



TEST REPORT

No. I21N03262-RF-LTE

for

Realme Chongqing Mobile Telecommunications Corp., Ltd..

Mobile Phone

Model Name: RMX3393

FCC ID: 2AUYFRMX3393

with

Hardware Version: 11

Software Version: ColorOS 12.1

Issued Date: 2021-12-06

Note:

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

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No. I21N03262-RF-LTE

REPORT HISTORY

Report Number	Revision	Description	Issue Date
I21N03262-RF-LTE	Rev.0	1st edition	2021-12-06



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1. SUMMARY OF TEST REPORT

1.1. Test Items

Description	Mobile Phone
Model Name	RMX3393
Applicant's name	Realme Chongqing Mobile Telecommunications Corp., Ltd..
Manufacturer's Name	Realme Chongqing Mobile Telecommunications Corp., Ltd..

1.2. Test Standards

FCC Part 2/22/24/27/90	10-1-19 Edition
ANSI C63.26	2015
KDB971168 D01	v03r01

1.3. Test Result

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

1.4. Testing Location

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

1.5. Project Data

Testing Start Date: 2020-10-26 Testing End Date: 2020-12-06

1.6. Signature

Lai Minghua
(Prepared this test report)

Huang Qiuqin
(Reviewed this test report)

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(Approved this test report)



2. CLIENT INFORMATION

2.1. Applicant Information

Company Name: Realme Chongqing Mobile Telecommunications Corp., Ltd..
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Chongqing,China.
Contact Person: Mei XiLi
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2.2. Manufacturer Information

Company Name: Realme Chongqing Mobile Telecommunications Corp., Ltd..
Address /Post: No.178Yulong Avenue, Yufengshan, Yubei District,
Chongqing,China.
Contact Person: Mei XiLi
Contact Email: ylp@realme.net
Telephone: (86)13798864426
Fax: /



3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT

(AE)

3.1. About EUT

Description	Mobile Phone
Model Name	RMX3393
FCC ID	2AUYFRMX3393
Frequency Bands	LTE Bands 2,4,5,7,12,13,17,26,38,41,66, CA_7C,CA_38C, CA_41C
Antenna	Integrated
Extreme vol. Limits	3.6V to 4.45V (nominal: 3.87V)
Extreme temp. Tolerance	-30°C to +50°C
Condition of EUT as received	No abnormality in appearance

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

3.2. Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version	Sample Arrival Date
UT05aa	868912050022117	11	ColorOS 12.1	2021-10-25
	868912050022109			
UT08aa	868912050021259	11	ColorOS 12.1	2021-12-01
	868912050021242			

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

UT08aa is used for conduction test, UT05aa is used for radiation test.

3.3. Internal Identification of AE used during the test

AE ID*	Description
AE1	Battery
AE2	Charger
AE3	USB Cable
AE4	Headset
AE5	RF Cable
AE1	
Model	BLP837
Manufacturer	Sunwoda Electronic Co., Ltd.
Capacity	4400mAh
Nominal Voltage	3.87 V
AE2	
Model	VCA7JAUH
Manufacturer	Huizhou Golden Lake Industrial Co., Ltd.
Specification	American Standard Charger
AE3	
Model	DL129
Manufacturer	/



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AE4

Model MH156

Manufacturer /

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

3.4. General Description

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



4. REFERENCE DOCUMENTS

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

Reference	Title	Version
FCC Part 22	PUBLIC MOBILE SERVICES	10-1-19 Edition
FCC Part 24	PERSONAL COMMUNICATIONS SERVICES	10-1-19 Edition
FCC Part 2	FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS	10-1-19 Edition
FCC Part 27	MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES	10-1-19 Edition
FCC Part 90	PRIVATE LAND MOBILE RADIO SERVICES	10-1-19 Edition
ANSI C63.26	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services	2015
KDB971168 D01	Power Meas License Digital Systems	v03r01

5. LABORATORY ENVIRONMENT

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

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

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

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

6. SUMMARY OF TEST RESULTS

Abbreviations used in this clause:		
Verdict Column	P	Pass
	F	Fail
	NA	Not applicable
	NM	Not measured
Location Column	A/B/C/D	The test is performed in test location A, B, C or D which are described in section 1.4 of this report

LTE Band 2

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

LTE Band 4

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

LTE Band 5

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/22.913	A.1	P



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2	Field Strength of Spurious Radiation	2.1053/22.917	A.2	P
3	Frequency Stability	2.1055/22.355	A.3	P
4	Occupied Bandwidth	2.1049/22.917	A.4	P
5	Emission Bandwidth	2.1049/22.917	A.5	P
6	Band Edge Compliance	2.1051/22.917	A.6	P
7	Conducted Spurious Emission	2.1051/22.917	A.7	P
8	Peak-to-Average Power Ratio	KDB971168 D01	A.8	P

LTE Band 7

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

**LTE Band 12**

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

LTE Band 13

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

LTE Band 17

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

LTE Band 26(814MHz-824MHz)



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

LTE band 26(824MHz-849MHz)

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

LTE Band 66

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

LTE Band 38

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/27.50(h)	A.1	P
2	Field Strength of Spurious Radiation	2.1053/27.53(m)	A.2	P



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3	Frequency Stability	2.1055/27.54	A.3	P
4	Occupied Bandwidth	2.1049/27.53(m)	A.4	P
5	Emission Bandwidth	2.1049/27.53(m)	A.5	P
6	Band Edge Compliance	2.1051/27.53(m)	A.6	P
7	Conducted Spurious Emission	2.1051/27.53(m)	A.7	P
8	Peak-to-Average Power Ratio	27.50(a)/ KDB971168 D01	A.8	P

LTE Band 41

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

**LTE Band CA_7C**

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

LTE Band CA_38C

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

LTE Band CA_41C

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



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7. STATEMENT

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

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

8. TEST EQUIPMENTS UTILIZED

NO.	Description	TYPE	Manufacture	series number	CAL DUE DATE
1	Test Receiver	ESR7	R&S	101676	2022-11-24
2	BiLog Antenna	3142E	ETS-Lindgren	0224831	2024-05-27
3	Horn Antenna	3117	ETS-Lindgren	00066577	2022-04-02
4	Horn Antenna	QSH-SL-18 -26-S-20	Q-par	17013	2023-01-06
5	Antenna	BBHA 9120D	Schwarzbeck	1593	2022-12-05
6	Antenna	VUBA 9117	Schwarzbeck	207	2023-07-15
7	Antenna	QWH-SL-18 -40-K-SG	Q-par	15979	2023-01-06
8	preamplifier	83017A	Agilent	MY39501110	/
9	Signal Generator	SMB100A	R&S	179725	2022-11-24
10	Fully Anechoic Chamber	FACT3-2.0	ETS-Lindgren	1285	2023-05-29
11	Spectrum Analyzer	FSV40	R&S	101192	2022-01-13
12	Universal Radio Communication Tester	CMW500	R&S	152499	2022-07-14
13	Universal Radio Communication Tester	CMW500	R&S	129146	2022-04-24
14	Spectrum Analyzer	FSU	R&S	101506	2021-12-13
15	Temperature Chamber	SH-241	ESPEC	92007516	2022-10-15
16	DC Power Supply	U3606A	Agilent Technologies	MY50450012	2022-11-13

Test software

Item	Name	Vesion
Radiated	EMC32	V10.50.40

ANNEX A: MEASUREMENT RESULTS

A.1 OUTPUT POWER

Reference

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

A.1.1 Summary

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

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

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

A.1.2 Conducted

A.1.2.1 Method of Measurements

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

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

A.1.2.2 Measurement result

LTE band 2

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	1909.3	22.52	21.54	20.34
		1880.0	22.55	21.77	20.52
		1850.7	22.57	21.83	20.59
	1 RB low	1909.3	22.51	21.52	20.26
		1880.0	22.57	21.79	20.52
		1850.7	22.62	21.85	20.57
	50% RB mid	1909.3	22.66	21.50	20.27
		1880.0	22.67	21.69	20.46
		1850.7	22.69	21.74	20.50
	100% RB	1909.3	21.66	20.68	19.59
		1880.0	21.73	20.79	19.69
		1850.7	21.65	20.83	19.61
3MHz	1 RB high	1908.5	22.49	21.57	20.28
		1880.0	22.68	21.89	20.62
		1851.5	22.60	21.81	20.61
	1 RB low	1908.5	22.56	21.69	20.41
		1880.0	22.65	21.84	20.60
		1851.5	22.64	21.84	20.60
	50% RB mid	1908.5	21.67	20.70	19.50
		1880.0	21.78	20.86	19.65
		1851.5	21.75	20.84	19.61



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	100% RB	1908.5	21.69	20.69	19.47
		1880.0	21.82	20.87	19.66
		1851.5	21.72	20.81	19.52
5MHz	1 RB high	1907.5	22.58	21.59	20.33
		1880.0	22.64	21.85	20.61
		1852.5	22.60	21.87	20.67
	1 RB low	1907.5	22.52	21.66	20.41
		1880.0	22.67	21.90	20.66
		1852.5	22.63	21.88	20.65
	50% RB mid	1907.5	21.65	20.70	20.43
		1880.0	21.79	20.84	20.55
		1852.5	21.73	20.82	20.56
	100% RB	1907.5	21.69	20.68	19.65
		1880.0	21.80	20.81	19.68
		1852.5	21.72	20.80	19.59
10MHz	1 RB high	1905.0	22.60	21.61	21.19
		1880.0	22.73	21.99	21.08
		1855.0	22.71	22.02	21.18
	1 RB low	1905.0	22.52	21.74	21.12
		1880.0	22.76	22.00	21.01
		1855.0	22.73	21.98	21.07
	50% RB mid	1905.0	21.66	20.72	20.16
		1880.0	21.80	20.86	20.27
		1855.0	21.78	20.82	20.18
	100% RB	1905.0	21.65	20.73	20.08
		1880.0	21.78	20.85	20.09
		1855.0	21.74	20.82	20.04
15MHz	1 RB high	1902.5	22.48	21.59	20.29
		1880.0	22.64	21.95	20.69
		1857.5	22.55	21.87	20.63
	1 RB low	1902.5	22.55	21.86	20.61
		1880.0	22.63	21.93	20.67
		1857.5	22.61	21.93	20.68
	50% RB mid	1902.5	21.61	20.70	19.49
		1880.0	21.77	20.86	19.63
		1857.5	21.74	20.86	19.57
	100% RB	1902.5	21.57	20.65	19.36
		1880.0	21.72	20.82	19.55
		1857.5	21.62	20.72	19.42



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20MHz	1 RB high	1900.0	22.53	21.58	20.37
		1880.0	22.69	21.99	20.72
		1860.0	22.58	21.93	20.72
	1 RB low	1900.0	22.56	21.88	20.63
		1880.0	22.67	22.00	20.77
		1860.0	22.65	21.91	20.67
	50% RB mid	1900.0	21.62	20.72	19.43
		1880.0	21.78	20.85	19.57
		1860.0	21.68	20.78	19.49
	100% RB	1900.0	21.58	20.70	19.40
		1880.0	21.79	20.82	19.62
		1860.0	21.63	20.70	19.46

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

LTE band 4

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	1754.3	22.49	21.70	20.59
		1732.5	22.57	21.79	20.72
		1710.7	22.58	21.81	20.69
	1 RB low	1754.3	22.50	21.78	20.66
		1732.5	22.58	21.81	20.74
		1710.7	22.61	21.69	20.72
	50% RB mid	1754.3	22.58	21.56	20.66
		1732.5	22.60	21.60	20.74
		1710.7	22.62	21.61	20.65
	100% RB	1754.3	21.57	20.59	19.48
		1732.5	21.63	20.66	19.53
		1710.7	21.58	20.66	19.51
3MHz	1 RB high	1753.5	22.59	21.74	20.72
		1732.5	22.57	21.83	20.70
		1711.5	22.59	21.79	20.68
	1 RB low	1753.5	22.55	21.71	20.75
		1732.5	22.57	21.85	20.63
		1711.5	22.64	21.89	20.63
	50% RB mid	1753.5	21.54	20.64	19.54
		1732.5	21.56	20.60	19.59
		1711.5	21.59	20.60	19.57
	100% RB	1753.5	21.54	20.55	19.52
		1732.5	21.55	20.59	19.54



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		1711.5	21.59	20.58	19.57
5MHz	1 RB high	1752.5	22.54	21.76	20.71
		1732.5	22.65	21.82	20.62
		1712.5	22.64	21.75	20.74
	1 RB low	1752.5	22.62	21.73	20.69
		1732.5	22.62	21.84	20.76
		1712.5	22.65	21.80	20.74
	50% RB mid	1752.5	21.58	20.57	19.53
		1732.5	21.62	20.59	19.61
		1712.5	21.60	20.55	19.60
	100% RB	1752.5	21.60	20.56	19.54
		1732.5	21.64	20.62	19.56
		1712.5	21.61	20.61	19.58
10MHz	1 RB high	1750.0	22.60	21.77	20.55
		1732.5	22.57	21.73	20.77
		1715.0	22.68	21.79	20.62
	1 RB low	1750.0	22.67	21.89	20.80
		1732.5	22.61	21.77	20.71
		1715.0	22.66	21.85	20.78
	50% RB mid	1750.0	21.58	20.59	19.53
		1732.5	21.60	20.58	19.57
		1715.0	21.61	20.60	19.56
	100% RB	1750.0	21.59	20.54	19.55
		1732.5	21.61	20.58	19.54
		1715.0	21.62	20.60	19.57
15MHz	1 RB high	1747.5	22.54	21.71	20.53
		1732.5	22.56	21.74	20.68
		1717.5	22.53	21.68	20.61
	1 RB low	1747.5	22.62	21.86	20.76
		1732.5	22.65	21.85	20.72
		1717.5	22.60	21.73	20.78
	50% RB mid	1747.5	21.66	20.65	19.59
		1732.5	21.62	20.63	19.63
		1717.5	21.59	20.62	19.55
	100% RB	1747.5	21.59	20.58	19.56
		1732.5	21.59	20.55	19.55
		1717.5	21.61	20.57	19.55
20MHz	1 RB high	1745.0	22.51	21.66	20.59
		1732.5	22.50	21.69	20.56



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	1 RB low	1720.0	22.56	21.72	20.59
		1745.0	22.62	21.77	20.60
		1732.5	22.54	21.83	20.74
	50% RB mid	1720.0	22.64	21.82	20.57
		1745.0	21.66	20.64	19.61
		1732.5	21.62	20.64	19.62
	100% RB	1720.0	21.49	20.50	19.46
		1745.0	21.60	20.60	19.59
		1732.5	21.59	20.56	19.53
		1720.0	21.53	20.55	19.53

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

LTE band 5

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	848.3	23.56	22.71	21.73
		836.5	23.57	22.84	21.84
		824.7	23.59	22.75	21.75
	1 RB low	848.3	23.54	22.69	21.73
		836.5	23.58	22.85	21.89
		824.7	23.57	22.75	21.79
	50% RB mid	848.3	23.71	22.67	21.79
		836.5	23.71	22.71	21.92
		824.7	23.73	22.63	21.89
	100% RB	848.3	22.69	21.74	20.72
		836.5	22.71	21.80	20.79
		824.7	22.71	21.80	20.74
3MHz	1 RB high	847.5	23.62	22.90	21.77
		836.5	23.64	22.89	21.92
		825.5	23.61	22.83	21.86
	1 RB low	847.5	23.57	22.74	21.64
		836.5	23.64	22.93	21.91
		825.5	23.61	22.84	21.87
	50% RB mid	847.5	22.66	21.66	20.74
		836.5	22.72	21.88	20.89
		825.5	22.68	21.79	20.80
	100% RB	847.5	22.62	21.66	20.69
		836.5	22.70	21.80	20.78
		825.5	22.66	21.72	20.70
5MHz	1 RB high	846.5	23.54	22.76	21.71
		836.5	23.54	22.79	21.78

	1 RB low	826.5	23.55	22.75	21.77
		846.5	23.47	22.67	21.60
		836.5	23.54	22.84	21.80
		826.5	23.54	22.70	21.72
	50% RB mid	846.5	22.70	21.65	20.74
		836.5	22.74	21.86	20.88
		826.5	22.70	21.74	20.79
	100% RB	846.5	22.60	21.58	20.62
		836.5	22.72	21.80	20.83
		826.5	22.69	21.73	20.70
10MHz	1 RB high	844.0	23.66	22.88	21.78
		836.5	23.69	22.88	21.85
		829.0	23.72	22.97	21.97
	1 RB low	844.0	23.65	22.89	21.80
		836.5	23.68	22.93	21.92
		829.0	23.66	22.77	21.86
	50% RB mid	844.0	22.75	21.70	20.73
		836.5	22.79	21.84	20.84
		829.0	22.78	21.78	20.78
	100% RB	844.0	22.68	21.64	20.68
		836.5	22.92	21.96	20.97
		829.0	22.67	21.73	20.73

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



LTE band 7

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
5MHz	1 RB high	2567.5	22.58	21.81	20.76
		2535.0	22.48	21.90	20.82
		2502.5	22.63	21.86	20.86
	1 RB low	2567.5	22.47	21.79	20.69
		2535.0	22.48	21.86	20.75
		2502.5	22.61	21.89	20.79
	50% RB mid	2567.5	21.70	20.67	19.72
		2535.0	21.62	20.63	19.64
		2502.5	21.71	20.69	19.69
	100% RB	2567.5	21.72	20.72	19.71
		2535.0	21.62	20.63	19.57
		2502.5	21.71	20.70	19.68
10MHz	1 RB high	2565.0	22.58	21.99	20.86
		2535.0	22.51	21.80	20.78
		2505.0	22.51	21.90	20.83
	1 RB low	2565.0	22.49	21.88	20.76
		2535.0	22.46	21.77	20.73
		2505.0	22.52	21.81	20.70
	50% RB mid	2565.0	21.69	20.68	19.65
		2535.0	21.64	20.65	19.60
		2505.0	21.66	20.67	19.65
	100% RB	2565.0	21.72	20.68	19.71
		2535.0	21.69	20.70	19.63
		2505.0	21.73	20.70	19.68
15MHz	1 RB high	2562.5	22.56	21.88	20.82
		2535.0	22.42	21.86	20.59
		2507.5	22.50	21.88	20.76
	1 RB low	2562.5	22.34	21.75	20.71
		2535.0	22.37	21.78	20.52
		2507.5	22.42	21.85	20.72
	50% RB mid	2562.5	21.65	20.67	19.66
		2535.0	21.60	20.62	19.63
		2507.5	21.66	20.63	19.64
	100% RB	2562.5	21.68	20.67	19.70
		2535.0	21.64	20.66	19.63
		2507.5	21.66	20.67	19.63



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20MHz	1 RB high	2560.0	22.53	21.95	20.77
		2535.0	22.50	21.75	20.70
		2510.0	22.42	21.73	20.79
	1 RB low	2560.0	22.37	21.70	20.46
		2535.0	22.29	21.57	20.51
		2510.0	22.39	21.74	20.62
	50% RB mid	2560.0	21.80	20.68	19.64
		2535.0	21.64	20.65	19.64
		2510.0	21.65	20.62	19.61
	100% RB	2560.0	21.65	20.58	19.60
		2535.0	21.64	20.63	19.66
		2510.0	21.64	20.64	19.62

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

LTE band 12

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	715.3	23.36	22.56	21.66
		707.5	23.30	22.57	21.66
		699.7	23.37	22.67	21.72
	1 RB low	715.3	23.32	22.54	21.66
		707.5	23.31	22.63	21.63
		699.7	23.34	22.54	21.69
	50% RB mid	715.3	23.40	22.42	21.66
		707.5	23.38	22.42	21.66
		699.7	23.35	22.39	21.66
	100% RB	715.3	22.40	21.62	20.52
		707.5	22.40	21.62	20.52
		699.7	22.34	21.58	20.42
3MHz	1 RB high	714.5	23.35	22.58	21.72
		707.5	23.39	22.60	21.68
		700.5	23.33	22.58	21.70
	1 RB low	714.5	23.31	22.60	21.55
		707.5	23.39	22.62	21.68
		700.5	23.28	22.54	21.62
	50% RB mid	714.5	22.36	21.55	20.53
		707.5	22.35	21.62	20.58
		700.5	22.34	21.59	20.52
	100% RB	714.5	22.36	21.49	20.49

		707.5	22.33	21.54	20.49
		700.5	22.36	21.53	20.55
5MHz	1 RB high	713.5	23.44	22.64	21.74
		707.5	23.50	22.65	21.67
		701.5	23.45	22.74	21.75
	1 RB low	713.5	23.35	22.57	21.67
		707.5	23.44	22.59	21.69
		701.5	23.41	22.58	21.69
	50% RB mid	713.5	22.39	21.49	20.53
		707.5	22.38	21.55	20.57
		701.5	22.32	21.48	20.51
	100% RB	713.5	22.36	21.51	20.48
		707.5	22.37	21.56	20.53
		701.5	22.37	21.56	20.54
10MHz	1 RB high	711.0	23.51	22.73	21.81
		707.5	23.54	22.74	21.80
		704.0	23.47	22.72	21.80
	1 RB low	711.0	23.40	22.68	21.60
		707.5	23.42	22.53	21.65
		704.0	23.37	22.63	21.64
	50% RB mid	711.0	22.44	21.56	20.59
		707.5	22.43	21.61	20.57
		704.0	22.41	21.60	20.57
	100% RB	711.0	22.47	21.58	20.60
		707.5	22.41	21.57	20.55
		704.0	22.41	21.55	20.52

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



LTE band 13

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
5MHz	1 RB high	784.5	23.56	22.74	21.61
		782.0	23.51	22.71	21.56
		779.5	23.53	22.81	21.54
	1 RB low	784.5	23.58	22.68	21.65
		782.0	23.46	22.68	21.55
		779.5	23.53	22.83	21.54
	50% RB mid	784.5	22.45	21.40	20.58
		782.0	22.50	21.48	20.63
		779.5	22.45	21.39	20.65
	100% RB	784.5	22.47	21.47	20.59
		782.0	22.48	21.49	20.61
		779.5	22.44	21.46	20.60
10MHz	1 RB high	782.0	23.42	22.67	21.64
	1 RB low	782.0	23.45	22.72	21.58
	50% RB mid	782.0	22.47	21.50	20.65
	100% RB	782.0	22.46	21.45	20.62

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

LTE band 17

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
5MHz	1 RB high	713.5	23.49	22.63	21.76
		710.0	23.39	22.73	21.69
		706.5	23.46	22.78	21.79
	1 RB low	713.5	23.34	22.62	21.57
		710.0	23.33	22.57	21.64
		706.5	23.32	22.56	21.66
	50% RB mid	713.5	22.35	21.50	20.48
		710.0	22.32	21.48	20.47
		706.5	22.34	21.48	20.52
	100% RB	713.5	22.31	21.49	20.44



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10MHz	1 RB high	710.0	22.39	21.53	20.53
		706.5	22.39	21.50	20.51
		711.0	23.45	22.63	21.62
	1 RB low	710.0	23.43	22.70	21.74
		709.0	23.46	22.62	21.73
		711.0	23.24	22.56	21.60
	50% RB mid	710.0	23.31	22.54	21.63
		709.0	23.29	22.50	21.58
		711.0	22.37	21.51	20.53
	100% RB	710.0	22.39	21.52	20.54
		709.0	22.36	21.51	20.49
		711.0	22.42	21.57	20.53
	100% RB	710.0	22.38	21.52	20.52
		709.0	22.41	21.50	20.51
		711.0	22.42	21.57	20.53

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

LTE band 26(814MHz-824MHz)

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	823.3	23.05	22.29	21.17
		819.0	23.09	22.30	21.19
		814.7	23.18	22.29	21.22
	1 RB low	823.3	23.04	22.16	21.15
		819.0	23.12	22.36	21.28
		814.7	23.20	22.30	21.30
	50% RB mid	823.3	23.04	22.01	21.06
		819.0	23.13	22.14	21.14
		814.7	23.16	22.18	21.28
	100% RB	823.3	22.04	21.13	20.14
		819.0	22.09	21.16	20.18
		814.7	22.17	21.18	20.27
3MHz	1 RB high	822.5	23.07	22.28	21.14
		819.0	23.21	22.21	21.13
		815.5	23.13	22.35	21.13
	1 RB low	822.5	23.05	22.24	21.04
		819.0	23.17	22.30	21.35
		815.5	23.16	22.26	21.30
	50% RB mid	822.5	22.04	21.08	20.26
		819.0	22.07	21.18	20.27
		815.5	22.08	21.14	20.29
	100% RB	822.5	22.05	21.03	20.19
		819.0	22.05	21.03	20.19
		815.5	22.05	21.03	20.19



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		819.0	22.13	21.10	20.21
		815.5	22.12	21.13	20.24
5MHz	1 RB high	821.5	23.07	22.19	21.18
		819.0	23.17	22.26	21.25
		816.5	23.27	22.40	21.19
	1 RB low	821.5	23.06	22.25	21.19
		819.0	23.06	22.23	21.09
		816.5	23.22	22.35	21.33
	50% RB mid	821.5	22.01	20.99	20.20
		819.0	22.08	21.07	20.26
		816.5	22.13	21.14	20.28
	100% RB	821.5	22.10	21.11	20.20
		819.0	22.15	21.16	20.27
		816.5	22.21	21.20	20.31
10MHz	1 RB high	819.0	22.11	21.09	20.29
	1 RB low	819.0	22.16	21.11	20.27
	50% RB mid	819.0	22.19	21.15	20.31
	100% RB	819.0	22.10	21.11	20.20

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



LTE band 26(824MHz-849MHz)

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	848.3	23.07	22.19	21.14
		836.5	23.09	22.33	21.26
		824.7	23.17	22.32	21.13
	1 RB low	848.3	23.05	22.02	21.11
		836.5	23.17	22.17	21.13
		824.7	23.20	22.17	21.22
	50% RB mid	848.3	23.03	22.07	21.07
		836.5	23.14	22.12	21.13
		824.7	23.17	22.16	21.25
	100% RB	848.3	22.88	22.03	20.83
		836.5	22.95	22.14	20.87
		824.7	22.78	22.02	20.93
3MHz	1 RB high	847.5	23.05	22.24	21.04
		836.5	23.17	22.30	21.35
		825.5	23.16	22.26	21.30
	1 RB low	847.5	22.02	21.06	20.17
		836.5	22.08	21.17	20.29
		825.5	22.11	21.17	20.30
	50% RB mid	847.5	22.04	21.11	20.19
		836.5	22.08	21.14	20.25
		825.5	22.11	21.17	20.27
	100% RB	847.5	21.95	21.06	20.38
		836.5	22.02	21.15	20.27
		825.5	21.63	20.76	20.514
5MHz	1 RB high	846.5	23.10	22.17	21.14
		836.5	23.18	22.36	21.27
		826.5	23.22	22.35	21.34
	1 RB low	846.5	21.99	20.94	20.18
		836.5	22.11	21.08	20.26
		826.5	22.18	21.15	20.32
	50% RB mid	846.5	22.11	21.09	20.29
		836.5	22.16	21.11	20.27
		826.5	22.19	21.15	20.31
	100% RB	846.5	22.00	21.09	20.86
		836.5	22.04	21.13	20.90
		826.5	22.18	21.25	21.05
10MHz	1 RB high	844.0	23.09	22.40	21.18



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		836.5	23.25	22.41	21.24
		829.0	23.22	22.34	21.23
		844.0	22.01	20.98	20.14
	1 RB low	836.5	22.14	21.16	20.27
		829.0	22.16	21.23	20.35
		844.0	22.10	21.09	20.21
	50% RB mid	836.5	22.18	21.23	20.34
		829.0	22.14	21.14	20.24
		844.0	21.98	21.08	20.40
	100% RB	836.5	22.08	21.16	20.34
		829.0	22.20	21.31	20.26
		844.0	22.10	21.09	20.21
15MHz	1 RB high	841.5	23.08	22.14	21.13
		836.5	23.12	22.29	21.08
		831.5	23.13	22.25	21.24
	1 RB low	841.5	23.02	22.08	21.16
		836.5	23.02	22.21	21.13
		831.5	23.12	22.34	21.07
	50% RB mid	841.5	22.07	21.04	20.23
		836.5	22.09	21.06	20.25
		831.5	22.17	21.15	20.27
	100% RB	841.5	22.02	21.02	20.11
		836.5	22.19	21.15	20.28
		831.5	22.12	21.08	20.21

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

LTE band 38

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
5MHz	1 RB high	2617.5	23.11	22.05	20.94
		2595.0	23.13	22.23	20.95
		2572.5	23.09	22.20	20.91
	1 RB low	2617.5	23.16	22.06	20.98
		2595.0	23.14	22.24	20.99
		2572.5	23.10	22.19	20.94
	50% RB mid	2617.5	22.03	21.13	20.18
		2595.0	22.20	21.15	20.19
		2572.5	22.18	21.12	20.10
	100% RB	2617.5	22.03	21.22	20.25
		2595.0	22.21	21.24	20.24
		2572.5	22.18	21.19	20.18

10MHz	1 RB high	2615.0	23.07	22.02	20.92
		2595.0	23.08	22.22	20.93
		2575.0	23.09	22.22	20.92
	1 RB low	2615.0	23.04	22.17	20.89
		2595.0	23.12	22.28	20.97
		2575.0	23.08	22.18	20.93
	50% RB mid	2615.0	22.00	21.20	20.22
		2595.0	22.19	21.22	20.22
		2575.0	22.18	21.18	20.21
	100% RB	2615.0	22.05	21.21	20.17
		2595.0	22.21	21.21	20.17
		2575.0	22.21	21.19	20.16
15MHz	1 RB high	2612.5	23.02	21.99	20.88
		2595.0	23.04	22.19	20.91
		2577.5	23.12	22.28	20.95
	1 RB low	2612.5	22.97	22.15	20.86
		2595.0	23.00	22.21	20.86
		2577.5	23.00	22.15	20.87
	50% RB mid	2612.5	22.14	21.11	20.13
		2595.0	22.19	21.14	20.14
		2577.5	22.17	21.13	20.14
	100% RB	2612.5	22.18	21.15	20.14
		2595.0	22.18	21.17	20.13
		2577.5	22.21	21.18	20.16
20MHz	1 RB high	2610.0	22.98	21.94	20.84
		2595.0	23.01	22.10	20.86
		2580.0	22.99	22.15	20.85
	1 RB low	2610.0	23.01	22.13	20.83
		2595.0	23.00	22.14	20.86
		2580.0	22.99	22.13	20.81
	50% RB mid	2610.0	22.20	21.22	20.19
		2595.0	22.21	21.20	20.16
		2580.0	22.21	21.21	20.15
	100% RB	2610.0	22.15	21.20	20.17
		2595.0	22.19	21.18	20.17
		2580.0	22.19	21.19	20.15

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



LTE band 41

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
5MHz	1 RB high	2687.5	23.28	22.25	21.20
		2593.0	23.29	22.26	21.14
		2498.5	23.26	22.44	21.15
	1 RB low	2687.5	23.31	22.26	21.18
		2593.0	23.32	22.22	21.16
		2498.5	23.33	22.45	21.14
	50% RB mid	2687.5	22.26	21.37	20.38
		2593.0	22.21	21.33	20.34
		2498.5	22.37	21.29	20.34
	100% RB	2687.5	22.29	21.46	20.45
		2593.0	22.26	21.43	20.44
		2498.5	22.38	21.41	20.40
10MHz	1 RB high	2685.0	23.27	22.23	21.13
		2593.0	23.24	22.22	21.11
		2501.0	23.25	22.41	21.10
	1 RB low	2685.0	23.27	22.27	21.17
		2593.0	23.34	22.24	21.16
		2501.0	23.26	22.43	21.14
	50% RB mid	2685.0	22.22	21.45	20.47
		2593.0	22.24	21.42	20.40
		2501.0	22.38	21.40	20.40
	100% RB	2685.0	22.26	21.45	20.41
		2593.0	22.25	21.46	20.41
		2501.0	22.42	21.43	20.39
15MHz	1 RB high	2682.5	23.21	22.18	21.09
		2593.0	23.19	22.17	21.08
		2503.5	23.20	22.39	21.08
	1 RB low	2682.5	23.26	22.27	21.15
		2593.0	23.28	22.27	21.15
		2503.5	23.28	22.45	21.14
	50% RB mid	2682.5	23.18	22.20	21.07
		2593.0	23.23	22.21	21.10
		2503.5	23.23	22.41	21.12
	100% RB	2682.5	22.21	21.39	20.37
		2593.0	22.26	21.41	20.39



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		2503.5	22.39	21.39	20.38
20MHz	1 RB high	2680.0	23.20	22.17	21.05
		2593.0	23.17	22.15	21.03
		2506.0	23.13	22.31	21.02
	1 RB low	2680.0	23.31	22.25	21.11
		2593.0	23.30	22.25	21.13
		2506.0	23.32	22.42	21.12
	50% RB mid	2680.0	22.27	21.41	20.38
		2593.0	22.25	21.44	20.37
		2506.0	22.42	21.43	20.40
	100% RB	2680.0	22.21	21.39	20.35
		2593.0	22.26	21.42	20.39
		2506.0	22.36	21.36	20.34

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



LTE band 66

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	1779.3	23.01	22.25	21.17
		1745.0	23.01	22.19	21.06
		1710.7	23.06	22.32	21.16
	1 RB low	1779.3	23.06	22.27	21.21
		1745.0	23.00	22.26	21.23
		1710.7	23.09	22.31	21.13
	50% RB mid	1779.3	23.01	22.07	21.06
		1745.0	23.07	22.01	21.18
		1710.7	23.06	22.06	21.18
	100% RB	1779.3	22.05	21.11	19.94
		1745.0	22.01	21.10	19.92
		1710.7	22.07	21.11	20.00
3MHz	1 RB high	1778.5	22.94	22.18	21.02
		1745.0	23.03	22.31	21.00
		1711.5	23.13	22.35	21.19
	1 RB low	1778.5	22.99	22.19	21.06
		1745.0	23.07	22.31	21.23
		1711.5	23.07	22.22	21.20
	50% RB mid	1778.5	21.99	21.02	19.99
		1745.0	22.00	21.00	19.98
		1711.5	22.02	21.08	20.01
	100% RB	1778.5	21.97	21.04	19.98
		1745.0	22.00	20.99	19.91
		1711.5	22.07	21.09	20.06
5MHz	1 RB high	1777.5	23.03	22.24	21.15
		1745.0	23.04	22.22	21.25
		1712.5	23.05	22.34	21.12
	1 RB low	1777.5	23.07	22.30	21.10
		1745.0	23.04	22.30	21.10
		1712.5	23.12	22.33	21.05
	50% RB mid	1777.5	22.03	21.00	20.01
		1745.0	22.02	20.97	19.99
		1712.5	22.08	21.07	20.06
	100% RB	1777.5	22.05	21.05	19.98
		1745.0	22.04	21.00	19.97
		1712.5	22.10	21.09	20.07
10MHz	1 RB high	1775.0	23.00	22.29	21.08



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		1745.0	23.04	22.29	21.05
		1715.0	23.09	22.11	21.13
		1775.0	22.03	21.00	19.95
	1 RB low	1745.0	22.05	21.06	20.03
		1715.0	22.16	21.11	20.11
		1775.0	22.02	21.00	19.99
	50% RB mid	1745.0	22.02	21.04	19.99
		1715.0	22.12	21.08	20.05
		1775.0	22.05	21.02	20.02
	100% RB	1745.0	22.11	21.04	20.02
		1715.0	22.07	21.04	20.03
		1775.0	22.05	21.02	20.02
15MHz	1 RB high	1772.5	23.00	22.15	21.05
		1745.0	22.88	22.14	21.01
		1717.5	23.00	22.19	20.89
	1 RB low	1772.5	22.97	22.20	21.09
		1745.0	23.01	22.37	21.09
		1717.5	23.08	22.29	21.12
	50% RB mid	1772.5	22.02	21.04	20.03
		1745.0	22.04	21.05	20.05
		1717.5	21.99	21.02	19.99
	100% RB	1772.5	22.06	21.01	19.99
		1745.0	22.02	21.00	19.95
		1717.5	22.04	20.94	19.93
20MHz	1 RB high	1770.0	22.94	22.17	20.95
		1745.0	22.92	22.21	20.99
		1720.0	22.88	22.07	21.10
	1 RB low	1770.0	21.96	20.94	19.94
		1745.0	22.02	21.05	20.00
		1720.0	22.04	21.00	19.96
	50% RB mid	1770.0	22.08	21.13	20.09
		1745.0	22.05	21.09	20.04
		1720.0	21.95	20.91	19.88
	100% RB	1770.0	22.02	21.02	20.03
		1745.0	22.03	21.02	20.01
		1720.0	21.94	20.93	19.93

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



LTE band CA-7C

Bandwidth	Frequency (MHz)	Frequency (MHz)	Modulation	PCC RB		SCC RB		Conducted Power(dBm)
				Size	Offset	Size	Offset	
15MHz/10 MHz	2507.5	2519.5	QPSK	1	74	1	0	22.06
				75	0	50	0	21.12
			16QAM	1	74	1	0	20.98
				75	0	50	0	20.89
			64QAM	1	74	1	0	19.99
				75	0	50	0	19.03
	2530.1	2542.1	QPSK	1	74	1	0	22.17
				75	0	50	0	21.35
			16QAM	1	74	1	0	21.12
				75	0	50	0	20.55
			64QAM	1	74	1	0	20.03
				75	0	50	0	19.87
	2552.7	2564.7	QPSK	1	74	1	0	22.14
				75	0	50	0	21.25
			16QAM	1	74	1	0	21.07
				75	0	50	0	20.66
			64QAM	1	74	1	0	20.42
				75	0	50	0	19.77
10MHz/20 MHz	2505.5	2519.9	QPSK	1	49	1	0	21.89
				50	0	100	0	21.12
			16QAM	1	49	1	0	21.00
				50	0	100	0	20.73
			64QAM	1	49	1	0	20.33
				50	0	100	0	19.99
	2525.6	2540	QPSK	1	49	1	0	22.08
				50	0	100	0	21.77
			16QAM	1	49	1	0	21.56
				50	0	100	0	20.99
			64QAM	1	49	1	0	20.77
				50	0	100	0	20.02
	2545.6	2560	QPSK	1	49	1	0	22.31
				50	0	100	0	21.79
			16QAM	1	49	1	0	21.66
				50	0	100	0	20.78
			64QAM	1	49	1	0	20.70
				50	0	100	0	19.96
20MHz/10 MHz	2510	2524.4	QPSK	1	99	1	0	22.01
				100	0	50	0	21.78



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			16QAM	1	99	1	0	21.22
				100	0	50	0	20.78
			64QAM	1	99	1	0	20.37
				100	0	50	0	19.67
	2530.1	2544.5	QPSK	1	99	1	0	22.21
				100	0	50	0	21.56
			16QAM	1	99	1	0	21.34
				100	0	50	0	20.99
			64QAM	1	99	1	0	20.43
				100	0	50	0	19.78
	2550.1	2564.5	QPSK	1	99	1	0	22.14
				100	0	50	0	21.47
			16QAM	1	99	1	0	21.55
				100	0	50	0	20.87
			64QAM	1	99	1	0	20.63
				100	0	50	0	20.14
15MHz/15 MHz	2507.5	2522.5	QPSK	1	74	1	0	21.99
				75	0	75	0	21.06
			16QAM	1	74	1	0	21.15
				75	0	75	0	20.76
			64QAM	1	74	1	0	20.41
				75	0	75	0	19.87
	2527.5	2542.5	QPSK	1	74	1	0	22.13
				75	0	75	0	21.46
			16QAM	1	74	1	0	21.33
				75	0	75	0	20.67
			64QAM	1	74	1	0	20.46
				75	0	75	0	20.02
	2547.5	2562.5	QPSK	1	74	1	0	22.25
				75	0	75	0	21.77
			16QAM	1	74	1	0	21.67
				75	0	75	0	20.89
			64QAM	1	74	1	0	20.65
				75	0	75	0	20.22
15MHz/20 MHz	2507.8	2425.9	QPSK	1	74	1	0	22.05
				75	0	100	0	21.76
			16QAM	1	74	1	0	21.69
				75	0	100	0	20.99
			64QAM	1	74	1	0	20.79
				75	0	100	0	20.03
	2525.3	2542.4	QPSK	1	74	1	0	21.98



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			16QAM	75	0	100	0	21.76
				1	74	1	0	21.31
				75	0	100	0	20.68
				1	74	1	0	20.75
				75	0	100	0	19.63
	2542.9	2560	QPSK	1	74	1	0	21.68
				75	0	100	0	21.66
			16QAM	1	74	1	0	21.13
				75	0	100	0	21.00
			64QAM	1	74	1	0	20.57
75	0	100		0	19.78			
20MHz/15 MHz	2510	2527.1	QPSK	1	99	1	0	21.87
				100	0	75	0	21.67
			16QAM	1	99	1	0	21.34
				100	0	75	0	20.75
			64QAM	1	99	1	0	20.65
				100	0	75	0	20.03
	2527.6	2544.7	QPSK	1	99	1	0	21.78
				100	0	75	0	21.63
			16QAM	1	99	1	0	21.22
				100	0	75	0	20.69
			64QAM	1	99	1	0	20.74
				100	0	75	0	20.06
	2545.1	2562.2	QPSK	1	99	1	0	21.85
				100	0	75	0	21.41
			16QAM	1	99	1	0	21.66
				100	0	75	0	20.78
			64QAM	1	99	1	0	20.69
				100	0	75	0	20.04
20MHz/20 MHz	2510	2529.8	QPSK	1	99	1	0	21.65
				100	0	100	0	21.66
			16QAM	1	99	1	0	21.45
				100	0	100	0	20.76
			64QAM	1	99	1	0	20.33
	100	0		100	0	19.77		
	2525.1	2544.9	QPSK	1	99	1	0	21.89
				100	0	100	0	21.69
			16QAM	1	99	1	0	21.70
				100	0	100	0	20.99
64QAM			1	99	1	0	20.96	
	100	0	100	0	19.87			



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	2540.2	2560	QPSK	1	99	1	0	21.96
				100	0	100	0	21.76
			16QAM	1	99	1	0	21.33
				100	0	100	0	20.89
			64QAM	1	99	1	0	20.75
				100	0	100	0	19.95

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

LTE band CA-38C

Bandwidth	Frequency (MHz)	Frequency (MHz)	Modulation	PCC RB		SCC RB		Conducted Power(dBm)
				Size	Offset	Size	Offset	
15MHz/15 MHz	2577.5	2592.5	QPSK	1	74	1	0	22.55
				75	0	75	0	22.34
			16QAM	1	74	1	0	22.01
				75	0	75	0	21.97
			64QAM	1	74	1	0	20.44
				75	0	75	0	20.05
	2587.5	2602.5	QPSK	1	74	1	0	22.41
				75	0	75	0	22.08
			16QAM	1	74	1	0	22.00
				75	0	75	0	21.87
			64QAM	1	74	1	0	20.76
				75	0	75	0	20.15
	2597.5	2612.5	QPSK	1	74	1	0	22.17
				75	0	75	0	22.05
			16QAM	1	74	1	0	21.98
				75	0	75	0	21.46
			64QAM	1	74	1	0	20.96
				75	0	75	0	20.55
20MHz/20 MHz	2580	2599.8	QPSK	1	99	1	0	22.23
				100	0	100	0	22.14
			16QAM	1	99	1	0	22.01
				100	0	100	0	21.61
			64QAM	1	99	1	0	20.87
				100	0	100	0	20.46
	2585.1	2604.9	QPSK	1	99	1	0	22.37
				100	0	100	0	21.89
			16QAM	1	99	1	0	21.76
				100	0	100	0	21.46
			64QAM	1	99	1	0	20.95
				100	0	100	0	20.12
	2590.2	2610	QPSK	1	99	1	0	22.23



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				100	0	100	0	21.78
			16QAM	1	99	1	0	21.66
				100	0	100	0	21.01
			64QAM	1	99	1	0	20.76
				100	0	100	0	20.55

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



LTE band CA-41C

Bandwidth	Frequency (MHz)	Frequency (MHz)	Modulation	PCC RB		SCC RB		Conducted Power(dBm)
				Size	Offset	Size	Offset	
5MHz/20M Hz	2668.3	2680.0	QPSK	1	24	1	0	22.31
				25	0	100	0	22.14
			16QAM	1	24	1	0	22.00
				25	0	100	0	21.89
			64QAM	1	24	1	0	21.15
				25	0	100	0	20.76
	2583.8	2595.5	QPSK	1	24	1	0	22.05
				25	0	100	0	21.79
			16QAM	1	24	1	0	21.76
				25	0	100	0	21.33
			64QAM	1	24	1	0	20.46
				25	0	100	0	20.33
	2499.3	2511.0	QPSK	1	24	1	0	22.30
				25	0	100	0	21.99
			16QAM	1	24	1	0	21.87
				25	0	100	0	21.85
			64QAM	1	24	1	0	20.76
				25	0	100	0	20.45
20MHz/5M Hz	2675.0	2686.7	QPSK	1	99	1	0	22.12
				100	0	25	0	21.79
			16QAM	1	99	1	0	21.85
				100	0	25	0	21.46
			64QAM	1	99	1	0	20.85
				100	0	25	0	20.56
	2590.5	2602.2	QPSK	1	99	1	0	21.87
				100	0	25	0	21.88
			16QAM	1	99	1	0	21.45
				100	0	25	0	21.33
			64QAM	1	99	1	0	20.65
				100	0	25	0	20.45
	2506.0	2517.7	QPSK	1	99	1	0	22.03
				100	0	25	0	21.89
			16QAM	1	99	1	0	21.88
				100	0	25	0	21.46
			64QAM	1	99	1	0	20.55
				100	0	25	0	20.43
10MHz/15	2670.5	2682.5	QPSK	1	49	1	0	22.15



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MHz			16QAM	50	0	75	0	21.88
				1	49	1	0	21.46
				50	0	75	0	21.21
			64QAM	1	49	1	0	20.99
				50	0	75	0	20.57
				1	49	1	0	22.21
	2585.9	2597.9	QPSK	50	0	75	0	21.87
				1	49	1	0	21.55
			16QAM	50	0	75	0	21.05
				1	49	1	0	20.45
			64QAM	50	0	75	0	20.30
				1	49	1	0	22.05
15MHz/10 MHz	2501.3	2513.3	QPSK	50	0	75	0	21.88
				1	49	1	0	21.67
			16QAM	50	0	75	0	21.31
				1	49	1	0	20.78
			64QAM	50	0	75	0	20.77
				1	49	1	0	21.89
	2672.7	2684.7	QPSK	75	0	50	0	21.67
				1	74	1	0	21.45
			16QAM	75	0	50	0	21.35
				1	74	1	0	20.78
			64QAM	75	0	50	0	20.55
				1	74	1	0	22.04
	2588.1	2600.1	QPSK	75	0	50	0	21.87
				1	74	1	0	21.54
			16QAM	75	0	50	0	21.33
				1	74	1	0	20.56
			64QAM	75	0	50	0	20.45
				1	74	1	0	21.91
10MHz/20 MHz	2503.5	2515.5	QPSK	75	0	50	0	21.76
				1	74	1	0	21.20
			16QAM	75	0	50	0	21.03
				1	74	1	0	20.46
			64QAM	75	0	50	0	20.12
				1	74	1	0	22.14
	2665.6	2680.0	QPSK	50	0	100	0	21.89
				1	49	1	0	21.76
			16QAM	50	0	100	0	21.54
				1	49	1	0	20.73
			64QAM	50	0	100	0	20.33
				1	49	1	0	22.14



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	2583.6	2598.0	QPSK	1	49	1	0	21.78
				50	0	100	0	21.65
			16QAM	1	49	1	0	21.03
				50	0	100	0	20.99
			64QAM	1	49	1	0	20.15
				50	0	100	0	19.87
	2501.5	2515.9	QPSK	1	49	1	0	21.78
				50	0	100	0	21.76
			16QAM	1	49	1	0	21.33
				50	0	100	0	21.21
			64QAM	1	49	1	0	20.05
				50	0	100	0	19.75
20MHz/10 MHz	2670.1	2684.5	QPSK	1	99	1	0	22.20
				100	0	50	0	21.98
			16QAM	1	99	1	0	21.35
				100	0	50	0	21.21
			64QAM	1	99	1	0	20.44
				100	0	50	0	20.31
	2588.1	2602.5	QPSK	1	99	1	0	21.86
				100	0	50	0	21.46
			16QAM	1	99	1	0	21.00
				100	0	50	0	20.87
			64QAM	1	99	1	0	20.12
				100	0	50	0	19.87
	2506.0	2520.4	QPSK	1	99	1	0	21.76
				100	0	50	0	21.67
			16QAM	1	99	1	0	21.00
				100	0	50	0	20.89
			64QAM	1	99	1	0	20.02
				100	0	50	0	19.68
15MHz/15 MHz	2667.5	2682.5	QPSK	1	74	1	0	21.79
				75	0	75	0	21.59
			16QAM	1	74	1	0	21.02
				75	0	75	0	20.94
			64QAM	1	74	1	0	20.33
				75	0	75	0	19.92
	2585.5	2600.5	QPSK	1	74	1	0	21.82
				75	0	75	0	21.78
			16QAM	1	74	1	0	21.21
				75	0	75	0	21.02
			64QAM	1	74	1	0	20.33



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	2503.5	2518.5	QPSK	75	0	75	0	20.23
				1	74	1	0	21.90
				75	0	75	0	21.78
			16QAM	1	74	1	0	21.03
				75	0	75	0	20.84
			64QAM	1	74	1	0	20.01
				75	0	75	0	19.85
15MHz/20 MHz	2662.9	2680.0	QPSK	1	74	1	0	21.93
				75	0	100	0	21.68
			16QAM	1	74	1	0	21.35
				75	0	100	0	21.00
			64QAM	1	74	1	0	20.65
				75	0	100	0	20.33
	2583.3	2600.4	QPSK	1	74	1	0	21.74
				75	0	100	0	21.65
			16QAM	1	74	1	0	20.89
				75	0	100	0	20.84
			64QAM	1	74	1	0	20.03
				75	0	100	0	19.85
	2503.8	2520.9	QPSK	1	74	1	0	21.65
				75	0	100	0	21.64
			16QAM	1	74	1	0	21.00
				75	0	100	0	20.96
			64QAM	1	74	1	0	20.20
				75	0	100	0	20.02
20MHz/15 MHz	2665.1	2682.2	QPSK	1	99	1	0	22.12
				100	0	75	0	21.87
			16QAM	1	99	1	0	21.05
				100	0	75	0	21.00
			64QAM	1	99	1	0	20.35
				100	0	75	0	20.05
	2585.6	2602.7	QPSK	1	99	1	0	21.84
				100	0	75	0	21.80
			16QAM	1	99	1	0	21.15
				100	0	75	0	20.99
			64QAM	1	99	1	0	20.13
				100	0	75	0	19.76
	2506.0	2523.1	QPSK	1	99	1	0	21.88
				100	0	75	0	21.75
			16QAM	1	99	1	0	21.02
				100	0	75	0	20.98

20MHz/20 MHz			64QAM	1	99	1	0	20.15
				100	0	75	0	19.84
	2660.2	2680.0	QPSK	1	99	1	0	21.93
				100	0	100	0	21.76
			16QAM	1	99	1	0	21.05
				100	0	100	0	20.90
			64QAM	1	99	1	0	20.12
				100	0	100	0	19.93
	2583.1	2602.9	QPSK	1	99	1	0	21.94
				100	0	100	0	21.70
			16QAM	1	99	1	0	21.12
				100	0	100	0	21.00
			64QAM	1	99	1	0	20.30
				100	0	100	0	20.02
	2506.0	2525.8	QPSK	1	99	1	0	21.63
				100	0	100	0	21.60
			16QAM	1	99	1	0	21.05
				100	0	100	0	20.86
			64QAM	1	99	1	0	20.01
				100	0	100	0	19.87

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

A.1.3 Radiated

A.1.3.1 Description

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

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

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

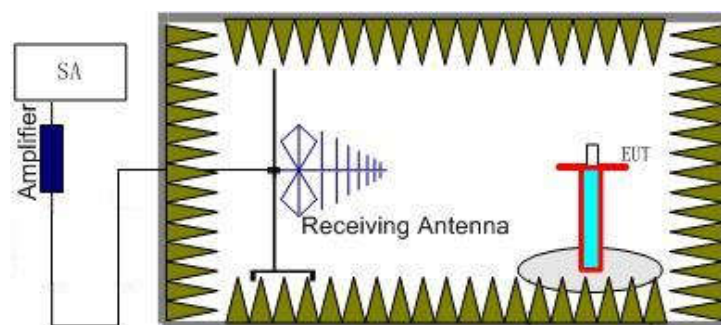
Rule Part 27.50(h)(2) specifies "Mobile stations are limited to 2.0 watts EIRP".

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

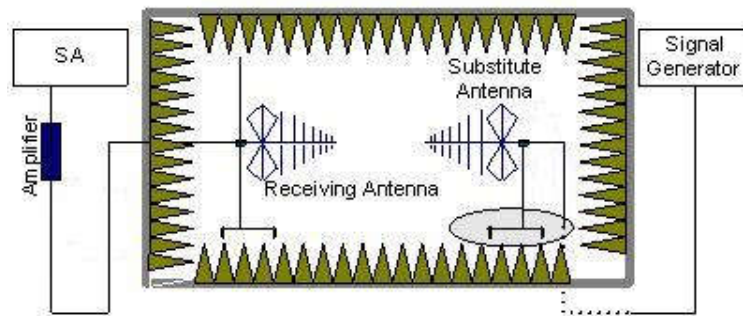
Rule Part 27.50(a)(3) specifies "For mobile and portable stations transmitting in the 2305–2315 MHz band or the 2350–2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth." Rule Part 90.635(b) specifies "The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw)."

A.1.3.2 Method of Measurement

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



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



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

4. An amplifier should be connected to the Signal Source output port. And the cable should be connected between the amplifier and the substitution antenna.

The cable loss (P_{cl}), the substitution Antenna Gain(dBi) (G_a) and the amplifier Gain (P_{Ag}) should be recorded after test.

The measurement results are obtained as described below:

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

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

A.1.3.3 Measurement result

Upper antenna

LTE BAND 2 QPSK-1.4MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	1850.70	-15.86	-29.30	8.10	21.54	H	33.00
	1880.00	-16.67	-29.40	8.10	20.83	H	33.00
	1909.30	-16.66	-29.30	8.10	20.74	H	33.00
LTE BAND 2 QPSK-3MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	1851.50	-16.69	-29.30	8.10	20.71	H	33.00
	1880.00	-16.72	-29.40	8.10	20.78	H	33.00
	1908.50	-15.82	-29.30	8.10	21.58	H	33.00
LTE BAND 2 QPSK-5MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	1852.50	-16.44	-29.30	8.10	20.96	H	33.00
	1880.00	-16.71	-29.40	8.10	20.79	H	33.00
	1907.50	-16.05	-29.30	8.10	21.35	H	33.00
LTE BAND 2 QPSK-10MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	1855.00	-16.41	-29.30	8.10	20.99	H	33.00
	1880.00	-16.07	-29.40	8.10	21.43	H	33.00
	1905.00	-16.26	-29.30	8.10	21.14	H	33.00
LTE BAND 2 QPSK-15MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	1857.50	-16.51	-29.30	8.10	20.89	H	33.00
	1880.00	-16.37	-29.40	8.10	21.13	H	33.00
	1902.50	-16.64	-29.30	8.10	20.76	H	33.00
LTE BAND 2 QPSK-20MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	1860.00	-15.66	-29.30	8.10	21.74	H	33.00
	1880.00	-16.65	-29.40	8.10	20.85	H	33.00
	1900.00	-15.74	-29.30	8.10	21.66	H	33.00



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LTE BAND 2	frequency(M Hz)	PMea(d Bm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polarizati on	Limit(dBm)
16QAM-1 .4MHz	1850.70	-17.51	-29.30	8.10	19.89	H	33.00
	1880.00	-17.70	-29.40	8.10	19.80	H	33.00
	1909.30	-17.60	-29.30	8.10	19.80	H	33.00
LTE BAND 2	frequency(M Hz)	PMea(d Bm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polarizati on	Limit(dBm)
16QAM-3 MHz	1851.50	-17.21	-29.30	8.10	20.19	H	33.00
	1880.00	-16.75	-29.40	8.10	20.75	H	33.00
	1908.50	-16.84	-29.30	8.10	20.56	H	33.00
LTE BAND 2	frequency(M Hz)	PMea(d Bm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polarizati on	Limit(dBm)
16QAM-5 MHz	1852.50	-17.35	-29.30	8.10	20.05	H	33.00
	1880.00	-17.01	-29.40	8.10	20.49	H	33.00
	1907.50	-17.24	-29.30	8.10	20.16	H	33.00
LTE BAND 2	frequency(M Hz)	PMea(d Bm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polarizati on	Limit(dBm)
16QAM-1 0MHz	1855.00	-17.45	-29.30	8.10	19.95	H	33.00
	1880.00	-17.70	-29.40	8.10	19.80	H	33.00
	1905.00	-17.61	-29.30	8.10	19.79	H	33.00
LTE BAND 2	frequency(M Hz)	PMea(d Bm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polarizati on	Limit(dBm)
16QAM-1 5MHz	1857.50	-17.41	-29.30	8.10	19.99	H	33.00
	1880.00	-17.56	-29.40	8.10	19.94	H	33.00
	1902.50	-17.05	-29.30	8.10	20.35	H	33.00
LTE BAND 2	frequency(M Hz)	PMea(d Bm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polarizati on	Limit(dBm)
16QAM-2 0MHz	1860.00	-17.44	-29.30	8.10	19.96	H	33.00
	1880.00	-17.01	-29.40	8.10	20.49	H	33.00
	1900.00	-16.68	-29.30	8.10	20.72	H	33.00



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LTE BAND 2	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(dB m)	Polariz ation	Limit(d Bm)
64QAM-1. 4MHz	1850.70	-18.64	-29.30	8.10	18.76	H	33.00
	1880.00	-18.64	-29.40	8.10	18.86	H	33.00
	1909.30	-18.57	-29.30	8.10	18.83	H	33.00
LTE BAND 2	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(dB m)	Polariz ation	Limit(d Bm)
64QAM-3 MHz	1851.50	-18.87	-29.30	8.10	18.53	H	33.00
	1880.00	-18.87	-29.40	8.10	18.63	H	33.00
	1908.50	-18.34	-29.30	8.10	19.06	H	33.00
LTE BAND 2	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(dB m)	Polariz ation	Limit(d Bm)
64QAM-5 MHz	1852.50	-18.95	-29.30	8.10	18.45	H	33.00
	1880.00	-19.19	-29.40	8.10	18.31	H	33.00
	1907.50	-18.36	-29.30	8.10	19.04	H	33.00
LTE BAND 2	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(dB m)	Polariz ation	Limit(d Bm)
64QAM-10 MHz	1855.00	-18.82	-29.30	8.10	18.58	H	33.00
	1880.00	-19.21	-29.40	8.10	18.29	H	33.00
	1905.00	-18.40	-29.30	8.10	19.00	H	33.00
LTE BAND 2	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(dB m)	Polariz ation	Limit(d Bm)
64QAM-15 MHz	1857.50	-18.66	-29.30	8.10	18.74	H	33.00
	1880.00	-18.58	-29.40	8.10	18.92	H	33.00
	1902.50	-18.77	-29.30	8.10	18.63	H	33.00
LTE BAND 2	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(dB m)	Polariz ation	Limit(d Bm)
64QAM-20 MHz	1860.00	-18.87	-29.30	8.10	18.53	H	33.00
	1880.00	-18.97	-29.40	8.10	18.53	H	33.00
	1900.00	-18.93	-29.30	8.10	18.47	H	33.00

LTE BAND 4 QPSK-1.4 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1710.70	-16.46	-29.60	8.10	21.24	H	30.00
	1732.50	-16.42	-29.60	8.10	21.28	H	30.00
	1754.30	-16.44	-29.50	8.10	21.16	H	30.00
LTE BAND 4 QPSK-3M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1711.50	-16.31	-29.60	8.10	21.39	H	30.00
	1732.50	-16.71	-29.60	8.10	20.99	H	30.00
	1753.50	-16.32	-29.50	8.10	21.28	H	30.00
LTE BAND 4 QPSK-5M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1712.50	-17.00	-29.60	8.10	20.70	H	30.00
	1732.50	-16.60	-29.60	8.10	21.10	H	30.00
	1752.50	-16.97	-29.50	8.10	20.63	H	30.00
LTE BAND 4 QPSK-10 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1715.00	-16.17	-29.60	8.10	21.53	H	30.00
	1732.50	-16.45	-29.60	8.10	21.25	H	30.00
	1750.00	-16.25	-29.50	8.10	21.35	H	30.00
LTE BAND 4 QPSK-15 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1717.50	-16.19	-29.60	8.10	21.51	H	30.00
	1732.50	-16.40	-29.60	8.10	21.30	H	30.00
	1747.50	-16.89	-29.50	8.10	20.71	H	30.00
LTE BAND 4 QPSK-20 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1720.00	-16.29	-29.60	8.10	21.41	H	30.00
	1732.50	-16.70	-29.60	8.10	21.00	H	30.00
	1745.00	-16.62	-29.50	8.10	20.98	H	30.00



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LTE BAND 4	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariz ation	Limit(d Bm)
16QAM-1. 4MHz	1710.70	-17.81	-29.60	8.10	19.89	H	30.00
	1732.50	-17.90	-29.60	8.10	19.80	H	30.00
	1754.30	-17.80	-29.50	8.10	19.80	H	30.00
LTE BAND 4	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariz ation	Limit(d Bm)
16QAM-3 MHz	1711.50	-17.51	-29.60	8.10	20.19	H	30.00
	1732.50	-17.95	-29.60	8.10	19.75	H	30.00
	1753.50	-17.04	-29.50	8.10	20.56	H	30.00
LTE BAND 4	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariz ation	Limit(d Bm)
16QAM-5 MHz	1712.50	-17.65	-29.60	8.10	20.05	H	30.00
	1732.50	-17.21	-29.60	8.10	20.49	H	30.00
	1752.50	-17.44	-29.50	8.10	20.16	H	30.00
LTE BAND 4	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariz ation	Limit(d Bm)
16QAM-10 MHz	1715.00	-17.65	-29.60	8.10	20.05	H	30.00
	1732.50	-17.90	-29.60	8.10	19.80	H	30.00
	1750.00	-17.81	-29.50	8.10	19.79	H	30.00
LTE BAND 4	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariz ation	Limit(d Bm)
16QAM-15 MHz	1717.50	-17.71	-29.60	8.10	19.99	H	30.00
	1732.50	-17.06	-29.60	8.10	20.64	H	30.00
	1747.50	-17.25	-29.50	8.10	20.35	H	30.00
LTE BAND 4	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariz ation	Limit(d Bm)
16QAM-20 MHz	1720.00	-17.74	-29.60	8.10	19.96	H	30.00
	1732.50	-17.21	-29.60	8.10	20.49	H	30.00
	1745.00	-17.88	-29.50	8.10	19.72	H	30.00



LTE BAND 4 64QAM-1. 4MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariz ation	Limit(d Bm)
	1710.70	-19.07	-29.60	8.10	18.63	V	30.00
	1732.50	-19.18	-29.60	8.10	18.52	V	30.00
	1754.30	-18.18	-29.50	8.10	19.42	V	30.00
LTE BAND 4 64QAM-3 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariz ation	Limit(d Bm)
	1711.50	-18.36	-29.60	8.10	19.34	V	30.00
	1732.50	-18.29	-29.60	8.10	19.41	V	30.00
	1753.50	-18.24	-29.50	8.10	19.36	V	30.00
LTE BAND 4 64QAM-5 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariz ation	Limit(d Bm)
	1712.50	-18.71	-29.60	8.10	18.99	V	30.00
	1732.50	-19.06	-29.60	8.10	18.64	V	30.00
	1752.50	-18.63	-29.50	8.10	18.97	V	30.00
LTE BAND 4 64QAM-10 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariz ation	Limit(d Bm)
	1715.00	-18.52	-29.60	8.10	19.18	V	30.00
	1732.50	-18.94	-29.60	8.10	18.76	V	30.00
	1750.00	-18.92	-29.50	8.10	18.68	V	30.00
LTE BAND 4 64QAM-15 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariz ation	Limit(d Bm)
	1717.50	-18.83	-29.60	8.10	18.87	V	30.00
	1732.50	-18.78	-29.60	8.10	18.92	V	30.00
	1747.50	-19.07	-29.50	8.10	18.53	V	30.00
LTE BAND 4 64QAM-20 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariz ation	Limit(d Bm)
	1720.00	-18.87	-29.60	8.10	18.83	V	30.00
	1732.50	-18.81	-29.60	8.10	18.89	V	30.00
	1745.00	-19.07	-29.50	8.10	18.53	V	30.00



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LTE BAND 5 QPSK-1.4MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
	824.70	-10.32	-33.60	-0.79	2.15	20.34	38.45	V
	836.50	-10.10	-33.50	-0.74	2.15	20.51	38.45	V
	848.30	-10.71	-33.50	-0.73	2.15	19.91	38.45	V
LTE BAND 5 QPSK-3 MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
	825.50	-10.05	-33.60	-0.84	2.15	20.56	38.45	V
	836.50	-10.00	-33.50	-0.74	2.15	20.61	38.45	V
	847.50	-11.02	-33.50	-0.73	2.15	19.60	38.45	V
LTE BAND 5 QPSK-5 MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
	826.50	-9.74	-33.60	-0.84	2.15	20.87	38.45	V
	836.50	-9.93	-33.50	-0.74	2.15	20.68	38.45	V
	846.50	-11.50	-33.50	-0.73	2.15	19.12	38.45	V
LTE BAND 5 QPSK-10 MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
	829.00	-10.12	-33.60	-0.84	2.15	20.49	38.45	V
	836.50	-9.78	-33.50	-0.74	2.15	20.83	38.45	V
	844.00	-10.59	-33.50	-0.78	2.15	19.98	38.45	V

LTE BAND 5 16QAM-1.4MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
	824.70	-10.90	-33.60	-0.79	2.15	19.76	38.45	H
	836.50	-11.41	-33.50	-0.74	2.15	19.20	38.45	H
	848.30	-11.35	-33.50	-0.73	2.15	19.27	38.45	H
LTE BAND 5 16QAM-3 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
	825.50	-11.51	-33.60	-0.84	2.15	19.10	38.45	H
	836.50	-10.36	-33.50	-0.74	2.15	20.25	38.45	H
	847.50	-11.26	-33.50	-0.73	2.15	19.36	38.45	H
LTE BAND 5 16QAM-5 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
	826.50	-11.57	-33.60	-0.84	2.15	19.04	38.45	H
	836.50	-10.51	-33.50	-0.74	2.15	20.10	38.45	H
	846.50	-11.71	-33.50	-0.73	2.15	18.91	38.45	H
LTE BAND 5 16QAM-10MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
	829.00	-11.39	-33.60	-0.84	2.15	19.22	38.45	H
	836.50	-10.29	-33.50	-0.74	2.15	20.32	38.45	H
	844.00	-11.07	-33.50	-0.78	2.15	19.50	38.45	H



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LTE BAND 5 64QAM-1.4MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(dB m)	Polari zation
	824.70	-12.11	-33.60	-0.79	2.15	18.55	38.45	H
	836.50	-11.74	-33.50	-0.74	2.15	18.87	38.45	H
	848.30	-12.16	-33.50	-0.73	2.15	18.46	38.45	H
LTE BAND 5 64QAM-3 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(dB m)	Polari zation
	825.50	-11.89	-33.60	-0.84	2.15	18.72	38.45	H
	836.50	-11.47	-33.50	-0.74	2.15	19.14	38.45	H
	847.50	-12.11	-33.50	-0.73	2.15	18.51	38.45	H
LTE BAND 5 64QAM-5 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(dB m)	Polari zation
	826.50	-11.64	-33.60	-0.84	2.15	18.97	38.45	H
	836.50	-11.32	-33.50	-0.74	2.15	19.29	38.45	H
	846.50	-12.05	-33.50	-0.73	2.15	18.57	38.45	H
LTE BAND 5 64QAM-10MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(dB m)	Polari zation
	829.00	-11.60	-33.60	-0.84	2.15	19.01	38.45	H
	836.50	-12.18	-33.50	-0.74	2.15	18.43	38.45	H
	844.00	-11.25	-33.50	-0.78	2.15	19.32	38.45	H

LTE BAND 7 QPSK-5MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2502.50	-18.40	-28.70	10.70	21.00	H	33.00
	2535.00	-17.61	-28.60	10.70	21.69	H	33.00
	2567.50	-17.71	-28.60	10.70	21.59	H	33.00
LTE BAND 7 QPSK-10 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2505.00	-18.64	-28.70	10.70	20.76	H	33.00
	2535.00	-17.63	-28.60	10.70	21.67	H	33.00
	2565.00	-18.32	-28.60	10.70	20.98	H	33.00
LTE BAND 7 QPSK-15 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2507.50	-18.44	-28.70	10.70	20.96	H	33.00
	2535.00	-17.80	-28.60	10.70	21.50	H	33.00
	2562.50	-18.37	-28.60	10.70	20.93	H	33.00
LTE BAND 7 QPSK-20 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2510.00	-18.03	-28.70	10.70	21.37	H	33.00
	2535.00	-18.28	-28.60	10.70	21.02	H	33.00
	2560.00	-17.69	-28.60	10.70	21.61	H	33.00



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LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
16QAM-5 MHz	2502.50	-19.67	-28.70	10.70	19.73	H	33.00
	2535.00	-19.47	-28.60	10.70	19.83	H	33.00
	2567.50	-19.56	-28.60	10.70	19.74	H	33.00
LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
16QAM-10 MHz	2505.00	-19.70	-28.70	10.70	19.70	H	33.00
	2535.00	-19.84	-28.60	10.70	19.46	H	33.00
	2565.00	-19.38	-28.60	10.70	19.92	H	33.00
LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
16QAM-15 MHz	2507.50	-19.36	-28.70	10.70	20.04	H	33.00
	2535.00	-18.90	-28.60	10.70	20.40	H	33.00
	2562.50	-19.07	-28.60	10.70	20.23	H	33.00
LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
16QAM-20 MHz	2510.00	-19.19	-28.70	10.70	20.21	H	33.00
	2535.00	-19.39	-28.60	10.70	19.91	H	33.00
	2560.00	-19.83	-28.60	10.70	19.47	H	33.00

LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
64QAM-5 MHz	2502.50	-20.53	-28.70	10.70	18.87	V	33.00
	2535.00	-20.74	-28.60	10.70	18.56	V	33.00
	2567.50	-20.03	-28.60	10.70	19.27	V	33.00
LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
64QAM-10 MHz	2505.00	-20.52	-28.70	10.70	18.88	V	33.00
	2535.00	-20.04	-28.60	10.70	19.26	V	33.00
	2565.00	-20.09	-28.60	10.70	19.21	V	33.00
LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
64QAM-15 MHz	2507.50	-20.53	-28.70	10.70	18.87	V	33.00
	2535.00	-20.89	-28.60	10.70	18.41	V	33.00
	2562.50	-20.37	-28.60	10.70	18.93	V	33.00
LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
64QAM-20 MHz	2510.00	-21.06	-28.70	10.70	18.34	V	33.00
	2535.00	-20.55	-28.60	10.70	18.75	V	33.00
	2560.00	-20.73	-28.60	10.70	18.57	V	33.00



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LTE BAND	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
12 QPSK-1.4MHz	699.70	-10.39	-34.80	-0.93	2.15	21.33	34.77	V
	707.50	-10.85	-34.70	-0.91	2.15	20.79	34.77	V
	715.30	-11.36	-34.70	-0.68	2.15	20.51	34.77	V
12 QPSK-3 MHz	700.50	-10.32	-34.80	-0.97	2.15	21.36	34.77	V
	707.50	-10.75	-34.70	-0.91	2.15	20.89	34.77	V
	714.50	-11.46	-34.70	-0.64	2.15	20.45	34.77	V
12 QPSK-5 MHz	701.50	-10.31	-34.80	-0.97	2.15	21.37	34.77	V
	707.50	-10.75	-34.70	-0.91	2.15	20.89	34.77	V
	713.50	-11.28	-34.70	-0.64	2.15	20.63	34.77	V
12 QPSK-10MHz	704.00	-10.34	-34.80	-0.97	2.15	21.34	34.77	V
	707.50	-10.39	-34.70	-0.91	2.15	21.25	34.77	V
	711.00	-11.20	-34.70	-0.64	2.15	20.71	34.77	V

LTE BAND	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
12 16QAM-1.4MHz	699.70	-11.91	-34.80	-0.93	2.15	19.81	34.77	H
	707.50	-12.38	-34.70	-0.91	2.15	19.26	34.77	H
	715.30	-13.03	-34.70	-0.68	2.15	18.84	34.77	H
12 16QAM-3MHz	700.50	-11.69	-34.80	-0.97	2.15	19.99	34.77	H
	707.50	-12.68	-34.70	-0.91	2.15	18.96	34.77	H
	714.50	-13.01	-34.70	-0.64	2.15	18.90	34.77	H
12 16QAM-5MHz	701.50	-11.77	-34.80	-0.97	2.15	19.91	34.77	H
	707.50	-11.91	-34.70	-0.91	2.15	19.73	34.77	H
	713.50	-12.96	-34.70	-0.64	2.15	18.95	34.77	H
12 16QAM-10MHz	704.00	-11.75	-34.80	-0.97	2.15	19.93	34.77	H
	707.50	-12.46	-34.70	-0.91	2.15	19.18	34.77	H
	711.00	-12.62	-34.70	-0.64	2.15	19.29	34.77	H



LTE BAND 12	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
64QAM-1.4MHz	699.70	-12.75	-34.80	-0.93	2.15	18.97	34.77	H
	707.50	-13.40	-34.70	-0.91	2.15	18.24	34.77	H
	715.30	-13.18	-34.70	-0.68	2.15	18.69	34.77	H
LTE BAND 12	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
64QAM-3MHz	700.50	-12.75	-34.80	-0.97	2.15	18.93	34.77	H
	707.50	-13.34	-34.70	-0.91	2.15	18.30	34.77	H
	714.50	-13.07	-34.70	-0.64	2.15	18.84	34.77	H
LTE BAND 12	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
64QAM-5MHz	701.50	-12.91	-34.80	-0.97	2.15	18.77	34.77	H
	707.50	-13.25	-34.70	-0.91	2.15	18.39	34.77	H
	713.50	-12.95	-34.70	-0.64	2.15	18.96	34.77	H
LTE BAND 12	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
64QAM-10MHz	704.00	-12.71	-34.80	-0.97	2.15	18.97	34.77	H
	707.50	-12.98	-34.70	-0.91	2.15	18.66	34.77	H
	711.00	-13.66	-34.70	-0.64	2.15	18.25	34.77	H

LTE BAND 13	frequency (MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
QPSK-5MHz	779.50	-11.22	-34.00	-0.08	2.15	20.55	34.77	V
	782.00	-11.13	-34.00	-0.13	2.15	20.59	34.77	V
	784.50	-11.39	-34.00	-0.13	2.15	20.33	34.77	V
LTE BAND 13	frequency (MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
QPSK-10MHz	782.00	-11.23	-34.00	-0.13	2.15	20.49	34.77	V

LTE BAND 13	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
16QAM-5MHz	779.50	-11.88	-34.00	-0.08	2.15	19.89	34.77	H
	782.00	-11.89	-34.00	-0.13	2.15	19.83	34.77	H
	784.50	-12.10	-34.00	-0.13	2.15	19.62	34.77	H
LTE BAND 13	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
16QAM-10MHz	782.00	-12.05	-34.00	-0.13	2.15	19.67	34.77	H



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LTE BAND 13 64QAM-5 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
	779.50	-13.64	-34.00	-0.08	2.15	18.13	34.77	H
	782.00	-12.80	-34.00	-0.13	2.15	18.92	34.77	H
	784.50	-13.05	-34.00	-0.13	2.15	18.67	34.77	H
LTE BAND 13 64QAM-10MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
	782.00	-13.66	-34.00	-0.13	2.15	18.06	34.77	H

LTE BAND 17 QPSK-5MHz	frequenc y(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(d Bm)	Polari zation
	706.50	-11.61	-34.70	-0.91	2.15	20.03	34.77	V
	710.00	-11.14	-34.70	-0.64	2.15	20.77	34.77	V
	713.50	-11.75	-34.70	-0.64	2.15	20.16	34.77	V
LTE BAND 17 QPSK-10MHz	frequenc y(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(d Bm)	Polari zation
	709.00	-11.63	-34.70	-0.91	2.15	20.01	34.77	V
	710.00	-11.12	-34.70	-0.64	2.15	20.79	34.77	V
	711.00	-11.00	-34.70	-0.64	2.15	20.91	34.77	V

LTE BAND 17 16QAM -5MHz	frequenc y(MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(d Bm)	Polari zation
	706.50	-12.09	-34.70	-0.91	2.15	19.55	34.77	V
	710.00	-12.64	-34.70	-0.64	2.15	19.27	34.77	V
	713.50	-13.24	-34.70	-0.64	2.15	18.67	34.77	V
LTE BAND 17 16QAM -10MHz	frequenc y(MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(d Bm)	Polari zation
	709.00	-12.26	-34.70	-0.91	2.15	19.38	34.77	V
	710.00	-12.56	-34.70	-0.64	2.15	19.35	34.77	V
	711.00	-12.65	-34.70	-0.64	2.15	19.26	34.77	V

LTE BAND 17 64QAM-5 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
	706.50	-13.27	-34.70	-0.91	2.15	18.37	34.77	H
	710.00	-13.46	-34.70	-0.64	2.15	18.45	34.77	H
	713.50	-13.45	-34.70	-0.64	2.15	18.46	34.77	H
LTE BAND 17 64QAM-10MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
	709.00	-13.17	-34.70	-0.91	2.15	18.47	34.77	H
	710.00	-13.40	-34.70	-0.64	2.15	18.51	34.77	H
	711.00	-13.63	-34.70	-0.64	2.15	18.28	34.77	H



LTE band 26(824MHz-849MHz)

LTE BAND	frequency(MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
26 QPSK-1 .4MHz	824.70	-10.13	-33.60	-0.79	2.15	20.53	38.45	H
	836.50	-9.56	-33.50	-0.74	2.15	21.05	38.45	H
	848.30	-9.74	-33.50	-0.73	2.15	20.88	38.45	H
26 QPSK-3 MHz	825.50	-9.64	-33.60	-0.79	2.15	21.02	38.45	H
	836.50	-9.28	-33.50	-0.74	2.15	21.33	38.45	H
	847.50	-9.98	-33.50	-0.73	2.15	20.64	38.45	H
26 QPSK-5 MHz	826.50	-9.72	-33.60	-0.79	2.15	20.94	38.45	H
	836.50	-10.06	-33.50	-0.74	2.15	20.55	38.45	H
	846.50	-9.59	-33.50	-0.73	2.15	21.03	38.45	H
26 QPSK-1 0MHz	829.00	-9.58	-33.60	-0.79	2.15	21.08	38.45	H
	836.50	-9.78	-33.50	-0.74	2.15	20.83	38.45	H
	844.00	-9.60	-33.50	-0.73	2.15	21.02	38.45	H
26 QPSK-1 5MHz	831.50	-9.32	-33.60	-0.79	2.15	21.34	38.45	H
	836.50	-9.68	-33.50	-0.74	2.15	20.93	38.45	H
	841.50	-9.56	-33.50	-0.73	2.15	21.06	38.45	H

LTE BAND	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
26 16QAM-1 .4MHz	824.70	-10.58	-33.60	-0.79	2.15	20.08	38.45	H
	836.50	-11.10	-33.50	-0.74	2.15	19.51	38.45	H
	848.30	-11.25	-33.50	-0.73	2.15	19.37	38.45	H
26 16QAM-3 MHz	825.50	-10.61	-33.60	-0.79	2.15	20.05	38.45	H
	836.50	-10.70	-33.50	-0.74	2.15	19.91	38.45	H
	847.50	-11.11	-33.50	-0.73	2.15	19.51	38.45	H
26 16QAM-5 MHz	826.50	-10.38	-33.60	-0.79	2.15	20.28	38.45	H
	836.50	-10.78	-33.50	-0.74	2.15	19.83	38.45	H
	846.50	-10.87	-33.50	-0.73	2.15	19.75	38.45	H



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LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
16QAM-10MHz	829.00	-10.31	-33.60	-0.79	2.15	20.35	38.45	H
	836.50	-10.33	-33.50	-0.74	2.15	20.28	38.45	H
	844.00	-10.13	-33.50	-0.73	2.15	20.49	38.45	H
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
16QAM-15MHz	831.50	-10.91	-33.60	-0.79	2.15	19.75	38.45	H
	836.50	-11.02	-33.50	-0.74	2.15	19.59	38.45	H
	841.50	-10.89	-33.50	-0.73	2.15	19.73	38.45	H

LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
64QAM-14MHz	824.70	-12.62	-33.60	-0.79	2.15	18.04	38.45	V
	836.50	-11.87	-33.50	-0.74	2.15	18.74	38.45	V
	848.30	-11.31	-33.50	-0.73	2.15	19.31	38.45	V
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
64QAM-3MHz	825.50	-12.49	-33.60	-0.79	2.15	18.17	38.45	V
	836.50	-12.00	-33.50	-0.74	2.15	18.61	38.45	V
	847.50	-11.05	-33.50	-0.73	2.15	19.57	38.45	V
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
64QAM-5MHz	826.50	-12.47	-33.60	-0.79	2.15	18.19	38.45	V
	836.50	-11.87	-33.50	-0.74	2.15	18.74	38.45	V
	846.50	-11.19	-33.50	-0.73	2.15	19.43	38.45	V
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
64QAM-10MHz	829.00	-12.31	-33.60	-0.79	2.15	18.35	38.45	V
	836.50	-11.41	-33.50	-0.74	2.15	19.20	38.45	V
	844.00	-10.99	-33.50	-0.73	2.15	19.63	38.45	V
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
64QAM-15MHz	831.50	-11.88	-33.60	-0.79	2.15	18.78	38.45	V
	836.50	-11.26	-33.50	-0.74	2.15	19.35	38.45	V
	841.50	-11.04	-33.50	-0.73	2.15	19.58	38.45	V



LTE band 26(814MHz-824MHz)

LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
QPSK-1.4MHz	814.70	-9.68	-33.70	-0.80	2.15	21.07	50.00	H
	819.00	-10.16	-33.60	-0.75	2.15	20.54	50.00	H
	823.30	-9.45	-33.60	-0.79	2.15	21.21	50.00	H
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
QPSK-3 MHz	815.50	-9.90	-33.70	-0.80	2.15	20.85	50.00	H
	819.00	-9.19	-33.60	-0.75	2.15	21.51	50.00	H
	822.50	-10.26	-33.60	-0.79	2.15	20.40	50.00	H
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
QPSK-5 MHz	816.50	-9.31	-33.70	-0.80	2.15	21.44	50.00	H
	819.00	-9.87	-33.60	-0.75	2.15	20.83	50.00	H
	821.50	-9.36	-33.60	-0.79	2.15	21.30	50.00	H
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
QPSK-10MHz	819.00	-9.43	-33.60	-0.80	2.15	21.22	50.00	H
	819.00	-9.48	-33.60	-0.75	2.15	21.22	50.00	H
	819.00	-9.44	-33.60	-0.79	2.15	21.22	50.00	H

LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
16QAM-1.4MHz	814.70	-11.43	-33.70	-0.80	2.15	19.32	50.00	V
	819.00	-10.67	-33.60	-0.75	2.15	20.03	50.00	V
	823.30	-10.98	-33.60	-0.79	2.15	19.68	50.00	V
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
16QAM-3 MHz	815.50	-11.39	-33.70	-0.80	2.15	19.36	50.00	V
	819.00	-10.58	-33.60	-0.75	2.15	20.12	50.00	V
	822.50	-11.15	-33.60	-0.79	2.15	19.51	50.00	V
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
16QAM-5 MHz	816.50	-10.56	-33.70	-0.80	2.15	20.19	50.00	V
	819.00	-10.66	-33.60	-0.75	2.15	20.04	50.00	V
	821.50	-11.04	-33.60	-0.79	2.15	19.62	50.00	V
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
16QAM-10MHz	819.00	-10.88	-33.60	-0.80	2.15	19.77	50.00	V
	819.00	-10.93	-33.60	-0.75	2.15	19.77	50.00	V
	819.00	-10.89	-33.60	-0.79	2.15	19.77	50.00	V



LTE BAND 26 64QAM-1.4MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
	814.70	-12.19	-33.70	-0.80	2.15	18.56	50.00	V
	819.00	-11.63	-33.60	-0.75	2.15	19.07	50.00	V
	823.30	-11.07	-33.60	-0.79	2.15	19.59	50.00	V
LTE BAND 26 64QAM-3 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
	815.50	-11.28	-33.70	-0.80	2.15	19.47	50.00	V
	819.00	-11.69	-33.60	-0.75	2.15	19.01	50.00	V
	822.50	-11.96	-33.60	-0.79	2.15	18.70	50.00	V
LTE BAND 26 64QAM-5 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
	816.50	-11.19	-33.70	-0.80	2.15	19.56	50.00	V
	819.00	-11.03	-33.60	-0.75	2.15	19.67	50.00	V
	821.50	-11.66	-33.60	-0.79	2.15	19.00	50.00	V
LTE BAND 26 64QAM-10MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
	819.00	-11.87	-33.60	-0.80	2.15	18.78	50.00	V
	819.00	-11.92	-33.60	-0.75	2.15	18.78	50.00	V
	819.00	-11.88	-33.60	-0.79	2.15	18.78	50.00	V

LTE BAND 38 QPSK-5MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2572.50	-18.59	-28.60	10.70	20.71	H	33.00
	2595.00	-18.04	-28.60	10.70	21.26	H	33.00
	2617.50	-17.92	-28.60	10.70	21.38	H	33.00
LTE BAND 38 QPSK-10 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2575.00	-18.20	-28.60	10.70	21.10	H	33.00
	2595.00	-18.60	-28.60	10.70	20.70	H	33.00
	2615.00	-17.72	-28.60	10.70	21.58	H	33.00
LTE BAND 38 QPSK-15 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2577.50	-18.09	-28.60	10.70	21.21	H	33.00
	2595.00	-18.03	-28.60	10.70	21.27	H	33.00
	2612.50	-18.53	-28.60	10.70	20.77	H	33.00
LTE BAND 38 QPSK-20 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2580.00	-17.85	-28.60	10.70	21.45	H	33.00
	2595.00	-18.41	-28.60	10.70	20.89	H	33.00
	2610.00	-18.00	-28.60	10.70	21.30	H	33.00



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LTE BAND	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
38 16QAM-5 MHz	2572.50	-19.39	-28.60	10.70	19.91	H	33.00
	2595.00	-19.82	-28.60	10.70	19.48	H	33.00
	2617.50	-19.28	-28.60	10.70	20.02	H	33.00
38 16QAM-10 MHz	2575.00	-19.62	-28.60	10.70	19.68	H	33.00
	2595.00	-19.77	-28.60	10.70	19.53	H	33.00
	2615.00	-19.89	-28.60	10.70	19.41	H	33.00
38 16QAM-15 MHz	2577.50	-19.13	-28.60	10.70	20.17	H	33.00
	2595.00	-18.95	-28.60	10.70	20.35	H	33.00
	2612.50	-19.19	-28.60	10.70	20.11	H	33.00
38 16QAM-20 MHz	2580.00	-19.06	-28.60	10.70	20.24	H	33.00
	2595.00	-19.67	-28.60	10.70	19.63	H	33.00
	2610.00	-19.92	-28.60	10.70	19.38	H	33.00

LTE BAND	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
38 64QAM-5 MHz	2572.50	-20.52	-28.60	10.70	18.78	H	33.00
	2595.00	-20.58	-28.60	10.70	18.72	H	33.00
	2617.50	-20.50	-28.60	10.70	18.80	H	33.00
38 64QAM-10 MHz	2575.00	-20.56	-28.60	10.70	18.74	H	33.00
	2595.00	-20.86	-28.60	10.70	18.44	H	33.00
	2615.00	-20.59	-28.60	10.70	18.71	H	33.00
38 64QAM-15 MHz	2577.50	-20.33	-28.60	10.70	18.97	H	33.00
	2595.00	-20.65	-28.60	10.70	18.65	H	33.00
	2612.50	-20.30	-28.60	10.70	19.00	H	33.00
38 64QAM-20 MHz	2580.00	-20.16	-28.60	10.70	19.14	H	33.00
	2595.00	-20.40	-28.60	10.70	18.90	H	33.00
	2610.00	-20.28	-28.60	10.70	19.02	H	33.00



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LTE BAND 66 QPSK-1.4 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1710.70	-16.26	-29.60	8.10	21.44	H	30.00
	1745.00	-16.89	-29.50	8.10	20.71	H	30.00
	1779.30	-16.91	-29.50	8.10	20.69	H	30.00
LTE BAND 66 QPSK-3M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1711.50	-16.15	-29.60	8.10	21.55	H	30.00
	1745.00	-16.84	-29.50	8.10	20.76	H	30.00
	1778.50	-16.64	-29.50	8.10	20.96	H	30.00
LTE BAND 66 QPSK-5M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1712.50	-16.92	-29.60	8.10	20.78	H	30.00
	1745.00	-15.97	-29.50	8.10	21.63	H	30.00
	1777.50	-16.44	-29.50	8.10	21.16	H	30.00
LTE BAND 66 QPSK-10 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1715.00	-16.05	-29.60	8.10	21.65	H	30.00
	1745.00	-16.11	-29.50	8.10	21.49	H	30.00
	1775.00	-16.66	-29.50	8.10	20.94	H	30.00
LTE BAND 66 QPSK-15 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1717.50	-16.07	-29.60	8.10	21.63	H	30.00
	1745.00	-16.25	-29.50	8.10	21.35	H	30.00
	1772.53	-16.57	-29.50	8.10	21.03	H	30.00
LTE BAND 66 QPSK-20 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1720.00	-16.23	-29.60	8.10	21.47	H	30.00
	1745.00	-16.36	-29.50	8.10	21.24	H	30.00
	1770.00	-16.18	-29.50	8.10	21.42	H	30.00



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LTE BAND 66 16QAM-1.4 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1710.70	-17.96	-29.60	8.10	19.74	V	30.00
	1745.00	-18.02	-29.50	8.10	19.58	V	30.00
	1779.30	-17.47	-29.50	8.10	20.13	V	30.00
LTE BAND 66 16QAM-3M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1711.50	-17.54	-29.60	8.10	20.16	V	30.00
	1745.00	-17.50	-29.50	8.10	20.10	V	30.00
	1778.50	-17.14	-29.50	8.10	20.46	V	30.00
LTE BAND 66 16QAM-5M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1712.50	-17.93	-29.60	8.10	19.77	V	30.00
	1745.00	-18.14	-29.50	8.10	19.46	V	30.00
	1777.50	-17.47	-29.50	8.10	20.13	V	30.00
LTE BAND 66 16QAM-10 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1715.00	-18.40	-29.60	8.10	19.30	V	30.00
	1745.00	-17.70	-29.50	8.10	19.90	V	30.00
	1775.00	-17.96	-29.50	8.10	19.64	V	30.00
LTE BAND 66 16QAM-15 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1717.50	-17.62	-29.60	8.10	20.08	V	30.00
	1745.00	-17.77	-29.50	8.10	19.83	V	30.00
	1772.53	-17.90	-29.50	8.10	19.70	V	30.00
LTE BAND 66 16QAM-20 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1720.00	-17.68	-29.60	8.10	20.02	V	30.00
	1745.00	-17.72	-29.50	8.10	19.88	V	30.00
	1770.00	-17.33	-29.50	8.10	20.27	V	30.00



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LTE BAND 66 64QAM-1.4 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1710.70	-19.52	-29.60	8.10	18.18	H	30.00
	1745.00	-18.51	-29.50	8.10	19.09	H	30.00
	1779.30	-18.49	-29.50	8.10	19.11	H	30.00
LTE BAND 66 64QAM-3M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1711.50	-18.60	-29.60	8.10	19.10	H	30.00
	1745.00	-18.53	-29.50	8.10	19.07	H	30.00
	1778.50	-18.90	-29.50	8.10	18.70	H	30.00
LTE BAND 66 64QAM-5M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1712.50	-18.95	-29.60	8.10	18.75	H	30.00
	1745.00	-19.05	-29.50	8.10	18.55	H	30.00
	1777.50	-18.52	-29.50	8.10	19.08	H	30.00
LTE BAND 66 64QAM-10 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1715.00	-19.40	-29.60	8.10	18.30	H	30.00
	1745.00	-18.83	-29.50	8.10	18.77	H	30.00
	1775.00	-18.82	-29.50	8.10	18.78	H	30.00
LTE BAND 66 64QAM-15 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1717.50	-19.49	-29.60	8.10	18.21	H	30.00
	1745.00	-18.48	-29.50	8.10	19.12	H	30.00
	1772.53	-18.94	-29.50	8.10	18.66	H	30.00
LTE BAND 66 64QAM-20 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1720.00	-18.68	-29.60	8.10	19.02	H	30.00
	1745.00	-18.78	-29.50	8.10	18.82	H	30.00
	1770.00	-18.51	-29.50	8.10	19.09	H	30.00



LTE BAND 41 QPSK-5M Hz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2498.50	-17.91	-28.70	10.70	21.49	H	33.00
	2593.00	-18.38	-28.60	10.70	20.92	H	33.00
	2687.50	-18.17	-28.50	10.70	21.03	H	33.00
LTE BAND 41 QPSK-10 MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2501.00	-18.01	-28.70	10.70	21.39	H	33.00
	2593.00	-19.13	-28.60	10.70	20.17	H	33.00
	2685.00	-18.62	-28.50	10.70	20.58	H	33.00
LTE BAND 41 QPSK-15 MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2503.50	-17.42	-28.70	10.70	21.98	H	33.00
	2593.00	-18.53	-28.60	10.70	20.77	H	33.00
	2682.50	-18.55	-28.50	10.70	20.65	H	33.00
LTE BAND 41 QPSK-20 MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2506.00	-17.41	-28.70	10.70	21.99	H	33.00
	2593.00	-18.64	-28.60	10.70	20.66	H	33.00
	2680.00	-18.38	-28.50	10.70	20.82	H	33.00

LTE BAND 41 16QAM-5 MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2498.50	-19.60	-28.70	10.70	19.80	V	33.00
	2593.00	-18.88	-28.60	10.70	20.42	V	33.00
	2687.50	-18.73	-28.50	10.70	20.47	V	33.00
LTE BAND 41 16QAM-10 MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2501.00	-20.03	-28.70	10.70	19.37	V	33.00
	2593.00	-19.42	-28.60	10.70	19.88	V	33.00
	2685.00	-18.50	-28.50	10.70	20.70	V	33.00
LTE BAND 41 16QAM-15 MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2503.50	-19.53	-28.70	10.70	19.87	V	33.00
	2593.00	-19.07	-28.60	10.70	20.23	V	33.00
	2682.50	-19.49	-28.50	10.70	19.71	V	33.00
LTE BAND 41 16QAM-20 MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2506.00	-18.99	-28.70	10.70	20.41	V	33.00
	2593.00	-19.12	-28.60	10.70	20.18	V	33.00
	2680.00	-18.84	-28.50	10.70	20.36	V	33.00



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LTE BAND 41 64QAM-5 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2498.50	-20.53	-28.70	10.70	18.87	H	33.00
	2593.00	-20.87	-28.60	10.70	18.43	H	33.00
	2687.50	-20.76	-28.50	10.70	18.44	H	33.00
LTE BAND 41 64QAM-10 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2501.00	-20.97	-28.70	10.70	18.43	H	33.00
	2593.00	-20.24	-28.60	10.70	19.06	H	33.00
	2685.00	-20.50	-28.50	10.70	18.70	H	33.00
LTE BAND 41 64QAM-15 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2503.50	-20.96	-28.70	10.70	18.44	H	33.00
	2593.00	-20.93	-28.60	10.70	18.37	H	33.00
	2682.50	-20.80	-28.50	10.70	18.40	H	33.00
LTE BAND 41 64QAM-20 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2506.00	-20.99	-28.70	10.70	18.41	H	33.00
	2593.00	-20.19	-28.60	10.70	19.11	H	33.00
	2680.00	-20.80	-28.50	10.70	18.40	H	33.00



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LTE BAND	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
CA_7C QPSK 10MHz+20MHz	2505.50	2519.90	-18.27	-28.70	10.70	21.13	V	33.00
	2525.60	2540.00	-18.73	-28.60	10.70	20.57	V	33.00
	2545.60	2560.00	-18.73	-28.60	10.70	20.57	V	33.00
LTE BAND CA_7C QPSK 20MHz+10MHz	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2510.00	2524.40	-18.30	-28.70	10.70	21.10	H	33.00
	2530.10	2544.50	-18.69	-28.60	10.70	20.61	H	33.00
	2550.10	2564.50	-18.92	-28.60	10.70	20.38	H	33.00
LTE BAND CA_7C QPSK 20MHz+15MHz	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2510.00	2527.10	-18.70	-28.70	10.70	20.70	H	33.00
	2527.60	2544.70	-19.12	-28.60	10.70	20.18	H	33.00
	2545.10	2562.20	-19.19	-28.60	10.70	20.11	H	33.00
LTE BAND CA_7C QPSK 20MHz+20MHz	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2510.00	2529.80	-18.43	-28.70	10.70	20.97	H	33.00
	2525.10	2544.90	-19.03	-28.60	10.70	20.27	H	33.00
	2540.20	2560.00	-18.56	-28.60	10.70	20.74	H	33.00
LTE BAND CA_7C QPSK 15MHz+10MHz	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2507.50	2519.50	-18.61	-28.70	10.70	20.79	H	33.00
	2530.10	2542.10	-18.21	-28.60	10.70	21.09	H	33.00
	2552.70	2564.70	-18.20	-28.60	10.70	21.10	H	33.00
LTE BAND CA_7C QPSK 15MHz+15MHz	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2507.50	2522.50	-18.55	-28.70	10.70	20.85	H	33.00
	2527.50	2542.50	-18.72	-28.60	10.70	20.58	H	33.00
	2547.50	2562.50	-18.16	-28.60	10.70	21.14	H	33.00
LTE BAND CA_7C QPSK 15MHz+20MHz	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2507.80	2425.90	-18.23	-28.70	10.70	21.17	H	33.00
	2525.30	2542.40	-18.19	-28.60	10.70	21.11	H	33.00
	2542.90	2560.00	-18.65	-28.60	10.70	20.65	H	33.00



LTE BAND	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
CA_38C QPSK 15MHz+1 5MHz	2577.50	2592.50	-18.39	-28.70	10.70	21.01	V	33.00
	2587.50	2602.50	-18.38	-28.60	10.70	20.92	V	33.00
	2597.50	2612.50	-18.24	-28.50	10.70	20.96	V	33.00
LTE BAND	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
CA_38C QPSK 20MHz+2 0MHz	2580.00	2599.80	-18.69	-28.70	10.70	20.71	V	33.00
	2585.10	2604.90	-18.41	-28.60	10.70	20.89	V	33.00
	2590.20	2610.00	-18.69	-28.60	10.70	20.61	V	33.00

LTE BAND	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
CA_41C QPSK 5MHz+20 MHz	2499.30	2511.00	-18.07	-28.70	10.70	21.33	V	33.00
	2583.80	2595.50	-18.32	-28.60	10.70	20.98	V	33.00
	2668.30	2680.00	-18.20	-28.50	10.70	21.00	V	33.00
LTE BAND	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
CA_41C QPSK 10MHz+2 0MHz	2501.50	2515.90	-17.72	-28.70	10.70	21.68	V	33.00
	2583.60	2598.00	-17.77	-28.60	10.70	21.53	V	33.00
	2665.60	2680.00	-18.73	-28.60	10.70	20.57	V	33.00
LTE BAND	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
CA_41C QPSK 15MHz+2 0MHz	2503.80	2520.90	-18.10	-28.70	10.70	21.30	H	33.00
	2583.30	2600.40	-18.02	-28.60	10.70	21.28	H	33.00
	2662.90	2680.00	-17.91	-28.60	10.70	21.39	H	33.00
LTE BAND	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
CA_41C QPSK 20MHz+5 MHz	2506.00	2517.70	-17.81	-28.70	10.70	21.59	H	33.00
	2590.50	2602.20	-17.54	-28.60	10.70	21.76	H	33.00
	2675.00	2686.70	-17.66	-28.60	10.70	21.64	H	33.00
LTE BAND	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
CA_41C QPSK 20MHz+1	2506.00	2520.40	-18.03	-28.70	10.70	21.37	H	33.00
	2588.10	2602.50	-17.86	-28.60	10.70	21.44	H	33.00
	2670.10	2684.50	-17.69	-28.60	10.70	21.61	H	33.00



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0MHz								
LTE BAND	frequency (MHz)	frequency (MHz)	PMea(d Bm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariz ation	Limit(d Bm)
CA_41C	2506.00	2523.10	-18.14	-28.70	10.70	21.26	H	33.00
QPSK	2585.60	2602.70	-17.87	-28.60	10.70	21.43	H	33.00
20MHz+1 5MHz	2665.10	2682.20	-18.48	-28.60	10.70	20.82	H	33.00
LTE BAND	frequency (MHz)	frequency (MHz)	PMea(d Bm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariz ation	Limit(d Bm)
CA_41C	2503.50	2518.50	-18.53	-28.70	10.70	20.87	H	33.00
QPSK	2585.50	2600.50	-18.46	-28.60	10.70	20.84	H	33.00
15MHz+1 5MHz	2667.50	2682.50	-18.67	-28.60	10.70	20.63	H	33.00
LTE BAND	frequency (MHz)	frequency (MHz)	PMea(d Bm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariz ation	Limit(d Bm)
CA_41C	2506.00	2525.80	-18.26	-28.70	10.70	21.14	H	33.00
QPSK	2583.10	2602.90	-18.88	-28.60	10.70	20.42	H	33.00
20MHz+2 0MHz	2660.20	2680.00	-18.95	-28.60	10.70	20.35	H	33.00
LTE BAND	frequency (MHz)	frequency (MHz)	PMea(d Bm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariz ation	Limit(d Bm)
CA_41C	2503.50	2515.50	-18.23	-28.70	10.70	21.17	H	33.00
QPSK	2588.10	2600.10	-18.18	-28.60	10.70	21.12	H	33.00
15MHz+1 0MHz	2672.70	2684.70	-18.55	-28.60	10.70	20.75	H	33.00
LTE BAND	frequency (MHz)	frequency (MHz)	PMea(d Bm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariz ation	Limit(d Bm)
CA_41C	2501.30	2513.30	-18.21	-28.70	10.70	21.19	V	33.00
QPSK	2585.90	2597.90	-18.33	-28.60	10.70	20.97	V	33.00
10MHz+1 5MHz	2670.50	2682.50	-19.13	-28.60	10.70	20.17	V	33.00

Down antenna

LTE BAND 2 QPSK-1.4 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1850.70	-16.66	-29.30	8.10	20.74	H	33.00
	1880.00	-16.58	-29.40	8.10	20.92	H	33.00
	1909.30	-15.81	-29.30	8.10	21.59	H	33.00
LTE BAND 2 QPSK-3M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1851.50	-16.12	-29.30	8.10	21.28	H	33.00
	1880.00	-16.49	-29.40	8.10	21.01	H	33.00
	1908.50	-16.84	-29.30	8.10	20.56	H	33.00
LTE BAND 2 QPSK-5M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1852.50	-15.89	-29.30	8.10	21.51	H	33.00
	1880.00	-16.57	-29.40	8.10	20.93	H	33.00
	1907.50	-16.08	-29.30	8.10	21.32	H	33.00
LTE BAND 2 QPSK-10 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1855.00	-16.11	-29.30	8.10	21.29	H	33.00
	1880.00	-16.30	-29.40	8.10	21.20	H	33.00
	1905.00	-16.72	-29.30	8.10	20.68	H	33.00
LTE BAND 2 QPSK-15 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1857.50	-15.97	-29.30	8.10	21.43	H	33.00
	1880.00	-16.03	-29.40	8.10	21.47	H	33.00
	1902.50	-16.85	-29.30	8.10	20.55	H	33.00
LTE BAND 2 QPSK-20 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1860.00	-16.08	-29.30	8.10	21.32	H	33.00
	1880.00	-16.40	-29.40	8.10	21.10	H	33.00
	1900.00	-16.65	-29.30	8.10	20.75	H	33.00



LTE BAND 2 16QAM-1.4 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polarizat ion	Limit(d Bm)
	1850.70	-17.39	-29.30	8.10	20.01	H	33.00
	1880.00	-17.78	-29.40	8.10	19.72	H	33.00
	1909.30	-16.93	-29.30	8.10	20.47	H	33.00
LTE BAND 2 16QAM-3M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polarizat ion	Limit(d Bm)
	1851.50	-17.42	-29.30	8.10	19.98	H	33.00
	1880.00	-17.63	-29.40	8.10	19.87	H	33.00
	1908.50	-16.95	-29.30	8.10	20.45	H	33.00
LTE BAND 2 16QAM-5M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polarizat ion	Limit(d Bm)
	1852.50	-17.43	-29.30	8.10	19.97	H	33.00
	1880.00	-17.02	-29.40	8.10	20.48	H	33.00
	1907.50	-16.95	-29.30	8.10	20.45	H	33.00
LTE BAND 2 16QAM-10 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polarizat ion	Limit(d Bm)
	1855.00	-17.42	-29.30	8.10	19.98	H	33.00
	1880.00	-17.64	-29.40	8.10	19.86	H	33.00
	1905.00	-17.05	-29.30	8.10	20.35	H	33.00
LTE BAND 2 16QAM-15 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polarizat ion	Limit(d Bm)
	1857.50	-17.37	-29.30	8.10	20.03	H	33.00
	1880.00	-17.19	-29.40	8.10	20.31	H	33.00
	1902.50	-17.22	-29.30	8.10	20.18	H	33.00
LTE BAND 2 16QAM-20 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polarizat ion	Limit(d Bm)
	1860.00	-17.39	-29.30	8.10	20.01	H	33.00
	1880.00	-17.71	-29.40	8.10	19.79	H	33.00
	1900.00	-17.87	-29.30	8.10	19.53	H	33.00



LTE BAND 2 64QAM-1.4 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1850.70	-18.09	-29.30	8.10	19.31	H	33.00
	1880.00	-18.79	-29.40	8.10	18.71	H	33.00
	1909.30	-17.99	-29.30	8.10	19.41	H	33.00
LTE BAND 2 64QAM-3M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1851.50	-18.39	-29.30	8.10	19.01	H	33.00
	1880.00	-18.95	-29.40	8.10	18.55	H	33.00
	1908.50	-18.22	-29.30	8.10	19.18	H	33.00
LTE BAND 2 64QAM-5M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1852.50	-18.45	-29.30	8.10	18.95	H	33.00
	1880.00	-18.89	-29.40	8.10	18.61	H	33.00
	1907.50	-18.42	-29.30	8.10	18.98	H	33.00
LTE BAND 2 64QAM-10 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1855.00	-18.33	-29.30	8.10	19.07	H	33.00
	1880.00	-18.50	-29.40	8.10	19.00	H	33.00
	1905.00	-18.99	-29.30	8.10	18.41	H	33.00
LTE BAND 2 64QAM-15 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1857.50	-18.17	-29.30	8.10	19.23	H	33.00
	1880.00	-18.23	-29.40	8.10	19.27	H	33.00
	1902.50	-18.20	-29.30	8.10	19.20	H	33.00
LTE BAND 2 64QAM-20 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1860.00	-18.62	-29.30	8.10	18.78	H	33.00
	1880.00	-18.62	-29.40	8.10	18.88	H	33.00
	1900.00	-18.80	-29.30	8.10	18.60	H	33.00



LTE BAND 4 QPSK-1.4 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1710.70	-16.99	-29.60	8.10	20.71	H	30.00
	1732.50	-16.44	-29.60	8.10	21.26	H	30.00
	1754.30	-16.43	-29.50	8.10	21.17	H	30.00
LTE BAND 4 QPSK-3M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1711.50	-17.01	-29.60	8.10	20.69	H	30.00
	1732.50	-16.50	-29.60	8.10	21.20	H	30.00
	1753.50	-16.44	-29.50	8.10	21.16	H	30.00
LTE BAND 4 QPSK-5M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1712.50	-17.04	-29.60	8.10	20.66	H	30.00
	1732.50	-16.48	-29.60	8.10	21.22	H	30.00
	1752.50	-16.55	-29.50	8.10	21.05	H	30.00
LTE BAND 4 QPSK-10 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1715.00	-16.87	-29.60	8.10	20.83	H	30.00
	1732.50	-16.35	-29.60	8.10	21.35	H	30.00
	1750.00	-16.43	-29.50	8.10	21.17	H	30.00
LTE BAND 4 QPSK-15 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1717.50	-16.87	-29.60	8.10	20.83	H	30.00
	1732.50	-16.71	-29.60	8.10	20.99	H	30.00
	1747.50	-16.65	-29.50	8.10	20.95	H	30.00
LTE BAND 4 QPSK-20 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1720.00	-16.98	-29.60	8.10	20.72	H	30.00
	1732.50	-16.82	-29.60	8.10	20.88	H	30.00
	1745.00	-16.50	-29.50	8.10	21.10	H	30.00



LTE BAND 4 16QAM-1.4 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1710.70	-17.41	-29.60	8.10	20.29	H	30.00
	1732.50	-18.06	-29.60	8.10	19.64	H	30.00
	1754.30	-17.82	-29.50	8.10	19.78	H	30.00
LTE BAND 4 16QAM-3M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1711.50	-17.42	-29.60	8.10	20.28	H	30.00
	1732.50	-17.89	-29.60	8.10	19.81	H	30.00
	1753.50	-17.99	-29.50	8.10	19.61	H	30.00
LTE BAND 4 16QAM-5M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1712.50	-17.46	-29.60	8.10	20.24	H	30.00
	1732.50	-18.04	-29.60	8.10	19.66	H	30.00
	1752.50	-18.01	-29.50	8.10	19.59	H	30.00
LTE BAND 4 16QAM-10 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1715.00	-15.84	-29.60	8.10	21.86	H	30.00
	1732.50	-15.83	-29.60	8.10	21.87	H	30.00
	1750.00	-15.99	-29.50	8.10	21.61	H	30.00
LTE BAND 4 16QAM-15 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1717.50	-17.62	-29.60	8.10	20.08	H	30.00
	1732.50	-18.05	-29.60	8.10	19.65	H	30.00
	1747.50	-17.92	-29.50	8.10	19.68	H	30.00
LTE BAND 4 16QAM-20 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1720.00	-17.98	-29.60	8.10	19.72	H	30.00
	1732.50	-17.49	-29.60	8.10	20.21	H	30.00
	1745.00	-17.43	-29.50	8.10	20.17	H	30.00



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LTE BAND 4	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
64QAM-1.4 MHz	1710.70	-18.65	-29.60	8.10	19.05	V	30.00
	1732.50	-19.15	-29.60	8.10	18.55	V	30.00
	1754.30	-18.92	-29.50	8.10	18.68	V	30.00
LTE BAND 4	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
64QAM-3M Hz	1711.50	-19.52	-29.60	8.10	18.18	V	30.00
	1732.50	-18.84	-29.60	8.10	18.86	V	30.00
	1753.50	-18.88	-29.50	8.10	18.72	V	30.00
LTE BAND 4	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
64QAM-5M Hz	1712.50	-18.61	-29.60	8.10	19.09	V	30.00
	1732.50	-18.99	-29.60	8.10	18.71	V	30.00
	1752.50	-18.96	-29.50	8.10	18.64	V	30.00
LTE BAND 4	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
64QAM-10 MHz	1715.00	-19.42	-29.60	8.10	18.28	V	30.00
	1732.50	-18.72	-29.60	8.10	18.98	V	30.00
	1750.00	-18.97	-29.50	8.10	18.63	V	30.00
LTE BAND 4	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
64QAM-15 MHz	1717.50	-18.45	-29.60	8.10	19.25	V	30.00
	1732.50	-18.85	-29.60	8.10	18.85	V	30.00
	1747.50	-18.17	-29.50	8.10	19.43	V	30.00
LTE BAND 4	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
64QAM-20 MHz	1720.00	-19.07	-29.60	8.10	18.63	V	30.00
	1732.50	-18.58	-29.60	8.10	19.12	V	30.00
	1745.00	-18.95	-29.50	8.10	18.65	V	30.00



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LTE BAND 5 QPSK-1.4MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction(dB)	ERP(dBm)	Limit(dBm)	Polarization
	824.70	-10.01	-33.60	-0.79	2.15	20.65	38.45	V
	836.50	-9.86	-33.50	-0.74	2.15	20.75	38.45	V
	848.30	-11.96	-33.50	-0.73	2.15	18.66	38.45	V
LTE BAND 5 QPSK-3MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction(dB)	ERP(dBm)	Limit(dBm)	Polarization
	825.50	-9.92	-33.60	-0.84	2.15	20.69	38.45	V
	836.50	-9.98	-33.50	-0.74	2.15	20.63	38.45	V
	847.50	-11.65	-33.50	-0.73	2.15	18.97	38.45	V
LTE BAND 5 QPSK-5MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction(dB)	ERP(dBm)	Limit(dBm)	Polarization
	826.50	-9.92	-33.60	-0.84	2.15	20.69	38.45	V
	836.50	-9.85	-33.50	-0.74	2.15	20.76	38.45	V
	846.50	-11.29	-33.50	-0.73	2.15	19.33	38.45	V
LTE BAND 5 QPSK-10MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction(dB)	ERP(dBm)	Limit(dBm)	Polarization
	829.00	-9.96	-33.60	-0.84	2.15	20.65	38.45	V
	836.50	-9.88	-33.50	-0.74	2.15	20.73	38.45	V
	844.00	-10.51	-33.50	-0.78	2.15	20.06	38.45	V

LTE BAND 5 16QAM-1.4MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
	824.70	-10.63	-33.60	-0.79	2.15	20.03	38.45	H
	836.50	-10.42	-33.50	-0.74	2.15	20.19	38.45	H
	848.30	-12.59	-33.50	-0.73	2.15	18.03	38.45	H
LTE BAND 5 16QAM-3MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
	825.50	-10.63	-33.60	-0.84	2.15	19.98	38.45	H
	836.50	-10.62	-33.50	-0.74	2.15	19.99	38.45	H
	847.50	-12.41	-33.50	-0.73	2.15	18.21	38.45	H
LTE BAND 5 16QAM-5MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
	826.50	-10.53	-33.60	-0.84	2.15	20.08	38.45	H
	836.50	-10.06	-33.50	-0.74	2.15	20.55	38.45	H
	846.50	-12.44	-33.50	-0.73	2.15	18.18	38.45	H
LTE BAND 5 16QAM-10MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
	829.00	-10.38	-33.60	-0.84	2.15	20.23	38.45	H
	836.50	-10.40	-33.50	-0.74	2.15	20.21	38.45	H
	844.00	-11.19	-33.50	-0.78	2.15	19.38	38.45	H



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LTE BAND 5	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(d Bm)	Polarization
64QAM-1.4MHz	824.70	-11.62	-33.60	-0.79	2.15	19.04	38.45	H
	836.50	-11.62	-33.50	-0.74	2.15	18.99	38.45	H
	848.30	-11.64	-33.50	-0.73	2.15	18.98	38.45	H
LTE BAND 5	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(d Bm)	Polarization
64QAM-3MHz	825.50	-11.54	-33.60	-0.84	2.15	19.07	38.45	H
	836.50	-11.73	-33.50	-0.74	2.15	18.88	38.45	H
	847.50	-11.63	-33.50	-0.73	2.15	18.99	38.45	H
LTE BAND 5	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(d Bm)	Polarization
64QAM-5MHz	826.50	-11.73	-33.60	-0.84	2.15	18.88	38.45	H
	836.50	-11.54	-33.50	-0.74	2.15	19.07	38.45	H
	846.50	-12.33	-33.50	-0.73	2.15	18.29	38.45	H
LTE BAND 5	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(d Bm)	Polarization
64QAM-10MHz	829.00	-11.42	-33.60	-0.84	2.15	19.19	38.45	H
	836.50	-11.33	-33.50	-0.74	2.15	19.28	38.45	H
	844.00	-11.81	-33.50	-0.78	2.15	18.76	38.45	H

LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polarization	Limit(d Bm)
QPSK-5MHz	2502.50	-17.99	-28.70	10.70	21.41	H	33.00
	2535.00	-18.66	-28.60	10.70	20.64	H	33.00
	2567.50	-18.17	-28.60	10.70	21.13	H	33.00
LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polarization	Limit(d Bm)
QPSK-10 MHz	2505.00	-18.22	-28.70	10.70	21.18	H	33.00
	2535.00	-18.32	-28.60	10.70	20.98	H	33.00
	2565.00	-18.70	-28.60	10.70	20.60	H	33.00
LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polarization	Limit(d Bm)
QPSK-15 MHz	2507.50	-18.87	-28.70	10.70	20.53	H	33.00
	2535.00	-18.55	-28.60	10.70	20.75	H	33.00
	2562.50	-18.26	-28.60	10.70	21.04	H	33.00
LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polarization	Limit(d Bm)
QPSK-20 MHz	2510.00	-18.43	-28.70	10.70	20.97	H	33.00
	2535.00	-17.98	-28.60	10.70	21.32	H	33.00
	2560.00	-17.96	-28.60	10.70	21.34	H	33.00



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LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
16QAM-5 MHz	2502.50	-19.26	-28.70	10.70	20.14	H	33.00
	2535.00	-19.88	-28.60	10.70	19.42	H	33.00
	2567.50	-19.36	-28.60	10.70	19.94	H	33.00
LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
16QAM-10 MHz	2505.00	-19.27	-28.70	10.70	20.13	H	33.00
	2535.00	-19.73	-28.60	10.70	19.57	H	33.00
	2565.00	-19.99	-28.60	10.70	19.31	H	33.00
LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
16QAM-15 MHz	2507.50	-19.45	-28.70	10.70	19.95	H	33.00
	2535.00	-19.67	-28.60	10.70	19.63	H	33.00
	2562.50	-19.24	-28.60	10.70	20.06	H	33.00
LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
16QAM-20 MHz	2510.00	-19.31	-28.70	10.70	20.09	H	33.00
	2535.00	-20.04	-28.60	10.70	19.26	H	33.00
	2560.00	-19.47	-28.60	10.70	19.83	H	33.00

LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
64QAM-5 MHz	2502.50	-20.76	-28.70	10.70	18.64	V	33.00
	2535.00	-20.02	-28.60	10.70	19.28	V	33.00
	2567.50	-20.76	-28.60	10.70	18.54	V	33.00
LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
64QAM-10 MHz	2505.00	-21.03	-28.70	10.70	18.37	V	33.00
	2535.00	-20.83	-28.60	10.70	18.47	V	33.00
	2565.00	-20.67	-28.60	10.70	18.63	V	33.00
LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
64QAM-15 MHz	2507.50	-20.21	-28.70	10.70	19.19	V	33.00
	2535.00	-20.41	-28.60	10.70	18.89	V	33.00
	2562.50	-20.30	-28.60	10.70	19.00	V	33.00
LTE BAND 7	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
64QAM-20 MHz	2510.00	-20.89	-28.70	10.70	18.51	V	33.00
	2535.00	-20.77	-28.60	10.70	18.53	V	33.00
	2560.00	-20.14	-28.60	10.70	19.16	V	33.00



LTE BAND	frequency(MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
12 QPSK-1.4MHz	699.70	-10.89	-34.80	-0.93	2.15	20.83	34.77	V
	707.50	-11.12	-34.70	-0.91	2.15	20.52	34.77	V
	715.30	-10.48	-34.70	-0.68	2.15	21.39	34.77	V
12 QPSK-3 MHz	700.50	-10.77	-34.80	-0.97	2.15	20.91	34.77	V
	707.50	-10.16	-34.70	-0.91	2.15	21.48	34.77	V
	714.50	-11.30	-34.70	-0.64	2.15	20.61	34.77	V
12 QPSK-5 MHz	701.50	-10.39	-34.80	-0.97	2.15	21.29	34.77	V
	707.50	-10.55	-34.70	-0.91	2.15	21.09	34.77	V
	713.50	-10.73	-34.70	-0.64	2.15	21.18	34.77	V
12 QPSK-1.0MHz	704.00	-10.93	-34.80	-0.97	2.15	20.75	34.77	V
	707.50	-10.34	-34.70	-0.91	2.15	21.30	34.77	V
	711.00	-11.30	-34.70	-0.64	2.15	20.61	34.77	V

LTE BAND	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
12 16QAM-1.4MHz	699.70	-12.25	-34.80	-0.93	2.15	19.47	34.77	H
	707.50	-12.42	-34.70	-0.91	2.15	19.22	34.77	H
	715.30	-12.33	-34.70	-0.68	2.15	19.54	34.77	H
12 16QAM-3 MHz	700.50	-12.26	-34.80	-0.97	2.15	19.42	34.77	H
	707.50	-12.33	-34.70	-0.91	2.15	19.31	34.77	H
	714.50	-12.37	-34.70	-0.64	2.15	19.54	34.77	H
12 16QAM-5 MHz	701.50	-12.35	-34.80	-0.97	2.15	19.33	34.77	H
	707.50	-12.53	-34.70	-0.91	2.15	19.11	34.77	H
	713.50	-12.52	-34.70	-0.64	2.15	19.39	34.77	H
12 16QAM-1.0MHz	704.00	-12.22	-34.80	-0.97	2.15	19.46	34.77	H
	707.50	-12.25	-34.70	-0.91	2.15	19.39	34.77	H
	711.00	-12.86	-34.70	-0.64	2.15	19.05	34.77	H



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LTE BAND	frequency(MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
12 64QAM-1.4MHz	699.70	-13.23	-34.80	-0.93	2.15	18.49	34.77	H
	707.50	-13.51	-34.70	-0.91	2.15	18.13	34.77	H
	715.30	-13.48	-34.70	-0.68	2.15	18.39	34.77	H
12 64QAM-3MHz	700.50	-13.46	-34.80	-0.97	2.15	18.22	34.77	H
	707.50	-13.32	-34.70	-0.91	2.15	18.32	34.77	H
	714.50	-13.43	-34.70	-0.64	2.15	18.48	34.77	H
12 64QAM-5MHz	701.50	-13.64	-34.80	-0.97	2.15	18.04	34.77	H
	707.50	-12.90	-34.70	-0.91	2.15	18.74	34.77	H
	713.50	-13.06	-34.70	-0.64	2.15	18.85	34.77	H
12 64QAM-10MHz	704.00	-13.32	-34.80	-0.97	2.15	18.36	34.77	H
	707.50	-13.26	-34.70	-0.91	2.15	18.38	34.77	H
	711.00	-13.90	-34.70	-0.64	2.15	18.01	34.77	H

LTE BAND	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
13 QPSK-5 MHz	779.50	-11.49	-34.00	-0.08	2.15	20.28	34.77	V
	782.00	-11.47	-34.00	-0.13	2.15	20.25	34.77	V
	784.50	-11.68	-34.00	-0.13	2.15	20.04	34.77	V
13 QPSK-10MHz	782.00	-11.41	-34.00	-0.13	2.15	20.31	34.77	V

LTE BAND	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
13 16QAM-5 MHz	779.50	-11.78	-34.00	-0.08	2.15	19.99	34.77	H
	782.00	-12.19	-34.00	-0.13	2.15	19.53	34.77	H
	784.50	-12.33	-34.00	-0.13	2.15	19.39	34.77	H
13 16QAM-10MHz	782.00	-11.78	-34.00	-0.13	2.15	19.94	34.77	H



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LTE BAND 13 64QAM-5 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
	779.50	-13.06	-34.00	-0.08	2.15	18.71	34.77	H
	782.00	-12.99	-34.00	-0.13	2.15	18.73	34.77	H
	784.50	-13.23	-34.00	-0.13	2.15	18.49	34.77	H
LTE BAND 13 64QAM-10MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
	782.00	-12.95	-34.00	-0.13	2.15	18.77	34.77	H

LTE BAND 17 QPSK-5MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(d Bm)	Polari zation
	706.50	-11.16	-34.70	-0.91	2.15	20.48	34.77	V
	710.00	-11.17	-34.70	-0.64	2.15	20.74	34.77	V
	713.50	-11.11	-34.70	-0.64	2.15	20.80	34.77	V
LTE BAND 17 QPSK-10MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(d Bm)	Polari zation
	709.00	-11.14	-34.70	-0.91	2.15	20.50	34.77	V
	710.00	-11.52	-34.70	-0.64	2.15	20.39	34.77	V
	711.00	-11.38	-34.70	-0.64	2.15	20.53	34.77	V

LTE BAND 17 16QAM-5MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(d Bm)	Polari zation
	706.50	-11.68	-34.70	-0.91	2.15	19.96	34.77	V
	710.00	-12.01	-34.70	-0.64	2.15	19.90	34.77	V
	713.50	-12.57	-34.70	-0.64	2.15	19.34	34.77	V
LTE BAND 17 16QAM-10MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(d Bm)	Polari zation
	709.00	-11.69	-34.70	-0.91	2.15	19.95	34.77	V
	710.00	-12.00	-34.70	-0.64	2.15	19.91	34.77	V
	711.00	-12.86	-34.70	-0.64	2.15	19.05	34.77	V

LTE BAND 17 64QAM-5 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
	706.50	-13.79	-34.70	-0.91	2.15	17.85	34.77	H
	710.00	-13.94	-34.70	-0.64	2.15	17.97	34.77	H
	713.50	-13.49	-34.70	-0.64	2.15	18.42	34.77	H
LTE BAND 17 64QAM-10MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
	709.00	-12.95	-34.70	-0.91	2.15	18.69	34.77	H
	710.00	-13.82	-34.70	-0.64	2.15	18.09	34.77	H
	711.00	-13.80	-34.70	-0.64	2.15	18.11	34.77	H



Band26(824MHz-849MHz)

LTE BAND	frequency(MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
26 QPSK-1.4MHz	824.70	-10.14	-33.60	-0.79	2.15	20.52	38.45	H
	836.50	-10.14	-33.50	-0.74	2.15	20.47	38.45	H
	848.30	-9.84	-33.50	-0.73	2.15	20.78	38.45	H
26 QPSK-3 MHz	825.50	-9.60	-33.60	-0.79	2.15	21.06	38.45	H
	836.50	-9.48	-33.50	-0.74	2.15	21.13	38.45	H
	847.50	-9.32	-33.50	-0.73	2.15	21.30	38.45	H
26 QPSK-5 MHz	826.50	-9.57	-33.60	-0.79	2.15	21.09	38.45	H
	836.50	-9.32	-33.50	-0.74	2.15	21.29	38.45	H
	846.50	-9.89	-33.50	-0.73	2.15	20.73	38.45	H
26 QPSK-1.0MHz	829.00	-9.48	-33.60	-0.79	2.15	21.18	38.45	H
	836.50	-9.93	-33.50	-0.74	2.15	20.68	38.45	H
	844.00	-10.05	-33.50	-0.73	2.15	20.57	38.45	H
26 QPSK-1.5MHz	831.50	-9.55	-33.60	-0.79	2.15	21.11	38.45	H
	836.50	-9.73	-33.50	-0.74	2.15	20.88	38.45	H
	841.50	-10.01	-33.50	-0.73	2.15	20.61	38.45	H

LTE BAND	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
26 16QAM-1.4MHz	824.70	-10.91	-33.60	-0.79	2.15	19.75	38.45	H
	836.50	-11.19	-33.50	-0.74	2.15	19.42	38.45	H
	848.30	-10.50	-33.50	-0.73	2.15	20.12	38.45	H
26 16QAM-3 MHz	825.50	-11.40	-33.60	-0.79	2.15	19.26	38.45	H
	836.50	-10.98	-33.50	-0.74	2.15	19.63	38.45	H
	847.50	-10.43	-33.50	-0.73	2.15	20.19	38.45	H
26 16QAM-5 MHz	826.50	-10.44	-33.60	-0.79	2.15	20.22	38.45	H
	836.50	-10.92	-33.50	-0.74	2.15	19.69	38.45	H
	846.50	-10.35	-33.50	-0.73	2.15	20.27	38.45	H



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LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
16QAM-1 0MHz	829.00	-11.05	-33.60	-0.79	2.15	19.61	38.45	H
	836.50	-11.04	-33.50	-0.74	2.15	19.57	38.45	H
	844.00	-10.47	-33.50	-0.73	2.15	20.15	38.45	H
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
16QAM-1 5MHz	831.50	-11.19	-33.60	-0.79	2.15	19.47	38.45	H
	836.50	-11.02	-33.50	-0.74	2.15	19.59	38.45	H
	841.50	-10.39	-33.50	-0.73	2.15	20.23	38.45	H

LTE BAND 26	frequenc y(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(d Bm)	Polari zation
64QAM- 1.4MHz	824.70	-12.13	-33.60	-0.79	2.15	18.53	38.45	V
	836.50	-12.15	-33.50	-0.74	2.15	18.46	38.45	V
	848.30	-12.37	-33.50	-0.73	2.15	18.25	38.45	V
LTE BAND 26	frequenc y(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(d Bm)	Polari zation
64QAM- 3MHz	825.50	-11.80	-33.60	-0.79	2.15	18.86	38.45	V
	836.50	-12.26	-33.50	-0.74	2.15	18.35	38.45	V
	847.50	-12.42	-33.50	-0.73	2.15	18.20	38.45	V
LTE BAND 26	frequenc y(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(d Bm)	Polari zation
64QAM- 5MHz	826.50	-12.27	-33.60	-0.79	2.15	18.39	38.45	V
	836.50	-11.98	-33.50	-0.74	2.15	18.63	38.45	V
	846.50	-12.54	-33.50	-0.73	2.15	18.08	38.45	V
LTE BAND 26	frequenc y(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(d Bm)	Polari zation
64QAM- 10MHz	829.00	-11.99	-33.60	-0.79	2.15	18.67	38.45	V
	836.50	-11.74	-33.50	-0.74	2.15	18.87	38.45	V
	844.00	-12.45	-33.50	-0.73	2.15	18.17	38.45	V
LTE BAND 26	frequenc y(MHz)	PMea(d Bm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(d Bm)	Polari zation
64QAM- 15MHz	831.50	-12.10	-33.60	-0.79	2.15	18.56	38.45	V
	836.50	-12.11	-33.50	-0.74	2.15	18.50	38.45	V
	841.50	-12.42	-33.50	-0.73	2.15	18.20	38.45	V



LTE band 26(814MHz-824MHz)

LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
QPSK-1.4MHz	814.70	-10.13	-33.70	-0.80	2.15	20.62	50.00	H
	819.00	-9.41	-33.60	-0.75	2.15	21.29	50.00	H
	823.30	-10.12	-33.60	-0.79	2.15	20.54	50.00	H
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
QPSK-3MHz	815.50	-9.70	-33.70	-0.80	2.15	21.05	50.00	H
	819.00	-9.41	-33.60	-0.75	2.15	21.29	50.00	H
	822.50	-10.11	-33.60	-0.79	2.15	20.55	50.00	H
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
QPSK-5MHz	816.50	-9.58	-33.70	-0.80	2.15	21.17	50.00	H
	819.00	-10.05	-33.60	-0.75	2.15	20.65	50.00	H
	821.50	-9.89	-33.60	-0.79	2.15	20.77	50.00	H
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
QPSK-10MHz	819.00	-9.78	-33.60	-0.80	2.15	20.87	50.00	H
	819.00	-9.83	-33.60	-0.75	2.15	20.87	50.00	H
	819.00	-9.79	-33.60	-0.79	2.15	20.87	50.00	H

LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
16QAM-1.4MHz	814.70	-11.33	-33.70	-0.80	2.15	19.42	50.00	V
	819.00	-11.19	-33.60	-0.75	2.15	19.51	50.00	V
	823.30	-10.43	-33.60	-0.79	2.15	20.23	50.00	V
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
16QAM-3MHz	815.50	-10.64	-33.70	-0.80	2.15	20.11	50.00	V
	819.00	-10.84	-33.60	-0.75	2.15	19.86	50.00	V
	822.50	-10.48	-33.60	-0.79	2.15	20.18	50.00	V
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
16QAM-5MHz	816.50	-11.33	-33.70	-0.80	2.15	19.42	50.00	V
	819.00	-10.89	-33.60	-0.75	2.15	19.81	50.00	V
	821.50	-10.39	-33.60	-0.79	2.15	20.27	50.00	V
LTE BAND 26	frequency (MHz)	PMea(dBm)	Pcl(dB)+PA g(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(dBm)	Limit(dBm)	Polariz ation
16QAM-10MHz	819.00	-11.42	-33.60	-0.80	2.15	19.23	50.00	V
	819.00	-11.47	-33.60	-0.75	2.15	19.23	50.00	V
	819.00	-11.43	-33.60	-0.79	2.15	19.23	50.00	V



LTE BAND 26 64QAM-1.4MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
	814.70	-12.49	-33.70	-0.80	2.15	18.26	50.00	V
	819.00	-11.95	-33.60	-0.75	2.15	18.75	50.00	V
	823.30	-12.62	-33.60	-0.79	2.15	18.04	50.00	V
LTE BAND 26 64QAM-3 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
	815.50	-12.08	-33.70	-0.80	2.15	18.67	50.00	V
	819.00	-12.68	-33.60	-0.75	2.15	18.02	50.00	V
	822.50	-12.45	-33.60	-0.79	2.15	18.21	50.00	V
LTE BAND 26 64QAM-5 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
	816.50	-12.15	-33.70	-0.80	2.15	18.60	50.00	V
	819.00	-12.53	-33.60	-0.75	2.15	18.17	50.00	V
	821.50	-12.45	-33.60	-0.79	2.15	18.21	50.00	V
LTE BAND 26 64QAM-10MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	Correctio n(dB)	ERP(d Bm)	Limit(d Bm)	Polariz ation
	819.00	-12.31	-33.60	-0.80	2.15	18.34	50.00	V
	819.00	-12.36	-33.60	-0.75	2.15	18.34	50.00	V
	819.00	-12.32	-33.60	-0.79	2.15	18.34	50.00	V

LTE BAND 38 QPSK-5MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2572.50	-18.17	-28.60	10.70	21.13	H	33.00
	2595.00	-19.02	-28.60	10.70	20.28	H	33.00
	2617.50	-18.42	-28.60	10.70	20.88	H	33.00
LTE BAND 38 QPSK-10 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2575.00	-19.08	-28.60	10.70	20.22	H	33.00
	2595.00	-18.66	-28.60	10.70	20.64	H	33.00
	2615.00	-19.14	-28.60	10.70	20.16	H	33.00
LTE BAND 38 QPSK-15 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2577.50	-18.16	-28.60	10.70	21.14	H	33.00
	2595.00	-18.57	-28.60	10.70	20.73	H	33.00
	2612.50	-18.87	-28.60	10.70	20.43	H	33.00
LTE BAND 38 QPSK-20 MHz	frequency (MHz)	PMea(dBm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2580.00	-18.22	-28.60	10.70	21.08	H	33.00
	2595.00	-18.46	-28.60	10.70	20.84	H	33.00
	2610.00	-18.56	-28.60	10.70	20.74	H	33.00



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LTE BAND	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
38 16QAM-5 MHz	2572.50	-19.73	-28.60	10.70	19.57	H	33.00
	2595.00	-19.33	-28.60	10.70	19.97	H	33.00
	2617.50	-18.85	-28.60	10.70	20.45	H	33.00
38 16QAM-10 MHz	2575.00	-19.67	-28.60	10.70	19.63	H	33.00
	2595.00	-19.21	-28.60	10.70	20.09	H	33.00
	2615.00	-19.48	-28.60	10.70	19.82	H	33.00
38 16QAM-15 MHz	2577.50	-19.61	-28.60	10.70	19.69	H	33.00
	2595.00	-18.79	-28.60	10.70	20.51	H	33.00
	2612.50	-18.76	-28.60	10.70	20.54	H	33.00
38 16QAM-20 MHz	2580.00	-18.77	-28.60	10.70	20.53	H	33.00
	2595.00	-18.85	-28.60	10.70	20.45	H	33.00
	2610.00	-19.48	-28.60	10.70	19.82	H	33.00

LTE BAND	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
38 64QAM-5 MHz	2572.50	-19.65	-28.60	10.70	19.65	H	33.00
	2595.00	-20.11	-28.60	10.70	19.19	H	33.00
	2617.50	-19.81	-28.60	10.70	19.49	H	33.00
38 64QAM-10 MHz	2575.00	-19.62	-28.60	10.70	19.68	H	33.00
	2595.00	-19.98	-28.60	10.70	19.32	H	33.00
	2615.00	-20.13	-28.60	10.70	19.17	H	33.00
38 64QAM-15 MHz	2577.50	-19.52	-28.60	10.70	19.78	H	33.00
	2595.00	-19.87	-28.60	10.70	19.43	H	33.00
	2612.50	-19.81	-28.60	10.70	19.49	H	33.00
38 64QAM-20 MHz	2580.00	-19.63	-28.60	10.70	19.67	H	33.00
	2595.00	-19.96	-28.60	10.70	19.34	H	33.00
	2610.00	-19.84	-28.60	10.70	19.46	H	33.00



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LTE BAND 66 QPSK-1.4 MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	1710.70	-16.75	-29.60	8.10	20.95	H	30.00
	1745.00	-17.01	-29.50	8.10	20.59	H	30.00
	1779.30	-16.94	-29.50	8.10	20.66	H	30.00
LTE BAND 66 QPSK-3M Hz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	1711.50	-16.69	-29.60	8.10	21.01	H	30.00
	1745.00	-16.30	-29.50	8.10	21.30	H	30.00
	1778.50	-16.26	-29.50	8.10	21.34	H	30.00
LTE BAND 66 QPSK-5M Hz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	1712.50	-16.65	-29.60	8.10	21.05	H	30.00
	1745.00	-16.23	-29.50	8.10	21.37	H	30.00
	1777.50	-16.95	-29.50	8.10	20.65	H	30.00
LTE BAND 66 QPSK-10 MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	1715.00	-16.77	-29.60	8.10	20.93	H	30.00
	1745.00	-17.12	-29.50	8.10	20.48	H	30.00
	1775.00	-16.33	-29.50	8.10	21.27	H	30.00
LTE BAND 66 QPSK-15 MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	1717.50	-16.78	-29.60	8.10	20.92	H	30.00
	1745.00	-16.87	-29.50	8.10	20.73	H	30.00
	1772.53	-16.42	-29.50	8.10	21.18	H	30.00
LTE BAND 66 QPSK-20 MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	1720.00	-16.92	-29.60	8.10	20.78	H	30.00
	1745.00	-16.70	-29.50	8.10	20.90	H	30.00
	1770.00	-16.33	-29.50	8.10	21.27	H	30.00

LTE BAND 66 16QAM-1.4 MHz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	1710.70	-18.11	-29.60	8.10	19.59	V	30.00
	1745.00	-17.49	-29.50	8.10	20.11	V	30.00
	1779.30	-17.44	-29.50	8.10	20.16	V	30.00
LTE BAND 66 16QAM-3M Hz	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	1711.50	-18.21	-29.60	8.10	19.49	V	30.00
	1745.00	-17.69	-29.50	8.10	19.91	V	30.00
	1778.50	-17.59	-29.50	8.10	20.01	V	30.00
LTE BAND	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)



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66	MHz)	Bm)	(dB)	Gain(dBi)	Bm)	tion	Bm)
16QAM-5M Hz	1712.50	-18.20	-29.60	8.10	19.50	V	30.00
	1745.00	-17.77	-29.50	8.10	19.83	V	30.00
	1777.50	-18.11	-29.50	8.10	19.49	V	30.00
LTE BAND 66 16QAM-10 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1715.00	-18.26	-29.60	8.10	19.44	V	30.00
	1745.00	-17.44	-29.50	8.10	20.16	V	30.00
	1775.00	-17.83	-29.50	8.10	19.77	V	30.00
LTE BAND 66 16QAM-15 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1717.50	-17.38	-29.60	8.10	20.32	V	30.00
	1745.00	-18.09	-29.50	8.10	19.51	V	30.00
	1772.53	-17.68	-29.50	8.10	19.92	V	30.00
LTE BAND 66 16QAM-20 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1720.00	-17.56	-29.60	8.10	20.14	V	30.00
	1745.00	-17.26	-29.50	8.10	20.34	V	30.00
	1770.00	-17.47	-29.50	8.10	20.13	V	30.00

LTE BAND 66 64QAM-1.4 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1710.70	-18.98	-29.60	8.10	18.72	H	30.00
	1745.00	-18.50	-29.50	8.10	19.10	H	30.00
	1779.30	-18.65	-29.50	8.10	18.95	H	30.00
LTE BAND 66 64QAM-3M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1711.50	-19.17	-29.60	8.10	18.53	H	30.00
	1745.00	-18.53	-29.50	8.10	19.07	H	30.00
	1778.50	-19.28	-29.50	8.10	18.32	H	30.00
LTE BAND 66 64QAM-5M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1712.50	-18.43	-29.60	8.10	19.27	H	30.00
	1745.00	-18.29	-29.50	8.10	19.31	H	30.00
	1777.50	-18.43	-29.50	8.10	19.17	H	30.00
LTE BAND 66 64QAM-10 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1715.00	-19.23	-29.60	8.10	18.47	H	30.00
	1745.00	-18.44	-29.50	8.10	19.16	H	30.00
	1775.00	-19.11	-29.50	8.10	18.49	H	30.00
LTE BAND 66 64QAM-15	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1717.50	-19.09	-29.60	8.10	18.61	H	30.00



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MHz	1745.00	-9.20	-29.50	8.10	28.40	H	30.00
	1772.53	-18.73	-29.50	8.10	18.87	H	30.00
LTE BAND 66 64QAM-20 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	1720.00	-18.43	-29.60	8.10	19.27	H	30.00
	1745.00	-19.15	-29.50	8.10	18.45	H	30.00
	1770.00	-18.91	-29.50	8.10	18.69	H	30.00

LTE BAND 41 QPSK-5M Hz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2498.50	-19.11	-28.70	10.70	20.29	H	33.00
	2593.00	-18.55	-28.60	10.70	20.75	H	33.00
	2687.50	-18.80	-28.50	10.70	20.40	H	33.00
LTE BAND 41 QPSK-10 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2501.00	-19.22	-28.70	10.70	20.18	H	33.00
	2593.00	-18.20	-28.60	10.70	21.10	H	33.00
	2685.00	-18.60	-28.50	10.70	20.60	H	33.00
LTE BAND 41 QPSK-15 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2503.50	-19.02	-28.70	10.70	20.38	H	33.00
	2593.00	-19.03	-28.60	10.70	20.27	H	33.00
	2682.50	-18.27	-28.50	10.70	20.93	H	33.00
LTE BAND 41 QPSK-20 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2506.00	-19.00	-28.70	10.70	20.40	H	33.00
	2593.00	-18.30	-28.60	10.70	21.00	H	33.00
	2680.00	-18.28	-28.50	10.70	20.92	H	33.00

LTE BAND 41 16QAM-5 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2498.50	-19.84	-28.70	10.70	19.56	V	33.00
	2593.00	-19.75	-28.60	10.70	19.55	V	33.00
	2687.50	-19.49	-28.50	10.70	19.71	V	33.00
LTE BAND 41 16QAM-10 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2501.00	-19.22	-28.70	10.70	20.18	V	33.00
	2593.00	-19.66	-28.60	10.70	19.64	V	33.00
	2685.00	-19.07	-28.50	10.70	20.13	V	33.00
LTE BAND 41 16QAM-15 MHz	frequency(MHz)	PMea(d Bm)	Pcl(dB)+PAg (dB)	Ga Antenna Gain(dBi)	EIRP(d Bm)	Polariza tion	Limit(d Bm)
	2503.50	-19.84	-28.70	10.70	19.56	V	33.00
	2593.00	-19.55	-28.60	10.70	19.75	V	33.00



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	2682.50	-19.43	-28.50	10.70	19.77	V	33.00
LTE BAND 41	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
16QAM-20 MHz	2506.00	-19.74	-28.70	10.70	19.66	V	33.00
	2593.00	-19.59	-28.60	10.70	19.71	V	33.00
	2680.00	-18.79	-28.50	10.70	20.41	V	33.00

LTE BAND 41	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
64QAM-5 MHz	2498.50	-20.80	-28.70	10.70	18.60	H	33.00
	2593.00	-20.80	-28.60	10.70	18.50	H	33.00
	2687.50	-19.97	-28.50	10.70	19.23	H	33.00
LTE BAND 41	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
64QAM-10 MHz	2501.00	-20.51	-28.70	10.70	18.89	H	33.00
	2593.00	-19.93	-28.60	10.70	19.37	H	33.00
	2685.00	-20.37	-28.50	10.70	18.83	H	33.00
LTE BAND 41	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
64QAM-15 MHz	2503.50	-19.83	-28.70	10.70	19.57	H	33.00
	2593.00	-20.26	-28.60	10.70	19.04	H	33.00
	2682.50	-19.73	-28.50	10.70	19.47	H	33.00
LTE BAND 41	frequency(MHz)	PMea(dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
64QAM-20 MHz	2506.00	-20.62	-28.70	10.70	18.78	H	33.00
	2593.00	-19.73	-28.60	10.70	19.57	H	33.00
	2680.00	-20.44	-28.50	10.70	18.76	H	33.00



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LTE BAND	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
CA_7C 16QAM 10MHz+20MHz	2505.50	2519.90	-18.06	-28.70	10.70	21.34	V	33.00
	2525.60	2540.00	-18.55	-28.60	10.70	20.75	V	33.00
	2545.60	2560.00	-18.56	-28.60	10.70	20.74	V	33.00
LTE BAND CA_7C 16QAM 20MHz+10MHz	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2510.00	2524.40	-18.12	-28.70	10.70	21.28	H	33.00
	2530.10	2544.50	-18.50	-28.60	10.70	20.80	H	33.00
LTE BAND CA_7C 16QAM 20MHz+15MHz	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2510.00	2527.10	-18.51	-28.70	10.70	20.89	H	33.00
	2527.60	2544.70	-18.94	-28.60	10.70	20.36	H	33.00
LTE BAND CA_7C 16QAM 20MHz+20MHz	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2510.00	2529.80	-18.25	-28.70	10.70	21.15	H	33.00
	2525.10	2544.90	-18.84	-28.60	10.70	20.46	H	33.00
LTE BAND CA_7C 16QAM 15MHz+10MHz	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2507.50	2519.50	-18.42	-28.70	10.70	20.98	H	33.00
	2530.10	2542.10	-18.04	-28.60	10.70	21.26	H	33.00
LTE BAND CA_7C 16QAM 15MHz+15MHz	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2507.50	2522.50	-18.39	-28.70	10.70	21.01	H	33.00
	2527.50	2542.50	-18.54	-28.60	10.70	20.76	H	33.00
LTE BAND CA_7C 16QAM 15MHz+20MHz	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2507.80	2425.90	-18.06	-28.70	10.70	21.34	H	33.00
	2525.30	2542.40	-18.00	-28.60	10.70	21.30	H	33.00
LTE BAND CA_7C 16QAM 15MHz+20MHz	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
	2542.90	2560.00	-18.49	-28.60	10.70	20.81	H	33.00



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LTE BAND	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
CA_38C 16QAM 15MHz+1 5MHz	2577.50	2592.50	-18.24	-28.70	10.70	21.16	V	33.00
	2587.50	2602.50	-18.24	-28.60	10.70	21.06	V	33.00
	2597.50	2612.50	-18.09	-28.50	10.70	21.11	V	33.00
CA_38C 16QAM 20MHz+2 0MHz	2580.00	2599.80	-18.55	-28.70	10.70	20.85	V	33.00
	2585.10	2604.90	-18.25	-28.60	10.70	21.05	V	33.00
	2590.20	2610.00	-18.51	-28.60	10.70	20.79	V	33.00

LTE BAND	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polarization	Limit(dBm)
CA_41C1 6QAM 5MHz+20 MHz	2499.30	2511.00	-17.91	-28.70	10.70	21.49	V	33.00
	2583.80	2595.50	-18.17	-28.60	10.70	21.13	V	33.00
	2668.30	2680.00	-18.05	-28.50	10.70	21.15	V	33.00
CA_41C 16QAM 10MHz+2 0MHz	2501.50	2515.90	-17.71	-28.70	10.70	21.69	V	33.00
	2583.60	2598.00	-17.64	-28.60	10.70	21.66	V	33.00
	2665.60	2680.00	-18.61	-28.60	10.70	20.69	V	33.00
CA_41C 16QAM 15MHz+2 0MHz	2503.80	2520.90	-17.95	-28.70	10.70	21.45	H	33.00
	2583.30	2600.40	-17.87	-28.60	10.70	21.43	H	33.00
	2662.90	2680.00	-17.78	-28.60	10.70	21.52	H	33.00
CA_41C 16QAM 20MHz+5 MHz	2506.00	2517.70	-17.83	-28.70	10.70	21.57	H	33.00
	2590.50	2602.20	-17.69	-28.60	10.70	21.61	H	33.00
	2675.00	2686.70	-17.71	-28.60	10.70	21.59	H	33.00
CA_41C 16QAM 20MHz+1 0MHz	2506.00	2520.40	-17.76	-28.70	10.70	21.64	H	33.00
	2588.10	2602.50	-17.84	-28.60	10.70	21.46	H	33.00
	2670.10	2684.50	-17.68	-28.60	10.70	21.62	H	33.00
LTE	frequency	frequency	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna	EIRP(dBm)	Polarization	Limit(dBm)



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BAND	(MHz)	(MHz)	dBm)	Ag(dB)	Gain(dBi)	dBm)	ation	Bm)
CA_41C	2506.00	2523.10	-18.01	-28.70	10.70	21.39	H	33.00
16QAM	2585.60	2602.70	-17.76	-28.60	10.70	21.54	H	33.00
20MHz+1 5MHz	2665.10	2682.20	-18.38	-28.60	10.70	20.92	H	33.00
LTE BAND	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polariz ation	Limit(d Bm)
CA_41C	2503.50	2518.50	-18.49	-28.70	10.70	20.91	H	33.00
16QAM	2585.50	2600.50	-18.39	-28.60	10.70	20.91	H	33.00
15MHz+1 5MHz	2667.50	2682.50	-18.63	-28.60	10.70	20.67	H	33.00
LTE BAND	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polariz ation	Limit(d Bm)
CA_41C	2506.00	2525.80	-18.14	-28.70	10.70	21.26	H	33.00
16QAM	2583.10	2602.90	-18.77	-28.60	10.70	20.53	H	33.00
20MHz+2 0MHz	2660.20	2680.00	-18.86	-28.60	10.70	20.44	H	33.00
LTE BAND	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polariz ation	Limit(d Bm)
CA_41C	2503.50	2515.50	-18.10	-28.70	10.70	21.30	H	33.00
16QAM	2588.10	2600.10	-18.08	-28.60	10.70	21.22	H	33.00
15MHz+1 0MHz	2672.70	2684.70	-18.44	-28.60	10.70	20.86	H	33.00
LTE BAND	frequency (MHz)	frequency (MHz)	PMea(dBm)	Pcl(dB)+P Ag(dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Polariz ation	Limit(d Bm)
CA_41C	2501.30	2513.30	-18.08	-28.70	10.70	21.32	V	33.00
16QAM	2585.90	2597.90	-18.22	-28.60	10.70	21.08	V	33.00
10MHz+1 5MHz	2670.50	2682.50	-19.01	-28.60	10.70	20.29	V	33.00

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

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

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

A.2 FIELD STRENGTH OF SPURIOUS RADIATION

Reference

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

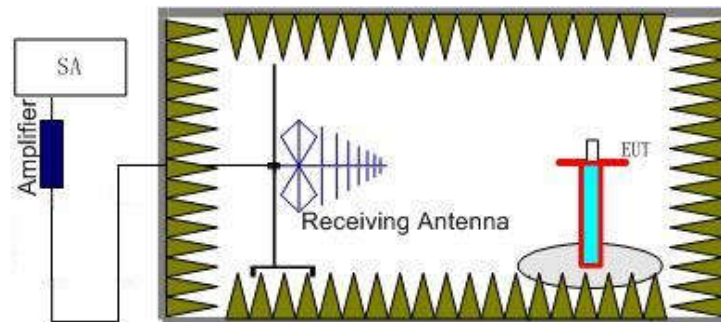
A.2.1 Measurement Method

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

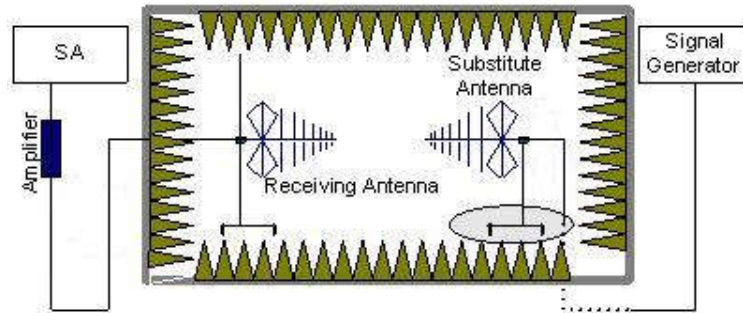
The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment, which is the transmitted carrier. The resolution bandwidth is set 1MHz as outlined in Part 22.917, 24.238, 27.53(h) and 90.691. The spectrum was scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of the LTE Bands 2,4,5,7,12,13,17,26,38,41,66,CA_7C, CA_38C, CA_41C.

The procedure of radiated spurious emissions is as follows:

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



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



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

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

An amplifier should be connected in for the test.

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

The measurement results are obtained as described below:

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

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

A.2.2 Measurement Results

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies of the LTE Bands 2,4,5,7,12,13,17,26,38,41,66,CA_7C, CA_38C, CA_41C.. It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of the LTE Bands 2,4,5,7,12,13,17,26,38,41,66,CA_7C, CA_38C, CA_41C. into any of the other blocks. The equipment must still, however, meet emissions requirements with the carrier at all frequencies over which it is capable of operating and it is the manufacturer's responsibility to verify this. Only worst case result is given below.



Upper antenna

	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polarizati on
LTE BAND 2 18607 QPSK	2965.60	-63.65	1.00	10.70	-53.95	-13.00	H
	4818.80	-75.15	1.30	12.50	-63.95	-13.00	H
	7121.37	-69.35	1.90	12.00	-59.25	-13.00	H
	11061.57	-61.95	2.30	10.50	-53.75	-13.00	V
	14748.77	-58.35	2.50	11.20	-49.65	-13.00	H
	17698.60	-56.65	3.30	12.80	-47.15	-13.00	H
	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polarizati on
LTE BAND 2 18900 QPSK	2961.60	-63.65	1.00	10.70	-53.95	-13.00	H
	4785.60	-75.35	1.30	12.50	-64.15	-13.00	H
	7289.67	-69.45	1.90	12.00	-59.35	-13.00	H
	12309.70	-62.05	2.60	12.60	-52.05	-13.00	V
	14754.27	-58.35	2.50	11.20	-49.65	-13.00	H
	17698.97	-56.65	3.30	12.80	-47.15	-13.00	H
	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polarizati on
LTE BAND 2 19193 QPSK	2975.60	-63.45	1.00	10.70	-53.75	-13.00	H
	4910.00	-75.05	1.40	12.50	-63.95	-13.00	V
	7272.43	-69.25	1.90	12.00	-59.15	-13.00	H
	12274.50	-62.45	2.60	12.60	-52.45	-13.00	V
	14742.53	-58.25	2.50	11.20	-49.55	-13.00	H
	17698.97	-56.75	3.30	12.80	-47.25	-13.00	H

	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polarizati on
LTE BAND 2 18607 16QAM	2967.20	-63.55	1.00	10.70	-53.85	-13.00	H
	4441.60	-75.85	1.30	12.40	-64.75	-13.00	H
	7012.83	-70.25	1.80	12.00	-60.05	-13.00	H
	12271.20	-62.35	2.60	12.60	-52.35	-13.00	V
	14744.73	-58.25	2.50	11.20	-49.55	-13.00	H
	17695.67	-56.55	3.30	12.80	-47.05	-13.00	H
	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polarizati on
LTE BAND 2 18900 16QAM	2976.00	-63.65	1.00	10.70	-53.95	-13.00	H
	4759.20	-75.15	1.30	12.50	-63.95	-13.00	H
	7157.67	-69.45	1.90	12.00	-59.35	-13.00	H
	12298.70	-62.25	2.60	12.60	-52.25	-13.00	V
	14741.80	-58.35	2.50	11.20	-49.65	-13.00	H
	17696.03	-56.85	3.30	12.80	-47.35	-13.00	H



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	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polarizati on
LTE BAND 2 19193 16QAM	2970.80	-63.45	1.00	10.70	-53.75	-13.00	H
	4782.80	-75.35	1.30	12.50	-64.15	-13.00	H
	7192.13	-69.45	1.80	12.00	-59.25	-13.00	V
	12291.73	-62.45	2.60	12.60	-52.45	-13.00	V
	14747.30	-58.35	2.50	11.20	-49.65	-13.00	H
	17697.13	-56.65	3.30	12.80	-47.15	-13.00	H

	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polarizat ion
LTE BAND 2 18607 64QAM	2962.00	-63.75	1.00	10.70	-54.05	-13.00	H
	4766.00	-75.25	1.30	12.50	-64.05	-13.00	H
	7138.97	-69.45	1.90	12.00	-59.35	-13.00	H
	12330.23	-62.15	2.60	12.60	-52.15	-13.00	V
	14750.97	-58.25	2.50	11.20	-49.55	-13.00	H
	17698.97	-56.85	3.30	12.80	-47.35	-13.00	H
	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polarizat ion
LTE BAND 2 18900 64QAM	2964.80	-63.35	1.00	10.70	-53.65	-13.00	H
	4762.00	-75.25	1.30	12.50	-64.05	-13.00	H
	7150.70	-69.35	1.90	12.00	-59.25	-13.00	H
	12273.77	-62.45	2.60	12.60	-52.45	-13.00	V
	14749.13	-58.35	2.50	11.20	-49.65	-13.00	H
	17700.43	-56.45	3.30	12.80	-46.95	-13.00	H
	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polarizat ion
LTE BAND 2 19193 64QAM	2964.80	-63.45	1.00	10.70	-53.75	-13.00	H
	4763.60	-75.45	1.30	12.50	-64.25	-13.00	H
	7286.73	-69.55	1.90	12.00	-59.45	-13.00	H
	12280.00	-62.45	2.60	12.60	-52.45	-13.00	V
	14813.30	-58.15	2.50	11.20	-49.45	-13.00	H
	17697.87	-56.85	3.30	12.80	-47.35	-13.00	H

	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polarizat ion
LTE BAND 4 19957	2966.40	-63.65	1.00	10.70	-53.95	-13.00	H
	4762.40	-75.25	1.30	12.50	-64.05	-13.00	H
	5646.80	-74.95	1.30	13.10	-63.15	-13.00	V
	7297.37	-69.15	1.90	12.00	-59.05	-13.00	H
	11057.90	-62.25	2.30	10.50	-54.05	-13.00	H
	14745.10	-58.15	2.50	11.20	-49.45	-13.00	H



LTE BAND 4 20175	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polarizat ion
	2966.80	-63.65	1.00	10.70	-53.95	-13.00	H
	3944.00	-76.85	1.30	12.20	-65.95	-13.00	V
	4930.00	-75.15	1.30	12.50	-63.95	-13.00	H
	7248.97	-69.55	1.90	12.00	-59.45	-13.00	H
	12314.47	-62.45	2.60	12.60	-52.45	-13.00	V
	14736.30	-58.55	2.50	11.20	-49.85	-13.00	H
LTE BAND 4 20393	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polarizat ion
	2966.80	-63.35	1.00	10.70	-53.65	-13.00	H
	4831.20	-75.15	1.30	12.50	-63.95	-13.00	H
	6390.40	-73.55	1.60	13.10	-62.05	-13.00	H
	7981.20	-68.45	1.90	11.30	-59.05	-13.00	H
	12264.97	-62.45	2.60	12.60	-52.45	-13.00	V
	14796.07	-58.35	2.50	11.20	-49.65	-13.00	H

LTE BAND 4 19957 16QAM	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polarizat ion
	2972.80	-63.45	1.00	10.70	-53.75	-13.00	H
	4786.00	-74.75	1.30	12.50	-63.55	-13.00	H
	7211.57	-69.35	1.80	12.00	-59.15	-13.00	H
	9896.67	-65.55	2.20	11.20	-56.55	-13.00	V
	12292.10	-62.15	2.60	12.60	-52.15	-13.00	V
	14740.33	-58.35	2.50	11.20	-49.65	-13.00	H
LTE BAND 4 20175 16QAM	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polarizat ion
	2966.00	-63.45	1.00	10.70	-53.75	-13.00	H
	4388.80	-76.35	1.30	12.40	-65.25	-13.00	H
	6582.40	-73.15	1.70	12.40	-62.45	-13.00	H
	7288.57	-69.25	1.90	12.00	-59.15	-13.00	H
	12276.70	-62.55	2.60	12.60	-52.55	-13.00	V
	14749.13	-58.25	2.50	11.20	-49.55	-13.00	H
LTE BAND 4 20393 16QAM	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polarizat ion
	2964.00	-63.65	1.00	10.70	-53.95	-13.00	H
	4811.20	-75.25	1.30	12.50	-64.05	-13.00	H
	7126.13	-69.45	1.90	12.00	-59.35	-13.00	H
	9909.87	-65.55	2.20	11.20	-56.55	-13.00	H
	12297.97	-62.25	2.60	12.60	-52.25	-13.00	V
	14746.20	-58.35	2.50	11.20	-49.65	-13.00	H



LTE BAND 4 19957 64QAM	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polariza tion
	2969.20	-63.65	1.00	10.70	-53.95	-13.00	H
	4761.20	-75.45	1.30	12.50	-64.25	-13.00	H
	7146.30	-69.85	1.90	12.00	-59.75	-13.00	V
	10282.40	-65.55	2.10	11.30	-56.35	-13.00	V
	12301.27	-62.45	2.60	12.60	-52.45	-13.00	V
	14746.20	-58.15	2.50	11.20	-49.45	-13.00	H
LTE BAND 4 20175 64QAM	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polariza tion
	2974.00	-63.35	1.00	10.70	-53.65	-13.00	H
	3942.40	-76.75	1.30	12.20	-65.85	-13.00	H
	5640.80	-75.15	1.30	13.10	-63.35	-13.00	H
	7253.73	-69.15	1.90	12.00	-59.05	-13.00	H
	12310.43	-62.25	2.60	12.60	-52.25	-13.00	V
	14738.50	-58.05	2.50	11.20	-49.35	-13.00	H
LTE BAND 4 20393 64QAM	Frequency (MHz)	Ppm (dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP (dBm)	limit	Polariza tion
	2974.80	-63.55	1.00	10.70	-53.85	-13.00	H
	4440.00	-75.65	1.30	12.40	-64.55	-13.00	H
	5654.40	-75.05	1.30	13.10	-63.25	-13.00	H
	7133.10	-69.55	1.90	12.00	-59.45	-13.00	H
	12290.63	-62.45	2.60	12.60	-52.45	-13.00	V
	14750.60	-58.15	2.50	11.20	-49.45	-13.00	H

LTE BAND 5 20407	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	2905.80	-64.55	1.00	10.70	-57.00	-13.00	H
	3472.40	-77.65	1.10	11.50	-69.40	-13.00	H
	3968.40	-78.05	1.20	12.20	-69.20	-13.00	H
	4850.80	-75.95	1.30	12.50	-66.90	-13.00	H
	5928.80	-75.05	1.50	13.10	-65.60	-13.00	H
	7457.60	-70.35	1.90	12.00	-62.40	-13.00	H
LTE BAND 5 20525	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	2974.60	-63.45	1.00	10.70	-55.90	-13.00	H
	3416.40	-76.85	1.20	11.50	-68.70	-13.00	V
	4234.00	-77.35	1.20	12.40	-68.30	-13.00	H
	5647.20	-75.15	1.30	13.10	-65.50	-13.00	H
	6762.80	-72.05	1.60	12.40	-63.40	-13.00	H
	8006.00	-68.55	2.00	11.30	-61.40	-13.00	H



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	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
LTE BAND 5 20643	2964.20	-63.65	1.00	10.70	-56.10	-13.00	H
	3612.40	-78.25	1.20	12.20	-69.40	-13.00	H
	4364.40	-76.95	1.30	12.40	-68.00	-13.00	H
	5072.80	-75.75	1.20	12.50	-66.60	-13.00	H
	6042.40	-75.45	1.50	13.10	-66.00	-13.00	H
	7183.60	-70.45	1.80	12.00	-62.40	-13.00	H

	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
LTE BAND 5 20407 16QAM	2810.20	-64.25	1.00	10.70	-56.70	-13.00	V
	3460.40	-77.35	1.10	11.50	-69.10	-13.00	V
	4501.60	-76.35	1.20	12.50	-67.20	-13.00	H
	5648.80	-74.95	1.30	13.10	-65.30	-13.00	H
	6382.80	-73.45	1.60	13.10	-64.10	-13.00	H
	7996.40	-68.65	1.90	11.30	-61.40	-13.00	H
	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
LTE BAND 5 20525 16QAM	2965.60	-63.65	1.00	10.70	-56.10	-13.00	H
	3358.40	-77.45	1.10	11.50	-69.20	-13.00	H
	3916.00	-77.25	1.30	12.20	-68.50	-13.00	H
	4679.60	-76.55	1.30	12.50	-67.50	-13.00	H
	5624.40	-76.05	1.30	13.10	-66.40	-13.00	H
	6412.00	-73.95	1.60	13.10	-64.60	-13.00	H
	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
LTE BAND 5 20643 16QAM	2965.20	-63.55	1.00	10.70	-56.00	-13.00	H
	3497.60	-77.75	1.10	11.50	-69.50	-13.00	H
	4051.20	-77.95	1.20	12.40	-68.90	-13.00	H
	4847.20	-75.75	1.30	12.50	-66.70	-13.00	H
	5842.00	-76.35	1.40	13.10	-66.80	-13.00	H
	7022.00	-71.15	1.80	12.00	-63.10	-13.00	H

	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
LTE BAND 5 20407 64QAM	2969.40	-63.45	1.00	10.70	-55.90	-13.00	H
	3408.00	-77.25	1.20	11.50	-69.10	-13.00	V
	4061.20	-78.15	1.20	12.40	-69.10	-13.00	V
	5141.60	-75.65	1.30	12.50	-66.60	-13.00	H
	6730.80	-72.15	1.70	12.40	-63.60	-13.00	H
	7706.80	-69.95	1.80	11.30	-62.60	-13.00	H



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	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
LTE BAND 5 20525 64QAM	2967.00	-63.55	1.00	10.70	-56.00	-13.00	H
	3449.20	-77.65	1.10	11.50	-69.40	-13.00	H
	4229.60	-77.65	1.20	12.40	-68.60	-13.00	H
	5228.40	-75.75	1.80	12.50	-67.20	-13.00	H
	6436.00	-74.05	1.60	13.10	-64.70	-13.00	H
	7637.60	-69.45	1.80	11.30	-62.10	-13.00	H
	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
LTE BAND 5 20643 64QAM	2967.80	-63.55	1.00	10.70	-56.00	-13.00	H
	3348.00	-77.75	1.10	11.50	-69.50	-13.00	V
	4166.40	-77.75	1.20	12.40	-68.70	-13.00	H
	5034.00	-75.75	1.30	12.50	-66.70	-13.00	H
	6193.20	-75.05	1.60	13.10	-65.70	-13.00	H
	7393.60	-70.25	1.90	12.00	-62.30	-13.00	H

	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
LTE BAND 7 20775	2968.40	-63.55	1.00	10.70	-53.85	-25.00	H
	4919.20	-74.75	1.30	12.50	-63.55	-25.00	H
	7151.80	-69.25	1.90	12.00	-59.15	-25.00	H
	12296.87	-62.15	2.60	12.60	-52.15	-25.00	V
	14746.20	-58.15	2.50	11.20	-49.45	-25.00	H
	17698.60	-56.65	3.30	12.80	-47.15	-25.00	H
	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
LTE BAND 7 21100	2970.40	-63.65	1.00	10.70	-53.95	-25.00	H
	4814.80	-75.25	1.30	12.50	-64.05	-25.00	V
	7127.97	-69.45	1.90	12.00	-59.35	-25.00	H
	11210.43	-62.05	2.50	10.50	-54.05	-25.00	V
	14749.13	-58.25	2.50	11.20	-49.55	-25.00	V
	17701.53	-56.65	3.30	12.80	-47.15	-25.00	H
	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
LTE BAND 7 21425	2977.60	-63.65	1.00	10.70	-53.95	-25.00	H
	4903.20	-75.75	1.40	12.50	-64.65	-25.00	V
	7251.53	-69.15	1.90	12.00	-59.05	-25.00	H
	11479.57	-61.15	2.60	10.50	-53.25	-25.00	V
	14748.77	-58.25	2.50	11.20	-49.55	-25.00	V
	17699.70	-56.55	3.30	12.80	-47.05	-25.00	H



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	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
LTE BAND 7 20775 16QAM	2974.40	-63.45	1.00	10.70	-53.75	-25.00	H
	4761.60	-75.05	1.30	12.50	-63.85	-25.00	H
	7119.17	-69.65	1.90	12.00	-59.55	-25.00	H
	11096.77	-62.45	2.30	10.50	-54.25	-25.00	V
	14749.87	-58.05	2.50	11.20	-49.35	-25.00	H
	17701.90	-56.65	3.30	12.80	-47.15	-25.00	H
	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
LTE BAND 7 21100 16QAM	2972.80	-63.75	1.00	10.70	-54.05	-25.00	H
	4815.20	-75.35	1.30	12.50	-64.15	-25.00	H
	7135.67	-69.45	1.90	12.00	-59.35	-25.00	H
	9887.87	-65.75	2.20	11.20	-56.75	-25.00	V
	14747.30	-58.05	2.50	11.20	-49.35	-25.00	H
	17698.97	-56.75	3.30	12.80	-47.25	-25.00	H
	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
LTE BAND 7 21425 16QAM	2972.80	-63.35	1.00	10.70	-53.65	-25.00	H
	4843.60	-75.35	1.30	12.50	-64.15	-25.00	H
	7250.07	-69.55	1.90	12.00	-59.45	-25.00	H
	12298.33	-62.35	2.60	12.60	-52.35	-25.00	V
	14738.50	-58.15	2.50	11.20	-49.45	-25.00	H
	17697.13	-56.65	3.30	12.80	-47.15	-25.00	H

	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
LTE BAND 7 20775 64QAM	2964.00	-63.65	1.00	10.70	-53.95	-25.00	H
	4816.40	-75.15	1.30	12.50	-63.95	-25.00	H
	7252.27	-69.75	1.90	12.00	-59.65	-25.00	H
	12336.83	-62.25	2.60	12.60	-52.25	-25.00	V
	14744.73	-58.35	2.50	11.20	-49.65	-25.00	V
	17701.90	-56.65	3.30	12.80	-47.15	-25.00	H
	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
LTE BAND 7 21100 64QAM	2973.60	-63.45	1.00	10.70	-53.75	-25.00	H
	4887.20	-75.65	1.40	12.50	-64.55	-25.00	V
	6574.40	-72.85	1.70	12.40	-62.15	-25.00	H
	11057.17	-61.95	2.30	10.50	-53.75	-25.00	V
	14796.07	-58.35	2.50	11.20	-49.65	-25.00	H
	17697.87	-56.65	3.30	12.80	-47.15	-25.00	H
	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
LTE BAND 7	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization



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21425 64QAM	2965.20	-63.55	1.00	10.70	-53.85	-25.00	H
	4768.00	-75.15	1.30	12.50	-63.95	-25.00	H
	7251.90	-69.15	1.90	12.00	-59.05	-25.00	H
	12264.23	-62.35	2.60	12.60	-52.35	-25.00	V
	14793.50	-58.35	2.50	11.20	-49.65	-25.00	H
	17696.40	-56.55	3.30	12.80	-47.05	-25.00	H

LTE BAND 12 23017	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	2853.60	-64.65	1.00	10.70	-57.10	-13.00	H
	3273.60	-77.55	1.10	11.50	-69.30	-13.00	V
	3803.60	-77.45	1.20	12.20	-68.60	-13.00	H
	4418.80	-76.55	1.30	12.40	-67.60	-13.00	H
	5132.90	-75.35	1.30	12.50	-66.30	-13.00	H
	6088.40	-74.55	1.60	13.10	-65.20	-13.00	H
LTE BAND 12 23095	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	2854.00	-64.65	1.00	10.70	-57.10	-13.00	V
	3170.00	-77.25	1.00	11.50	-68.90	-13.00	H
	3588.80	-77.65	1.10	12.20	-68.70	-13.00	H
	4502.00	-76.35	1.20	12.50	-67.20	-13.00	V
	5644.40	-74.65	1.30	13.10	-65.00	-13.00	H
	6734.00	-71.65	1.70	12.40	-63.10	-13.00	V
LTE BAND 12 23173	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	2800.40	-64.35	1.00	10.70	-56.80	-13.00	V
	3248.00	-77.45	1.10	11.50	-69.20	-13.00	H
	3821.60	-77.45	1.20	12.20	-68.60	-13.00	H
	4474.80	-76.15	1.20	12.40	-67.10	-13.00	H
	5532.50	-75.05	1.40	13.10	-65.50	-13.00	H
	6383.00	-73.45	1.60	13.10	-64.10	-13.00	H

LTE BAND 12 23017 16QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	2800.80	-64.45	1.00	10.70	-56.90	-13.00	V
	3172.40	-77.15	1.10	11.50	-68.90	-13.00	H
	3581.60	-77.65	1.10	12.20	-68.70	-13.00	H
	4444.80	-75.95	1.30	12.40	-67.00	-13.00	H
	5645.30	-74.95	1.30	13.10	-65.30	-13.00	H
LTE BAND 12 23095	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	6737.60	-71.85	1.70	12.40	-63.30	-13.00	H
LTE BAND 12 23095	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	2868.40	-64.45	1.00	10.70	-56.90	-13.00	V



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16QAM	3414.80	-77.15	1.20	11.50	-69.00	-13.00	H
	3944.40	-76.95	1.30	12.20	-68.20	-13.00	H
	4390.40	-76.75	1.30	12.40	-67.80	-13.00	H
	5015.30	-75.15	1.30	12.50	-66.10	-13.00	H
	6080.00	-74.25	1.60	13.10	-64.90	-13.00	H
LTE BAND 12 23173 16QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	2318.80	-66.25	0.90	9.80	-59.50	-13.00	H
	2806.80	-64.55	1.00	10.70	-57.00	-13.00	H
	3300.80	-77.75	1.10	11.50	-69.50	-13.00	V
	4195.20	-77.25	1.20	12.40	-68.20	-13.00	H
	4767.60	-75.35	1.30	12.50	-66.30	-13.00	H
	5648.60	-74.65	1.30	13.10	-65.00	-13.00	H

LTE BAND 12 23017 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	2797.60	-64.55	1.00	10.70	-57.00	-13.00	V
	3245.60	-77.65	1.10	11.50	-69.40	-13.00	V
	3728.40	-78.85	1.10	12.20	-69.90	-13.00	H
	4256.00	-77.55	1.20	12.40	-68.50	-13.00	H
	5013.80	-75.05	1.30	12.50	-66.00	-13.00	H
	5899.10	-75.05	1.50	13.10	-65.60	-13.00	H
LTE BAND 12 23095 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	2862.00	-64.45	1.00	10.70	-56.90	-13.00	V
	3358.40	-77.35	1.10	11.50	-69.10	-13.00	H
	3882.80	-77.45	1.20	12.20	-68.60	-13.00	H
	4610.80	-76.05	1.30	12.50	-67.00	-13.00	H
	5208.80	-75.35	1.60	12.50	-66.60	-13.00	H
	5947.10	-74.95	1.50	13.10	-65.50	-13.00	H
LTE BAND 12 23173 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	2760.00	-64.45	1.00	10.70	-56.90	-13.00	V
	3167.60	-77.15	1.00	11.50	-68.80	-13.00	H
	3592.40	-77.75	1.10	12.20	-68.80	-13.00	H
	4483.20	-76.45	1.20	12.40	-67.40	-13.00	H
	5642.60	-74.65	1.30	13.10	-65.00	-13.00	H
	6758.60	-71.65	1.60	12.40	-63.00	-13.00	V



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LTE BAND 13 23205	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1593.20	-69.25	0.70	8.10	-64.00	-40.00	H
	2123.60	-68.05	0.90	9.80	-61.30	-13.00	H
	2696.00	-64.95	1.00	10.70	-57.40	-13.00	V
	3392.00	-77.45	1.10	11.50	-69.20	-13.00	H
	4360.80	-76.85	1.30	12.40	-67.90	-13.00	H
	5564.30	-74.95	1.40	13.10	-65.40	-13.00	H
LTE BAND 13 23230	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1579.20	-69.15	0.70	8.10	-63.90	-40.00	H
	2062.00	-68.85	0.80	9.80	-62.00	-13.00	H
	2852.80	-64.55	1.00	10.70	-57.00	-13.00	H
	3500.80	-78.45	1.10	12.20	-69.50	-13.00	V
	4076.40	-77.55	1.30	12.40	-68.60	-13.00	H
	5411.90	-76.15	1.20	12.50	-67.00	-13.00	H
LTE BAND 13 23255	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1579.60	-69.15	0.70	8.10	-63.90	-40.00	H
	2022.40	-67.55	0.80	9.80	-60.70	-13.00	H
	2816.00	-64.45	1.00	10.70	-56.90	-13.00	V
	3590.00	-77.65	1.10	12.20	-68.70	-13.00	H
	5018.30	-75.05	1.30	12.50	-66.00	-13.00	H
	6738.50	-71.55	1.70	12.40	-63.00	-13.00	V

LTE BAND 13 23205 16QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(d Bm)	limit	Polarizat ion
	1589.20	-69.35	0.70	8.10	-64.10	-40.00	H
	1968.80	-66.65	0.80	8.10	-61.50	-13.00	H
	2716.00	-65.15	1.00	10.70	-57.60	-13.00	V
	3437.20	-77.35	1.10	11.50	-69.10	-13.00	H
	4256.00	-77.65	1.20	12.40	-68.60	-13.00	H
	5317.10	-75.75	1.60	12.50	-67.00	-13.00	H
LTE BAND 13 23230 16QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(d Bm)	limit	Polarizat ion
	1586.00	-69.35	0.70	8.10	-64.10	-40.00	H
	2833.60	-65.05	1.00	10.70	-57.50	-13.00	V
	3385.60	-77.45	1.10	11.50	-69.20	-13.00	V
	3982.00	-78.65	1.20	12.20	-69.80	-13.00	V
	4862.80	-75.75	1.30	12.50	-66.70	-13.00	H
	5856.50	-75.45	1.40	13.10	-65.90	-13.00	H
LTE BAND 13	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(d Bm)	limit	Polarizat ion



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23255 16QAM	1600.00	-68.85	0.70	8.10	-63.60	-40.00	H
	2820.00	-64.65	1.00	10.70	-57.10	-13.00	V
	3287.20	-77.85	1.10	11.50	-69.60	-13.00	V
	4256.40	-77.75	1.20	12.40	-68.70	-13.00	H
	5272.70	-75.65	1.60	12.50	-66.90	-13.00	H
	6635.00	-72.55	1.80	12.40	-64.10	-13.00	H

LTE BAND 13 23205 64QAM	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1596.00	-68.85	0.70	8.10	-63.60	-40.00	H
	2424.40	-66.25	0.90	9.80	-59.50	-13.00	H
	3378.00	-77.35	1.10	11.50	-69.10	-13.00	V
	4080.80	-77.55	1.30	12.40	-68.60	-13.00	H
	4868.80	-75.45	1.40	12.50	-66.50	-13.00	H
	5875.40	-75.75	1.40	13.10	-66.20	-13.00	H
LTE BAND 13 23230 64QAM	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1596.00	-69.15	0.70	8.10	-63.90	-40.00	H
	2144.80	-67.75	0.90	9.80	-61.00	-13.00	V
	2798.00	-64.65	1.00	10.70	-57.10	-13.00	V
	3486.40	-77.85	1.10	11.50	-69.60	-13.00	H
	4755.20	-75.65	1.30	12.50	-66.60	-13.00	H
	5638.40	-74.75	1.30	13.10	-65.10	-13.00	H
LTE BAND 13 23255 64QAM	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1599.20	-69.15	0.70	8.10	-63.90	-40.00	H
	1965.60	-66.75	0.80	8.10	-61.60	-13.00	H
	2324.80	-66.35	0.90	9.80	-59.60	-13.00	H
	2808.00	-64.55	1.00	10.70	-57.00	-13.00	V
	3946.00	-77.25	1.30	12.20	-68.50	-13.00	H
	4982.00	-75.45	1.30	12.50	-66.40	-13.00	H

LTE BAND 17 23755	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarizat ion
	1336.00	-67.05	0.70	6.00	-63.90	-13.00	V
	1765.20	-68.65	0.80	8.10	-63.50	-13.00	H
	2280.80	-66.75	0.90	9.80	-60.00	-13.00	V
	2980.00	-64.15	1.00	10.70	-56.60	-13.00	H
	4444.80	-76.15	1.30	12.40	-67.20	-13.00	H
	5591.90	-75.15	1.40	13.10	-65.60	-13.00	H
LTE BAND 17 23790	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarizat ion
	1377.60	-65.75	0.70	6.00	-62.60	-13.00	V



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	2024.00	-67.65	0.80	9.80	-60.80	-13.00	H
	2603.20	-64.95	0.90	10.70	-57.30	-13.00	V
	2966.00	-63.55	1.00	10.70	-56.00	-13.00	H
	4758.80	-75.45	1.30	12.50	-66.40	-13.00	H
	6384.20	-73.45	1.60	13.10	-64.10	-13.00	H
LTE BAND 17 23825	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	1360.40	-66.15	0.70	6.00	-63.00	-13.00	V
	2079.60	-67.45	0.80	9.80	-60.60	-13.00	H
	2757.20	-64.35	1.00	10.70	-56.80	-13.00	V
	2967.20	-63.75	1.00	10.70	-56.20	-13.00	H
	4443.20	-76.15	1.30	12.40	-67.20	-13.00	H
	6342.80	-73.25	1.60	13.10	-63.90	-13.00	H

LTE BAND 17 23755 16QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	1401.20	-66.25	0.70	6.00	-63.10	-13.00	V
	1922.00	-66.75	0.80	8.10	-61.60	-13.00	V
	2562.00	-66.15	1.00	10.70	-58.60	-13.00	H
	2971.60	-63.85	1.00	10.70	-56.30	-13.00	H
	4115.20	-77.65	1.20	12.40	-68.60	-13.00	H
	5560.70	-75.15	1.40	13.10	-65.60	-13.00	H
LTE BAND 17 23790 16QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	1382.40	-65.85	0.70	6.00	-62.70	-13.00	V
	2079.60	-67.35	0.80	9.80	-60.50	-13.00	H
	2540.00	-65.15	0.90	10.70	-57.50	-13.00	H
	2972.40	-63.65	1.00	10.70	-56.10	-13.00	H
	4476.80	-76.25	1.20	12.40	-67.20	-13.00	H
	6724.70	-71.95	1.70	12.40	-63.40	-13.00	H
LTE BAND 17 23825 16QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	1382.40	-65.95	0.70	6.00	-62.80	-13.00	V
	2016.00	-67.45	0.80	9.80	-60.60	-13.00	H
	2530.80	-65.25	0.90	10.70	-57.60	-13.00	H
	2964.40	-63.75	1.00	10.70	-56.20	-13.00	H
	4767.20	-75.25	1.30	12.50	-66.20	-13.00	H
	6385.40	-73.25	1.60	13.10	-63.90	-13.00	H



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LTE BAND 17 23755 64QAM	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1404.80	-66.25	0.70	6.00	-63.10	-13.00	V
	1994.00	-66.15	0.80	8.10	-61.00	-13.00	H
	2528.00	-65.75	0.90	10.70	-58.10	-13.00	H
	2978.00	-64.15	1.00	10.70	-56.60	-13.00	H
	3946.00	-77.45	1.30	12.20	-68.70	-13.00	H
	5159.90	-75.15	1.30	12.50	-66.10	-13.00	H
LTE BAND 17 23790 64QAM	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1390.40	-66.05	0.70	6.00	-62.90	-13.00	V
	2022.00	-67.55	0.80	9.80	-60.70	-13.00	H
	2595.60	-65.05	1.00	10.70	-57.50	-13.00	V
	3588.00	-77.55	1.10	12.20	-68.60	-13.00	H
	4761.60	-75.35	1.30	12.50	-66.30	-13.00	H
	6763.70	-71.75	1.60	12.40	-63.10	-13.00	H
LTE BAND 17 23825 64QAM	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1376.40	-65.95	0.70	6.00	-62.80	-13.00	V
	2022.00	-67.45	0.80	9.80	-60.60	-13.00	H
	2540.00	-65.25	0.90	10.70	-57.60	-13.00	H
	2975.20	-63.65	1.00	10.70	-56.10	-13.00	H
	4816.00	-75.15	1.30	12.50	-66.10	-13.00	H
	6380.90	-73.25	1.60	13.10	-63.90	-13.00	H

LTE BAND 26 part 22 27033	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarizat ion
	1389.40	-65.75	0.70	6.00	-62.60	-13.00	V
	2021.00	-67.45	0.80	9.80	-60.60	-13.00	H
	2604.60	-64.85	0.90	10.70	-57.20	-13.00	V
	2964.80	-63.65	1.00	10.70	-56.10	-13.00	H
	4765.20	-75.35	1.30	12.50	-66.30	-13.00	H
	7293.20	-69.45	1.90	12.00	-61.50	-13.00	H
LTE BAND 26 psrt 22 26915	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarizat ion
	1377.00	-65.85	0.70	6.00	-62.70	-13.00	V
	2022.60	-67.45	0.80	9.80	-60.60	-13.00	H
	2966.80	-63.65	1.00	10.70	-56.10	-13.00	H
	4441.60	-76.25	1.30	12.40	-67.30	-13.00	H
	5641.20	-74.85	1.30	13.10	-65.20	-13.00	H
	8094.80	-68.85	1.80	11.30	-61.50	-13.00	H
LTE BAND 26	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarizat ion



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part 22 26797	1388.40	-66.05	0.70	6.00	-62.90	-13.00	V
	2029.60	-67.35	0.80	9.80	-60.50	-13.00	H
	2972.00	-63.75	1.00	10.70	-56.20	-13.00	H
	4504.00	-76.15	1.20	12.50	-67.00	-13.00	H
	5641.20	-74.85	1.30	13.10	-65.20	-13.00	H
	7291.20	-69.55	1.90	12.00	-61.60	-13.00	H

LTE BAND 26 part 22 27033 16QAM	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1375.40	-65.75	0.70	6.00	-62.60	-13.00	V
	2021.80	-67.35	0.80	9.80	-60.50	-13.00	H
	2601.40	-64.95	0.90	10.70	-57.30	-13.00	V
	2965.20	-63.65	1.00	10.70	-56.10	-13.00	H
	5641.20	-74.95	1.30	13.10	-65.30	-13.00	H
	8010.40	-68.55	2.00	11.30	-61.40	-13.00	H
LTE BAND 26 psrt 22 26915 16QAM	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1381.00	-65.75	0.70	6.00	-62.60	-13.00	V
	2022.40	-67.45	0.80	9.80	-60.60	-13.00	H
	2540.00	-65.25	0.90	10.70	-57.60	-13.00	H
	2965.20	-63.65	1.00	10.70	-56.10	-13.00	H
	4907.60	-75.25	1.40	12.50	-66.30	-13.00	H
	7975.20	-68.65	1.90	11.30	-61.40	-13.00	H
LTE BAND 26 part 22 26797 16QAM	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1374.40	-65.75	0.70	6.00	-62.60	-13.00	V
	2015.80	-67.45	0.80	9.80	-60.60	-13.00	H
	2606.20	-64.95	0.90	10.70	-57.30	-13.00	V
	2965.20	-63.55	1.00	10.70	-56.00	-13.00	H
	5646.00	-74.85	1.30	13.10	-65.20	-13.00	H
	7289.60	-69.55	1.90	12.00	-61.60	-13.00	H

LTE BAND 26 part 22 27033 64QAM	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1367.60	-65.75	0.70	6.00	-62.60	-13.00	V
	1994.40	-65.95	0.80	8.10	-60.80	-13.00	H
	2603.60	-64.85	0.90	10.70	-57.20	-13.00	V
	2973.20	-63.75	1.00	10.70	-56.20	-13.00	H
	4765.20	-75.35	1.30	12.50	-66.30	-13.00	H
	7632.40	-69.35	1.80	11.30	-62.00	-13.00	H
LTE BAND 26 psrt 22	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1393.60	-65.95	0.70	6.00	-62.80	-13.00	V



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26915 64QAM	2016.40	-67.55	0.80	9.80	-60.70	-13.00	H
	2971.40	-63.55	1.00	10.70	-56.00	-13.00	H
	4813.60	-75.35	1.30	12.50	-66.30	-13.00	H
	5648.00	-74.65	1.30	13.10	-65.00	-13.00	H
	7991.20	-68.75	1.90	11.30	-61.50	-13.00	H
LTE BAND 26 part 22 26797 64QAM	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1368.80	-65.75	0.70	6.00	-62.60	-13.00	V
	2015.00	-67.45	0.80	9.80	-60.60	-13.00	H
	2600.80	-64.85	0.90	10.70	-57.20	-13.00	V
	2973.20	-63.55	1.00	10.70	-56.00	-13.00	H
	4820.80	-75.45	1.30	12.50	-66.40	-13.00	H
	7121.60	-69.75	1.90	12.00	-61.80	-13.00	H

LTE BAND 26 part 90 26783	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1380.00	-65.65	0.70	6.00	-62.50	-13.00	V
	2028.80	-67.45	0.80	9.80	-60.60	-13.00	H
	2965.60	-63.55	1.00	10.70	-56.00	-13.00	H
	3920.80	-76.85	1.30	12.20	-68.10	-13.00	H
	4988.80	-75.35	1.30	12.50	-66.30	-13.00	H
	7296.40	-69.65	1.90	12.00	-61.70	-13.00	H
LTE BAND 26 psrt 90 26740	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1368.00	-65.75	0.70	6.00	-62.60	-13.00	V
	2020.60	-67.65	0.80	9.80	-60.80	-13.00	H
	2965.00	-63.75	1.00	10.70	-56.20	-13.00	H
	3942.80	-76.95	1.30	12.20	-68.20	-13.00	H
	5642.40	-74.95	1.30	13.10	-65.30	-13.00	H
	7292.00	-69.65	1.90	12.00	-61.70	-13.00	H
LTE BAND 26 part 90 26697	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1382.40	-65.95	0.70	6.00	-62.80	-13.00	V
	2014.40	-67.45	0.80	9.80	-60.60	-13.00	H
	2971.80	-63.75	1.00	10.70	-56.20	-13.00	H
	4200.00	-77.05	1.20	12.40	-68.00	-13.00	H
	5640.40	-74.95	1.30	13.10	-65.30	-13.00	H
	7994.40	-68.55	1.90	11.30	-61.30	-13.00	H



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LTE BAND 26 part 90 26783 16QAM	frequenc y(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(d Bm)	limit	Polarizat ion
	1375.60	-65.75	0.70	6.00	-62.60	-13.00	V
	2016.60	-67.55	0.80	9.80	-60.70	-13.00	H
	2982.40	-63.95	1.00	10.70	-56.40	-13.00	H
	4706.80	-76.05	1.30	12.50	-67.00	-13.00	H
	5645.20	-74.85	1.30	13.10	-65.20	-13.00	H
	8006.40	-68.65	2.00	11.30	-61.50	-13.00	V
LTE BAND 26 psrt 90 26740 16QAM	frequenc y(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(d Bm)	limit	Polarizat ion
	1369.40	-65.85	0.70	6.00	-62.70	-13.00	V
	2027.80	-67.65	0.80	9.80	-60.80	-13.00	H
	2605.60	-64.95	0.90	10.70	-57.30	-13.00	V
	2969.20	-63.65	1.00	10.70	-56.10	-13.00	H
	4829.20	-75.35	1.30	12.50	-66.30	-13.00	H
	7285.20	-69.75	1.90	12.00	-61.80	-13.00	H
LTE BAND 26 part 90 26697 16QAM	frequenc y(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(d Bm)	limit	Polarizat ion
	1374.40	-65.75	0.70	6.00	-62.60	-13.00	V
	2015.80	-67.45	0.80	9.80	-60.60	-13.00	H
	2606.20	-64.95	0.90	10.70	-57.30	-13.00	V
	2965.20	-63.55	1.00	10.70	-56.00	-13.00	H
	5646.00	-74.85	1.30	13.10	-65.20	-13.00	H
	7289.60	-69.55	1.90	12.00	-61.60	-13.00	H

LTE BAND 26 part 90 26783 64QAM	frequenc y(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1363.20	-66.05	0.70	6.00	-62.90	-13.00	V
	2096.40	-67.75	0.90	9.80	-61.00	-13.00	V
	2866.60	-64.55	1.00	10.70	-57.00	-13.00	V
	4196.40	-77.25	1.20	12.40	-68.20	-13.00	H
	4965.60	-75.65	1.30	12.50	-66.60	-13.00	H
	7177.20	-70.15	1.80	12.00	-62.10	-13.00	H
LTE BAND 26 psrt 90 26740 64QAM	frequenc y(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1376.20	-65.75	0.70	6.00	-62.60	-13.00	V
	2017.00	-67.65	0.80	9.80	-60.80	-13.00	H
	2604.00	-64.75	0.90	10.70	-57.10	-13.00	V
	2964.40	-63.75	1.00	10.70	-56.20	-13.00	H
	4816.40	-75.15	1.30	12.50	-66.10	-13.00	H
	7293.20	-69.65	1.90	12.00	-61.70	-13.00	H
LTE BAND 26	frequenc y(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion



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part 90 26697 64QAM	1392.20	-66.15	0.70	6.00	-63.00	-13.00	V
	2029.40	-67.65	0.80	9.80	-60.80	-13.00	H
	2965.00	-63.65	1.00	10.70	-56.10	-13.00	H
	4972.80	-75.25	1.30	12.50	-66.20	-13.00	H
	5642.00	-74.75	1.30	13.10	-65.10	-13.00	H
	7999.20	-68.55	1.90	11.30	-61.30	-13.00	H

LTE BAND 38 37775	frequency (MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2972.40	-63.35	1.00	10.70	-53.65	-25.00	H
	4817.20	-75.15	1.30	12.50	-63.95	-25.00	H
	7155.10	-69.45	1.90	12.00	-59.35	-25.00	H
	12290.27	-62.05	2.60	12.60	-52.05	-25.00	V
	14750.23	-57.95	2.50	11.20	-49.25	-25.00	H
	17703.00	-56.15	3.30	12.80	-46.65	-25.00	H
LTE BAND 38 38000	frequency (MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2965.20	-63.45	1.00	10.70	-53.75	-25.00	H
	4757.60	-75.45	1.30	12.50	-64.25	-25.00	H
	7256.67	-69.25	1.90	12.00	-59.15	-25.00	H
	12306.77	-62.35	2.60	12.60	-52.35	-25.00	V
	14755.00	-58.35	2.50	11.20	-49.65	-25.00	H
	17700.43	-56.55	3.30	12.80	-47.05	-25.00	H
LTE BAND 38 38225	frequency (MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2963.20	-63.65	1.00	10.70	-53.95	-25.00	H
	4814.00	-75.55	1.30	12.50	-64.35	-25.00	H
	7255.93	-68.95	1.90	12.00	-58.85	-25.00	H
	12293.20	-62.35	2.60	12.60	-52.35	-25.00	V
	14749.50	-58.15	2.50	11.20	-49.45	-25.00	H
	17696.03	-56.85	3.30	12.80	-47.35	-25.00	H

LTE BAND 38 37775 16QAM	frequency (MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2964.80	-63.45	1.00	10.70	-53.75	-25.00	H
	4760.80	-75.25	1.30	12.50	-64.05	-25.00	H
	7156.20	-69.35	1.90	12.00	-59.25	-25.00	V
	12307.13	-62.15	2.60	12.60	-52.15	-25.00	V
	14793.13	-58.35	2.50	11.20	-49.65	-25.00	H
	17694.93	-56.45	3.30	12.80	-46.95	-25.00	H
LTE BAND 38 38000	frequency (MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2970.80	-63.35	1.00	10.70	-53.65	-25.00	H



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16QAM	4439.20	-75.95	1.30	12.40	-64.85	-25.00	H
	7303.97	-69.35	1.90	12.00	-59.25	-25.00	H
	12297.60	-62.45	2.60	12.60	-52.45	-25.00	V
	14808.53	-58.35	2.50	11.20	-49.65	-25.00	H
	17698.60	-56.85	3.30	12.80	-47.35	-25.00	H
LTE BAND 38 38225 16QAM	frequency (MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2964.80	-63.55	1.00	10.70	-53.85	-25.00	H
	4476.80	-75.95	1.20	12.40	-64.75	-25.00	H
	7218.90	-69.25	1.80	12.00	-59.05	-25.00	H
	12285.87	-62.45	2.60	12.60	-52.45	-25.00	V
	14744.73	-58.45	2.50	11.20	-49.75	-25.00	H
	17703.37	-56.45	3.30	12.80	-46.95	-25.00	H

LTE BAND 38 37775 64QAM	frequency (MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2966.80	-63.65	1.00	10.70	-53.95	-25.00	H
	4909.60	-75.05	1.40	12.50	-63.95	-25.00	V
	7285.27	-69.35	1.90	12.00	-59.25	-25.00	V
	12308.23	-62.25	2.60	12.60	-52.25	-25.00	V
	14889.57	-58.05	2.70	11.20	-49.55	-25.00	H
	17698.97	-56.65	3.30	12.80	-47.15	-25.00	H
LTE BAND 38 38000 64QAM	frequency (MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2964.00	-63.65	1.00	10.70	-53.95	-25.00	H
	4830.40	-75.25	1.30	12.50	-64.05	-25.00	H
	7151.43	-69.55	1.90	12.00	-59.45	-25.00	H
	12297.97	-62.25	2.60	12.60	-52.25	-25.00	V
	14746.20	-58.25	2.50	11.20	-49.55	-25.00	V
	17700.07	-56.65	3.30	12.80	-47.15	-25.00	H
LTE BAND 38 38225 64QAM	frequency (MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2963.20	-63.75	1.00	10.70	-54.05	-25.00	H
	4740.80	-75.55	1.30	12.50	-64.35	-25.00	H
	7220.00	-69.55	1.80	12.00	-59.35	-25.00	H
	12304.20	-62.35	2.60	12.60	-52.35	-25.00	V
	14746.20	-58.35	2.50	11.20	-49.65	-25.00	H
	17700.07	-56.45	3.30	12.80	-46.95	-25.00	H

LTE BAND 41 39675	frequency (MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2965.20	-63.45	1.00	10.70	-53.75	-25.00	H
	4439.20	-75.85	1.30	12.40	-64.75	-25.00	H



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	7214.13	-69.25	1.80	12.00	-59.05	-25.00	H
	12300.90	-62.35	2.60	12.60	-52.35	-25.00	V
	14814.03	-58.35	2.50	11.20	-49.65	-25.00	V
	17699.70	-56.35	3.30	12.80	-46.85	-25.00	H
LTE BAND 41 40620	frequency (MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2912.00	-64.45	1.00	10.70	-54.75	-25.00	H
	3410.40	-77.05	1.20	11.50	-66.75	-25.00	V
	4411.60	-76.65	1.30	12.40	-65.55	-25.00	V
	7252.27	-69.25	1.90	12.00	-59.15	-25.00	H
	11736.97	-61.95	2.60	11.00	-53.55	-25.00	V
	17695.67	-56.85	3.30	12.80	-47.35	-25.00	H
LTE BAND 41 41565	frequency (MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2888.80	-65.15	1.00	10.70	-55.45	-25.00	H
	3968.00	-77.75	1.20	12.20	-66.75	-25.00	V
	5952.40	-75.25	1.50	13.10	-63.65	-25.00	H
	8934.90	-69.25	2.00	12.00	-59.25	-25.00	H
	13179.07	-63.75	2.40	13.30	-52.85	-25.00	V
	17694.93	-56.85	3.30	12.80	-47.35	-25.00	H

LTE BAND 41 39675 16QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polariza tion
	2971.20	-63.55	1.00	10.70	-53.85	-25.00	H
	4834.00	-75.25	1.30	12.50	-64.05	-25.00	H
	7284.53	-69.65	1.90	12.00	-59.55	-25.00	H
	12295.40	-62.25	2.60	12.60	-52.25	-25.00	V
	14811.47	-58.45	2.50	11.20	-49.75	-25.00	H
	17695.30	-56.65	3.30	12.80	-47.15	-25.00	H
LTE BAND 41 40620 16QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polariza tion
	2865.60	-64.55	1.00	10.70	-54.85	-25.00	H
	3550.40	-77.85	1.20	12.20	-66.85	-25.00	V
	4834.40	-75.35	1.30	12.50	-64.15	-25.00	H
	6725.60	-72.45	1.70	12.40	-61.75	-25.00	H
	11473.33	-62.05	2.60	10.50	-54.15	-25.00	V
	17696.40	-56.75	3.30	12.80	-47.25	-25.00	H
LTE BAND 41 41565 16QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polariza tion
	2906.00	-65.05	1.00	10.70	-55.35	-25.00	H
	3633.20	-78.25	1.20	12.20	-67.25	-25.00	H
	5102.40	-75.45	1.20	12.50	-64.15	-25.00	V
	7217.07	-69.45	1.80	12.00	-59.25	-25.00	H



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	14742.90	-58.35	2.50	11.20	-49.65	-25.00	V
	17694.57	-56.65	3.30	12.80	-47.15	-25.00	H

LTE BAND 41 39675 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2974.80	-63.65	1.00	10.70	-53.95	-25.00	H
	4825.60	-75.25	1.30	12.50	-64.05	-25.00	H
	7252.63	-69.25	1.90	12.00	-59.15	-25.00	H
	12303.47	-62.55	2.60	12.60	-52.55	-25.00	V
	14793.87	-58.35	2.50	11.20	-49.65	-25.00	H
	17695.67	-56.75	3.30	12.80	-47.25	-25.00	H
LTE BAND 41 40620 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2899.20	-64.45	1.00	10.70	-54.75	-25.00	H
	3610.40	-78.35	1.20	12.20	-67.35	-25.00	H
	4927.60	-75.55	1.30	12.50	-64.35	-25.00	H
	7926.57	-68.95	1.90	11.30	-59.55	-25.00	H
	14810.37	-58.45	2.50	11.20	-49.75	-25.00	H
	17697.50	-56.85	3.30	12.80	-47.35	-25.00	H
LTE BAND 41 41565 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2889.20	-65.15	1.00	10.70	-55.45	-25.00	V
	3486.00	-77.65	1.10	11.50	-67.25	-25.00	V
	4812.80	-75.45	1.30	12.50	-64.25	-25.00	H
	7253.37	-69.35	1.90	12.00	-59.25	-25.00	H
	12569.30	-65.05	2.40	13.80	-53.65	-25.00	V
	17517.83	-59.15	2.90	12.80	-49.25	-25.00	H

LTE BAND 66 131979	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2822.40	-64.55	1.00	10.70	-54.85	-13.00	V
	3475.20	-77.65	1.10	11.50	-67.25	-13.00	H
	4525.60	-76.75	1.20	12.50	-65.45	-13.00	H
	6437.20	-73.85	1.60	13.10	-62.35	-13.00	H
	9680.33	-66.35	2.20	11.20	-57.35	-13.00	V
	13796.90	-62.85	2.50	12.40	-52.95	-13.00	V
LTE BAND 66 132322	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2952.40	-64.25	1.00	10.70	-54.55	-13.00	H
	3956.00	-77.75	1.20	12.20	-66.75	-13.00	H
	5495.20	-75.65	1.40	12.50	-64.55	-13.00	H
	7015.77	-70.65	1.80	12.00	-60.45	-13.00	H
	9293.50	-68.05	2.00	11.60	-58.45	-13.00	V



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	14751.33	-58.45	2.50	11.20	-49.75	-13.00	V
LTE BAND 66 132665	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2811.20	-64.25	1.00	10.70	-54.55	-13.00	V
	3915.60	-77.25	1.30	12.20	-66.35	-13.00	H
	5654.40	-75.45	1.30	13.10	-63.65	-13.00	H
	7248.60	-69.35	1.90	12.00	-59.25	-13.00	H
	10778.50	-63.35	2.40	10.80	-54.95	-13.00	H
	14750.97	-57.95	2.50	11.20	-49.25	-13.00	H

LTE BAND 66 131979 16QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2252.00	-67.05	0.90	9.80	-58.15	-13.00	V
	3784.40	-79.25	1.10	12.20	-68.15	-13.00	V
	4185.20	-78.05	1.20	12.40	-66.85	-13.00	H
	5676.80	-75.45	1.30	13.10	-63.65	-13.00	H
	7014.30	-70.65	1.80	12.00	-60.45	-13.00	H
	10113.73	-66.65	2.00	11.30	-57.35	-13.00	H
LTE BAND 66 132322 16QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2982.80	-63.95	1.00	10.70	-54.25	-13.00	H
	3718.00	-78.35	1.20	12.20	-67.35	-13.00	H
	5104.00	-75.65	1.20	12.50	-64.35	-13.00	V
	7251.53	-69.75	1.90	12.00	-59.65	-13.00	V
	10635.13	-64.55	2.20	10.80	-55.95	-13.00	H
	14745.83	-58.25	2.50	11.20	-49.55	-13.00	H
LTE BAND 66 132665 16QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2863.20	-64.25	1.00	10.70	-54.55	-13.00	V
	3884.00	-76.55	1.20	12.20	-65.55	-13.00	H
	5641.60	-75.05	1.30	13.10	-63.25	-13.00	H
	7965.80	-68.25	1.90	11.30	-58.85	-13.00	H
	11366.63	-61.45	2.50	10.50	-53.45	-13.00	V
	14742.17	-58.15	2.50	11.20	-49.45	-13.00	H

LTE BAND 66 131979 64QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2411.20	-66.45	0.90	9.80	-57.55	-13.00	H
	4236.00	-78.05	1.20	12.40	-66.85	-13.00	H
	6264.80	-75.05	1.60	13.10	-63.55	-13.00	V
	7789.80	-69.75	1.80	11.30	-60.25	-13.00	H
	9843.87	-66.85	2.30	11.20	-57.95	-13.00	V
	12371.30	-63.85	2.60	12.60	-53.85	-13.00	V



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	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
LTE BAND 66 132322 64QAM	2765.20	-64.55	1.00	10.70	-54.85	-13.00	V
	3751.20	-77.85	1.10	12.20	-66.75	-13.00	H
	5074.80	-75.55	1.20	12.50	-64.25	-13.00	H
	7246.77	-69.35	1.90	12.00	-59.25	-13.00	H
	10127.30	-66.05	2.00	11.30	-56.75	-13.00	V
	14743.63	-57.95	2.50	11.20	-49.25	-13.00	H
	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
LTE BAND 66 132665 64QAM	2805.20	-64.45	1.00	10.70	-54.75	-13.00	V
	3943.60	-76.85	1.30	12.20	-65.95	-13.00	H
	5650.00	-75.05	1.30	13.10	-63.25	-13.00	V
	7287.47	-69.35	1.90	12.00	-59.25	-13.00	H
	10253.43	-64.65	2.20	11.30	-55.55	-13.00	V
	14714.30	-58.35	2.50	11.20	-49.65	-13.00	H

LTE BAND CA_41C QPSK 20MHz+5M Hz 39750+3986 7	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2964.40	-64.05	1.00	10.70	-54.35	-25.00	H
	3580.40	-77.95	1.10	12.20	-66.85	-25.00	H
	4765.60	-75.55	1.30	12.50	-64.35	-25.00	H
	7301.40	-70.05	1.90	12.00	-59.95	-25.00	H
	14817.33	-59.05	2.50	11.20	-50.35	-25.00	H
	17706.67	-56.85	3.30	12.80	-47.35	-25.00	H
LTE BAND CA_41C QPSK 20MHz+5M Hz 40595+4071 2	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2974.80	-64.05	1.00	10.70	-54.35	-25.00	H
	3431.20	-77.25	1.20	11.50	-66.95	-25.00	V
	4499.20	-76.65	1.20	12.40	-65.45	-25.00	H
	6704.40	-72.15	1.70	12.40	-61.45	-25.00	H
	11213.00	-62.45	2.50	10.50	-54.45	-25.00	V
	17712.17	-57.25	3.30	12.80	-47.75	-25.00	H
LTE BAND CA_41C QPSK 20MHz+5M Hz 41440+4155 7	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2963.60	-64.05	1.00	10.70	-54.35	-25.00	H
	3345.20	-77.95	1.10	11.50	-67.55	-25.00	V
	4446.80	-76.55	1.30	12.40	-65.45	-25.00	H
	7216.70	-70.15	1.80	12.00	-59.95	-25.00	H
	12847.97	-64.45	2.70	13.80	-53.35	-25.00	V
	17961.50	-57.45	3.20	12.80	-47.85	-25.00	H



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LTE BAND CA_7C QPSK 20MHz+20M Hz 20850+2104 8	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2975.20	-63.95	1.00	10.70	-54.25	-25.00	H
	4878.00	-75.55	1.40	12.50	-64.45	-25.00	H
	7147.03	-69.55	1.90	12.00	-59.45	-25.00	H
	11474.80	-61.65	2.60	10.50	-53.75	-25.00	V
	14749.87	-58.85	2.50	11.20	-50.15	-25.00	H
	17701.53	-56.85	3.30	12.80	-47.35	-25.00	H
LTE BAND CA_7C QPSK 20MHz+20M Hz 21001+2119 9	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2974.40	-63.85	1.00	10.70	-54.15	-25.00	H
	4440.80	-76.25	1.30	12.40	-65.15	-25.00	H
	5646.40	-75.05	1.30	13.10	-63.25	-25.00	H
	7253.38	-69.55	1.90	12.00	-59.45	-25.00	H
	11393.00	-61.65	2.50	10.50	-53.65	-25.00	V
	12315.30	-62.85	2.60	12.60	-52.85	-25.00	V
LTE BAND CA_7C QPSK 20MHz+20M Hz 21152+2135 0	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2972.80	-63.95	1.00	10.70	-54.25	-25.00	H
	4822.80	-75.75	1.30	12.50	-64.55	-25.00	H
	7298.83	-69.65	1.90	12.00	-59.55	-25.00	H
	11370.30	-61.95	2.50	10.50	-53.95	-25.00	V
	14799.00	-58.85	2.50	11.20	-50.15	-25.00	H
	17703.00	-56.95	3.30	12.80	-47.45	-25.00	H

LTE BAND CA_38C QPSK 20MHz+20M Hz 37850+3804 8	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2964.80	-63.95	1.00	10.70	-54.25	-25.00	H
	4768.80	-75.75	1.30	12.50	-64.55	-25.00	H
	7143.37	-69.85	1.90	12.00	-59.75	-25.00	H
	11062.30	-62.45	2.30	10.50	-54.25	-25.00	V
	14750.60	-58.85	2.50	11.20	-50.15	-25.00	H
	17704.10	-56.95	3.30	12.80	-47.45	-25.00	H
LTE BAND CA_38C QPSK 20MHz+20M Hz 37901+3809 9	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2965.20	-63.85	1.00	10.70	-54.15	-25.00	H
	4914.80	-75.45	1.30	12.50	-64.25	-25.00	H
	7282.33	-69.55	1.90	12.00	-59.45	-25.00	H
	11499.37	-61.45	2.60	10.50	-53.55	-25.00	V
	14793.87	-58.85	2.50	11.20	-50.15	-25.00	H
	17701.90	-56.95	3.30	12.80	-47.45	-25.00	H
LTE BAND CA_38C	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization



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QPSK 20MHz+20M Hz 37952+3815 0	2900.00	-65.15	1.00	10.70	-55.45	-25.00	H
	3817.60	-77.95	1.20	12.20	-66.95	-25.00	H
	5638.00	-75.25	1.30	13.10	-63.45	-25.00	H
	7996.60	-68.85	1.90	11.30	-59.45	-25.00	H
	14880.40	-58.95	2.70	11.20	-50.45	-25.00	H
	17704.10	-56.85	3.30	12.80	-47.35	-25.00	H

Down antenna

LTE BAND 2 18607	frequency (MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2964.40	-63.55	1.00	10.70	-53.85	-13.00	H
	4756.80	-75.25	1.30	12.50	-64.05	-13.00	H
	7147.77	-69.45	1.90	12.00	-59.35	-13.00	H
	11072.57	-62.05	2.30	10.50	-53.85	-13.00	V
	14748.40	-58.05	2.50	11.20	-49.35	-13.00	H
	17697.50	-56.55	3.30	12.80	-47.05	-13.00	H
LTE BAND 2 18900	frequency (MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2968.00	-63.35	1.00	10.70	-53.65	-13.00	H
	4390.40	-76.35	1.30	12.40	-65.25	-13.00	H
	6390.00	-73.35	1.60	13.10	-61.85	-13.00	H
	12336.47	-62.35	2.60	12.60	-52.35	-13.00	V
	14747.30	-58.35	2.50	11.20	-49.65	-13.00	H
	17697.50	-56.65	3.30	12.80	-47.15	-13.00	H
LTE BAND 2 19193	frequency (MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2976.00	-63.55	1.00	10.70	-53.85	-13.00	H
	4761.60	-75.25	1.30	12.50	-64.05	-13.00	H
	7297.00	-69.35	1.90	12.00	-59.25	-13.00	H
	12327.30	-62.45	2.60	12.60	-52.45	-13.00	V
	14742.53	-58.25	2.50	11.20	-49.55	-13.00	H
	17698.60	-56.55	3.30	12.80	-47.05	-13.00	H

LTE BAND 2 18607 16QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polariza tion
	2962.80	-63.55	1.00	10.70	-53.85	-13.00	H
	4761.20	-75.35	1.30	12.50	-64.15	-13.00	H
	7153.27	-69.25	1.90	12.00	-59.15	-13.00	H
	12289.53	-62.25	2.60	12.60	-52.25	-13.00	V
	14748.40	-58.35	2.50	11.20	-49.65	-13.00	V
	17698.97	-56.55	3.30	12.80	-47.05	-13.00	H
LTE BAND 2	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polariza tion



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18900 16QAM	2976.40	-63.35	1.00	10.70	-53.65	-13.00	H
	4768.40	-75.25	1.30	12.50	-64.05	-13.00	H
	7151.07	-69.35	1.90	12.00	-59.25	-13.00	H
	12265.70	-62.35	2.60	12.60	-52.35	-13.00	V
	14745.47	-58.35	2.50	11.20	-49.65	-13.00	H
	17698.97	-56.65	3.30	12.80	-47.15	-13.00	H
LTE BAND 2 19193 16QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2974.40	-63.55	1.00	10.70	-53.85	-13.00	H
	4763.60	-75.15	1.30	12.50	-63.95	-13.00	H
	7254.83	-69.35	1.90	12.00	-59.25	-13.00	H
	12295.77	-62.35	2.60	12.60	-52.35	-13.00	V
	14750.60	-58.35	2.50	11.20	-49.65	-13.00	H
	17693.10	-57.05	3.30	12.80	-47.55	-13.00	H

LTE BAND 2 18607 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2966.80	-63.65	1.00	10.70	-53.95	-13.00	H
	4835.20	-75.45	1.30	12.50	-64.25	-13.00	H
	7082.50	-70.05	1.80	12.00	-59.85	-13.00	H
	12321.07	-62.25	2.60	12.60	-52.25	-13.00	V
	14748.40	-58.35	2.50	11.20	-49.65	-13.00	H
	17698.97	-56.55	3.30	12.80	-47.05	-13.00	H
LTE BAND 2 18900 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2966.80	-63.55	1.00	10.70	-53.85	-13.00	H
	4753.60	-75.55	1.30	12.50	-64.35	-13.00	H
	7293.33	-69.35	1.90	12.00	-59.25	-13.00	H
	12329.13	-62.45	2.60	12.60	-52.45	-13.00	V
	14802.67	-58.45	2.50	11.20	-49.75	-13.00	H
	17696.77	-56.55	3.30	12.80	-47.05	-13.00	H
LTE BAND 2 19193 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2966.00	-63.55	1.00	10.70	-53.85	-13.00	H
	4877.20	-75.15	1.40	12.50	-64.05	-13.00	H
	7156.20	-69.55	1.90	12.00	-59.45	-13.00	H
	12342.33	-62.45	2.60	12.60	-52.45	-13.00	V
	14748.40	-58.35	2.50	11.20	-49.65	-13.00	H
	17699.33	-56.65	3.30	12.80	-47.15	-13.00	H

LTE BAND 4	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2965.20	-63.65	1.00	10.70	-53.95	-13.00	H



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19957	4337.60	-76.65	1.30	12.40	-65.55	-13.00	H
	5648.80	-75.05	1.30	13.10	-63.25	-13.00	H
	7254.47	-69.35	1.90	12.00	-59.25	-13.00	V
	12296.87	-62.45	2.60	12.60	-52.45	-13.00	V
	14812.57	-58.35	2.50	11.20	-49.65	-13.00	V
LTE BAND 4 20175	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2972.80	-63.85	1.00	10.70	-54.15	-13.00	H
	3944.40	-76.65	1.30	12.20	-65.75	-13.00	V
	5096.00	-75.25	1.20	12.50	-63.95	-13.00	H
	7145.57	-69.25	1.90	12.00	-59.15	-13.00	H
	12289.53	-62.55	2.60	12.60	-52.55	-13.00	V
	14742.53	-58.45	2.50	11.20	-49.75	-13.00	H
LTE BAND 4 20393	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2965.20	-63.55	1.00	10.70	-53.85	-13.00	H
	4440.80	-75.85	1.30	12.40	-64.75	-13.00	H
	5914.00	-74.85	1.50	13.10	-63.25	-13.00	H
	7212.67	-69.15	1.80	12.00	-58.95	-13.00	V
	12298.33	-62.25	2.60	12.60	-52.25	-13.00	V
	14735.93	-58.35	2.50	11.20	-49.65	-13.00	H

LTE BAND 4 19957 16QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2974.40	-63.75	1.00	10.70	-54.05	-13.00	H
	4736.80	-75.85	1.30	12.50	-64.65	-13.00	H
	6385.20	-73.65	1.60	13.10	-62.15	-13.00	H
	7253.73	-69.25	1.90	12.00	-59.15	-13.00	V
	12267.90	-62.65	2.60	12.60	-52.65	-13.00	V
	14818.80	-58.55	2.50	11.20	-49.85	-13.00	H
LTE BAND 4 20175 16QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2967.60	-63.45	1.00	10.70	-53.75	-13.00	H
	3943.20	-76.45	1.30	12.20	-65.55	-13.00	H
	5643.60	-75.15	1.30	13.10	-63.35	-13.00	H
	7148.13	-69.55	1.90	12.00	-59.45	-13.00	H
	12250.67	-62.65	2.60	12.60	-52.65	-13.00	V
	14750.23	-58.15	2.50	11.20	-49.45	-13.00	H
LTE BAND 4 20393 16QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2974.80	-63.45	1.00	10.70	-53.75	-13.00	H
	4764.40	-75.05	1.30	12.50	-63.85	-13.00	H
	7249.33	-69.15	1.90	12.00	-59.05	-13.00	H



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	9303.03	-67.15	2.00	11.60	-57.55	-13.00	H
	12279.63	-61.95	2.60	12.60	-51.95	-13.00	V
	14751.70	-58.25	2.50	11.20	-49.55	-13.00	H

LTE BAND 4 19957 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polariza tion
	2966.00	-63.65	1.00	10.70	-53.95	-13.00	H
	4763.60	-75.15	1.30	12.50	-63.95	-13.00	H
	6659.20	-72.45	1.80	12.40	-61.85	-13.00	H
	7303.60	-69.35	1.90	12.00	-59.25	-13.00	H
	12274.87	-62.25	2.60	12.60	-52.25	-13.00	V
	14735.57	-58.25	2.50	11.20	-49.55	-13.00	H
LTE BAND 4 20175 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polariza tion
	2970.40	-63.55	1.00	10.70	-53.85	-13.00	H
	3944.00	-76.65	1.30	12.20	-65.75	-13.00	H
	4931.60	-75.05	1.30	12.50	-63.85	-13.00	H
	7285.63	-69.25	1.90	12.00	-59.15	-13.00	H
	12285.87	-62.45	2.60	12.60	-52.45	-13.00	V
	14746.93	-58.05	2.50	11.20	-49.35	-13.00	H
LTE BAND 4 20393 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polariza tion
	2964.00	-63.65	1.00	10.70	-53.95	-13.00	H
	4754.40	-75.35	1.30	12.50	-64.15	-13.00	V
	6380.00	-73.55	1.60	13.10	-62.05	-13.00	H
	7969.83	-68.35	1.90	11.30	-58.95	-13.00	H
	12271.20	-62.35	2.60	12.60	-52.35	-13.00	V
	14793.13	-57.95	2.50	11.20	-49.25	-13.00	H

LTE BAND 5 20407	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polariza tion
	2861.80	-64.35	1.00	10.70	-56.80	-13.00	V
	3418.00	-76.95	1.20	11.50	-68.80	-13.00	H
	4786.00	-75.45	1.30	12.50	-66.40	-13.00	H
	5649.20	-74.95	1.30	13.10	-65.30	-13.00	H
	6758.40	-72.05	1.60	12.40	-63.40	-13.00	V
	7998.80	-68.55	1.90	11.30	-61.30	-13.00	H
LTE BAND 5 20525	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polariza tion
	2966.00	-63.55	1.00	10.70	-56.00	-13.00	H
	3583.20	-77.55	1.10	12.20	-68.60	-13.00	H
	4442.40	-76.25	1.30	12.40	-67.30	-13.00	H
	5650.80	-75.15	1.30	13.10	-65.50	-13.00	H



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	6762.00	-72.05	1.60	12.40	-63.40	-13.00	H
	7550.00	-69.05	1.80	11.30	-61.70	-13.00	H
LTE BAND 5 20643	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	2973.20	-63.55	1.00	10.70	-56.00	-13.00	H
	3575.60	-78.15	1.10	12.20	-69.20	-13.00	H
	4587.20	-77.05	1.30	12.50	-68.00	-13.00	H
	5641.20	-75.35	1.30	13.10	-65.70	-13.00	H
	6816.80	-72.75	1.60	12.40	-64.10	-13.00	V
	7914.80	-69.65	1.70	11.30	-62.20	-13.00	H

LTE BAND 5 20407 16QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	2846.60	-65.05	1.00	10.70	-57.50	-13.00	H
	3344.80	-77.85	1.10	11.50	-69.60	-13.00	V
	4078.40	-77.65	1.30	12.40	-68.70	-13.00	V
	4728.40	-76.15	1.30	12.50	-67.10	-13.00	H
	5555.20	-75.55	1.40	13.10	-66.00	-13.00	H
	7136.00	-70.05	1.90	12.00	-62.10	-13.00	H
LTE BAND 5 20525 16QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	2809.60	-64.15	1.00	10.70	-56.60	-13.00	V
	3554.40	-77.45	1.20	12.20	-68.60	-13.00	H
	4194.80	-77.15	1.20	12.40	-68.10	-13.00	H
	5646.40	-75.15	1.30	13.10	-65.50	-13.00	H
	6394.40	-73.75	1.60	13.10	-64.40	-13.00	H
	7294.00	-69.65	1.90	12.00	-61.70	-13.00	H
LTE BAND 5 20643 16QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	2974.60	-63.55	1.00	10.70	-56.00	-13.00	H
	3245.20	-77.55	1.10	11.50	-69.30	-13.00	H
	3894.80	-78.15	1.20	12.20	-69.30	-13.00	H
	4602.80	-76.55	1.30	12.50	-67.50	-13.00	H
	5558.80	-75.85	1.40	13.10	-66.30	-13.00	H
	6601.60	-73.45	1.70	12.40	-64.90	-13.00	H

LTE BAND 5 20407 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	2809.80	-64.25	1.00	10.70	-56.70	-13.00	V
	3919.60	-77.05	1.30	12.20	-68.30	-13.00	H
	4788.00	-75.45	1.30	12.50	-66.40	-13.00	H
	5647.60	-75.15	1.30	13.10	-65.50	-13.00	H
	6393.20	-73.65	1.60	13.10	-64.30	-13.00	H



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	7994.80	-68.55	1.90	11.30	-61.30	-13.00	H
LTE BAND 5 20525 64QAM	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	2975.00	-63.65	1.00	10.70	-56.10	-13.00	H
	3446.80	-77.75	1.10	11.50	-69.50	-13.00	V
	4180.40	-78.35	1.20	12.40	-69.30	-13.00	H
	5166.40	-75.85	1.60	12.50	-67.10	-13.00	H
	6088.40	-75.05	1.60	13.10	-65.70	-13.00	H
	6958.00	-71.85	1.80	12.40	-63.40	-13.00	H
LTE BAND 5 20643 64QAM	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	2880.40	-65.05	1.00	10.70	-57.50	-13.00	V
	3555.60	-77.55	1.20	12.20	-68.70	-13.00	H
	3916.00	-77.25	1.30	12.20	-68.50	-13.00	H
	4502.40	-76.25	1.20	12.50	-67.10	-13.00	H
	5029.10	-75.05	1.30	12.50	-66.00	-13.00	H
	6740.90	-71.85	1.70	12.40	-63.30	-13.00	V

LTE BAND 7 20775	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2975.20	-63.65	1.00	10.70	-53.95	-25.00	V
	4737.20	-76.05	1.30	12.50	-64.85	-25.00	H
	7146.67	-69.75	1.90	12.00	-59.65	-25.00	H
	11060.47	-61.95	2.30	10.50	-53.75	-25.00	V
	14747.30	-58.35	2.50	11.20	-49.65	-25.00	V
	17697.87	-56.75	3.30	12.80	-47.25	-25.00	H
LTE BAND 7 21100	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2972.00	-63.65	1.00	10.70	-53.95	-25.00	H
	4812.00	-75.45	1.30	12.50	-64.25	-25.00	H
	7153.63	-69.45	1.90	12.00	-59.35	-25.00	H
	12291.00	-62.25	2.60	12.60	-52.25	-25.00	V
	14745.10	-58.35	2.50	11.20	-49.65	-25.00	V
	17697.50	-56.75	3.30	12.80	-47.25	-25.00	H
LTE BAND 7 21425	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polarizat ion
	2965.60	-63.35	1.00	10.70	-53.65	-25.00	H
	4758.80	-75.35	1.30	12.50	-64.15	-25.00	H
	7279.77	-69.35	1.90	12.00	-59.25	-25.00	H
	12310.43	-62.35	2.60	12.60	-52.35	-25.00	V
	14751.33	-58.25	2.50	11.20	-49.55	-25.00	H
	17701.53	-56.45	3.30	12.80	-46.95	-25.00	H



	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
LTE BAND 7 20775 16QAM	2962.40	-63.55	1.00	10.70	-53.85	-25.00	H
	4778.40	-75.95	1.30	12.50	-64.75	-25.00	H
	7250.07	-69.35	1.90	12.00	-59.25	-25.00	V
	12314.47	-62.35	2.60	12.60	-52.35	-25.00	V
	14741.80	-58.25	2.50	11.20	-49.55	-25.00	H
	17695.30	-56.75	3.30	12.80	-47.25	-25.00	H
	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
LTE BAND 7 21100 16QAM	2964.80	-63.65	1.00	10.70	-53.95	-25.00	H
	4442.00	-76.25	1.30	12.40	-65.15	-25.00	H
	5650.40	-74.75	1.30	13.10	-62.95	-25.00	H
	12336.10	-62.55	2.60	12.60	-52.55	-25.00	V
	14816.60	-58.65	2.50	11.20	-49.95	-25.00	H
	17702.27	-56.65	3.30	12.80	-47.15	-25.00	H
	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
LTE BAND 7 21425 16QAM	2966.40	-63.65	1.00	10.70	-53.95	-25.00	H
	4760.40	-74.95	1.30	12.50	-63.75	-25.00	H
	7250.43	-69.05	1.90	12.00	-58.95	-25.00	H
	12339.77	-62.45	2.60	12.60	-52.45	-25.00	V
	14716.13	-58.45	2.50	11.20	-49.75	-25.00	H
	17697.50	-56.65	3.30	12.80	-47.15	-25.00	H

	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
LTE BAND 7 20775 64QAM	2962.80	-63.55	1.00	10.70	-53.85	-25.00	H
	4927.20	-75.15	1.30	12.50	-63.95	-25.00	H
	7214.13	-69.45	1.80	12.00	-59.25	-25.00	V
	12308.97	-62.25	2.60	12.60	-52.25	-25.00	V
	14746.93	-58.35	2.50	11.20	-49.65	-25.00	H
	17696.77	-56.95	3.30	12.80	-47.45	-25.00	H
	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
LTE BAND 7 21100 64QAM	2966.00	-63.55	1.00	10.70	-53.85	-25.00	H
	4221.60	-77.15	1.20	12.40	-65.95	-25.00	H
	7209.00	-69.65	1.80	12.00	-59.45	-25.00	H
	11031.50	-62.25	2.30	10.50	-54.05	-25.00	V
	14737.77	-58.35	2.50	11.20	-49.65	-25.00	H
	17697.87	-56.85	3.30	12.80	-47.35	-25.00	H



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	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
LTE BAND 7 21425 64QAM	2972.40	-63.75	1.00	10.70	-54.05	-25.00	H
	4785.20	-75.05	1.30	12.50	-63.85	-25.00	H
	7233.57	-69.75	1.80	12.00	-59.55	-25.00	H
	12339.77	-62.55	2.60	12.60	-52.55	-25.00	V
	14750.60	-58.15	2.50	11.20	-49.45	-25.00	H
	17698.60	-56.45	3.30	12.80	-46.95	-25.00	H

	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
LTE BAND 12 23017	2810.80	-64.35	1.00	10.70	-56.80	-13.00	V
	3379.20	-77.15	1.10	11.50	-68.90	-13.00	H
	3941.20	-77.15	1.30	12.20	-68.40	-13.00	H
	4768.80	-75.25	1.30	12.50	-66.20	-13.00	H
	5640.80	-74.95	1.30	13.10	-65.30	-13.00	H
	6391.10	-73.55	1.60	13.10	-64.20	-13.00	H
	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
LTE BAND 12 23095	2861.60	-64.65	1.00	10.70	-57.10	-13.00	H
	3582.00	-77.55	1.10	12.20	-68.60	-13.00	H
	4479.20	-76.15	1.20	12.40	-67.10	-13.00	H
	5642.90	-74.75	1.30	13.10	-65.10	-13.00	H
	6116.60	-74.25	1.60	13.10	-64.90	-13.00	H
	6764.60	-71.65	1.60	12.40	-63.00	-13.00	V
	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
LTE BAND 12 23173	2808.80	-64.35	1.00	10.70	-56.80	-13.00	V
	3376.40	-77.15	1.10	11.50	-68.90	-13.00	H
	3926.40	-77.05	1.30	12.20	-68.30	-13.00	V
	4478.40	-76.05	1.20	12.40	-67.00	-13.00	H
	5641.40	-74.75	1.30	13.10	-65.10	-13.00	H
	6382.10	-73.25	1.60	13.10	-63.90	-13.00	H

	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
LTE BAND 12 23017 16QAM	2892.00	-65.05	1.00	10.70	-57.50	-13.00	V
	3378.40	-77.15	1.10	11.50	-68.90	-13.00	V
	4139.20	-77.55	1.20	12.40	-68.50	-13.00	H
	4983.60	-75.45	1.30	12.50	-66.40	-13.00	H
	6381.50	-73.55	1.60	13.10	-64.20	-13.00	H
	6756.50	-71.95	1.60	12.40	-63.30	-13.00	V
	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization



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BAND	Hz)	m)			m)		ion
12	2819.60	-64.55	1.00	10.70	-57.00	-13.00	V
23095	3321.60	-77.65	1.10	11.50	-69.40	-13.00	V
16QAM	3921.20	-77.35	1.30	12.20	-68.60	-13.00	H
	4757.20	-75.65	1.30	12.50	-66.60	-13.00	H
	5396.30	-76.25	1.20	12.50	-67.10	-13.00	H
	6141.20	-74.15	1.60	13.10	-64.80	-13.00	H
LTE	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
BAND	2810.00	-64.15	1.00	10.70	-56.60	-13.00	V
12	3418.00	-76.75	1.20	11.50	-68.60	-13.00	H
23173	3887.60	-77.15	1.20	12.20	-68.30	-13.00	H
16QAM	4444.40	-76.05	1.30	12.40	-67.10	-13.00	H
	5646.80	-74.85	1.30	13.10	-65.20	-13.00	H
	6393.20	-73.25	1.60	13.10	-63.90	-13.00	H

LTE	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
BAND	2853.20	-64.65	1.00	10.70	-57.10	-13.00	V
12	3185.20	-77.55	1.10	11.50	-69.30	-13.00	H
23017	3690.80	-78.55	1.20	12.20	-69.70	-13.00	H
64QAM	4360.40	-77.05	1.30	12.40	-68.10	-13.00	H
	5130.50	-75.65	1.30	12.50	-66.60	-13.00	V
	5943.80	-75.05	1.50	13.10	-65.60	-13.00	H
LTE	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
BAND	2852.00	-64.55	1.00	10.70	-57.00	-13.00	V
12	3247.60	-77.45	1.10	11.50	-69.20	-13.00	H
23095	3800.40	-77.55	1.20	12.20	-68.70	-13.00	H
64QAM	4757.20	-75.65	1.30	12.50	-66.60	-13.00	H
	5275.40	-75.35	1.60	12.50	-66.60	-13.00	H
	6069.80	-74.55	1.60	13.10	-65.20	-13.00	H
LTE	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
BAND	2819.60	-64.75	1.00	10.70	-57.20	-13.00	H
12	3193.60	-77.95	1.10	11.50	-69.70	-13.00	H
23173	3605.60	-78.25	1.10	12.20	-69.30	-13.00	H
64QAM	4109.20	-77.65	1.20	12.40	-68.60	-13.00	H
	4787.20	-75.55	1.30	12.50	-66.50	-13.00	H
	5350.70	-76.15	1.30	12.50	-67.10	-13.00	H

LTE	frequency(M	Ppm(dBm	Path	Ga Antenna	ERP(d	limit	Polarizat
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BAND	Hz)	)	loss	Gain(dBi)	Bm)		ion
13 23205	1562.00	-69.45	0.70	8.10	-64.20	-40.00	H
	2276.00	-66.45	0.90	9.80	-59.70	-13.00	H
	3385.20	-77.35	1.10	11.50	-69.10	-13.00	H
	4115.20	-77.75	1.20	12.40	-68.70	-13.00	H
	4878.40	-75.45	1.40	12.50	-66.50	-13.00	H
	5931.20	-75.35	1.50	13.10	-65.90	-13.00	H
LTE BAND 13 23230	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(d Bm)	limit	Polarizat ion
13 23230	1576.00	-68.95	0.70	8.10	-63.70	-40.00	H
	2280.80	-66.85	0.90	9.80	-60.10	-13.00	V
	2821.20	-64.65	1.00	10.70	-57.10	-13.00	V
	3406.40	-77.35	1.20	11.50	-69.20	-13.00	V
	4256.00	-77.65	1.20	12.40	-68.60	-13.00	H
	5239.70	-75.55	1.80	12.50	-67.00	-13.00	V
LTE BAND 13 23255	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(d Bm)	limit	Polarizat ion
13 23255	1591.60	-69.45	0.70	8.10	-64.20	-40.00	H
	2247.60	-67.15	0.90	9.80	-60.40	-13.00	V
	2856.40	-64.65	1.00	10.70	-57.10	-13.00	V
	3674.80	-78.55	1.20	12.20	-69.70	-13.00	H
	4837.60	-75.85	1.30	12.50	-66.80	-13.00	H
	5892.50	-75.05	1.50	13.10	-65.60	-13.00	V

LTE BAND 13 23205 16QAM	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
13 23205 16QAM	1584.40	-69.15	0.70	8.10	-63.90	-40.00	H
	2799.20	-64.35	1.00	10.70	-56.80	-13.00	V
	3249.20	-77.65	1.10	11.50	-69.40	-13.00	V
	3943.20	-77.25	1.30	12.20	-68.50	-13.00	H
	4824.40	-75.45	1.30	12.50	-66.40	-13.00	H
	6406.10	-73.35	1.60	13.10	-64.00	-13.00	H
LTE BAND 13 23230 16QAM	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
13 23230 16QAM	1596.00	-69.05	0.70	8.10	-63.80	-40.00	H
	2401.20	-66.35	0.90	9.80	-59.60	-13.00	H
	3321.60	-77.75	1.10	11.50	-69.50	-13.00	V
	3760.00	-78.65	1.10	12.20	-69.70	-13.00	H
	4533.20	-76.85	1.20	12.50	-67.70	-13.00	H
	5591.90	-75.55	1.40	13.10	-66.00	-13.00	H
LTE BAND 13	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
13	1589.20	-69.25	0.70	8.10	-64.00	-40.00	H



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23255 16QAM	2309.60	-66.35	0.90	9.80	-59.60	-13.00	H
	2819.60	-64.55	1.00	10.70	-57.00	-13.00	H
	3249.60	-77.95	1.10	11.50	-69.70	-13.00	H
	4535.20	-76.75	1.20	12.50	-67.60	-13.00	H
	5712.20	-75.45	1.50	13.10	-66.00	-13.00	H

LTE BAND 13 23205 64QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polariza tion
	1582.80	-69.05	0.70	8.10	-63.80	-40.00	H
	2486.40	-65.75	0.90	9.80	-59.00	-13.00	H
	3270.00	-77.85	1.10	11.50	-69.60	-13.00	V
	3930.80	-77.45	1.30	12.20	-68.70	-13.00	H
	4477.20	-76.15	1.20	12.40	-67.10	-13.00	H
	5641.10	-74.75	1.30	13.10	-65.10	-13.00	H
LTE BAND 13 23230 64QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polariza tion
	1586.00	-69.25	0.70	8.10	-64.00	-40.00	H
	2010.80	-68.05	0.80	9.80	-61.20	-13.00	H
	2797.60	-64.55	1.00	10.70	-57.00	-13.00	V
	3539.60	-78.65	1.20	12.20	-69.80	-13.00	H
	4462.40	-76.65	1.20	12.40	-67.60	-13.00	H
	5652.20	-74.75	1.30	13.10	-65.10	-13.00	H
LTE BAND 13 23255 64QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polariza tion
	1574.40	-68.95	0.70	8.10	-63.70	-40.00	H
	2026.00	-67.55	0.80	9.80	-60.70	-13.00	H
	2604.80	-65.15	0.90	10.70	-57.50	-13.00	H
	2973.60	-63.75	1.00	10.70	-56.20	-13.00	H
	3916.80	-77.05	1.30	12.20	-68.30	-13.00	H
	5648.90	-74.65	1.30	13.10	-65.00	-13.00	H

LTE BAND 17 23755	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(d Bm)	limit	Polarizat ion
	1379.20	-65.95	0.70	6.00	-62.80	-13.00	V
	2004.80	-67.75	0.80	9.80	-60.90	-13.00	H
	2964.00	-63.85	1.00	10.70	-56.30	-13.00	H
	3580.00	-77.75	1.10	12.20	-68.80	-13.00	H
	4757.60	-75.45	1.30	12.50	-66.40	-13.00	H
	5646.20	-74.55	1.30	13.10	-64.90	-13.00	H
LTE BAND 17 23790	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(d Bm)	limit	Polarizat ion
	1390.00	-66.05	0.70	6.00	-62.90	-13.00	V
	2132.40	-67.75	0.90	9.80	-61.00	-13.00	V



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	2599.60	-65.15	0.90	10.70	-57.50	-13.00	V
	2973.20	-63.75	1.00	10.70	-56.20	-13.00	H
	4502.00	-76.35	1.20	12.50	-67.20	-13.00	H
	5646.50	-74.75	1.30	13.10	-65.10	-13.00	H
LTE BAND 17 23825	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(d Bm)	limit	Polarizat ion
	1369.20	-65.95	0.70	6.00	-62.80	-13.00	V
	2022.00	-67.55	0.80	9.80	-60.70	-13.00	H
	2596.80	-64.65	1.00	10.70	-57.10	-13.00	V
	2965.20	-63.75	1.00	10.70	-56.20	-13.00	H
	4439.20	-76.25	1.30	12.40	-67.30	-13.00	H
	6383.90	-73.45	1.60	13.10	-64.10	-13.00	H

LTE BAND 17 23755 16QAM	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1374.00	-65.85	0.70	6.00	-62.70	-13.00	V
	1860.00	-67.55	0.80	8.10	-62.40	-13.00	V
	2262.40	-66.15	0.90	9.80	-59.40	-13.00	V
	2800.40	-64.25	1.00	10.70	-56.70	-13.00	V
	2976.80	-63.55	1.00	10.70	-56.00	-13.00	H
	4812.40	-75.65	1.30	12.50	-66.60	-13.00	H
LTE BAND 17 23790 16QAM	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1377.20	-65.75	0.70	6.00	-62.60	-13.00	V
	2020.40	-67.55	0.80	9.80	-60.70	-13.00	H
	2603.20	-64.95	0.90	10.70	-57.30	-13.00	H
	2965.20	-63.75	1.00	10.70	-56.20	-13.00	H
	4754.00	-75.55	1.30	12.50	-66.50	-13.00	H
	6381.20	-73.35	1.60	13.10	-64.00	-13.00	H
LTE BAND 17 23825 16QAM	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1378.40	-65.95	0.70	6.00	-62.80	-13.00	V
	2026.80	-67.45	0.80	9.80	-60.60	-13.00	H
	2604.40	-64.85	0.90	10.70	-57.20	-13.00	V
	2964.80	-63.55	1.00	10.70	-56.00	-13.00	H
	5012.60	-74.95	1.30	12.50	-65.90	-13.00	H
	6380.90	-73.45	1.60	13.10	-64.10	-13.00	H

LTE BAND 17 23755 64QAM	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1414.80	-65.95	0.70	6.00	-62.80	-13.00	V
	1853.60	-67.65	0.80	8.10	-62.50	-13.00	V
	2274.00	-66.25	0.90	9.80	-59.50	-13.00	V



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	2801.20	-64.35	1.00	10.70	-56.80	-13.00	V
	2975.20	-63.65	1.00	10.70	-56.10	-13.00	H
	4753.20	-75.65	1.30	12.50	-66.60	-13.00	H
LTE BAND 17 23790 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	1360.40	-66.15	0.70	6.00	-63.00	-13.00	V
	2014.80	-67.65	0.80	9.80	-60.80	-13.00	H
	2605.20	-64.95	0.90	10.70	-57.30	-13.00	V
	2965.20	-63.65	1.00	10.70	-56.10	-13.00	H
	4864.80	-75.75	1.30	12.50	-66.70	-13.00	H
	6699.50	-72.15	1.70	12.40	-63.60	-13.00	H
LTE BAND 17 23825 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	1375.20	-66.05	0.70	6.00	-62.90	-13.00	V
	2014.40	-67.55	0.80	9.80	-60.70	-13.00	H
	2590.40	-64.85	1.00	10.70	-57.30	-13.00	H
	2964.40	-63.75	1.00	10.70	-56.20	-13.00	H
	4766.40	-75.25	1.30	12.50	-66.20	-13.00	H
	6383.30	-73.35	1.60	13.10	-64.00	-13.00	H

LTE BAND 26 part 22 27033	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	1315.00	-66.25	0.70	6.00	-63.10	-13.00	V
	1613.00	-68.85	0.80	8.10	-63.70	-13.00	H
	2196.00	-66.95	0.90	9.80	-60.20	-13.00	V
	2961.40	-64.15	1.00	10.70	-56.60	-13.00	H
	3968.40	-77.55	1.20	12.20	-68.70	-13.00	H
	7103.20	-70.05	1.90	12.00	-62.10	-13.00	H
LTE BAND 26 psrt 22 26915	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	1375.60	-65.95	0.70	6.00	-62.80	-13.00	V
	2021.80	-67.55	0.80	9.80	-60.70	-13.00	H
	2592.80	-64.75	1.00	10.70	-57.20	-13.00	V
	2971.40	-63.55	1.00	10.70	-56.00	-13.00	H
	5650.40	-74.85	1.30	13.10	-65.20	-13.00	H
	7968.40	-68.85	1.90	11.30	-61.60	-13.00	H
LTE BAND 26 part 22 26797	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dBm)	limit	Polarization
	1382.20	-65.75	0.70	6.00	-62.60	-13.00	V
	2022.60	-67.45	0.80	9.80	-60.60	-13.00	H
	2605.40	-64.95	0.90	10.70	-57.30	-13.00	V
	2973.20	-63.75	1.00	10.70	-56.20	-13.00	H
	5640.80	-74.95	1.30	13.10	-65.30	-13.00	H



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	7127.20	-69.85	1.90	12.00	-61.90	-13.00	H
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LTE BAND 26 part 22 27033 16QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polariza tion
	1382.20	-66.35	0.70	6.00	-63.20	-13.00	V
	1695.80	-68.95	0.80	8.10	-63.80	-13.00	H
	2451.40	-66.45	0.90	9.80	-59.70	-13.00	V
	2966.00	-63.65	1.00	10.70	-56.10	-13.00	H
	4564.80	-77.15	1.30	12.50	-68.10	-13.00	H
	7220.00	-70.15	1.80	12.00	-62.10	-13.00	H
LTE BAND 26 psrt 22 26915 16QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polariza tion
	1380.80	-65.85	0.70	6.00	-62.70	-13.00	V
	2015.60	-67.35	0.80	9.80	-60.50	-13.00	H
	2967.00	-63.55	1.00	10.70	-56.00	-13.00	H
	4498.80	-76.15	1.20	12.40	-67.10	-13.00	H
	7106.00	-69.85	1.90	12.00	-61.90	-13.00	H
	8002.40	-68.65	2.00	11.30	-61.50	-13.00	H
LTE BAND 26 part 22 26797 16QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polariza tion
	1370.40	-65.95	0.70	6.00	-62.80	-13.00	V
	2026.80	-67.45	0.80	9.80	-60.60	-13.00	H
	2603.80	-64.95	0.90	10.70	-57.30	-13.00	H
	2967.40	-63.55	1.00	10.70	-56.00	-13.00	H
	4882.40	-75.25	1.40	12.50	-66.30	-13.00	H
	8002.80	-68.65	2.00	11.30	-61.50	-13.00	H

LTE BAND 26 part 22 27033 64QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(d Bm)	limit	Polariza tion
	1380.20	-65.85	0.70	6.00	-62.70	-13.00	V
	1978.60	-66.05	0.80	8.10	-60.90	-13.00	H
	2595.60	-64.65	1.00	10.70	-57.10	-13.00	V
	2974.80	-63.65	1.00	10.70	-56.10	-13.00	H
	4822.80	-75.45	1.30	12.50	-66.40	-13.00	H
	7294.40	-69.65	1.90	12.00	-61.70	-13.00	H
LTE BAND 26 psrt 22 26915 64QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(d Bm)	limit	Polariza tion
	1375.60	-65.95	0.70	6.00	-62.80	-13.00	V
	2088.60	-67.25	0.90	9.80	-60.50	-13.00	V
	2964.20	-63.75	1.00	10.70	-56.20	-13.00	H
	5035.20	-75.35	1.30	12.50	-66.30	-13.00	H
	7288.80	-69.65	1.90	12.00	-61.70	-13.00	H
	7981.20	-68.85	1.90	11.30	-61.60	-13.00	H



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LTE BAND 26 part 22 26797 64QAM	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	ERP(d Bm)	limit	Polariza tion
	1408.00	-65.65	0.70	6.00	-62.50	-13.00	V
	2027.40	-67.25	0.80	9.80	-60.40	-13.00	H
	2605.00	-64.75	0.90	10.70	-57.10	-13.00	V
	2965.00	-63.65	1.00	10.70	-56.10	-13.00	H
	4786.40	-75.35	1.30	12.50	-66.30	-13.00	H
	7132.00	-69.85	1.90	12.00	-61.90	-13.00	H

LTE BAND 26 part 90 26783	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1381.80	-65.75	0.70	6.00	-62.60	-13.00	V
	2020.40	-67.65	0.80	9.80	-60.80	-13.00	H
	2605.20	-64.95	0.90	10.70	-57.30	-13.00	V
	2974.00	-63.55	1.00	10.70	-56.00	-13.00	H
	4766.40	-75.25	1.30	12.50	-66.20	-13.00	H
	7976.40	-68.45	1.90	11.30	-61.20	-13.00	H
LTE BAND 26 psrt 90 26740	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1376.80	-65.85	0.70	6.00	-62.70	-13.00	V
	1982.60	-66.25	0.80	8.10	-61.10	-13.00	H
	2963.40	-63.55	1.00	10.70	-56.00	-13.00	H
	3941.60	-77.05	1.30	12.20	-68.30	-13.00	H
	4878.00	-75.15	1.40	12.50	-66.20	-13.00	H
	7290.80	-69.55	1.90	12.00	-61.60	-13.00	H
LTE BAND 26 part 90 26697	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1368.60	-65.85	0.70	6.00	-62.70	-13.00	V
	2028.60	-67.45	0.80	9.80	-60.60	-13.00	H
	2980.20	-63.75	1.00	10.70	-56.20	-13.00	H
	4880.00	-75.35	1.40	12.50	-66.40	-13.00	H
	5656.80	-74.95	1.30	13.10	-65.30	-13.00	H
	7291.60	-69.65	1.90	12.00	-61.70	-13.00	H

LTE BAND 26 part 90 26783 16QAM	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion
	1382.00	-65.95	0.70	6.00	-62.80	-13.00	V
	2024.00	-67.45	0.80	9.80	-60.60	-13.00	H
	2602.40	-64.85	0.90	10.70	-57.20	-13.00	V
	2965.80	-63.55	1.00	10.70	-56.00	-13.00	H
	4871.60	-75.35	1.40	12.50	-66.40	-13.00	H
	8003.20	-68.55	2.00	11.30	-61.40	-13.00	H
LTE	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	ERP(dB m)	limit	Polarizat ion



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BAND 26	MHz)	m)			m)		ion
psrt 90	1384.60	-65.85	0.70	6.00	-62.70	-13.00	V
26740	2005.20	-67.55	0.80	9.80	-60.70	-13.00	H
16QAM	2605.20	-64.85	0.90	10.70	-57.20	-13.00	V
	2974.00	-63.65	1.00	10.70	-56.10	-13.00	H
	4764.00	-75.45	1.30	12.50	-66.40	-13.00	H
	7117.60	-69.85	1.90	12.00	-61.90	-13.00	H
LTE	frequency(	Ppm(dB			ERP(dB		Polarizat
BAND 26	MHz)	m)	Path loss	Ga Antenna Gain(dBi)	m)	limit	ion
part 90	1376.20	-65.85	0.70	6.00	-62.70	-13.00	V
26697	2022.80	-67.55	0.80	9.80	-60.70	-13.00	H
16QAM	2973.00	-63.65	1.00	10.70	-56.10	-13.00	H
	4439.20	-76.25	1.30	12.40	-67.30	-13.00	H
	5649.20	-74.75	1.30	13.10	-65.10	-13.00	H
	8003.20	-68.55	2.00	11.30	-61.40	-13.00	H

LTE BAND	frequency(	Ppm(dBm	Path	Ga Antenna	ERP(dB		Polariza
26	MHz)	)	loss	Gain(dBi)	m)	limit	tion
part 90	1377.40	-65.75	0.70	6.00	-62.60	-13.00	V
26783	2027.80	-67.55	0.80	9.80	-60.70	-13.00	H
64QAM	2758.40	-64.25	1.00	10.70	-56.70	-13.00	H
	2972.20	-63.55	1.00	10.70	-56.00	-13.00	H
	4815.60	-75.35	1.30	12.50	-66.30	-13.00	H
	7122.00	-69.75	1.90	12.00	-61.80	-13.00	H
LTE BAND	frequency(	Ppm(dBm	Path	Ga Antenna	ERP(dB		Polariza
26	MHz)	)	loss	Gain(dBi)	m)	limit	tion
psrt 90	1382.60	-65.85	0.70	6.00	-62.70	-13.00	V
26740	2021.60	-67.45	0.80	9.80	-60.60	-13.00	H
64QAM	2979.40	-63.75	1.00	10.70	-56.20	-13.00	H
	4478.40	-76.15	1.20	12.40	-67.10	-13.00	V
	6725.20	-71.95	1.70	12.40	-63.40	-13.00	H
	7972.80	-68.55	1.90	11.30	-61.30	-13.00	H
LTE BAND	frequency(	Ppm(dBm	Path	Ga Antenna	ERP(dB		Polariza
26	MHz)	)	loss	Gain(dBi)	m)	limit	tion
part 90	1376.80	-65.95	0.70	6.00	-62.80	-13.00	V
26697	2022.20	-67.45	0.80	9.80	-60.60	-13.00	H
64QAM	2975.00	-63.55	1.00	10.70	-56.00	-13.00	H
	3942.00	-76.95	1.30	12.20	-68.20	-13.00	H
	5650.40	-74.75	1.30	13.10	-65.10	-13.00	H
	7994.40	-68.65	1.90	11.30	-61.40	-13.00	H



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LTE BAND 38 37775	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polariza tion
	2964.00	-63.65	1.00	10.70	-53.95	-25.00	H
	4814.80	-75.15	1.30	12.50	-63.95	-25.00	H
	7255.20	-68.95	1.90	12.00	-58.85	-25.00	V
	12301.27	-62.65	2.60	12.60	-52.65	-25.00	V
	14752.07	-58.15	2.50	11.20	-49.45	-25.00	H
	17697.50	-56.25	3.30	12.80	-46.75	-25.00	H
LTE BAND 38 38000	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polariza tion
	2970.00	-63.45	1.00	10.70	-53.75	-25.00	H
	4759.60	-75.05	1.30	12.50	-63.85	-25.00	H
	7143.00	-69.65	1.90	12.00	-59.55	-25.00	H
	12325.83	-62.45	2.60	12.60	-52.45	-25.00	V
	14744.73	-58.15	2.50	11.20	-49.45	-25.00	H
	17696.40	-56.65	3.30	12.80	-47.15	-25.00	H
LTE BAND 38 38225	frequency(M Hz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polariza tion
	2974.80	-63.65	1.00	10.70	-53.95	-25.00	H
	4828.80	-75.15	1.30	12.50	-63.95	-25.00	H
	7222.57	-69.35	1.80	12.00	-59.15	-25.00	H
	12312.63	-62.35	2.60	12.60	-52.35	-25.00	V
	14742.90	-58.05	2.50	11.20	-49.35	-25.00	H
	17700.80	-56.85	3.30	12.80	-47.35	-25.00	H

LTE BAND 38 37775 16QAM	frequency(MH z)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(d Bm)	limit	Polariza tion
	2964.00	-63.55	1.00	10.70	-53.85	-25.00	H
	4813.60	-75.55	1.30	12.50	-64.35	-25.00	V
	6308.40	-73.75	1.60	13.10	-62.25	-25.00	H
	11251.13	-62.05	2.60	10.50	-54.15	-25.00	V
	14746.57	-58.35	2.50	11.20	-49.65	-25.00	V
	17699.70	-56.35	3.30	12.80	-46.85	-25.00	H
LTE BAND 38 38000 16QAM	frequency(MH z)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(d Bm)	limit	Polariza tion
	2965.20	-63.45	1.00	10.70	-53.75	-25.00	H
	4926.00	-74.85	1.30	12.50	-63.65	-25.00	H
	7251.90	-69.35	1.90	12.00	-59.25	-25.00	H
	11037.00	-62.35	2.30	10.50	-54.15	-25.00	V
	14748.03	-58.15	2.50	11.20	-49.45	-25.00	H
	17699.33	-56.55	3.30	12.80	-47.05	-25.00	H
LTE BAND	frequency(MH z)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(d Bm)	limit	Polariza tion



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38 38225 16QAM	2966.80	-63.35	1.00	10.70	-53.65	-25.00	H
	4766.00	-75.35	1.30	12.50	-64.15	-25.00	H
	7130.53	-69.65	1.90	12.00	-59.55	-25.00	H
	12297.23	-62.35	2.60	12.60	-52.35	-25.00	V
	14746.20	-58.55	2.50	11.20	-49.85	-25.00	V
	17701.53	-56.75	3.30	12.80	-47.25	-25.00	H

LTE BAND 38 37775 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2972.40	-63.65	1.00	10.70	-53.95	-25.00	H
	4847.20	-75.25	1.30	12.50	-64.05	-25.00	H
	7251.53	-69.45	1.90	12.00	-59.35	-25.00	V
	12299.07	-62.25	2.60	12.60	-52.25	-25.00	V
	14747.30	-58.35	2.50	11.20	-49.65	-25.00	H
	17694.93	-56.85	3.30	12.80	-47.35	-25.00	H
LTE BAND 38 38000 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2970.00	-63.65	1.00	10.70	-53.95	-25.00	H
	4766.00	-75.15	1.30	12.50	-63.95	-25.00	H
	7153.63	-69.45	1.90	12.00	-59.35	-25.00	H
	12306.03	-62.25	2.60	12.60	-52.25	-25.00	V
	14745.83	-58.15	2.50	11.20	-49.45	-25.00	H
	17700.80	-56.75	3.30	12.80	-47.25	-25.00	H
LTE BAND 38 38225 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2968.40	-63.45	1.00	10.70	-53.75	-25.00	H
	4816.00	-75.25	1.30	12.50	-64.05	-25.00	H
	7146.67	-69.35	1.90	12.00	-59.25	-25.00	H
	12289.17	-62.45	2.60	12.60	-52.45	-25.00	V
	14747.30	-58.35	2.50	11.20	-49.65	-25.00	H
	17697.87	-56.65	3.30	12.80	-47.15	-25.00	H

LTE BAND 41 39675	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2975.20	-63.45	1.00	10.70	-53.75	-25.00	H
	4476.40	-76.05	1.20	12.40	-64.85	-25.00	H
	7219.27	-69.45	1.80	12.00	-59.25	-25.00	H
	12288.43	-62.45	2.60	12.60	-52.45	-25.00	V
	14749.50	-58.55	2.50	11.20	-49.85	-25.00	H
	17701.90	-56.65	3.30	12.80	-47.15	-25.00	H
LTE BAND 41 40620	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2903.20	-64.55	1.00	10.70	-54.85	-25.00	H



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	3806.40	-77.55	1.20	12.20	-66.55	-25.00	H
	5149.20	-75.45	1.30	12.50	-64.25	-25.00	V
	8861.93	-69.35	1.90	12.00	-59.25	-25.00	V
	14824.30	-58.55	2.50	11.20	-49.85	-25.00	H
	17694.93	-56.65	3.30	12.80	-47.15	-25.00	H
LTE BAND 41 41565	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polariza tion
	2877.60	-64.45	1.00	10.70	-54.75	-25.00	H
	3589.20	-77.95	1.10	12.20	-66.85	-25.00	H
	4829.20	-75.35	1.30	12.50	-64.15	-25.00	H
	6592.40	-72.95	1.70	12.40	-62.25	-25.00	H
	9998.23	-65.75	2.20	11.20	-56.75	-25.00	V
	14661.87	-58.95	2.60	11.20	-50.35	-25.00	H

LTE BAND 41 39675 16QAM	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(d Bm)	limit	Polariza tion
	2964.40	-63.55	1.00	10.70	-53.85	-25.00	H
	4986.80	-74.85	1.30	12.50	-63.65	-25.00	H
	7303.97	-69.35	1.90	12.00	-59.25	-25.00	H
	12326.57	-62.55	2.60	12.60	-52.55	-25.00	V
	14749.50	-58.35	2.50	11.20	-49.65	-25.00	H
	17697.50	-56.55	3.30	12.80	-47.05	-25.00	H
LTE BAND 41 40620 16QAM	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(d Bm)	limit	Polariza tion
	2916.00	-64.55	1.00	10.70	-54.85	-25.00	V
	3818.00	-77.75	1.20	12.20	-66.75	-25.00	H
	4971.20	-75.85	1.30	12.50	-64.65	-25.00	H
	7291.50	-69.25	1.90	12.00	-59.15	-25.00	H
	14736.30	-58.55	2.50	11.20	-49.85	-25.00	H
	17696.77	-56.75	3.30	12.80	-47.25	-25.00	H
LTE BAND 41 41565 16QAM	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(d Bm)	limit	Polariza tion
	2964.40	-63.45	1.00	10.70	-53.75	-25.00	H
	3944.00	-76.75	1.30	12.20	-65.85	-25.00	V
	7214.13	-69.45	1.80	12.00	-59.25	-25.00	H
	11073.30	-62.25	2.30	10.50	-54.05	-25.00	V
	14801.93	-58.55	2.50	11.20	-49.85	-25.00	H
	17702.63	-56.65	3.30	12.80	-47.15	-25.00	H

LTE BAND 41 39675 64QAM	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(d Bm)	limit	Polariza tion
	2970.80	-63.55	1.00	10.70	-53.85	-25.00	H
	4816.80	-74.95	1.30	12.50	-63.75	-25.00	H



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	7152.17	-69.15	1.90	12.00	-59.05	-25.00	H
	12271.93	-62.65	2.60	12.60	-52.65	-25.00	V
	14750.97	-58.45	2.50	11.20	-49.75	-25.00	V
	17698.97	-56.45	3.30	12.80	-46.95	-25.00	H
LTE BAND 41 40620 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2906.80	-64.55	1.00	10.70	-54.85	-25.00	V
	3590.00	-77.85	1.10	12.20	-66.75	-25.00	H
	4534.00	-76.75	1.20	12.50	-65.45	-25.00	H
	7939.03	-68.65	1.90	11.30	-59.25	-25.00	H
	14765.63	-59.55	2.50	11.20	-50.85	-25.00	H
	17696.03	-56.35	3.30	12.80	-46.85	-25.00	H
LTE BAND 41 41565 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2962.40	-63.95	1.00	10.70	-54.25	-25.00	H
	4245.20	-77.05	1.20	12.40	-65.85	-25.00	H
	7282.33	-69.25	1.90	12.00	-59.15	-25.00	H
	11503.40	-61.75	2.60	11.00	-53.35	-25.00	V
	14744.37	-58.15	2.50	11.20	-49.45	-25.00	H
	17698.60	-56.35	3.30	12.80	-46.85	-25.00	H

LTE BAND 66 131979	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2451.20	-66.25	0.90	9.80	-57.35	-13.00	H
	3534.80	-78.65	1.10	12.20	-67.55	-13.00	H
	4771.60	-76.25	1.30	12.50	-65.05	-13.00	H
	5800.40	-76.45	1.50	13.10	-64.85	-13.00	H
	6824.80	-72.45	1.80	12.40	-61.85	-13.00	H
	12238.20	-63.85	2.60	12.60	-53.85	-13.00	V
LTE BAND 66 132322	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2970.40	-63.55	1.00	10.70	-53.85	-13.00	H
	4392.80	-76.85	1.30	12.40	-65.75	-13.00	H
	5849.60	-75.55	1.40	13.10	-63.85	-13.00	H
	7528.00	-69.25	1.90	11.30	-59.85	-13.00	H
	10214.20	-65.45	2.20	11.30	-56.35	-13.00	V
	12879.13	-64.75	2.70	13.80	-53.65	-13.00	V
LTE BAND 66 132665	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2861.20	-64.15	1.00	10.70	-54.45	-13.00	H
	3944.40	-76.55	1.30	12.20	-65.65	-13.00	H
	5100.80	-75.25	1.20	12.50	-63.95	-13.00	H
	7253.00	-68.95	1.90	12.00	-58.85	-13.00	H



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	10253.07	-64.85	2.20	11.30	-55.75	-13.00	H
	14792.40	-58.35	2.50	11.20	-49.65	-13.00	H

LTE BAND 66 131979 16QAM	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polariza tion
	2453.20	-65.95	0.90	9.80	-57.05	-13.00	H
	3865.60	-78.15	1.20	12.20	-67.15	-13.00	H
	5883.60	-76.35	1.50	13.10	-64.75	-13.00	H
	7199.83	-69.95	1.80	12.00	-59.75	-13.00	V
	10455.10	-66.05	2.30	11.30	-57.05	-13.00	H
	13958.60	-63.95	2.20	12.40	-53.75	-13.00	V
LTE BAND 66 132322 16QAM	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polariza tion
	2980.80	-64.15	1.00	10.70	-54.45	-13.00	H
	3822.80	-77.65	1.20	12.20	-66.65	-13.00	H
	5029.60	-75.65	1.30	12.50	-64.45	-13.00	H
	7023.83	-70.25	1.80	12.00	-60.05	-13.00	H
	10754.67	-63.45	2.40	10.80	-55.05	-13.00	H
	14745.83	-58.35	2.50	11.20	-49.65	-13.00	H
LTE BAND 66 132665 16QAM	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(dB m)	limit	Polariza tion
	2760.40	-64.15	1.00	10.70	-54.45	-13.00	V
	3860.00	-77.25	1.20	12.20	-66.25	-13.00	V
	5647.60	-75.05	1.30	13.10	-63.25	-13.00	H
	8059.67	-68.45	2.00	11.30	-59.15	-13.00	H
	12338.67	-62.25	2.60	12.60	-52.25	-13.00	V
	14746.93	-58.15	2.50	11.20	-49.45	-13.00	H

LTE BAND 66 131979 64QAM	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(d Bm)	limit	Polariza tion
	2208.40	-67.15	0.90	9.80	-58.25	-13.00	V
	3776.00	-77.85	1.10	12.20	-66.75	-13.00	V
	5416.00	-76.25	1.20	12.50	-64.95	-13.00	H
	7261.07	-70.45	1.90	12.00	-60.35	-13.00	V
	10274.70	-66.55	2.10	11.30	-57.35	-13.00	H
	13747.40	-63.55	2.50	12.40	-53.65	-13.00	V
LTE BAND 66 132322 64QAM	frequency(MHz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(d Bm)	limit	Polariza tion
	2867.20	-64.05	1.00	10.70	-54.35	-13.00	V
	4502.00	-76.15	1.20	12.50	-64.85	-13.00	V
	7211.20	-69.55	1.80	12.00	-59.35	-13.00	H
	9833.23	-65.45	2.30	11.20	-56.55	-13.00	V
	12291.37	-62.35	2.60	12.60	-52.35	-13.00	V



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	14737.03	-58.15	2.50	11.20	-49.45	-13.00	V
LTE BAND 66 132665 64QAM	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2966.00	-63.65	1.00	10.70	-53.95	-13.00	H
	3390.80	-77.35	1.10	11.50	-66.95	-13.00	H
	3910.80	-77.95	1.30	12.20	-67.05	-13.00	H
	4460.40	-77.15	1.20	12.40	-65.95	-13.00	H
	5250.00	-75.55	1.80	12.50	-64.85	-13.00	H
	6568.40	-72.95	1.70	12.40	-62.25	-13.00	H

LTE BAND CA_41C QPSK 20MHz+5M Hz 39750+398 67	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2966.40	-64.05	1.00	10.70	-54.35	-25.00	H
	3547.60	-77.95	1.20	12.20	-66.95	-25.00	H
	4814.40	-75.65	1.30	12.50	-64.45	-25.00	H
	7968.00	-68.75	1.90	11.30	-59.35	-25.00	H
	14738.13	-59.05	2.50	11.20	-50.35	-25.00	H
	17700.43	-57.25	3.30	12.80	-47.75	-25.00	H
LTE BAND CA_41C QPSK 20MHz+5M Hz 40595+407 12	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2964.40	-64.05	1.00	10.70	-54.35	-25.00	H
	3414.80	-77.25	1.20	11.50	-66.95	-25.00	H
	4589.20	-76.55	1.30	12.50	-65.35	-25.00	H
	7545.60	-68.95	1.80	11.30	-59.45	-25.00	H
	12310.07	-63.25	2.60	12.60	-53.25	-25.00	V
	17705.93	-56.75	3.30	12.80	-47.25	-25.00	H
LTE BAND CA_41C QPSK 20MHz+5M Hz 41440+415 57	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2964.00	-64.15	1.00	10.70	-54.45	-25.00	H
	3455.20	-77.85	1.10	11.50	-67.45	-25.00	V
	4474.80	-76.55	1.20	12.40	-65.35	-25.00	V
	6311.60	-73.95	1.60	13.10	-62.45	-25.00	H
	11474.43	-61.85	2.60	10.50	-53.95	-25.00	V
	17700.43	-57.15	3.30	12.80	-47.65	-25.00	H

LTE BAND CA_7C QPSK 20MHz+20M Hz 20850+2104 8	frequency(MHz)	Ppm(dBm)	Path loss	Ga Antenna Gain(dBi)	EIRP(dBm)	limit	Polarization
	2968.00	-64.05	1.00	10.70	-54.35	-25.00	H
	4754.80	-75.75	1.30	12.50	-64.55	-25.00	H
	7251.90	-69.55	1.90	12.00	-59.45	-25.00	H
	11478.10	-61.65	2.60	10.50	-53.75	-25.00	V
	14810.37	-58.85	2.50	11.20	-50.15	-25.00	H
	17705.57	-56.65	3.30	12.80	-47.15	-25.00	H



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LTE BAND CA_7C QPSK 20MHz+20M Hz 21001+2119 9	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(d Bm)	limit	Polariz ation
	2973.60	-63.95	1.00	10.70	-54.25	-25.00	H
	4756.40	-75.75	1.30	12.50	-64.55	-25.00	H
	7149.60	-69.85	1.90	12.00	-59.75	-25.00	H
	11394.13	-61.75	2.50	10.50	-53.75	-25.00	V
	14799.73	-58.85	2.50	11.20	-50.15	-25.00	H
	17705.20	-56.95	3.30	12.80	-47.45	-25.00	H
LTE BAND CA_7C QPSK 20MHz+20M Hz 21152+2135 0	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(d Bm)	limit	Polariz ation
	2973.20	-63.95	1.00	10.70	-54.25	-25.00	H
	4842.00	-75.85	1.30	12.50	-64.65	-25.00	H
	6379.20	-73.55	1.60	13.10	-62.05	-25.00	H
	11534.20	-62.05	2.60	11.00	-53.65	-25.00	V
	14794.60	-58.85	2.50	11.20	-50.15	-25.00	H
	17706.30	-56.85	3.30	12.80	-47.35	-25.00	H

LTE BAND CA_38C QPSK 20MHz+20M Hz 37850+3804 8	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(d Bm)	limit	Polariz ation
	2964.40	-64.05	1.00	10.70	-54.35	-25.00	H
	4872.80	-75.65	1.40	12.50	-64.55	-25.00	H
	7214.87	-69.85	1.80	12.00	-59.65	-25.00	H
	11686.73	-62.25	2.60	11.00	-53.85	-25.00	V
	14995.17	-58.95	2.40	11.20	-50.15	-25.00	H
	17704.10	-56.75	3.30	12.80	-47.25	-25.00	H
LTE BAND CA_38C QPSK 20MHz+20M Hz 37901+3809 9	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(d Bm)	limit	Polariz ation
	2758.80	-64.75	1.00	10.70	-55.05	-25.00	H
	3611.20	-78.05	1.20	12.20	-67.05	-25.00	H
	5642.40	-75.15	1.30	13.10	-63.35	-25.00	H
	7991.83	-68.85	1.90	11.30	-59.45	-25.00	H
	14741.80	-58.85	2.50	11.20	-50.15	-25.00	H
	17709.60	-56.95	3.30	12.80	-47.45	-25.00	H
LTE BAND CA_38C QPSK 20MHz+20M Hz 37952+3815 0	frequency(M Hz)	Ppm(dB m)	Path loss	Ga Antenna Gain(dBi)	EIRP(d Bm)	limit	Polariz ation
	2963.60	-64.15	1.00	10.70	-54.45	-25.00	H
	3394.80	-77.75	1.10	11.50	-67.35	-25.00	H
	4565.60	-76.75	1.30	12.50	-65.55	-25.00	H
	7197.27	-70.15	1.80	12.00	-59.95	-25.00	H
	14793.87	-59.15	2.50	11.20	-50.45	-25.00	H
	17700.80	-57.25	3.30	12.80	-47.75	-25.00	H

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

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



A.3 FREQUENCY STABILITY

Reference

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

A.3.1 Method of Measurement

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

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

A.3.2 Measurement Limit

According to the JTC standard the frequency stability of the carrier shall be accurate to within 0.1 ppm of the received frequency from the base station. This accuracy is sufficient to meet Sec. 24.235, Frequency Stability. 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 between 3.6V and 4.45V, with a nominal voltage of 3.87V. 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. These voltages represent a tolerance from -7% to 15%. For the purposes of measuring frequency stability these voltage limits are to be used.

A.3.3 Measurement results

LTE Band 2, 1.4MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	22	12	7	0.012	0.006	0.004
3.87	13	8	11	0.007	0.004	0.006
4.45	9	5	4	0.005	0.003	0.002

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	22	18	-20	0.012	0.010	0.011
-20	15	-15	13	0.008	0.008	0.007
-10	14	-22	-19	0.007	0.012	0.010
0	26	15	21	0.014	0.008	0.011
10	28	6	14	0.015	0.003	0.007
20	7	18	9	0.004	0.010	0.005
30	13	9	7	0.007	0.005	0.004
40	-10	28	-25	0.005	0.015	0.013
50	16	-23	-21	0.009	0.012	0.011

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

LTE Band 4, 1.4MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	16	20	-10	0.009	0.012	0.006
3.87	7	9	12	0.004	0.005	0.007
4.45	21	22	-5	0.012	0.013	0.003

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	-17	14	16	0.010	0.008	0.009
-20	14	-16	-15	0.008	0.009	0.009
-10	-11	-10	15	0.006	0.006	0.009
0	9	21	9	0.005	0.012	0.005
10	7	18	-8	0.004	0.010	0.005
20	-12	-5	14	0.007	0.003	0.008
30	24	-9	19	0.014	0.005	0.011
40	19	-17	11	0.011	0.010	0.006
50	-8	6	-20	0.005	0.003	0.012

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

LTE Band 5, 1.4MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	12	14	-6	0.014	0.017	0.007
3.87	-10	13	-8	0.012	0.016	0.010
4.45	-11	-5	-10	0.013	0.006	0.012

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	-18	-11	11	0.022	0.013	0.013
-20	10	-14	12	0.012	0.017	0.014
-10	-8	13	-14	0.010	0.016	0.017
0	14	10	11	0.017	0.012	0.013
10	19	8	-15	0.023	0.010	0.018
20	-17	-10	-10	0.020	0.012	0.012
30	15	-8	-8	0.018	0.010	0.010
40	-5	17	19	0.006	0.020	0.023
50	9	-14	-19	0.011	0.017	0.023

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

LTE Band 7, 5MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	23	26	15	0.009	0.010	0.006
3.87	5	8	19	0.002	0.003	0.007
4.45	16	7	28	0.006	0.003	0.011

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	-28	-30	-38	0.011	0.012	0.015
-20	25	16	-33	0.010	0.006	0.013
-10	-14	-22	-31	0.006	0.009	0.012
0	14	33	22	0.006	0.013	0.009
10	29	25	26	0.011	0.010	0.010
20	14	18	39	0.006	0.007	0.015
30	26	24	28	0.010	0.009	0.011
40	-10	-25	-31	0.004	0.010	0.012
50	-19	27	-26	0.007	0.011	0.010

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

LTE Band 12, 1.4MHz bandwidth (worst case of all bandwidths)
Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	22	13	22	0.031	0.018	0.031
3.87	16	15	24	0.023	0.021	0.034
4.45	28	26	16	0.040	0.037	0.023

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	-11	21	-26	0.016	0.030	0.037
-20	8	11	12	0.011	0.016	0.017
-10	9	-13	-21	0.013	0.018	0.030
0	16	23	8	0.023	0.033	0.011
10	28	16	15	0.040	0.023	0.021
20	5	17	12	0.007	0.024	0.017
30	22	9	29	0.031	0.013	0.041
40	-18	-19	-22	0.025	0.027	0.031
50	9	20	16	0.013	0.028	0.023

Expanded measurement uncertainty is 10Hz, k = 2

LTE Band 13, 5MHz bandwidth (worst case of all bandwidths)
Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	13	22	9	0.017	0.028	0.012
3.87	26	15	15	0.033	0.019	0.019
4.45	25	26	3	0.032	0.033	0.004

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	-10	-16	-30	0.013	0.020	0.038
-20	7	14	28	0.009	0.018	0.036
-10	5	17	19	0.006	0.022	0.024
0	1	22	44	0.001	0.028	0.056
10	-8	13	8	0.010	0.017	0.010
20	-3	4	7	0.004	0.005	0.009
30	9	6	6	0.012	0.008	0.008
40	-13	13	22	0.017	0.017	0.028
50	-6	10	-17	0.008	0.013	0.022

Expanded measurement uncertainty is 10Hz, k = 2

LTE Band 17, 5MHz bandwidth (worst case of all bandwidths)
Frequency Error vs Voltage



No. I21N03262-RF-LTE

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	-10	5	8	0.013	0.006	0.010
3.87	6	-7	7	0.008	0.009	0.009
4.45	7	-4	9	0.009	0.005	0.012

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	9	-11	-10	0.013	0.015	0.014
-20	-5	9	8	0.007	0.013	0.011
-10	-8	6	6	0.011	0.008	0.008
0	-11	7	9	0.014	0.009	0.012
10	6	-6	5	0.008	0.008	0.006
20	6	-11	-7	0.008	0.014	0.009
30	-2	-8	10	0.003	0.010	0.013
40	-10	4	10	0.014	0.006	0.014
50	7	9	7	0.009	0.013	0.009

Expanded measurement uncertainty is 10Hz, k = 2

LTE Band 26(814MHz-824MHz), 1.4MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	-26	18	-26	0.032	0.022	0.032
3.87	-35	-25	35	0.043	0.031	0.043
4.45	9	-38	33	0.011	0.046	0.040

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	-34	21	-35	0.042	0.026	0.043
-20	19	-14	27	0.023	0.017	0.033
-10	26	17	26	0.032	0.021	0.032
0	-36	42	44	0.044	0.051	0.054
10	29	-25	-33	0.035	0.031	0.040
20	27	-16	27	0.033	0.020	0.033
30	-31	-42	38	0.038	0.051	0.046
40	27	-31	33	0.033	0.038	0.040
50	-19	28	-39	0.023	0.034	0.048

Expanded measurement uncertainty is 10Hz, k = 2

LTE band 26(824MHz-849MHz), 1.4MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM

3.60	19	-22	-9	0.023	0.026	0.011
3.87	-26	35	16	0.031	0.042	0.019
4.45	35	18	-3	0.042	0.022	0.004

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	-26	33	-39	0.031	0.039	0.047
-20	19	-35	27	0.023	0.042	0.032
-10	-24	29	24	0.029	0.035	0.029
0	-34	-26	26	0.041	0.031	0.031
10	-15	28	15	0.018	0.033	0.018
20	29	-31	-15	0.035	0.037	0.018
30	26	49	26	0.031	0.059	0.031
40	-29	-30	-38	0.035	0.036	0.045
50	27	39	-28	0.032	0.047	0.033

Expanded measurement uncertainty is 10Hz, k = 2

LTE Band 38, 5MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	-21	25	-15	0.008	0.010	0.006
3.87	-19	-16	27	0.007	0.006	0.010
4.45	20	18	29	0.008	0.007	0.011

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	-29	-22	31	0.011	0.008	0.012
-20	27	-26	19	0.010	0.010	0.007
-10	19	18	-19	0.007	0.007	0.007
0	21	34	20	0.008	0.013	0.008
10	-22	-19	19	0.008	0.007	0.007
20	36	-22	25	0.014	0.008	0.010
30	23	14	-22	0.009	0.005	0.008
40	-31	-21	-25	0.012	0.008	0.010
50	-20	25	-32	0.008	0.010	0.012

Expanded measurement uncertainty is 10 Hz, k = 2

LTE Band 41, 5MHz bandwidth (worst case of all bandwidths)
Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	5	8	12	0.002	0.003	0.005
3.87	16	15	11	0.006	0.006	0.004
4.45	8	16	18	0.003	0.006	0.007

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	-9	14	-23	0.003	0.005	0.009
-20	11	13	20	0.004	0.005	0.008
-10	-10	-8	13	0.004	0.003	0.005
0	9	14	21	0.003	0.005	0.008
10	5	2	24	0.002	0.001	0.009
20	21	3	19	0.008	0.001	0.007
30	9	23	17	0.003	0.009	0.007
40	-18	-11	-13	0.007	0.004	0.005
50	16	-17	23	0.006	0.007	0.009

Expanded measurement uncertainty is 10 Hz, $k = 2$
LTE Band 66, 1.4MHz bandwidth (worst case of all bandwidths)
Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	28	25	-11	0.016	0.014	0.006
3.87	-25	-23	24	0.014	0.013	0.014
4.45	16	-16	9	0.009	0.009	0.005

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	-17	-22	-20	0.010	0.013	0.011
-20	-19	-13	-17	0.011	0.007	0.010
-10	-14	-15	-18	0.008	0.009	0.010
0	-18	18	-26	0.010	0.010	0.015
10	-21	17	-14	0.012	0.010	0.008
20	-19	16	25	0.011	0.009	0.014
30	-13	9	13	0.007	0.005	0.007
40	-10	-8	-23	0.006	0.005	0.013
50	-19	-17	-17	0.011	0.010	0.010

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



LTE Band CA_7C, 15MHz+10MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	-16	15	3	0.006	0.006	0.001
3.87	24	-12	5	0.009	0.005	0.002
4.45	-8	-13	18	0.003	0.005	0.007

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	-19	-18	-20	0.007	0.007	0.008
-20	20	16	11	0.008	0.006	0.004
-10	14	17	19	0.006	0.007	0.007
0	-18	18	-26	0.007	0.007	0.010
10	16	15	-5	0.006	0.006	0.002
20	7	8	-24	0.003	0.003	0.009
30	21	-22	33	0.008	0.009	0.013
40	-14	15	-29	0.006	0.006	0.011
50	18	-10	20	0.007	0.004	0.008

Expanded measurement uncertainty is 10Hz, k = 2

LTE Band CA_38C, 15MHz+15MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	-18	-15	24	0.007	0.006	0.009
3.87	-20	22	17	0.008	0.009	0.007
4.45	19	23	24	0.007	0.009	0.009

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	-19	-15	21	0.007	0.006	0.008
-20	16	18	20	0.006	0.007	0.008
-10	-15	12	14	0.006	0.005	0.005
0	16	7	10	0.006	0.003	0.004
10	-9	-8	17	0.003	0.003	0.007
20	26	-19	9	0.010	0.007	0.003
30	-30	-11	14	0.012	0.004	0.005
40	10	17	13	0.004	0.007	0.005
50	-21	-15	15	0.008	0.006	0.006

Expanded measurement uncertainty is 10 Hz, k = 2

LTE Band CA_41C, 5MHz+20MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage



Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	19	-35	-26	0.007	0.013	0.010
3.87	-26	41	15	0.010	0.016	0.006
4.45	-35	-8	35	0.013	0.003	0.013

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	-32	17	31	0.012	0.007	0.012
-20	-25	26	24	0.010	0.010	0.009
-10	15	-20	-21	0.006	0.008	0.008
0	33	28	26	0.013	0.011	0.010
10	-24	-36	17	0.009	0.014	0.007
20	17	24	14	0.007	0.009	0.005
30	9	-16	-15	0.003	0.006	0.006
40	-20	14	-27	0.008	0.005	0.010
50	22	-29	28	0.008	0.011	0.011

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

A.4 OCCUPIED BANDWIDTH

Reference

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

A.4.1 Occupied Bandwidth Results

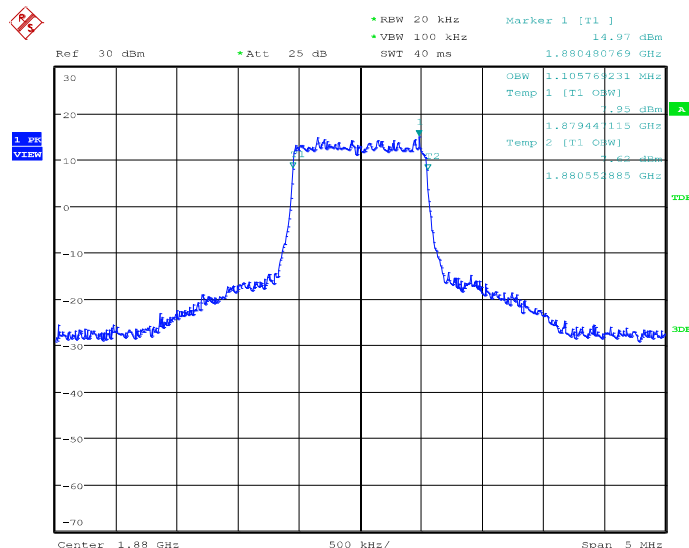
Occupied bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the extreme and mid frequencies of the US Cellular/PCS frequency bands. The table below lists the measured 99% BW. Spectrum analyzer plots are included on the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

- The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (i.e., two to five times the OBW).
- The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
- Set the reference level of the instrument as required to keep the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope must be at least $10\log(\text{OBW} / \text{RBW})$ below the reference level.
- Set the detection mode to peak, and the trace mode to max hold.
- Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

LTE band 2, 1.4MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1880.0	QPSK	16QAM	64QAM
	1105.77	1089.74	1089.74

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

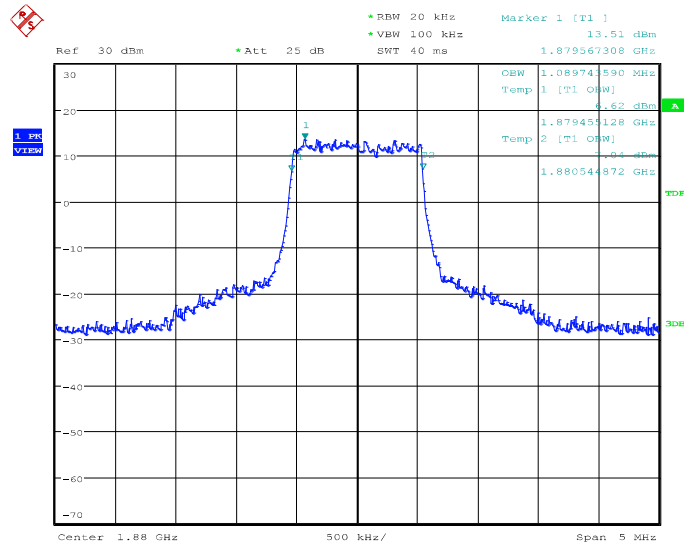


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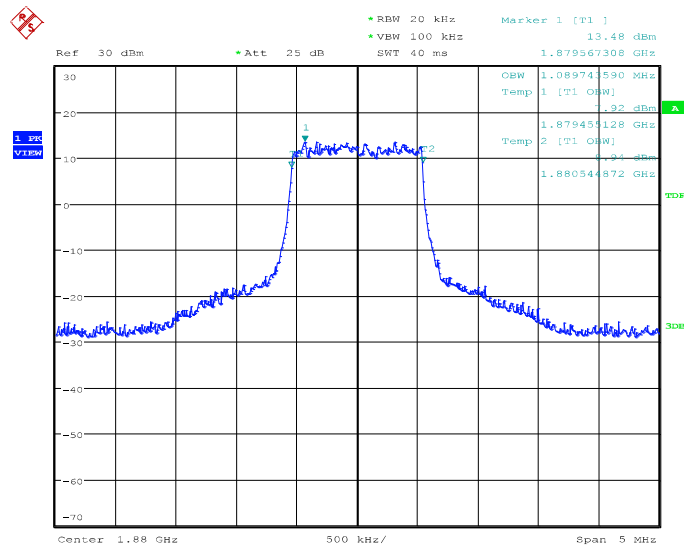
No. I21N03262-RF-LTE

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



Date: 9.NOV.2021 08:43:31

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



Date: 9.NOV.2021 11:58:22

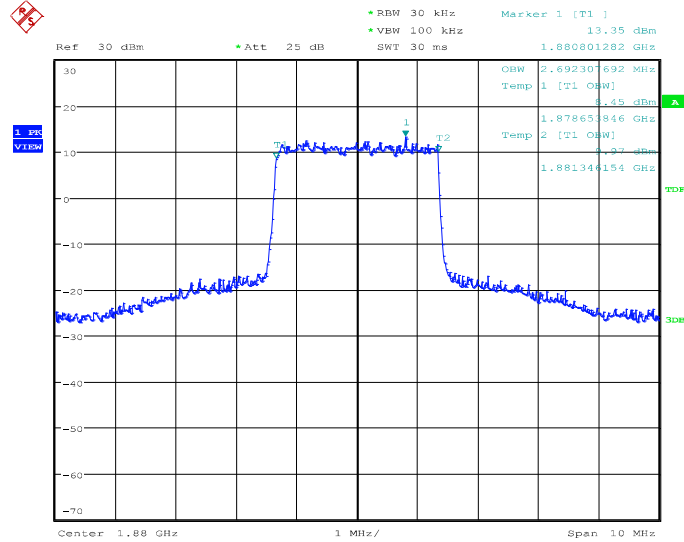


No. I21N03262-RF-LTE

LTE band 2, 3MHz (99% BW)

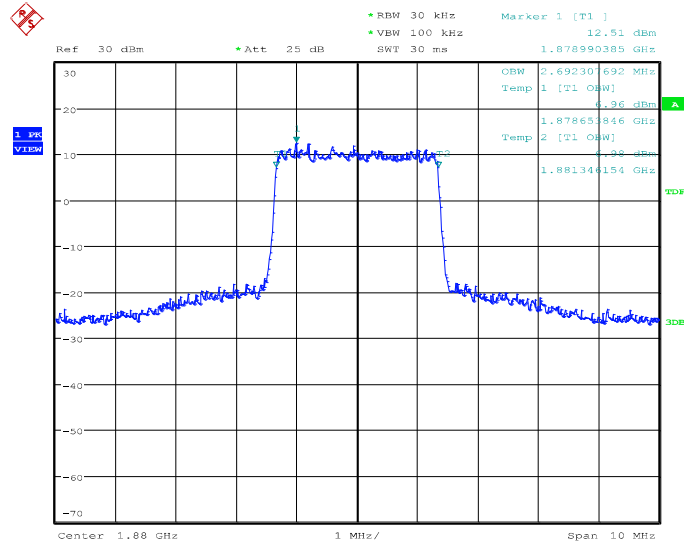
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1880.0	QPSK	16QAM	64QAM
	2692.31	2692.31	2692.31

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



Date: 9.NOV.2021 08:46:26

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

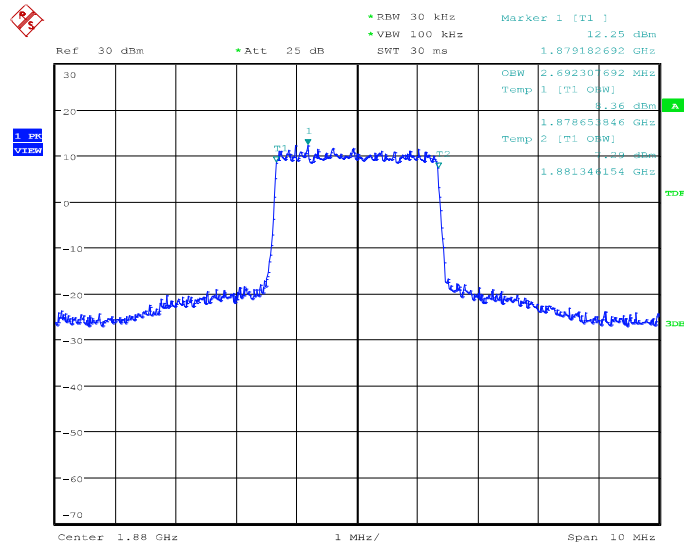


Date: 9.NOV.2021 08:46:39



No. I21N03262-RF-LTE

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



Date: 9.NOV.2021 12:00:55

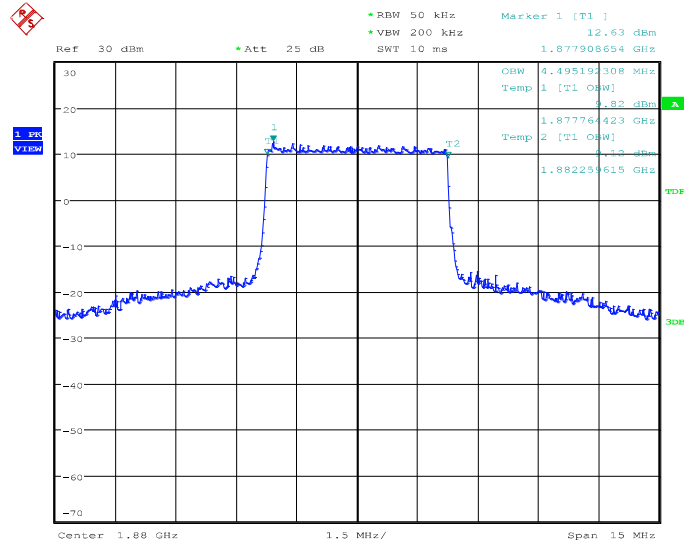


No. I21N03262-RF-LTE

LTE band 2, 5MHz (99% BW)

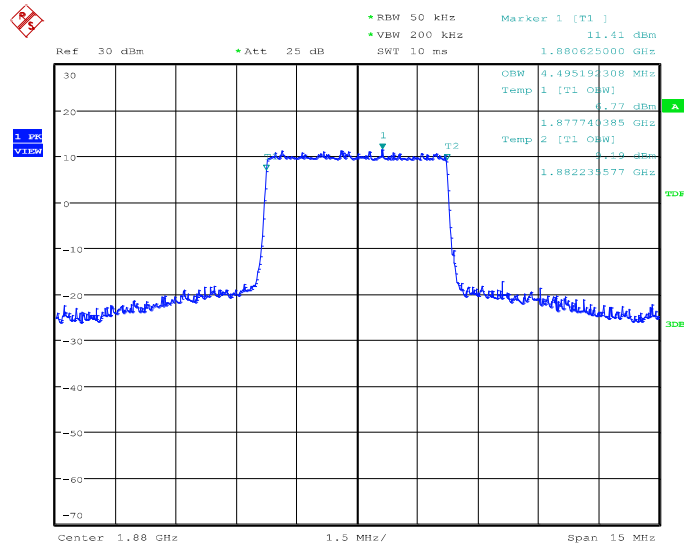
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1880.0	QPSK	16QAM	64QAM
	4495.19	4495.19	4519.23

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



Date: 9.NOV.2021 08:49:34

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

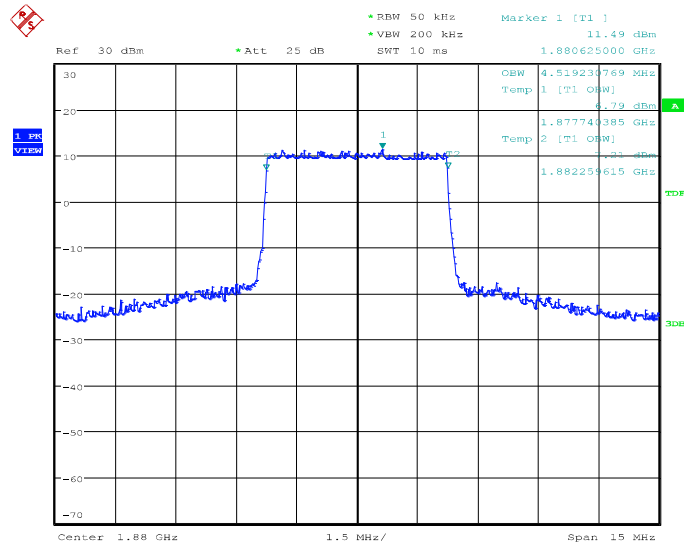


Date: 9.NOV.2021 08:49:48



No. I21N03262-RF-LTE

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



Date: 9.NOV.2021 12:03:28

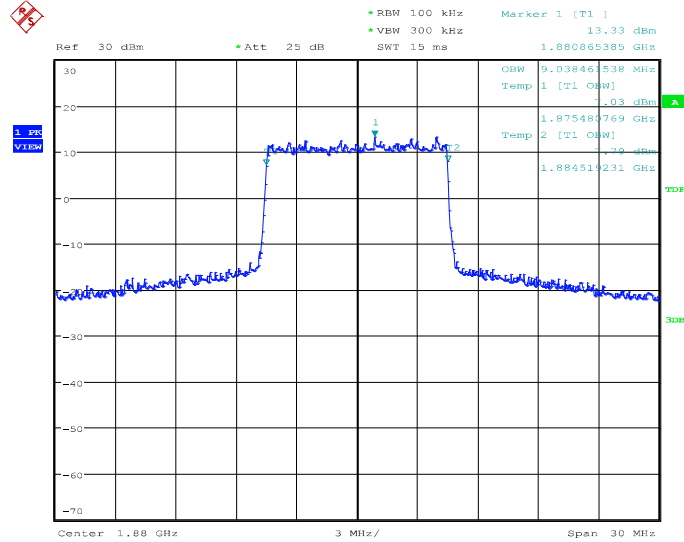


No. I21N03262-RF-LTE

LTE band 2, 10MHz (99% BW)

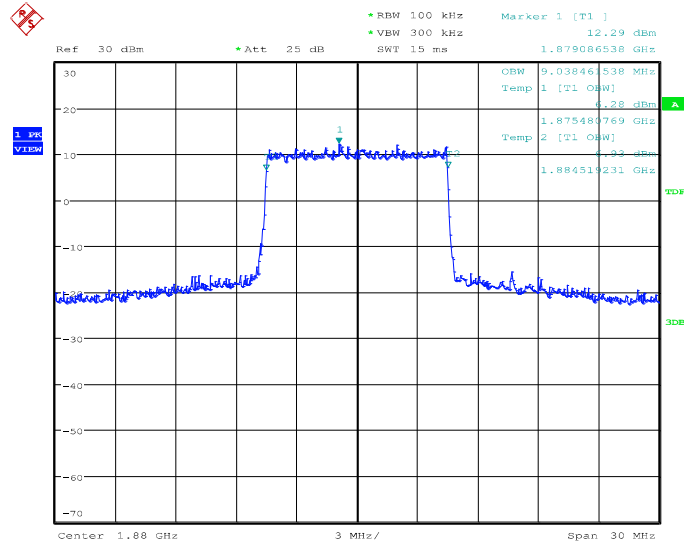
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1880.0	QPSK	16QAM	64QAM
	9038.46	9038.46	8990.38

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



Date: 9.NOV.2021 08:52:43

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

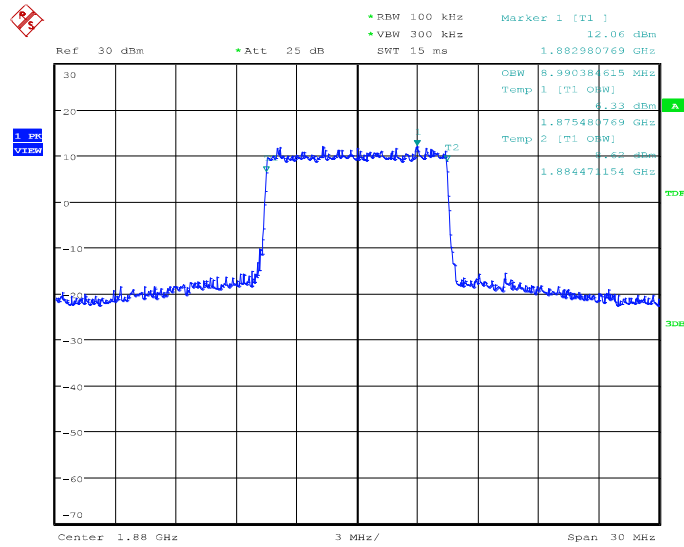


Date: 9.NOV.2021 08:52:57



No. I21N03262-RF-LTE

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



Date: 9.NOV.2021 12:06:02

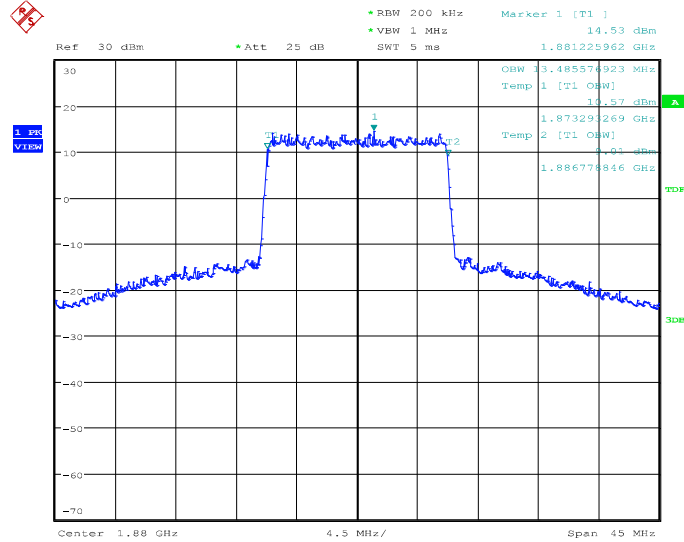


No. I21N03262-RF-LTE

LTE band 2, 15MHz (99% BW)

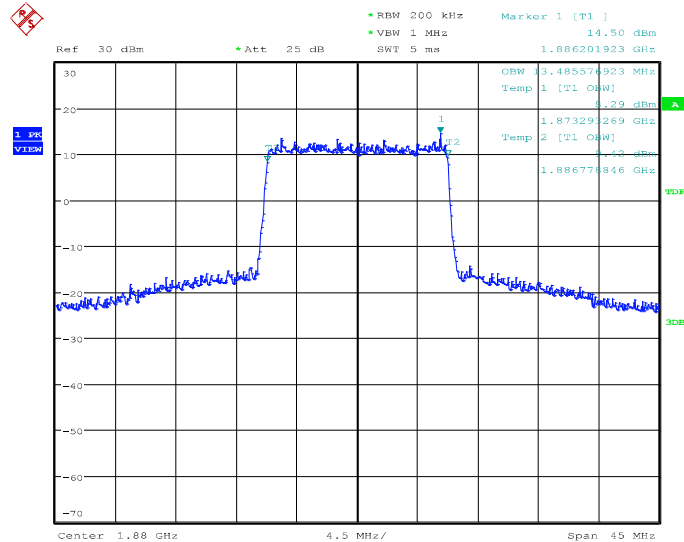
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
	QPSK	16QAM	64QAM
1880.0	13485.58	13485.58	13485.58

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



Date: 9.NOV.2021 08:55:52

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

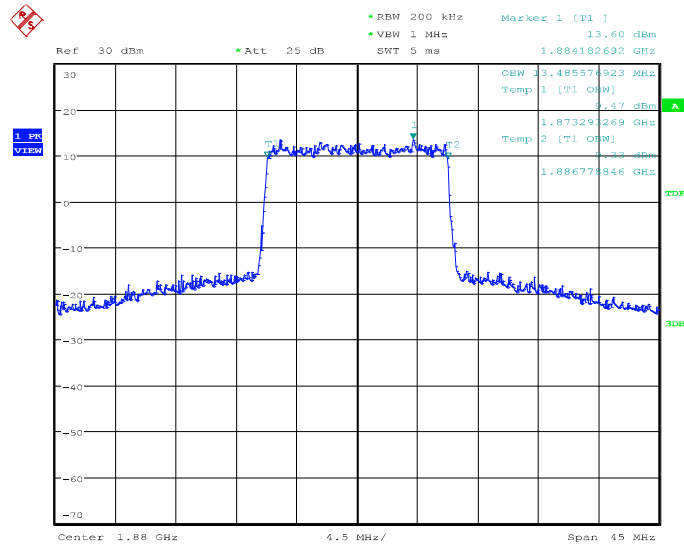


Date: 9.NOV.2021 08:56:06



No. I21N03262-RF-LTE

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



Date: 9.NOV.2021 12:08:35

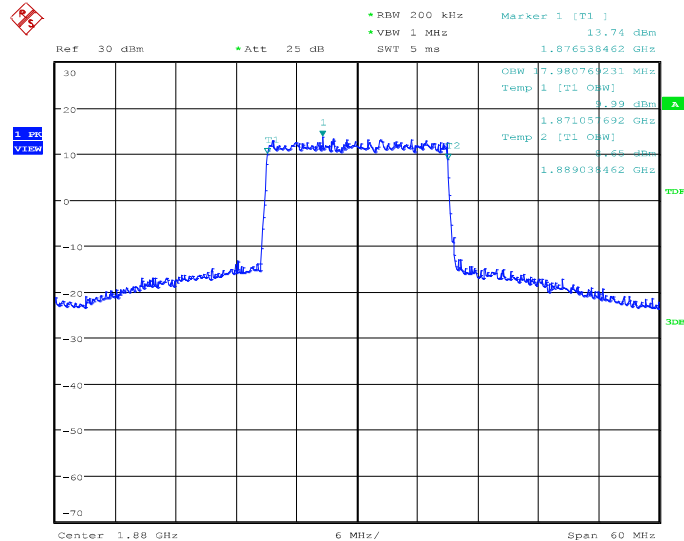


No. I21N03262-RF-LTE

LTE band 2, 20MHz (99% BW)

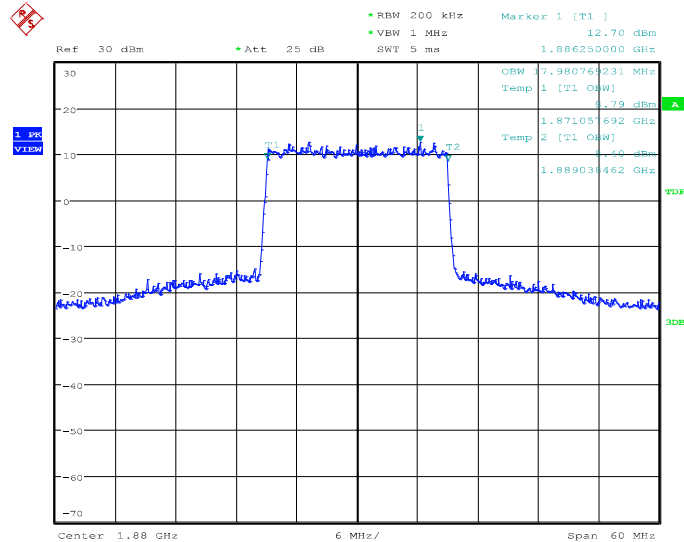
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1880.0	QPSK	16QAM	64QAM
	17980.77	17980.77	17980.77

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



Date: 9.NOV.2021 08:59:02

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

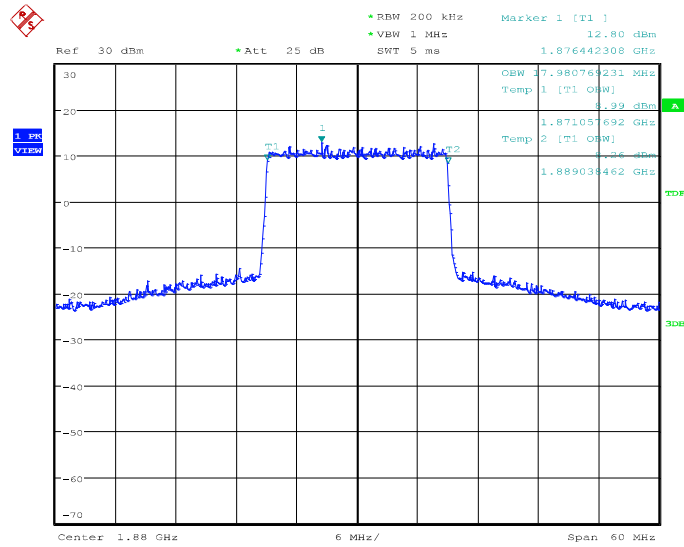


Date: 9.NOV.2021 08:59:15



No. I21N03262-RF-LTE

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



Date: 9.NOV.2021 12:11:09

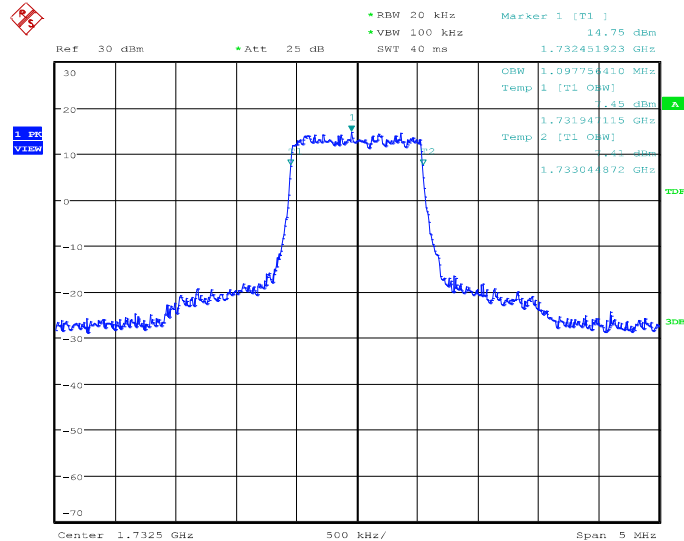


No. I21N03262-RF-LTE

LTE band 4, 1.4MHz (99% BW)

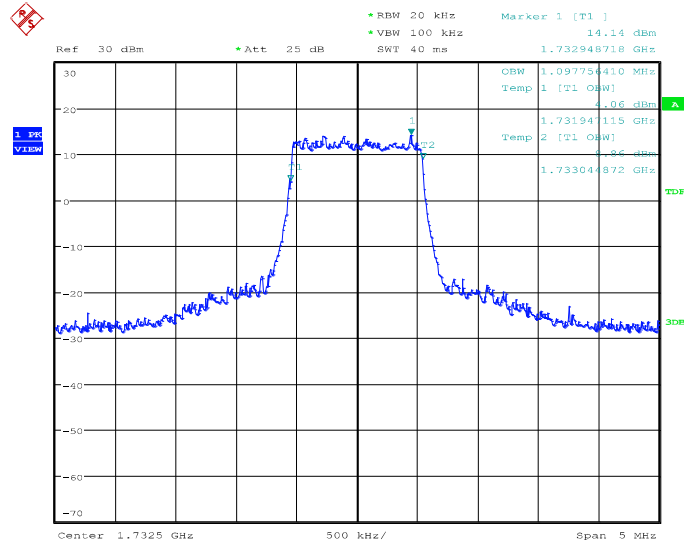
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1732.5	QPSK	16QAM	64QAM
	1097.76	1097.76	1089.74

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



Date: 9.NOV.2021 09:03:15

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

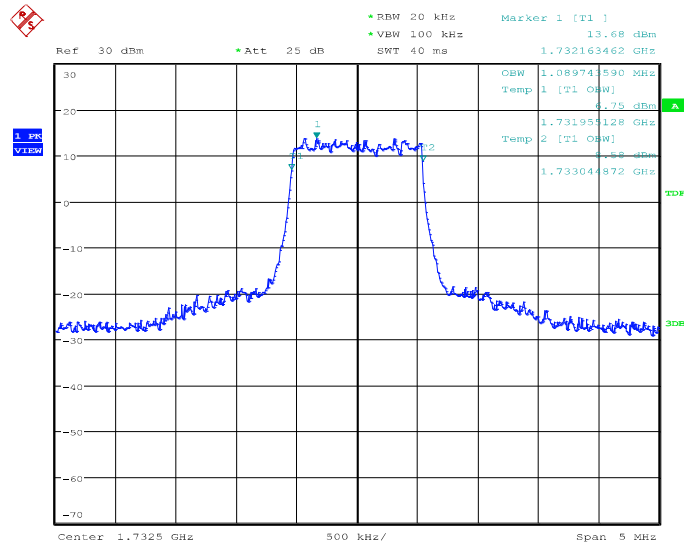


Date: 9.NOV.2021 09:03:29



No. I21N03262-RF-LTE

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



Date: 9.NOV.2021 12:13:44

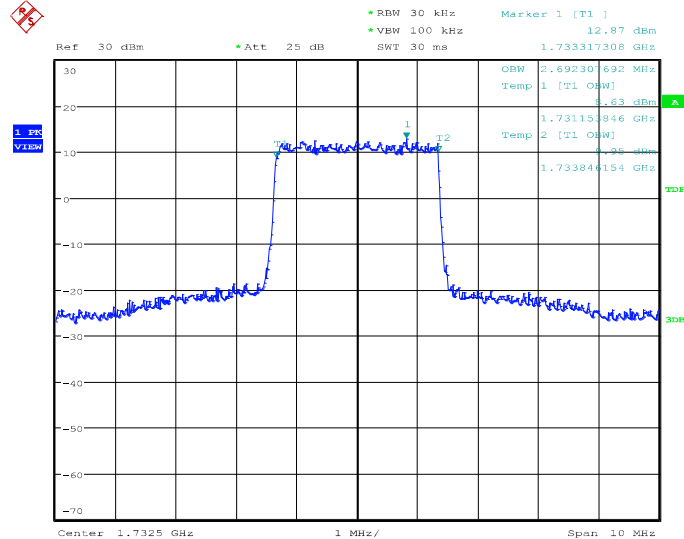


No. I21N03262-RF-LTE

LTE band 4, 3MHz (99% BW)

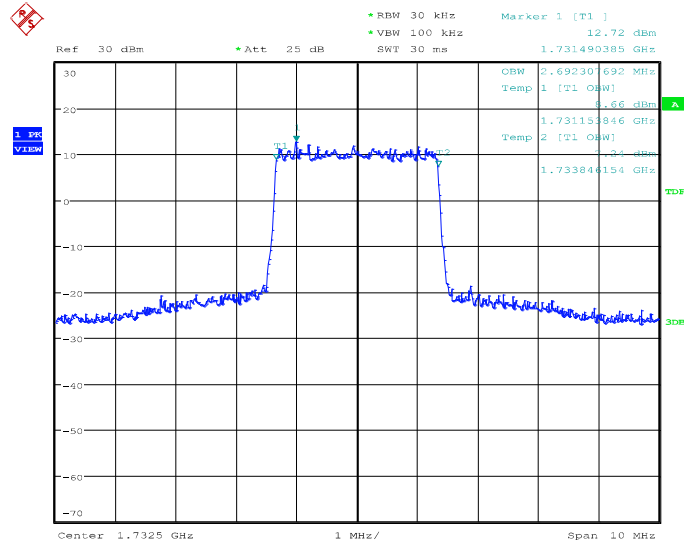
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1732.5	QPSK	16QAM	64QAM
	2692.31	2692.31	2692.31

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



Date: 9.NOV.2021 09:06:24

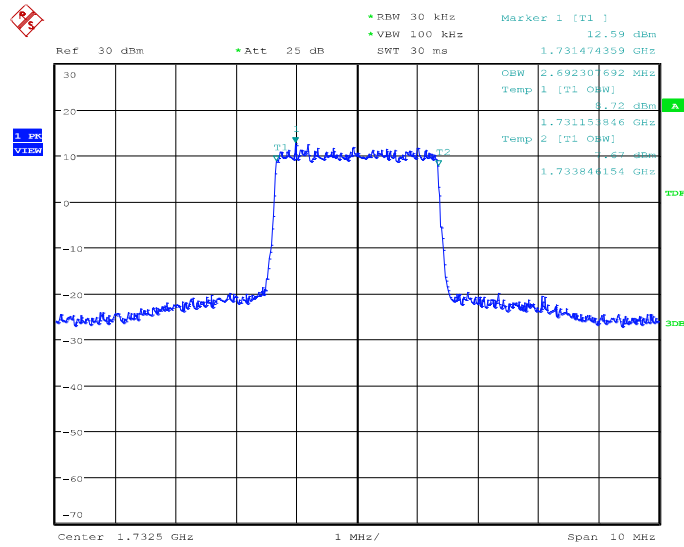
LTE band 4, 3MHz Bandwidth, 16QAM (99% BW)



Date: 9.NOV.2021 09:06:38

No. I21N03262-RF-LTE

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



Date: 9.NOV.2021 12:16:17

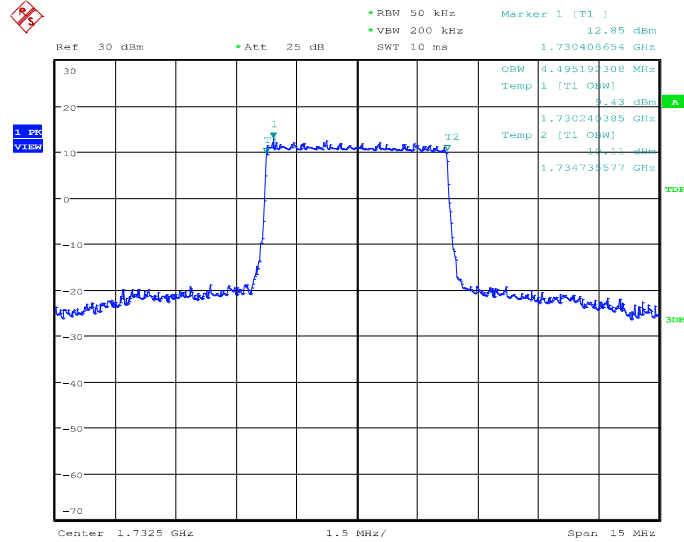


No. I21N03262-RF-LTE

LTE band 4, 5MHz (99% BW)

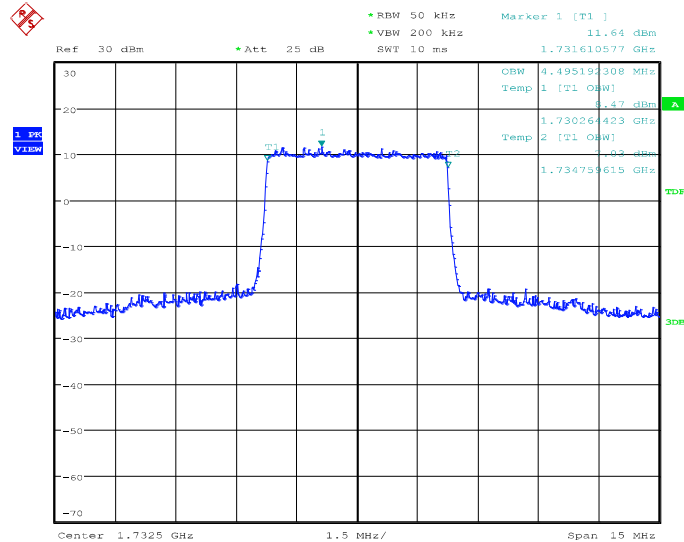
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1732.5	QPSK	16QAM	64QAM
	4495.19	4495.19	4471.15

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



Date: 9.NOV.2021 09:09:32

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

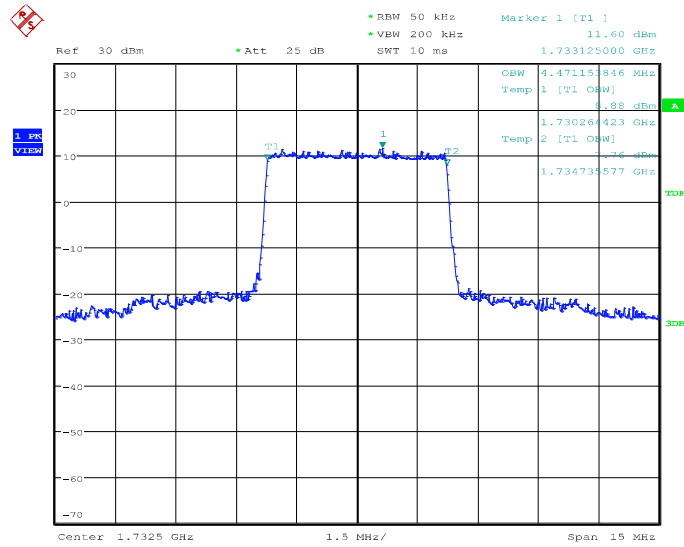


Date: 9.NOV.2021 09:09:46



No. I21N03262-RF-LTE

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



Date: 9.NOV.2021 12:18:50

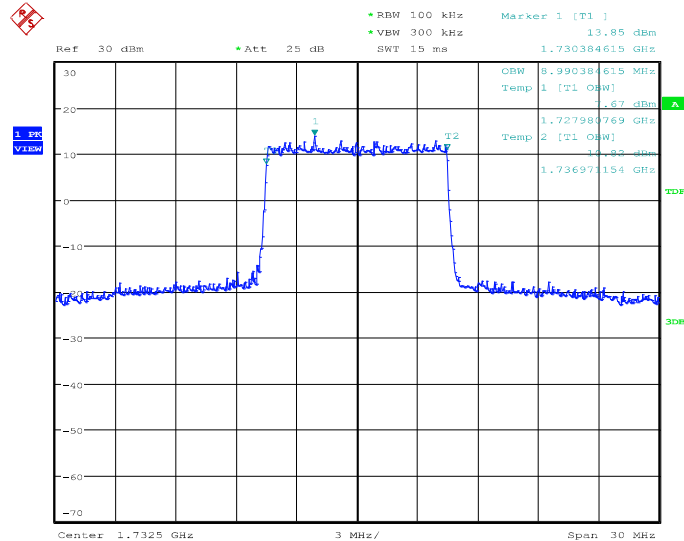


No. I21N03262-RF-LTE

LTE band 4, 10MHz (99% BW)

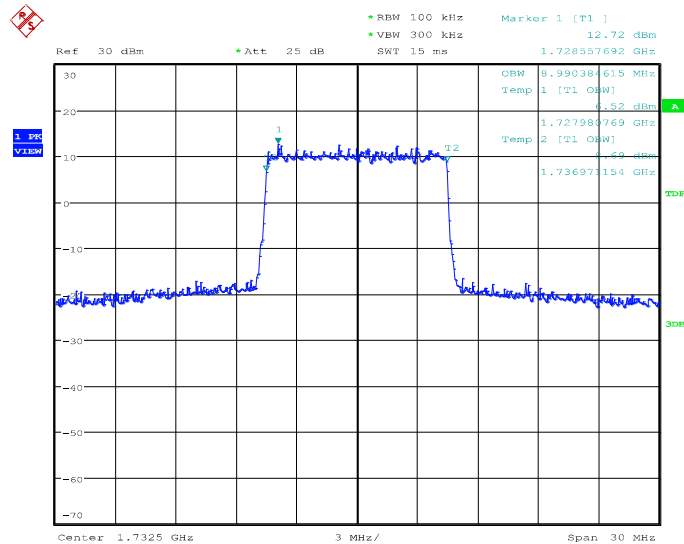
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1732.5	QPSK	16QAM	64QAM
	8990.38	8990.38	8990.38

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



Date: 9.NOV.2021 09:12:41

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

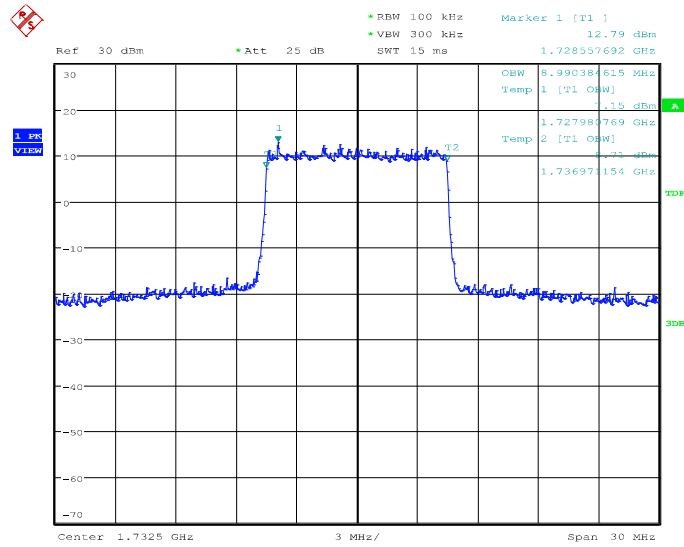


Date: 9.NOV.2021 09:12:55



No. I21N03262-RF-LTE

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



Date: 9.NOV.2021 12:21:23

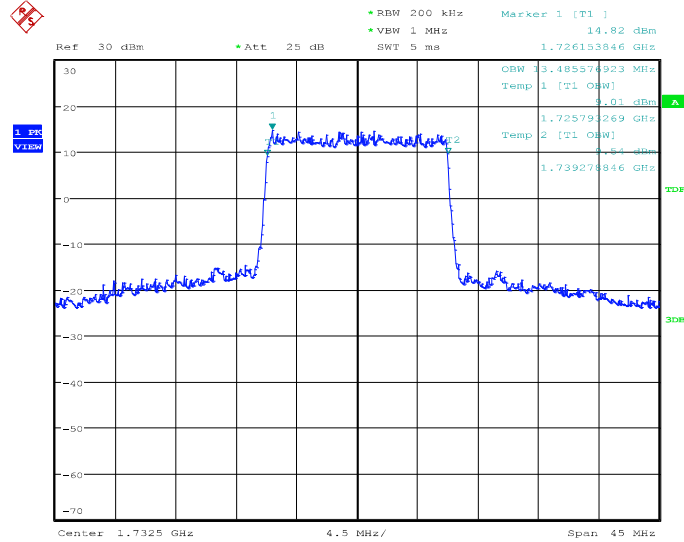


No. I21N03262-RF-LTE

LTE band 4, 15MHz (99% BW)

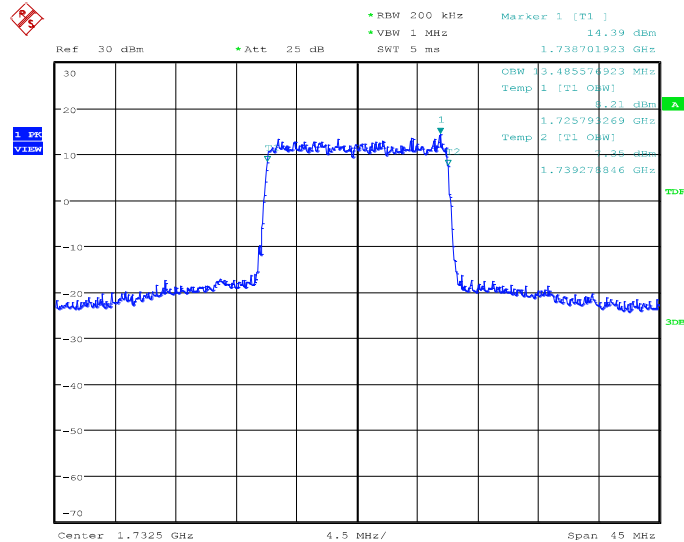
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1732.5	QPSK	16QAM	64QAM
	13485.58	13485.58	13485.58

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



Date: 9.NOV.2021 09:15:50

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

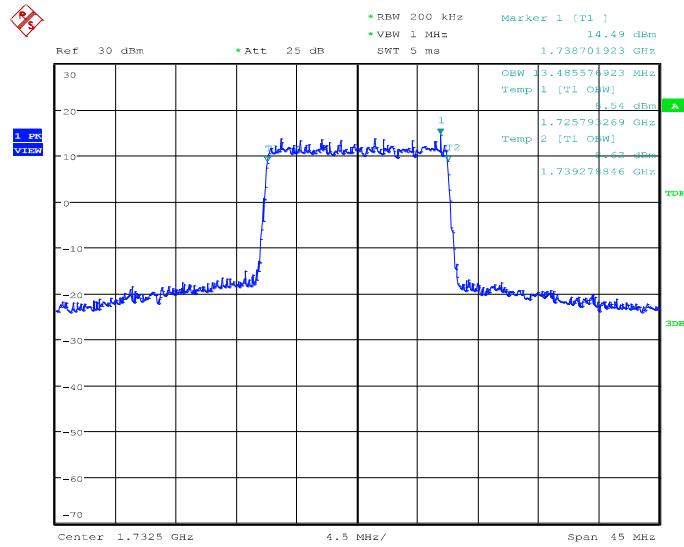


Date: 9.NOV.2021 09:16:03



No. I21N03262-RF-LTE

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

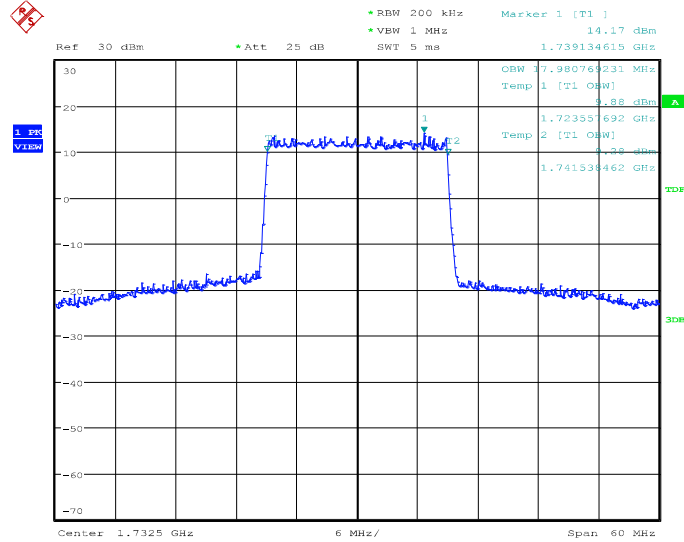


Date: 9.NOV.2021 12:23:56

LTE band 4, 20MHz (99% BW)

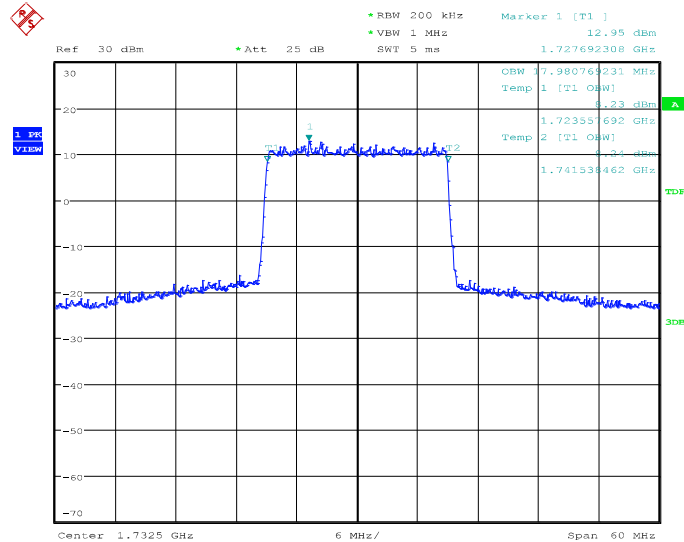
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1732.5	QPSK	16QAM	64QAM
	17980.77	17980.77	17980.77

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



Date: 9.NOV.2021 09:18:59

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

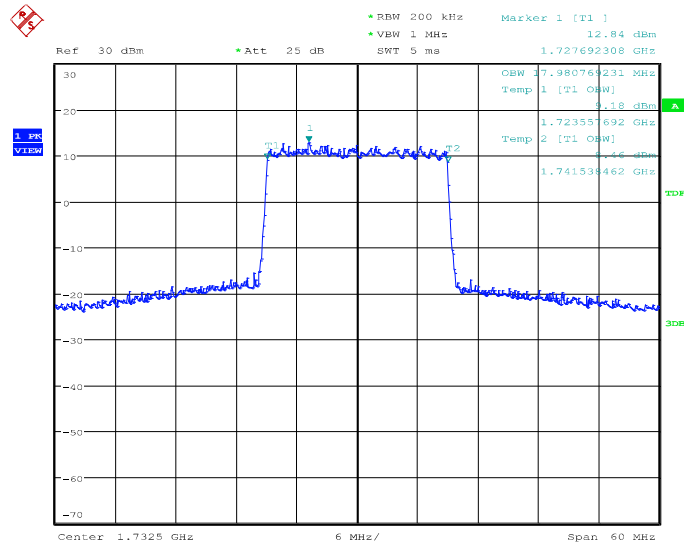


Date: 9.NOV.2021 09:19:12



No. I21N03262-RF-LTE

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



Date: 9.NOV.2021 12:26:30

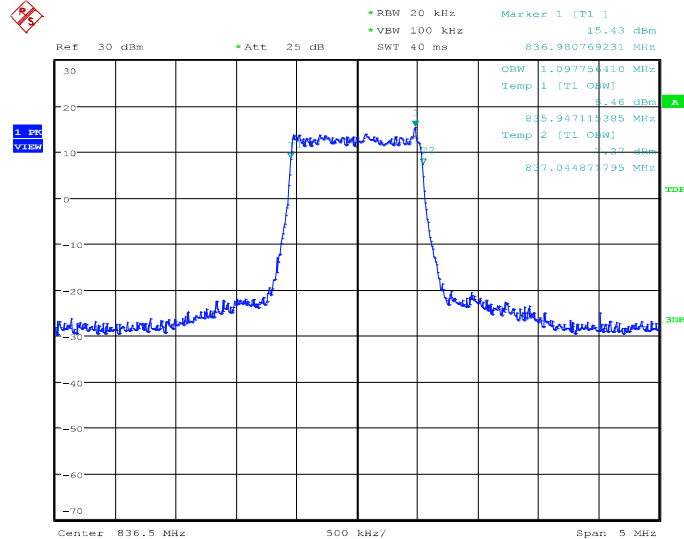


No. I21N03262-RF-LTE

LTE band 5, 1.4MHz (99% BW)

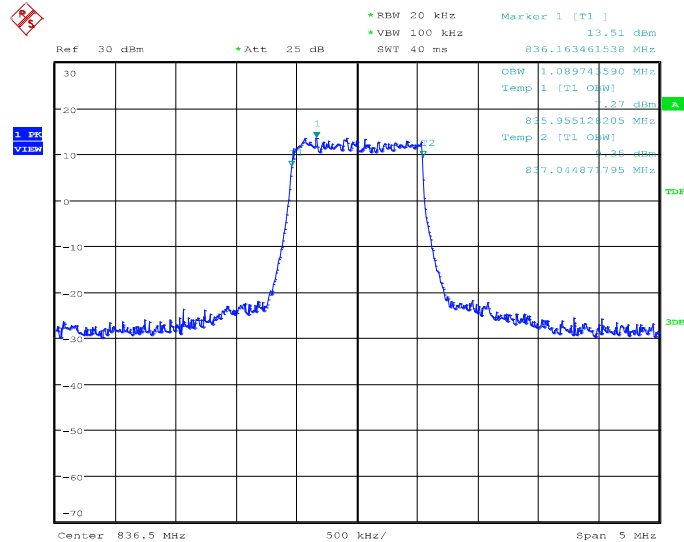
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
	QPSK	16QAM	64QAM
836.5	1097.76	1089.74	1089.74

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



Date: 9.NOV.2021 08:30:11

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

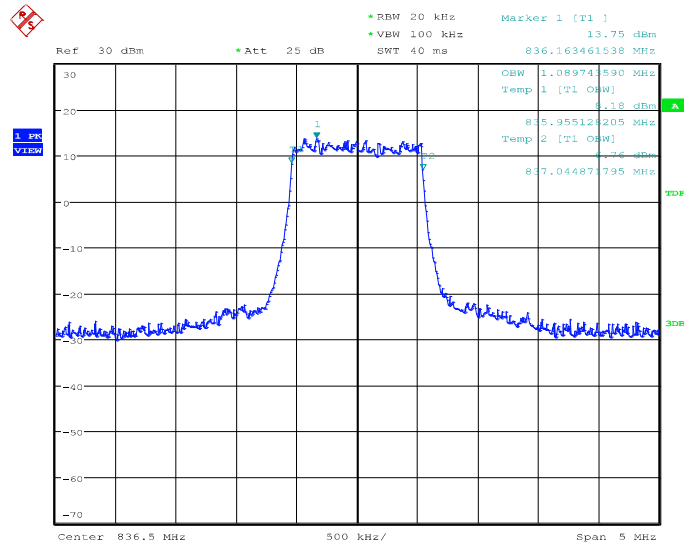


Date: 9.NOV.2021 08:30:25



No. I21N03262-RF-LTE

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



Date: 9.NOV.2021 11:48:08

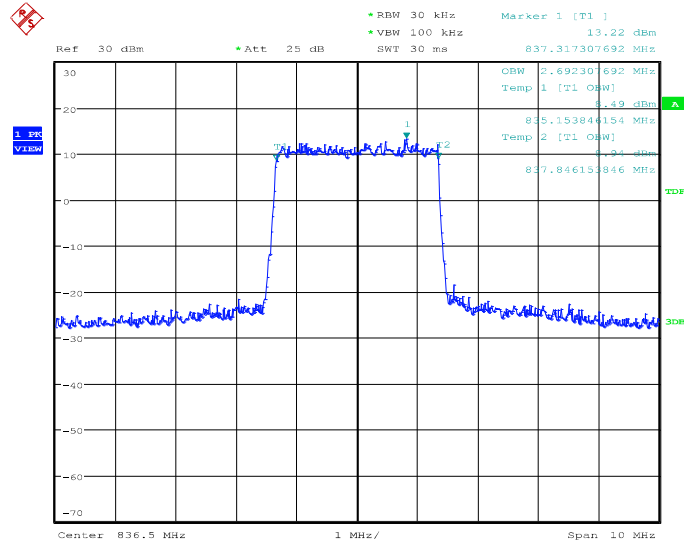


No. I21N03262-RF-LTE

LTE band 5, 3MHz (99% BW)

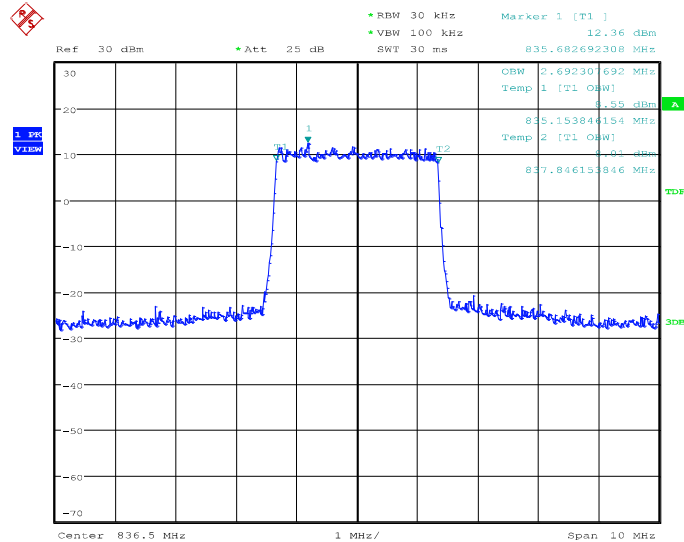
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
	QPSK	16QAM	64QAM
836.5	2692.31	2692.31	2692.31

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



Date: 9.NOV.2021 08:33:20

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

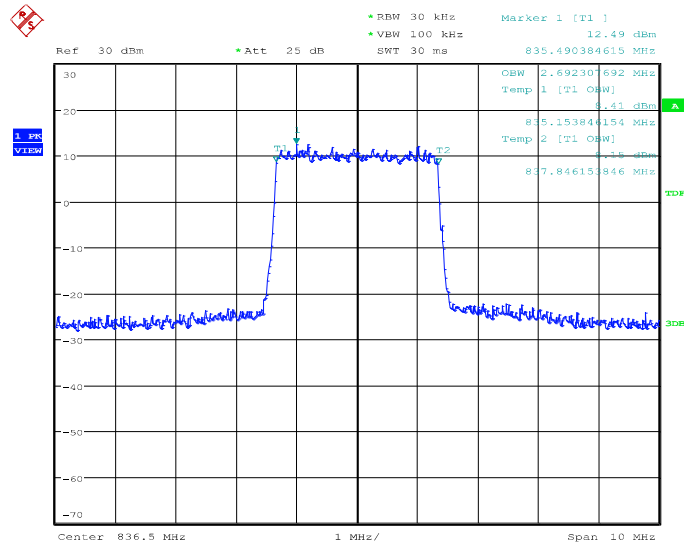


Date: 9.NOV.2021 08:33:34



No. I21N03262-RF-LTE

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



Date: 9.NOV.2021 11:50:40

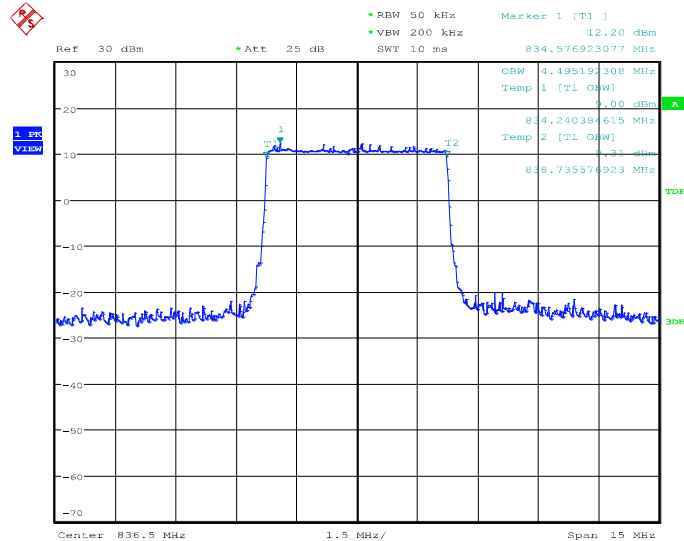


No. I21N03262-RF-LTE

LTE band 5, 5MHz (99% BW)

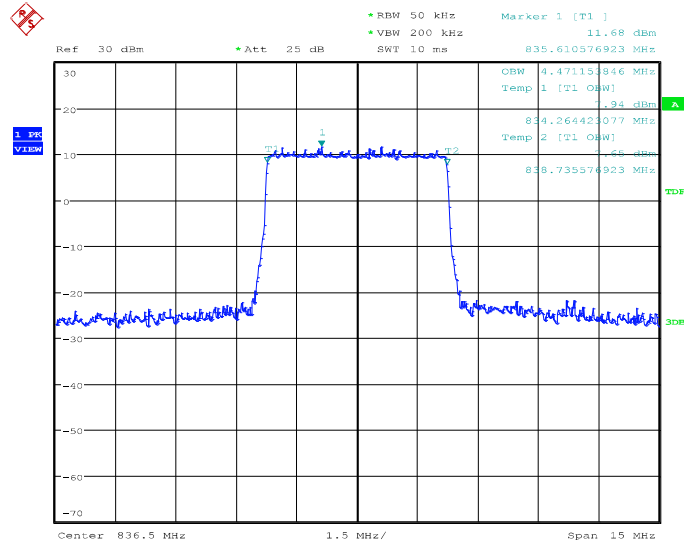
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
836.5	QPSK	16QAM	64QAM
	4495.19	4471.15	4495.19

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



Date: 9.NOV.2021 08:36:28

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

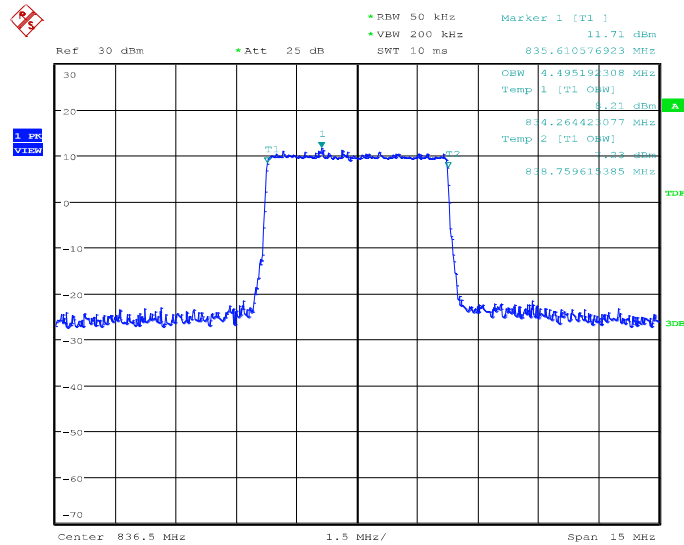


Date: 9.NOV.2021 08:36:42



No. I21N03262-RF-LTE

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



Date: 9.NOV.2021 11:53:13

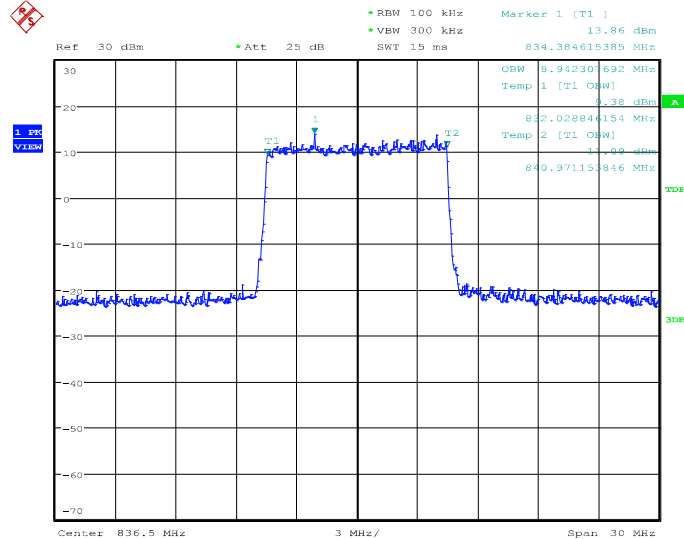


No. I21N03262-RF-LTE

LTE band 5, 10MHz (99% BW)

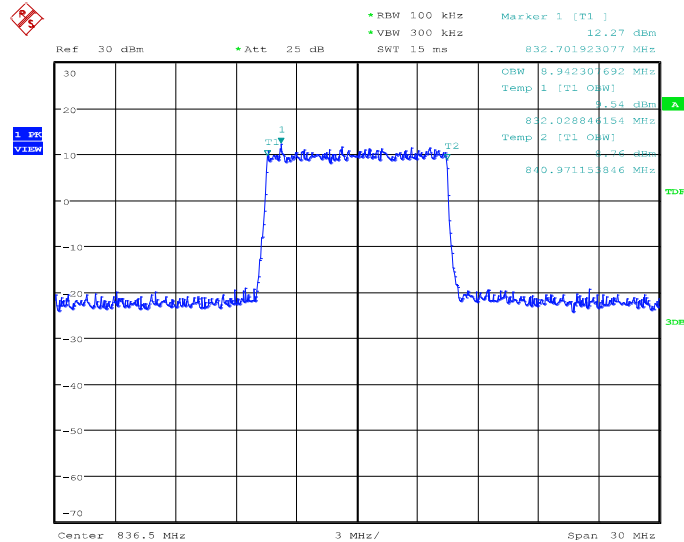
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
836.5	QPSK	16QAM	64QAM
	8942.31	8942.31	8942.31

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



Date: 9.NOV.2021 08:39:37

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

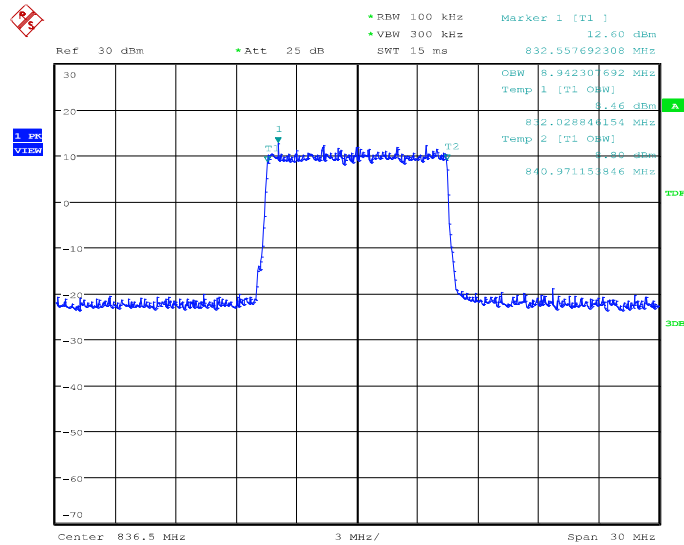


Date: 9.NOV.2021 08:39:51



No. I21N03262-RF-LTE

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



Date: 9.NOV.2021 11:55:47

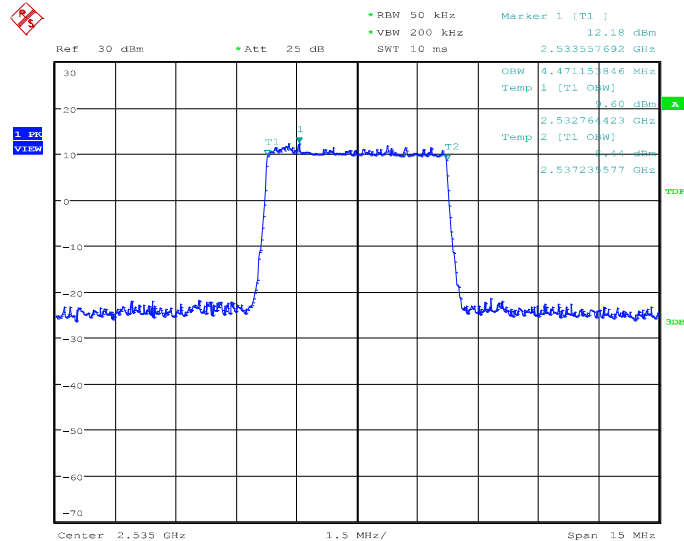


No. I21N03262-RF-LTE

LTE band 7, 5MHz (99% BW)

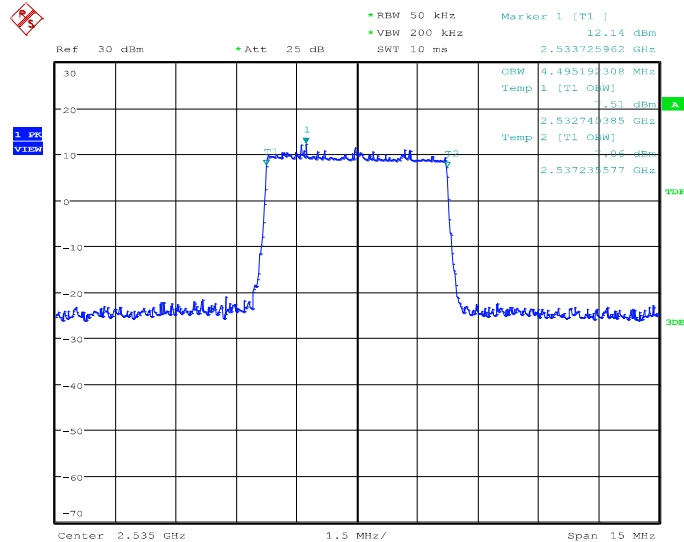
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2535.0	QPSK	16QAM	64QAM
	4471.15	4495.19	4495.19

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



Date: 9.NOV.2021 07:57:33

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

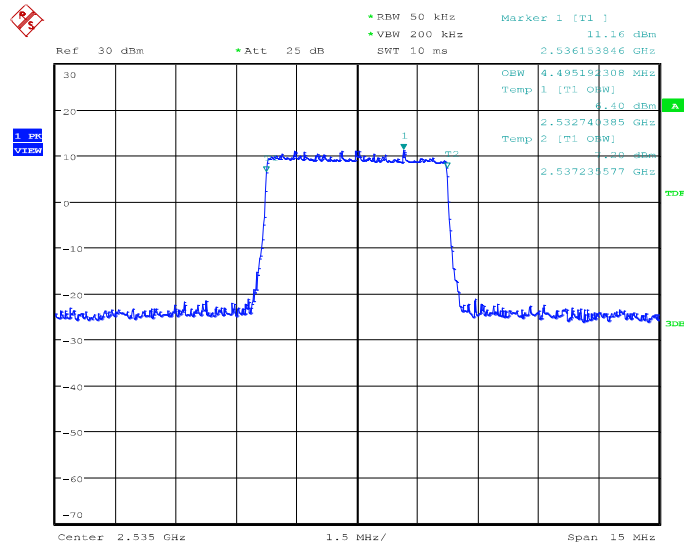


Date: 9.NOV.2021 07:57:47



No. I21N03262-RF-LTE

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



Date: 9.NOV.2021 10:47:26