942.31	8990.38

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



Date: 21.MAR.2023 17:04:59

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

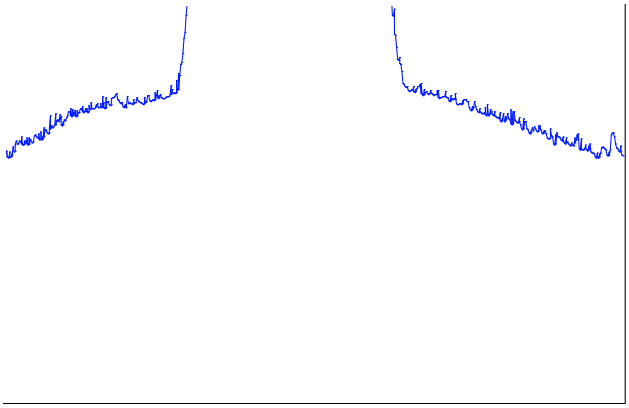


Date: 21.MAR.2023 17:05:39

LTE band 71, 15MHz (99%)

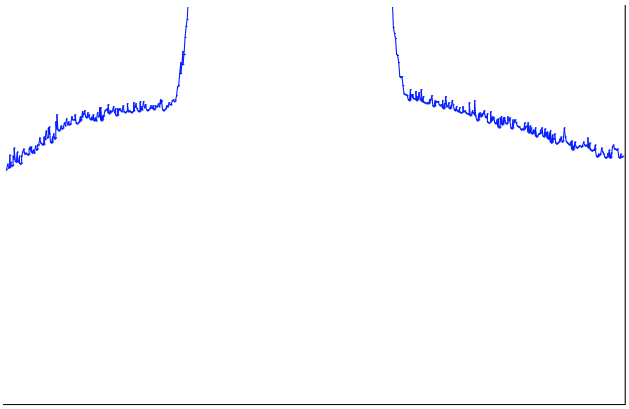
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
680.5	QPSK	16QAM
	13413.46	13413.46

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



Date: 21.MAR.2023 17:06:34

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

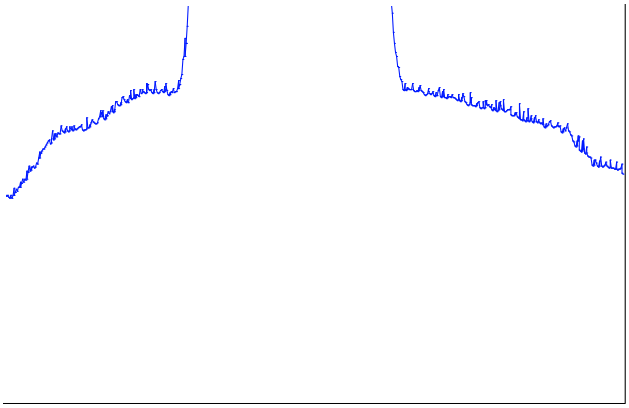


Date: 21.MAR.2023 17:07:14

LTE band 71, 20MHz (99%)

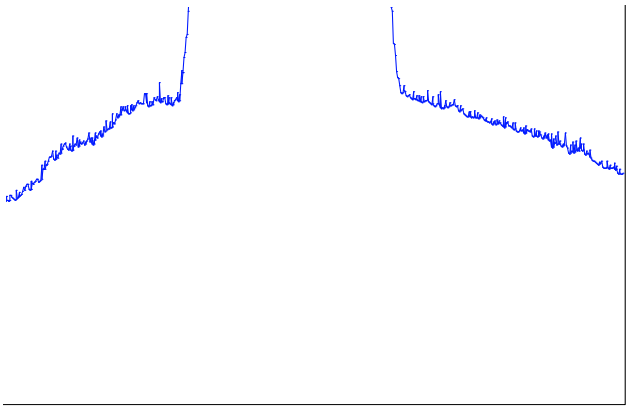
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
680.5	QPSK	16QAM
	17884.62	17980.77

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



Date: 21.MAR.2023 17:08:00

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

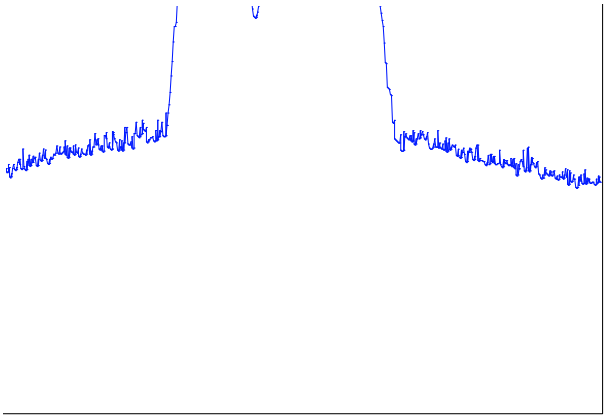


Date: 21.MAR.2023 17:08:40

LTE CA band 5B, 3MHz+5MHz(99%)

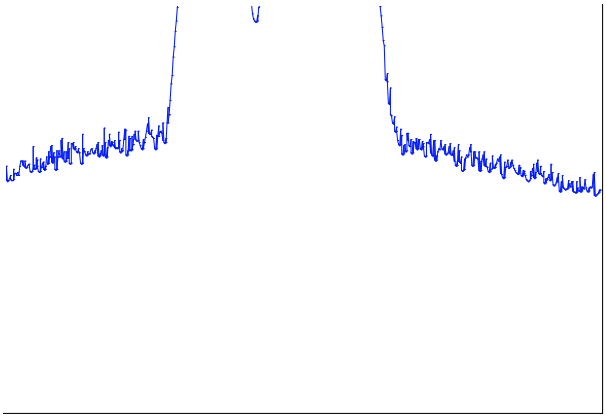
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
836.5	7.615	7.538

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



Date: 24.MAR.2023 09:11:42

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

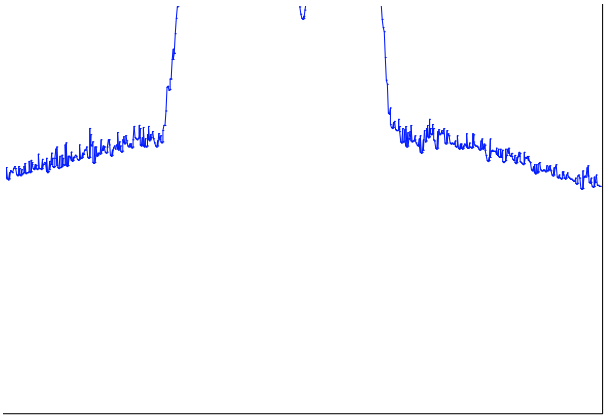


Date: 24.MAR.2023 09:12:06

LTE CA band 5B, 5MHz+3MHz(99%)

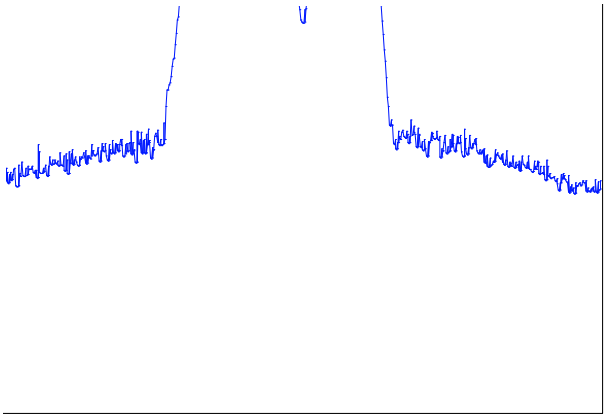
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
836.5	7.577	7.538

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



Date: 24.MAR.2023 09:13:07

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

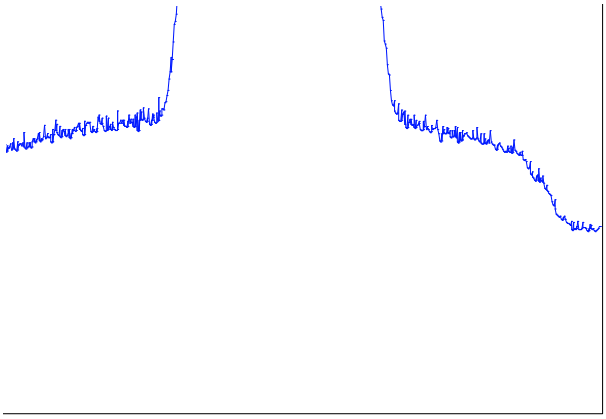


Date: 24.MAR.2023 09:13:30

LTE CA band 5B, 5MHz+10MHz(99%)

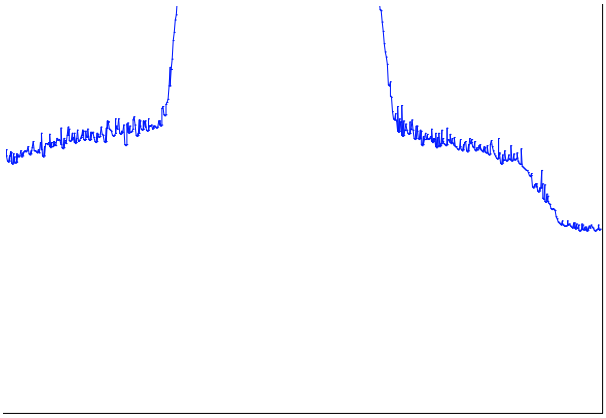
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
836.5	14.279	14.207

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



Date: 24.MAR.2023 09:14:30

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

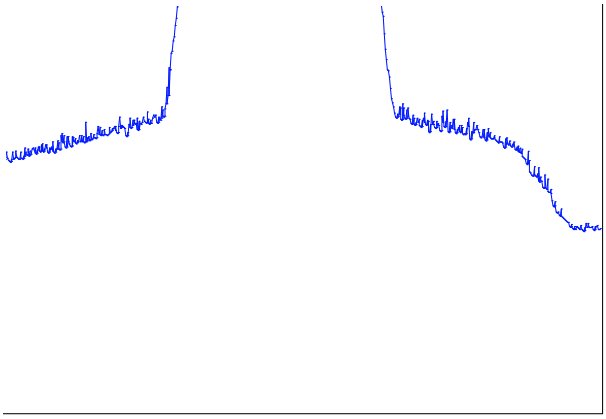


Date: 24.MAR.2023 09:14:54

LTE CA band 5B,10MHz+5MHz(99%)

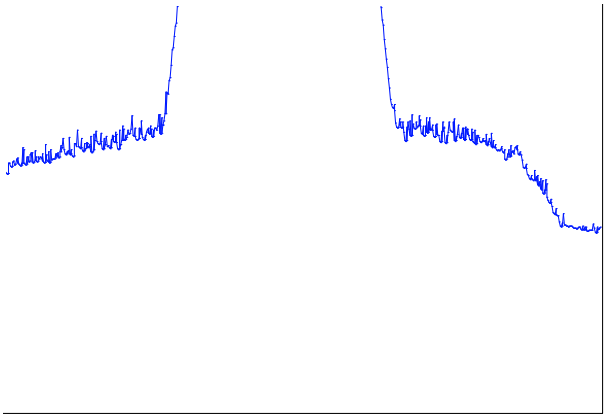
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
836.5	14.207	14.207

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



Date: 24.MAR.2023 09:15:55

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

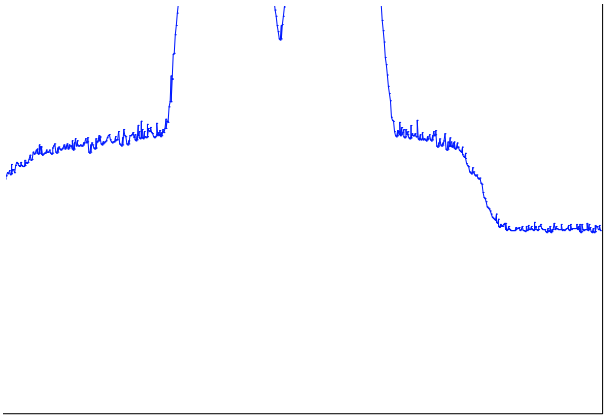


Date: 24.MAR.2023 09:16:19

LTE CA band 5B,10MHz+10MHz(99%)

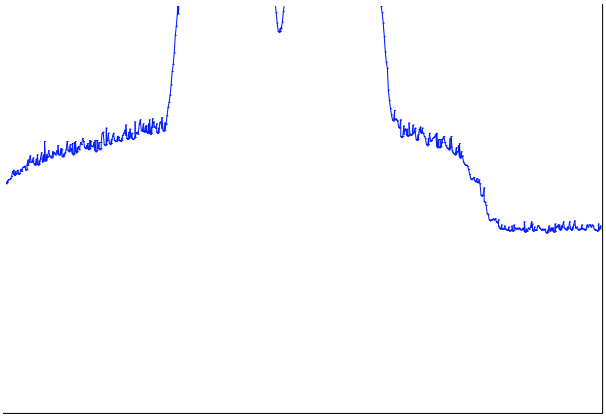
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
836.5	19.038	19.038

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



Date: 24.MAR.2023 09:17:19

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

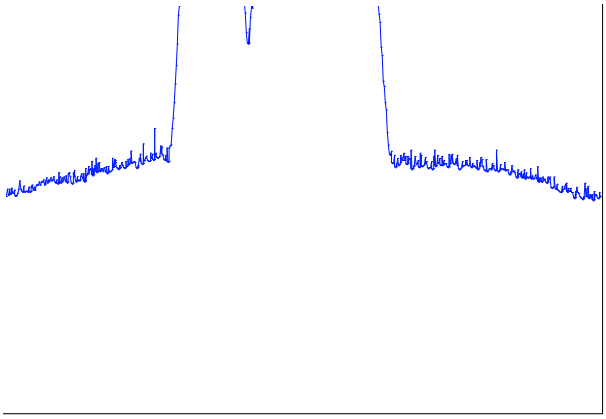


Date: 24.MAR.2023 09:17:43

LTE CA band 7C,10MHz+20MHz(99%)

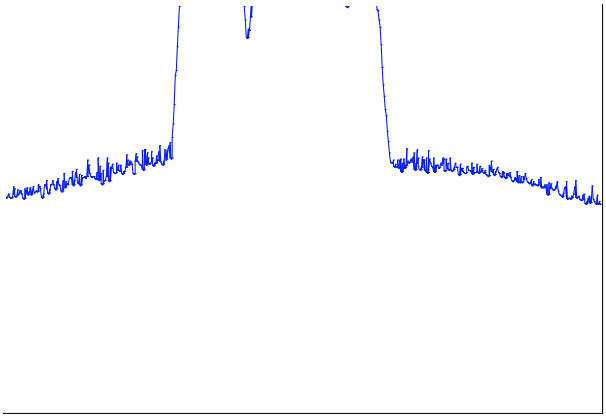
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2535	27.981	27.837

LTE CA band 7C , 10MHz+20MHz Bandwidth,QPSK (99% BW)



Date: 23.MAR.2023 21:24:41

LTE CA band 7C , 10MHz+20MHz Bandwidth,16QAM (99% BW)

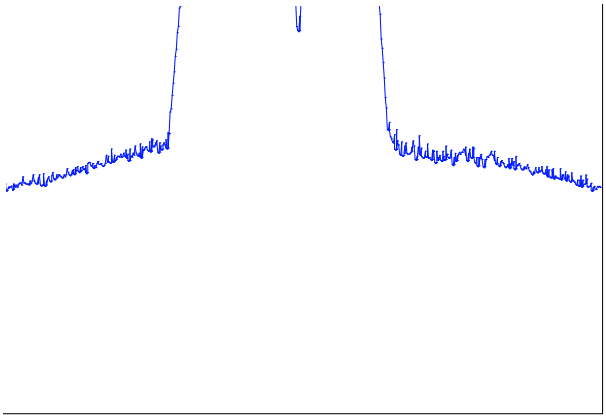


Date: 23.MAR.2023 21:25:23

LTE CA band 7C,15MHz+10MHz(99%)

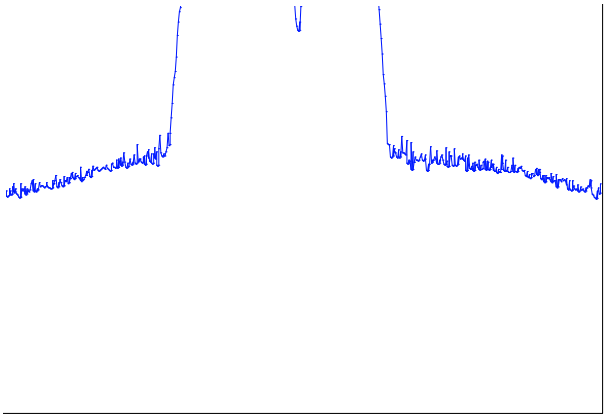
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2535	23.197	23.197

LTE CA band 7C , 15MHz+10MHz Bandwidth,QPSK (99% BW)



Date: 23.MAR.2023 21:26:25

LTE CA band 7C , 15MHz+10MHz Bandwidth,16QAM (99% BW)

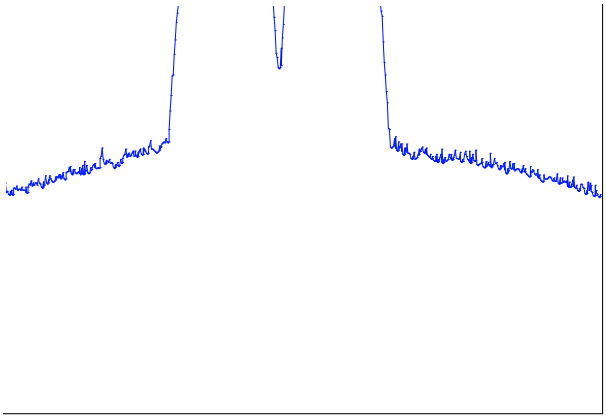


Date: 23.MAR.2023 21:26:49

LTE CA band 7C,15MHz+15MHz(99%)

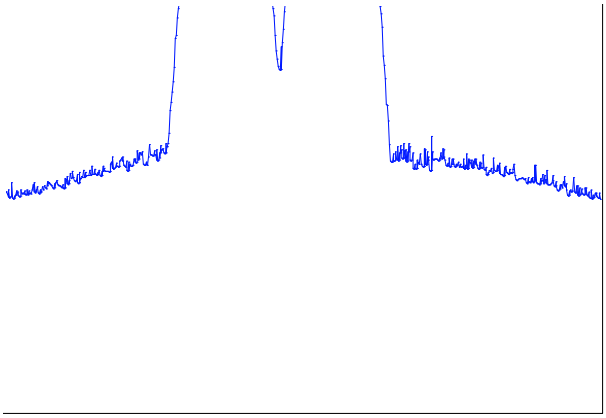
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2535	28.413	28.413

LTE CA band 7C , 15MHz+15MHz Bandwidth,QPSK (99% BW)



Date: 23.MAR.2023 21:27:49

LTE CA band 7C , 15MHz+15MHz Bandwidth,16QAM (99% BW)

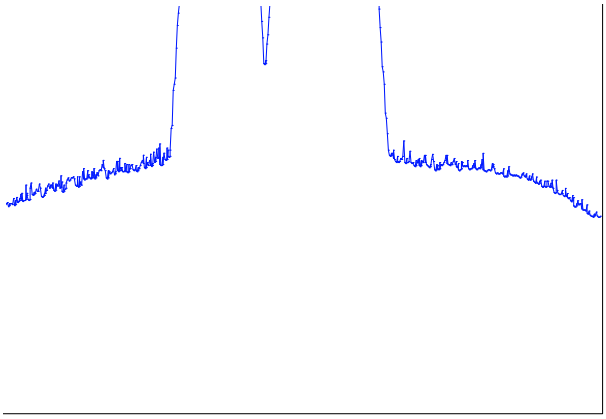


Date: 23.MAR.2023 21:28:13

LTE CA band 7C,15MHz+20MHz(99%)

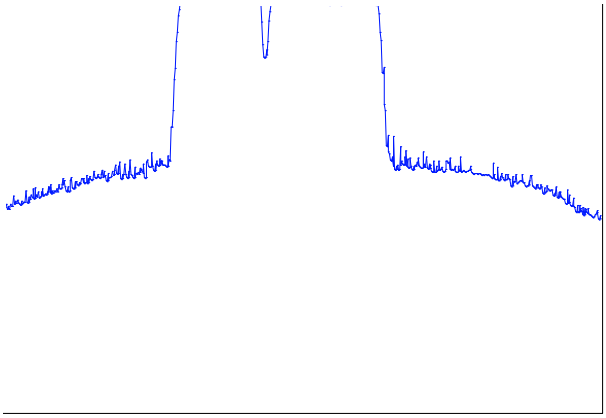
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2535	32.644	32.644

LTE CA band 7C , 15MHz+20MHz Bandwidth,QPSK (99% BW)



Date: 23.MAR.2023 21:29:14

LTE CA band 7C , 15MHz+20MHz Bandwidth,16QAM (99% BW)

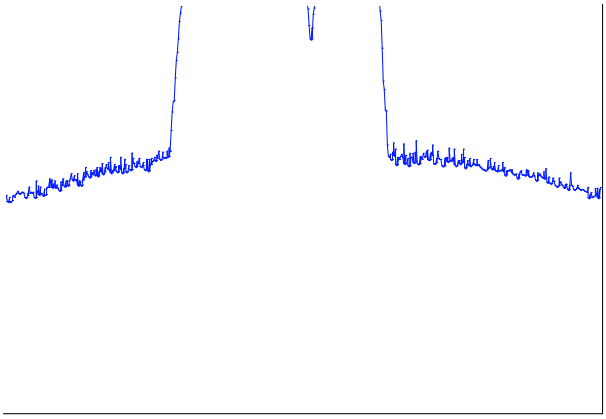


Date: 23.MAR.2023 21:29:38

LTE CA band 7C,20MHz+10MHz(99%)

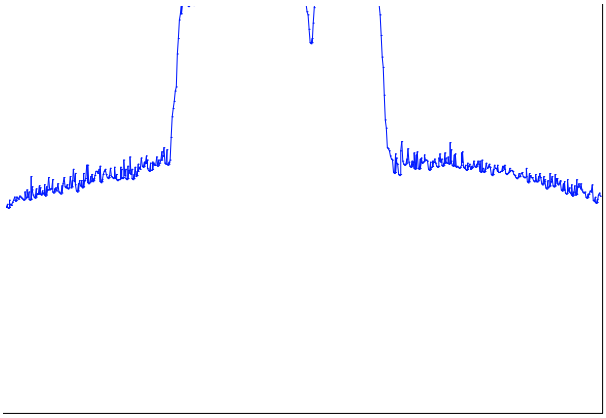
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2535	27.837	27.837

LTE CA band 7C , 20MHz+10MHz Bandwidth,QPSK (99% BW)



Date: 23.MAR.2023 21:30:40

LTE CA band 7C , 20MHz+10MHz Bandwidth,16QAM (99% BW)

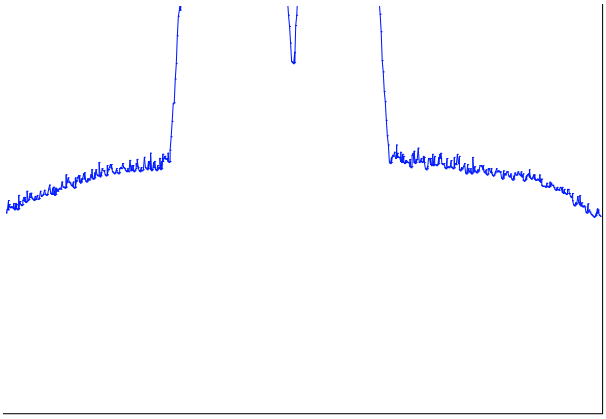


Date: 23.MAR.2023 21:31:04

LTE CA band 7C,20MHz+15MHz(99%)

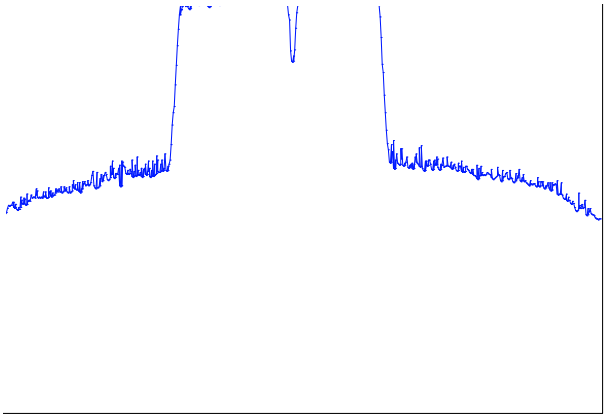
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2535	32.812	32.644

LTE CA band 7C , 20MHz+15MHz Bandwidth,QPSK (99% BW)



Date: 23.MAR.2023 21:32:04

LTE CA band 7C , 20MHz+15MHz Bandwidth,16QAM (99% BW)



Date: 23.MAR.2023 21:32:28