



TEST REPORT

No. I21Z70475-WMD03

for

SAMSUNG Electronics Co., Ltd.

Multi-band GSM/WCDMA/LTE phone with Bluetooth, WLAN

Model Name: SM-A037U

FCC ID: ZCASMA037U

with

Hardware Version: REV1.0

Software Version: A037U.001

Issued Date: 2021-11-01

Note:

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Test Laboratory:

CTTL, Telecommunication Technology Labs, CAICT

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

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

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

REPORT HISTORY

Report Number	Revision	Description	Issue Date
I21Z70475-WMD03	Rev.0	1 st edition	2021-10-28
I21Z70475-WMD03	Rev.1	2 nd edition Update the results in A.1.3.	2021-10-29
I21Z70475-WMD03	Rev.2	3 rd edition Update the results for Band 13 in A.1.3.	2021-11-01
I21Z70475-WMD03	Rev.3	4 th edition Update the results for Band 71 in A.5.	2021-11-01

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

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1. Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM (NVLAP) with lab code 600118-0 and is also an FCC accredited test laboratory (CN5017), and ISED accredited test laboratory (CN0066). The detail accreditation scope can be found on NVLAP website.

1.2. Testing Location

Location 1: CTTL (huayuan North Road)

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

Location 2: CTTL(Shouxiang)

Address: Shouxiang Building, No.51 Xueyuan Road, Haidian
District, Beijing 100191, P.R. China

1.3. Testing Environment

Normal Temperature: 15-35℃
Relative Humidity: 20-75%

1.4. Project Data

Testing Start Date: 2021-09-16
Testing End Date: 2021-11-01

1.5. Signature



Dong Yuan
(Prepared this test report)



Zhou Yu
(Reviewed this test report)



Zhao Hui Lin
Deputy Director of the laboratory
(Approved this test report)

2. Client Information

2.1. Applicant Information

Company Name: SAMSUNG Electronics Co., Ltd.
Address /Post: 19 Chapin Rd., Building D Pine Brook, NJ 07058
Contact: Jenni Chun
Email: j1.chun@samsung.com
Telephone: +1-201-937-4203

2.2. Manufacturer Information

Company Name: SAMSUNG Electronics Co., Ltd.
Address /Post: Samsung R5, Maetan dong 129, Samsung ro
Youngtong gu, Suwon city 443 742, Korea
Contact: Kobe Cho
Email: ggobi.cho@samsung.com
Telephone: +82-10-2722-4159

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

3.1. About EUT

Description	Multi-band GSM/WCDMA/LTE phone with Bluetooth, WLAN
Model Name	SM-A037U
FCC ID	ZCASMA037U
Antenna	Embedded
Output power	26.73dBm maximum EIRP measured for LTE Band 25
Extreme vol. Limits	3.5VDC to 4.4VDC (nominal: 3.8VDC)
Extreme temp. Tolerance	0°C to +55°C

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

3.2. Internal Identification of EUT used during the test

EUT ID*	SN	HW Version	SW Version	Date of receipt
UT06a	2170475UT06a	REV1.0	A037U.001	2021-09-16
UT18a	2170475UT18a	REV1.0	A037U.001	2021-09-29

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

3.3. Internal Identification of AE used during the test

AE ID*	Description
AE1	Battery
AE2	Battery

AE1

Model	SCUD-WT-W1
Manufacturer	SCUD (Fujian) Electronics Co.,Ltd.
Capacitance	4900mAh

AE2

Model	WT-S-W1
Manufacturer	SCUD (Fujian) Electronics Co.,Ltd.
Capacitance	4900mAh

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

4. Reference Documents

4.1. Documents supplied by applicant

EUT parameters are supplied by the client or manufacturer, which are the bases of testing.

4.2. Reference Documents for testing

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

Reference	Title	Version
FCC Part 24	PERSONAL COMMUNICATIONS SERVICES	10-1-20 Edition
FCC Part 22	PUBLIC MOBILE SERVICES	10-1-20 Edition
FCC Part 27	MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES	10-1-20 Edition
FCC Part 90	PRIVATE LAND MOBILE RADIO SERVICES	10-1-20 Edition
ANSI/TIA-603-E	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards	2016
ANSI C63.26	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services	2015
KDB 971168 D01	MEASUREMENT GUIDANCE FOR CERTIFICATION OF LICENSED DIGITAL TRANSMITTERS	v03r01

5. Laboratory Environment

Control room / conducted chamber did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 20 %, Max. = 80 %
Shielding effectiveness	> 110 dB
Electrical insulation	> 2 MΩ
Ground system resistance	< 0.5 Ω

Semi-anechoic chamber SAC-1 (23 meters×17meters×10meters) 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, >60dB; 1MHz - 1000MHz, >90dB.
Electrical insulation	> 2 MΩ
Ground system resistance	< 4Ω
Normalised site attenuation (NSA)	< ± 4 dB, 3m/10m distance, from 30 to 1000 MHz
Site voltage standing-wave ratio (S_{VSWR})	Between 0 and 6 dB, from 1GHz to 18GHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 6000 MHz

Fully-anechoic chamber FAC-3 (8.6 meters×6.1 meters×3.85 meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 30 °C
Relative humidity	Min. = 35 %, Max. = 60 %
Shielding effectiveness	> 110 dB
Electrical insulation	> 2 MΩ
Ground system resistance	< 1 Ω
Site voltage standing-wave ratio (S_{VSWR})	Between 0 and 6 dB, from 1GHz to 18GHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 6000 MHz

6. Summary Of Test Result

LTE Band 2

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

LTE Band 4

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

LTE Band 5

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

LTE Band 7

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

LTE Band 12

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

LTE Band 13

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

LTE Band 14

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

LTE Band 25

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

LTE Band 26(814MHz~824MHz)

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

LTE Band 26(824MHz~849MHz)

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

LTE Band 41

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

LTE Band 66

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

LTE Band 71

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

Terms used in Verdict column

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

LTE Band 41 is tested by power class 2.

Explanation of worst-case configuration

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

7. Test Equipment Utilized

Description	Type	Series Number	Manufacture	Cal Due Date	Calibration Interval
Wideband Radio Communication Tester	CMW500	159082	R&S	2021-12-17	1 year
Spectrum Analyzer	FSU	200030	R&S	2022-06-02	1 year
Radio Communication Analyzer	MT8821C	6201763159	Anritsu	2022-08-09	1 year
Climate Chamber	SH-242	93008556	ESPEC	2023-12-23	3 years
Test Receiver	E4440A	MY48250642	Agilent	2022-03-04	1 year
EMI Antenna	VULB9163	9163-235	Schwarzbeck	2022-04-07	1 year
EMI Antenna	3117	00119021	ETS-Lindgren	2022-02-02	1 year
EMI Antenna	3117	00058888	ETS-Lindgren	2021-11-30	1 year
EMI Antenna	9117	167	Schwarzbeck	2022-08-19	1 year
Signal Generator	N5183A	MY49060052	Agilent	2022-07-11	1 year
Power Amplifier	5S1G4	0341863	AR	/	/
Universal Radio Communication Tester	CMW500	143008	R&S	2021-12-01	1 year
Universal Radio Communication Tester	MT8821C	Anritsu	6262257899	2022-05-06	1 year

Annex A: Measurement Results

A.1 Output Power

A.1.1 Summary

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

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

A.1.2 Conducted

A.1.2.1 Method of Measurements

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

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

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	24.41	23.60	22.53
		1880.0	24.47	23.74	22.61
		1850.7	24.49	23.73	22.67
	1 RB low	1909.3	24.39	23.66	22.62
		1880.0	24.43	23.73	22.57
		1850.7	24.50	23.78	22.74
	50% RB mid	1909.3	24.56	23.49	22.64
		1880.0	24.58	23.59	22.74
		1850.7	24.64	23.67	22.80
	100% RB	1909.3	23.56	22.60	21.55
		1880.0	23.52	22.61	21.57
		1850.7	23.62	22.72	21.61
3MHz	1 RB high	1908.5	24.49	23.66	22.62
		1880.0	24.49	23.79	22.63
		1851.5	24.50	23.63	22.69
	1 RB low	1908.5	24.46	23.66	22.66
		1880.0	24.52	23.82	22.67
		1851.5	24.59	23.93	22.79
	50% RB mid	1908.5	23.51	22.55	21.57
		1880.0	23.53	22.58	21.61
		1851.5	23.55	22.67	21.64
	100% RB	1908.5	23.48	22.49	21.54

5MHz		1880.0	23.53	22.52	21.53
		1851.5	23.55	22.58	21.54
	1 RB high	1907.5	24.42	23.54	22.58
		1880.0	24.41	23.69	22.52
		1852.5	24.35	23.66	22.50
	1 RB low	1907.5	24.38	23.62	22.53
		1880.0	24.43	23.61	22.60
		1852.5	24.51	23.79	22.77
	50% RB mid	1907.5	23.53	22.51	21.57
		1880.0	23.55	22.53	21.61
		1852.5	23.55	22.60	21.58
	100% RB	1907.5	23.53	22.52	21.54
		1880.0	23.54	22.52	21.56
		1852.5	23.52	22.59	21.56
10MHz	1 RB high	1905.0	24.50	23.70	22.65
		1880.0	24.51	23.81	22.60
		1855.0	24.49	23.82	22.77
	1 RB low	1905.0	24.48	23.71	22.65
		1880.0	24.58	23.77	22.67
		1855.0	24.57	23.78	22.81
	50% RB mid	1905.0	23.57	22.54	21.58
		1880.0	23.59	22.61	21.62
		1855.0	23.53	22.55	21.54
	100% RB	1905.0	23.57	22.56	21.61
		1880.0	23.63	22.62	21.62
		1855.0	23.61	22.66	21.66
15MHz	1 RB high	1902.5	24.39	23.56	22.61
		1880.0	24.42	23.69	22.63
		1857.5	24.45	23.75	22.63
	1 RB low	1902.5	24.47	23.77	22.63
		1880.0	24.51	23.69	22.70
		1857.5	24.53	23.73	22.76
	50% RB mid	1902.5	23.57	22.53	21.60
		1880.0	23.61	22.57	21.63
		1857.5	23.55	22.53	21.56
	100% RB	1902.5	23.55	22.52	21.55
		1880.0	23.60	22.58	21.60
		1857.5	23.59	22.62	21.57
20MHz	1 RB high	1900.0	24.31	23.55	22.46
		1880.0	24.30	23.49	22.34
		1860.0	24.35	23.56	22.50
	1 RB low	1900.0	24.33	23.60	22.42
		1880.0	24.42	23.71	22.57

		1860.0	24.42	23.64	22.67
	50% RB mid	1900.0	23.60	22.59	21.62
		1880.0	23.65	22.62	21.63
		1860.0	23.60	22.64	21.61
	100% RB	1900.0	23.56	22.51	21.54
		1880.0	23.62	22.56	21.63
		1860.0	23.63	22.63	21.65

LTE band 4

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	1754.3	24.00	23.30	22.25
		1732.5	23.84	23.10	22.09
		1710.7	23.83	23.08	22.10
	1 RB low	1754.3	23.99	23.24	22.23
		1732.5	23.85	23.13	22.08
		1710.7	23.87	23.14	22.07
	50% RB mid	1754.3	24.16	23.07	22.30
		1732.5	23.99	22.98	22.09
		1710.7	24.03	22.97	22.12
	100% RB	1754.3	23.13	22.20	21.13
		1732.5	22.95	22.05	20.98
		1710.7	22.98	22.07	21.00
3MHz	1 RB high	1753.5	24.07	23.25	22.35
		1732.5	23.93	23.21	22.11
		1711.5	23.86	23.07	22.04
	1 RB low	1753.5	24.08	23.33	22.25
		1732.5	23.89	23.17	22.10
		1711.5	23.94	23.13	22.14
	50% RB mid	1753.5	23.12	22.24	21.21
		1732.5	22.94	22.06	21.07
		1711.5	22.97	22.02	21.00
	100% RB	1753.5	23.10	22.15	21.13
		1732.5	22.95	21.98	20.96
		1711.5	22.95	22.02	20.99
5MHz	1 RB high	1752.5	23.99	23.30	22.20
		1732.5	23.81	23.12	22.00
		1712.5	23.75	23.04	22.01
	1 RB low	1752.5	23.98	23.31	22.27
		1732.5	23.81	23.11	22.06
		1712.5	23.87	23.10	22.07
	50% RB mid	1752.5	23.16	22.20	21.20
		1732.5	23.00	22.04	21.05
		1712.5	23.02	22.02	21.01
	100% RB	1752.5	23.15	22.16	21.14
		1732.5	22.95	22.00	20.98
		1712.5	22.98	21.99	21.01
10MHz	1 RB high	1750.0	24.09	23.39	22.32
		1732.5	23.94	23.24	22.17
		1715.0	23.85	23.10	22.07
	1 RB low	1750.0	24.05	23.31	22.26

		1732.5	23.91	23.10	22.05
		1715.0	23.95	23.20	22.12
	50% RB mid	1750.0	23.19	22.26	21.23
		1732.5	23.03	22.05	21.05
		1715.0	23.00	21.99	21.05
	100% RB	1750.0	23.20	22.25	21.24
		1732.5	23.01	22.07	21.05
		1715.0	23.03	22.07	21.06
15MHz	1 RB high	1747.5	23.98	23.29	22.17
		1732.5	23.88	23.16	22.11
		1717.5	23.81	23.04	22.02
	1 RB low	1747.5	23.90	23.25	22.10
		1732.5	23.84	23.12	21.99
		1717.5	23.86	23.04	22.11
	50% RB mid	1747.5	23.17	22.20	21.16
		1732.5	23.03	22.02	21.04
		1717.5	23.01	22.01	21.03
	100% RB	1747.5	23.15	22.18	21.17
		1732.5	23.00	22.02	21.02
		1717.5	23.00	22.02	21.01
20MHz	1 RB high	1745.0	23.63	22.91	21.85
		1732.5	23.56	22.79	21.78
		1720.0	23.46	22.68	21.72
	1 RB low	1745.0	23.51	22.74	21.70
		1732.5	23.53	22.76	21.78
		1720.0	23.53	22.77	21.72
	50% RB mid	1745.0	22.94	21.97	20.96
		1732.5	22.86	21.90	20.88
		1720.0	22.85	21.87	20.85
	100% RB	1745.0	22.92	21.95	20.95
		1732.5	22.79	21.82	20.83
		1720.0	22.78	21.77	20.83

LTE band 5

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	848.3	24.97	24.09	23.09
		836.5	24.86	24.06	22.97
		824.7	24.89	24.02	23.11
	1 RB low	848.3	24.93	24.03	23.16
		836.5	24.85	23.99	23.05
		824.7	24.81	23.95	23.08
	50% RB mid	848.3	25.12	24.02	23.17
		836.5	25.04	23.94	23.12
		824.7	25.01	23.93	23.09
	100% RB	848.3	24.08	23.15	22.12
		836.5	24.01	23.07	22.06
		824.7	24.03	23.11	22.02
3MHz	1 RB high	847.5	24.97	24.11	23.12
		836.5	24.91	24.03	23.08
		825.5	24.91	24.09	23.12
	1 RB low	847.5	24.98	24.15	23.07
		836.5	24.90	24.10	23.08
		825.5	24.86	24.06	23.04
	50% RB mid	847.5	24.08	23.14	22.17
		836.5	24.05	23.09	22.07
		825.5	24.00	23.10	22.09
	100% RB	847.5	24.08	23.05	22.06
		836.5	23.97	22.98	22.00
		825.5	23.97	23.03	22.01
5MHz	1 RB high	846.5	24.90	24.06	23.00
		836.5	24.79	23.95	23.01
		826.5	24.81	24.10	23.00
	1 RB low	846.5	24.85	24.14	23.06
		836.5	24.83	24.07	23.06
		826.5	24.80	23.97	22.97
	50% RB mid	846.5	24.07	23.02	22.12
		836.5	24.02	22.97	22.06
		826.5	24.04	23.04	22.09
	100% RB	846.5	24.04	23.00	22.05
		836.5	24.01	22.98	22.01
		826.5	24.02	23.04	22.03
10MHz	1 RB high	844.0	24.92	23.91	22.93
		836.5	24.44	23.62	22.96
		829.0	24.31	23.85	22.95
	1 RB low	844.0	24.79	23.69	22.88

		836.5	24.37	23.67	22.86
		829.0	24.31	23.57	22.80
	50% RB mid	844.0	23.97	22.88	21.97
		836.5	23.42	22.76	21.83
		829.0	23.39	22.63	21.91
	100% RB	844.0	23.98	22.94	21.97
		836.5	23.43	22.68	21.93
		829.0	23.46	22.58	21.96

LTE band 7

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)		
			QPSK	16QAM	64QAM
5MHz	1 RB high	2567.5	22.89	21.75	20.63
		2535.0	22.47	21.77	20.71
		2502.5	22.33	21.70	20.51
	1 RB low	2567.5	22.54	21.71	20.79
		2535.0	22.47	21.79	20.68
		2502.5	22.33	21.58	20.53
	50% RB mid	2567.5	21.63	20.66	19.68
		2535.0	21.66	20.86	19.67
		2502.5	21.50	20.52	19.70
	100% RB	2567.5	21.52	20.62	19.62
		2535.0	21.55	20.69	20.03
		2502.5	21.52	20.50	19.93
10MHz	1 RB high	2565.0	23.00	21.81	20.80
		2535.0	22.50	21.85	20.75
		2505.0	22.37	21.71	20.75
	1 RB low	2565.0	22.83	21.84	20.90
		2535.0	22.60	21.95	20.95
		2505.0	22.45	21.78	20.71
	50% RB mid	2565.0	21.67	20.70	19.71
		2535.0	21.64	20.74	20.17
		2505.0	21.53	20.94	19.70
	100% RB	2565.0	21.64	20.69	19.67
		2535.0	21.63	20.73	20.13
		2505.0	21.68	20.68	19.87
15MHz	1 RB high	2562.5	22.92	21.64	20.62
		2535.0	22.76	21.96	21.15
		2507.5	22.33	21.96	20.93
	1 RB low	2562.5	23.10	21.82	21.06
		2535.0	22.59	21.95	21.14
		2507.5	22.36	21.78	20.68
	50% RB mid	2562.5	22.18	20.70	20.20
		2535.0	22.09	21.09	20.15
		2507.5	21.67	20.98	20.02
	100% RB	2562.5	21.97	20.82	19.88
		2535.0	21.98	21.17	20.18
		2507.5	21.54	21.01	20.02
20MHz	1 RB high	2560.0	22.50	21.30	20.32
		2535.0	22.18	21.44	20.58
		2510.0	21.85	21.20	20.57
	1 RB low	2560.0	22.47	21.49	20.37

		2535.0	22.05	21.33	20.62
		2510.0	21.88	21.20	20.58
	50% RB mid	2560.0	21.79	20.53	19.57
		2535.0	21.69	20.90	19.89
		2510.0	21.18	20.30	19.74
	100% RB	2560.0	21.77	20.74	19.41
		2535.0	21.68	20.85	19.88
		2510.0	21.15	20.24	19.72

LTE band 12

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	715.3	24.99	23.66	22.98
		707.5	25.07	24.28	23.24
		699.7	24.68	24.33	23.26
	1 RB low	715.3	25.00	23.72	23.14
		707.5	25.07	24.27	23.23
		699.7	24.70	24.03	23.40
	50% RB mid	715.3	24.75	23.62	23.15
		707.5	25.26	24.14	23.35
		699.7	24.82	23.84	23.40
	100% RB	715.3	23.69	22.69	22.11
		707.5	24.25	23.31	22.23
		699.7	23.83	22.85	22.26
3MHz	1 RB high	714.5	25.02	23.65	22.80
		707.5	24.63	24.22	23.36
		700.5	24.74	24.43	23.42
	1 RB low	714.5	24.53	23.74	22.74
		707.5	24.65	24.29	23.41
		700.5	24.78	24.03	23.39
	50% RB mid	714.5	23.70	22.72	22.12
		707.5	23.75	23.29	22.29
		700.5	23.83	22.97	22.34
	100% RB	714.5	23.63	22.63	22.10
		707.5	23.70	23.23	22.22
		700.5	23.81	22.92	22.26
5MHz	1 RB high	713.5	24.44	23.59	22.57
		707.5	24.56	23.81	22.81
		701.5	24.54	23.80	22.75
	1 RB low	713.5	24.51	23.74	22.69
		707.5	24.60	23.88	22.78
		701.5	24.69	23.95	22.93
	50% RB mid	713.5	23.71	22.68	21.71
		707.5	23.79	22.77	21.76
		701.5	23.83	22.82	21.84
	100% RB	713.5	23.71	22.68	21.67
		707.5	23.73	22.72	21.70
		701.5	23.80	22.81	21.77
10MHz	1 RB high	711.0	24.85	23.47	22.62
		707.5	24.67	23.83	23.02
		704.0	24.43	23.89	23.14
	1 RB low	711.0	25.03	23.69	23.15

		707.5	24.57	23.88	23.19
		704.0	24.60	23.81	23.30
	50% RB mid	711.0	24.21	22.79	22.07
		707.5	23.85	22.82	22.06
		704.0	23.63	23.10	22.11
	100% RB	711.0	24.10	23.03	22.00
		707.5	24.05	22.99	22.03
		704.0	23.68	23.15	22.13

LTE band 13

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)		
			QPSK	16QAM	64QAM
5MHz	1 RB high	784.5	24.73	23.50	22.46
		782.0	24.25	23.45	22.48
		779.5	24.24	23.55	22.55
	1 RB low	784.5	24.74	23.58	22.48
		782.0	24.27	23.45	22.41
		779.5	24.26	23.42	22.59
	50% RB mid	784.5	23.92	22.48	21.48
		782.0	23.47	22.49	21.49
		779.5	23.47	22.43	21.89
	100% RB	784.5	23.60	22.42	21.41
		782.0	23.43	22.43	21.41
		779.5	23.41	22.40	21.40
10MHz	1 RB high	782.0	24.43	23.53	22.75
	1 RB low	782.0	24.20	23.42	22.50
	50% RB mid	782.0	23.34	22.69	21.69
	100% RB	782.0	23.31	22.77	21.74

LTE band 14

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)		
			QPSK	16QAM	64QAM
5MHz	1 RB high	795.5	24.70	23.44	22.86
		793.0	24.22	23.84	22.86
		790.5	24.25	23.87	22.96
	1 RB low	795.5	24.78	23.57	22.82
		793.0	24.29	23.66	22.96
		790.5	24.30	23.81	22.98
	50% RB mid	795.5	23.59	22.59	22.03
		793.0	23.54	22.79	22.08
		790.5	23.62	22.93	22.05
	100% RB	795.5	23.50	22.69	21.97
		793.0	23.44	22.91	21.95
		790.5	23.65	22.96	21.96
10MHz	1 RB high	793.0	24.06	23.32	22.53
	1 RB low	793.0	23.98	23.36	22.66
	50% RB mid	793.0	23.09	22.16	21.51
	100% RB	793.0	23.07	22.15	21.75

LTE band 25

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	1914.3	24.42	23.40	22.32
		1882.5	24.09	23.68	22.64
		1850.7	23.96	23.47	22.62
	1 RB low	1914.3	24.40	23.22	22.57
		1882.5	24.33	23.52	22.67
		1850.7	23.94	23.38	22.69
	50% RB mid	1914.3	24.21	22.97	22.62
		1882.5	24.54	23.48	22.69
		1850.7	24.07	23.33	22.67
	100% RB	1914.3	23.02	22.10	21.44
		1882.5	23.52	22.63	21.53
		1850.7	23.52	22.66	21.60
3MHz	1 RB high	1913.5	24.51	23.72	22.59
		1882.5	24.57	23.77	22.77
		1851.5	24.49	23.68	22.72
	1 RB low	1913.5	24.53	23.32	22.68
		1882.5	24.50	23.67	22.73
		1851.5	24.55	23.86	22.75
	50% RB mid	1913.5	23.61	22.23	21.68
		1882.5	23.62	22.67	21.72
		1851.5	23.55	22.65	21.64
	100% RB	1913.5	23.56	22.46	21.55
		1882.5	23.61	22.60	21.63
		1851.5	23.55	22.57	21.60
5MHz	1 RB high	1912.5	24.41	23.64	22.54
		1882.5	24.45	23.78	22.64
		1852.5	24.42	23.69	22.64
	1 RB low	1912.5	24.45	23.36	22.62
		1882.5	24.45	23.64	22.66
		1852.5	24.44	23.71	22.69
	50% RB mid	1912.5	23.63	22.48	21.68
		1882.5	23.64	22.60	21.71
		1852.5	23.59	22.63	21.68
	100% RB	1912.5	23.59	22.42	21.61
		1882.5	23.64	22.64	21.67
		1852.5	23.57	22.61	21.59
10MHz	1 RB high	1910.0	24.50	23.78	22.62
		1882.5	24.58	23.78	22.70
		1855.0	24.53	23.88	22.74
	1 RB low	1910.0	24.53	23.78	22.63

		1882.5	24.61	23.80	22.71
		1855.0	24.56	23.84	22.76
	50% RB mid	1910.0	23.63	22.62	21.67
		1882.5	23.66	22.62	21.67
		1855.0	23.58	22.63	21.60
	100% RB	1910.0	23.65	22.62	21.66
		1882.5	23.69	22.67	21.71
		1855.0	23.63	22.67	21.67
15MHz	1 RB high	1907.5	24.46	23.67	22.55
		1882.5	24.46	23.80	22.70
		1857.5	24.49	23.80	22.63
	1 RB low	1907.5	24.50	23.71	22.68
		1882.5	24.55	23.74	22.75
		1857.5	24.49	23.80	22.72
	50% RB mid	1907.5	23.65	22.61	21.69
		1882.5	23.68	22.64	21.69
		1857.5	23.62	22.61	21.65
	100% RB	1907.5	23.66	22.61	21.66
		1882.5	23.67	22.65	21.67
		1857.5	23.62	22.64	21.65
20MHz	1 RB high	1905.0	24.30	23.57	22.49
		1882.5	24.29	23.63	22.50
		1860.0	24.38	23.66	22.56
	1 RB low	1905.0	24.28	23.52	22.42
		1882.5	24.36	23.58	22.57
		1860.0	24.35	23.54	22.53
	50% RB mid	1905.0	23.66	22.65	21.70
		1882.5	23.69	22.69	21.70
		1860.0	23.67	22.69	21.68
	100% RB	1905.0	23.59	22.57	21.62
		1882.5	23.66	22.62	21.72
		1860.0	23.68	22.68	21.75

LTE band 26(814MHz~824MHz)

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	823.3	24.76	23.80	22.72
		819.0	24.73	23.80	22.74
		814.7	24.63	23.73	23.14
	1 RB low	823.3	24.73	23.78	22.76
		819.0	24.72	23.75	22.74
		814.7	24.64	23.70	23.13
	50% RB mid	823.3	24.94	24.08	22.90
		819.0	24.88	24.08	22.90
		814.7	24.81	24.02	22.85
	100% RB	823.3	23.82	23.06	21.99
		819.0	23.82	23.03	21.96
		814.7	23.75	22.97	21.90
3MHz	1 RB high	822.5	24.76	23.80	22.68
		819.0	24.77	23.78	22.68
		815.5	24.78	23.76	22.68
	1 RB low	822.5	24.81	23.85	22.75
		819.0	24.77	23.81	22.72
		815.5	24.74	23.78	22.74
	50% RB mid	822.5	23.79	22.92	21.81
		819.0	23.78	22.93	21.79
		815.5	23.71	22.88	21.76
	100% RB	822.5	23.80	22.83	21.93
		819.0	23.79	22.85	21.90
		815.5	23.76	22.81	21.90
5MHz	1 RB high	821.5	24.75	23.80	23.00
		819.0	24.74	23.82	23.00
		816.5	24.77	23.81	23.02
	1 RB low	821.5	24.75	23.77	22.97
		819.0	24.67	23.74	22.95
		816.5	24.67	23.74	22.94
	50% RB mid	821.5	23.85	23.00	21.99
		819.0	23.85	22.98	21.97
		816.5	23.82	22.95	21.98
	100% RB	821.5	23.83	22.87	21.96
		819.0	23.84	22.89	21.98
		816.5	23.79	22.84	21.93
10MHz	1 RB high	819.0	24.87	23.86	22.79
	1 RB low	819.0	24.77	23.77	22.71
	50% RB mid	819.0	23.89	23.06	22.11
	100% RB	819.0	23.88	23.01	21.98

LTE band 26(824MHz~849MHz)

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	848.3	24.93	23.96	22.82
		836.5	24.81	23.85	22.77
		824.7	24.71	23.77	23.21
	1 RB low	848.3	24.89	23.88	22.81
		836.5	24.82	23.82	22.75
		824.7	24.71	23.78	23.18
	50% RB mid	848.3	24.99	24.20	22.96
		836.5	24.92	24.12	22.90
		824.7	24.88	24.09	22.92
	100% RB	848.3	23.99	23.17	22.13
		836.5	23.87	23.06	22.02
		824.7	23.79	23.05	21.98
3MHz	1 RB high	847.5	24.93	23.92	22.79
		836.5	24.85	23.85	22.68
		825.5	24.81	23.80	22.74
	1 RB low	847.5	24.95	23.94	22.81
		836.5	24.82	23.86	22.74
		825.5	24.83	23.86	22.77
	50% RB mid	847.5	23.96	23.01	21.96
		836.5	23.87	22.91	21.86
		825.5	23.81	22.93	21.82
	100% RB	847.5	23.93	22.92	22.04
		836.5	23.87	22.86	21.99
		825.5	23.76	22.83	21.92
5MHz	1 RB high	846.5	24.88	23.94	23.05
		836.5	24.77	23.85	22.95
		826.5	24.76	23.85	23.02
	1 RB low	846.5	24.86	23.93	23.08
		836.5	24.74	23.82	22.93
		826.5	24.72	23.82	22.98
	50% RB mid	846.5	23.96	23.04	22.08
		836.5	23.90	22.99	22.04
		826.5	23.84	22.98	22.00
	100% RB	846.5	23.96	22.94	22.06
		836.5	23.87	22.84	21.97
		826.5	23.80	22.83	21.92
10MHz	1 RB high	844.0	25.00	23.99	22.85
		836.5	24.97	23.95	22.83
		829.0	24.86	23.86	22.75
	1 RB low	844.0	24.92	23.91	22.78

		836.5	24.84	23.82	22.75
		829.0	24.82	23.82	22.76
	50% RB mid	844.0	23.98	23.11	22.13
		836.5	23.95	23.05	22.12
		829.0	23.92	23.05	22.12
	100% RB	844.0	23.99	23.05	22.06
		836.5	23.95	22.99	22.02
		829.0	23.91	23.02	22.01
15MHz	1 RB high	841.5	24.92	24.27	23.27
		836.5	24.89	24.27	23.23
		831.5	24.81	24.16	23.14
	1 RB low	841.5	24.82	24.17	23.17
		836.5	24.79	24.16	23.21
		831.5	24.76	24.09	23.16
	50% RB mid	841.5	24.05	22.95	22.04
		836.5	24.02	22.90	22.01
		831.5	23.97	22.92	21.96
	100% RB	841.5	24.04	23.01	22.07
		836.5	23.97	22.93	21.99
		831.5	23.93	22.96	21.98

LTE band 41

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)		
			QPSK	16QAM	64QAM
5MHz	1 RB high	2687.5	27.22	26.31	25.20
		2593.0	27.37	26.55	25.36
		2498.5	27.14	26.31	25.11
	1 RB low	2687.5	27.27	26.39	25.25
		2593.0	27.46	26.58	25.45
		2498.5	27.22	26.32	25.15
	50% RB mid	2687.5	26.43	25.37	24.27
		2593.0	26.55	25.56	24.54
		2498.5	26.28	25.29	24.26
	100% RB	2687.5	26.32	25.36	24.22
		2593.0	26.45	25.52	24.50
		2498.5	26.21	25.25	24.22
10MHz	1 RB high	2685.0	27.31	26.41	25.26
		2593.0	27.42	26.60	25.42
		2501.0	27.22	26.41	25.21
	1 RB low	2685.0	27.44	26.56	25.39
		2593.0	27.58	26.77	25.56
		2501.0	27.30	26.44	25.22
	50% RB mid	2685.0	26.44	25.46	24.35
		2593.0	26.57	25.60	24.60
		2501.0	26.28	25.33	24.29
	100% RB	2685.0	26.48	25.48	24.38
		2593.0	26.59	25.61	24.58
		2501.0	26.32	25.36	24.25
15MHz	1 RB high	2682.5	27.17	26.28	25.13
		2593.0	27.27	26.43	25.26
		2503.5	27.08	26.25	25.11
	1 RB low	2682.5	27.36	26.50	25.32
		2593.0	27.51	26.67	25.50
		2503.5	27.15	26.30	25.10
	50% RB mid	2682.5	26.47	25.38	24.33
		2593.0	26.53	25.51	24.54
		2503.5	26.27	25.22	24.22
	100% RB	2682.5	26.42	25.44	24.34
		2593.0	26.52	25.53	24.53
		2503.5	26.22	25.28	24.22
20MHz	1 RB high	2680.0	27.01	26.18	24.98
		2593.0	27.05	26.23	25.06
		2506.0	26.87	26.11	24.93
	1 RB low	2680.0	27.25	26.39	25.24

		2593.0	27.39	26.57	25.37
		2506.0	26.97	26.15	24.99
	50% RB mid	2680.0	26.47	25.50	24.40
		2593.0	26.57	25.53	24.56
		2506.0	26.27	25.30	24.28
	100% RB	2680.0	26.47	25.49	24.43
		2593.0	26.54	25.56	24.55
		2506.0	26.30	25.32	24.29

LTE band 66

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	1779.3	24.07	22.79	21.80
		1745.0	23.47	22.87	21.78
		1710.7	23.38	22.74	21.73
	1 RB low	1779.3	23.97	22.86	21.91
		1745.0	23.49	22.83	21.77
		1710.7	23.39	22.74	21.83
	50% RB mid	1779.3	23.77	22.79	21.84
		1745.0	23.62	22.67	22.10
		1710.7	23.53	22.47	22.03
	100% RB	1779.3	22.73	21.83	20.69
		1745.0	22.69	21.87	20.68
		1710.7	22.51	21.69	20.82
3MHz	1 RB high	1778.5	24.10	23.32	22.35
		1745.0	24.02	23.27	22.27
		1711.5	23.88	23.05	22.13
	1 RB low	1778.5	24.13	23.38	22.32
		1745.0	24.02	23.28	22.23
		1711.5	23.91	23.10	22.10
	50% RB mid	1778.5	23.13	22.22	21.21
		1745.0	23.09	22.20	21.13
		1711.5	22.93	22.01	21.01
	100% RB	1778.5	23.14	22.17	21.18
		1745.0	23.06	22.11	21.04
		1711.5	22.94	21.94	20.98
5MHz	1 RB high	1777.5	23.51	23.29	22.17
		1745.0	23.44	23.26	22.17
		1712.5	23.46	23.01	22.02
	1 RB low	1777.5	23.50	23.10	22.23
		1745.0	23.46	23.22	22.22
		1712.5	23.45	23.10	22.01
	50% RB mid	1777.5	22.74	22.20	21.19
		1745.0	22.67	22.13	21.12
		1712.5	22.92	22.00	20.98
	100% RB	1777.5	22.68	22.20	21.17
		1745.0	22.63	22.12	21.12
		1712.5	22.90	22.00	20.97
10MHz	1 RB high	1775.0	24.03	22.85	21.78
		1745.0	23.55	22.94	21.75
		1715.0	23.37	22.71	21.58
	1 RB low	1775.0	23.65	23.01	21.89

		1745.0	23.54	22.95	21.88
		1715.0	23.45	22.75	22.01
	50% RB mid	1775.0	22.76	21.75	21.25
		1745.0	22.69	21.68	21.18
		1715.0	22.53	21.86	21.02
	100% RB	1775.0	22.76	21.73	21.11
		1745.0	22.67	21.68	21.01
		1715.0	22.55	21.68	20.94
15MHz	1 RB high	1772.5	23.50	22.89	21.76
		1745.0	23.45	22.78	21.71
		1717.5	23.32	22.59	21.88
	1 RB low	1772.5	23.59	22.83	21.93
		1745.0	23.45	22.68	22.08
		1717.5	23.36	22.61	21.98
	50% RB mid	1772.5	22.76	21.74	21.23
		1745.0	22.63	21.59	21.11
		1717.5	22.56	21.67	20.95
	100% RB	1772.5	22.69	21.71	21.16
		1745.0	22.65	21.62	21.15
		1717.5	22.54	21.74	20.99
20MHz	1 RB high	1770.0	23.85	23.15	22.03
		1745.0	23.78	23.02	21.97
		1720.0	23.65	22.90	21.88
	1 RB low	1770.0	23.87	23.16	22.12
		1745.0	23.80	23.13	22.00
		1720.0	23.69	22.89	21.88
	50% RB mid	1770.0	23.19	22.25	21.23
		1745.0	23.06	22.12	21.08
		1720.0	22.98	21.97	20.99
	100% RB	1770.0	23.14	22.17	21.20
		1745.0	23.07	22.12	21.13
		1720.0	22.93	21.93	20.95

LTE band 71

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)		
			QPSK	16QAM	64QAM
5MHz	1 RB high	695.5	25.03	24.26	23.24
		680.5	25.02	24.30	23.16
		665.5	24.97	24.25	23.11
	1 RB low	695.5	25.03	24.21	23.25
		680.5	25.01	24.21	23.24
		665.5	24.75	24.17	23.11
	50% RB mid	695.5	24.35	23.29	22.34
		680.5	24.25	23.24	22.22
		665.5	24.25	23.20	22.22
	100% RB	695.5	24.32	23.31	22.28
		680.5	24.25	23.23	22.19
		665.5	24.08	23.17	22.13
10MHz	1 RB high	693.0	23.80	24.42	23.27
		680.5	25.09	24.28	23.34
		668.0	25.06	24.30	23.25
	1 RB low	693.0	23.75	24.40	23.31
		680.5	25.05	24.36	23.32
		668.0	25.10	24.20	23.20
	50% RB mid	693.0	22.88	23.32	22.32
		680.5	24.29	23.27	22.23
		668.0	24.29	23.27	22.26
	100% RB	693.0	22.86	23.32	22.30
		680.5	24.34	23.28	22.25
		668.0	24.26	23.24	22.17
15MHz	1 RB high	690.5	25.07	24.29	23.19
		680.5	25.03	24.30	23.20
		670.5	24.96	24.17	23.18
	1 RB low	690.5	25.06	24.41	23.28
		680.5	25.03	24.34	23.29
		670.5	25.02	24.24	23.18
	50% RB mid	690.5	24.31	23.23	22.24
		680.5	24.24	23.20	22.24
		670.5	24.24	23.22	22.19
	100% RB	690.5	24.30	23.27	22.28
		680.5	24.25	23.22	22.22
		670.5	24.22	23.18	22.16
20MHz	1 RB high	688.0	24.91	24.15	23.06
		680.5	24.83	24.06	22.94
		673.0	24.80	24.01	23.02
	1 RB low	688.0	24.90	24.07	23.08

		680.5	24.87	24.17	23.06
		673.0	24.84	24.01	23.12
	50% RB mid	688.0	24.33	23.30	22.28
		680.5	24.28	23.26	22.25
		673.0	24.20	23.17	22.16
	100% RB	688.0	24.26	23.19	22.21
		680.5	24.22	23.16	22.20
		673.0	24.13	23.11	22.09

A.1.3 Radiated

A.1.3.1 Description

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

Rule Part 22.913(a) specifies "Mobile stations are limited to 2.0 watts EIRP."

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 and mobile and portable stations operating in the 1695–1710 MHz and 1755–1780 MHz bands 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(h) (2) specifies "Mobile stations are limited to 2.0 watts EIRP."

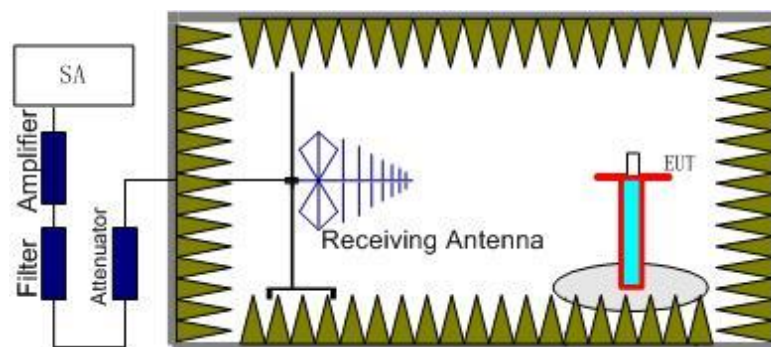
Rule Part 90.542(a) (7) Portable stations (hand-held devices) transmitting in the 758-768 MHz band and the 788-798 MHz band are limited to 3 watts ERP.

Rule Part 90.635(b) specifies "The maximum output power of the transmitter for mobile stations is 100 watts (50dBm)".

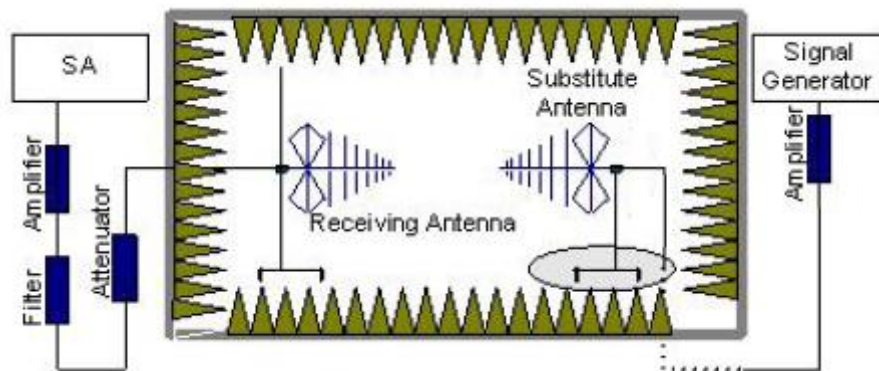
A.1.3.2 Method of Measurement

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

1. EUT was placed on a 1.5-meter-high non-conductive stand at a 3-meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.5m. 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 rms 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. Adjust 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 (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, $ERP = EIRP - 2.15$.

A.1.3.3 Measurement result

LTE Band 2-EIRP

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

LTE Band 2_1.4MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1850.70	-20.29	2.92	43.75	4.87	25.41	33.00	7.59	H
1880.00	-19.27	2.85	43.75	4.82	26.45	33.00	6.55	H
1909.30	-19.14	2.87	43.77	4.76	26.52	33.00	6.48	H

LTE Band 2_3MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1851.50	-20.46	2.87	43.75	4.87	25.29	33.00	7.71	H
1880.00	-19.41	2.85	43.75	4.82	26.31	33.00	6.69	H
1908.50	-19.30	2.89	43.78	4.76	26.35	33.00	6.65	H

LTE Band 2_5MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1852.50	-20.50	2.87	43.75	4.87	25.25	33.00	7.75	H
1880.00	-19.36	2.85	43.75	4.82	26.36	33.00	6.64	H
1907.50	-19.37	2.84	43.77	4.77	26.33	33.00	6.67	H

LTE Band 2_10MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1855.00	-20.54	2.88	43.74	4.86	25.18	33.00	7.82	H
1880.00	-19.38	2.85	43.75	4.82	26.34	33.00	6.66	H
1905.00	-19.22	2.87	43.77	4.77	26.45	33.00	6.55	H

LTE Band 2_15MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1857.50	-20.50	2.87	43.75	4.86	25.24	33.00	7.76	H
1880.00	-19.45	2.85	43.75	4.82	26.27	33.00	6.73	H
1902.50	-19.35	2.86	43.77	4.78	26.34	33.00	6.66	H

LTE Band 2_20 MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1860.00	-20.31	2.86	43.75	4.85	25.43	33.00	7.57	H
1880.00	-19.39	2.85	43.75	4.82	26.33	33.00	6.67	H
1900.00	-19.19	2.87	43.77	4.78	26.49	33.00	6.51	H

LTE Band 2_1.4MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1850.70	-21.02	2.92	43.75	4.87	24.68	33.00	8.32	H
1880.00	-20.02	2.85	43.75	4.82	25.70	33.00	7.30	H
1909.30	-19.89	2.87	43.77	4.76	25.77	33.00	7.23	H

LTE Band 2_3MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1851.50	-21.21	2.87	43.75	4.87	24.54	33.00	8.46	H
1880.00	-20.16	2.85	43.75	4.82	25.56	33.00	7.44	H
1908.50	-20.05	2.89	43.78	4.76	25.60	33.00	7.40	H

LTE Band 2_5MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1852.50	-21.24	2.87	43.75	4.87	24.51	33.00	8.49	H
1880.00	-20.14	2.85	43.75	4.82	25.58	33.00	7.42	H
1907.50	-20.12	2.84	43.77	4.77	25.58	33.00	7.42	H

LTE Band 2_10MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1855.00	-21.29	2.88	43.74	4.86	24.43	33.00	8.57	H
1880.00	-20.15	2.85	43.75	4.82	25.57	33.00	7.43	H
1905.00	-19.98	2.87	43.77	4.77	25.69	33.00	7.31	H

LTE Band 2_15MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1857.50	-21.28	2.87	43.75	4.86	24.46	33.00	8.54	H
1880.00	-20.20	2.85	43.75	4.82	25.52	33.00	7.48	H
1902.50	-20.10	2.86	43.77	4.78	25.59	33.00	7.41	H

LTE Band 2_20 MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1860.00	-21.05	2.86	43.75	4.85	24.69	33.00	8.31	H
1880.00	-20.13	2.85	43.75	4.82	25.59	33.00	7.41	H
1900.00	-19.97	2.87	43.77	4.78	25.71	33.00	7.29	H

LTE Band 2_1.4MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1850.70	-22.14	2.92	43.75	4.87	23.56	33.00	9.44	H
1880.00	-21.11	2.85	43.75	4.82	24.61	33.00	8.39	H
1909.30	-20.99	2.87	43.77	4.76	24.67	33.00	8.33	H

LTE Band 2_3MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1851.50	-22.28	2.87	43.75	4.87	23.47	33.00	9.53	H
1880.00	-21.24	2.85	43.75	4.82	24.48	33.00	8.52	H
1908.50	-21.13	2.89	43.78	4.76	24.52	33.00	8.48	H

LTE Band 2_5MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1852.50	-22.33	2.87	43.75	4.87	23.42	33.00	9.58	H
1880.00	-21.21	2.85	43.75	4.82	24.51	33.00	8.49	H
1907.50	-21.22	2.84	43.77	4.77	24.48	33.00	8.52	H

LTE Band 2_10MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1855.00	-22.39	2.88	43.74	4.86	23.33	33.00	9.67	H
1880.00	-21.23	2.85	43.75	4.82	24.49	33.00	8.51	H
1905.00	-21.10	2.87	43.77	4.77	24.57	33.00	8.43	H

LTE Band 2_15MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1857.50	-22.37	2.87	43.75	4.86	23.37	33.00	9.63	H
1880.00	-21.27	2.85	43.75	4.82	24.45	33.00	8.55	H
1902.50	-21.19	2.86	43.77	4.78	24.50	33.00	8.50	H

LTE Band 2_20 MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1860.00	-22.14	2.86	43.75	4.85	23.60	33.00	9.40	H
1880.00	-21.21	2.85	43.75	4.82	24.51	33.00	8.49	H
1900.00	-21.04	2.87	43.77	4.78	24.64	33.00	8.36	H

LTE Band 4- EIRP

Limits: ≤30dBm (1W)

LTE Band 4_1.4MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1710.70	-20.95	3.17	44.10	5.12	25.10	30.00	4.90	H
1732.50	-21.40	3.33	44.14	5.08	24.49	30.00	5.51	H
1754.30	-20.05	3.76	44.14	5.04	25.37	30.00	4.63	H

LTE Band 4_3MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1711.50	-20.79	3.40	44.10	5.12	25.03	30.00	4.97	H
1732.50	-21.54	3.33	44.14	5.08	24.35	30.00	5.65	H
1753.50	-20.13	3.80	44.13	5.04	25.24	30.00	4.76	H

LTE Band 4_5MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1712.50	-20.44	3.66	44.10	5.12	25.12	30.00	4.88	H
1732.50	-21.50	3.33	44.14	5.08	24.39	30.00	5.61	H
1752.50	-20.24	3.82	44.14	5.05	25.13	30.00	4.87	H

LTE Band 4_10MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1715.00	-20.41	3.56	44.10	5.11	25.24	30.00	4.76	H
1732.50	-21.56	3.33	44.14	5.08	24.33	30.00	5.67	H
1750.00	-21.38	3.00	44.15	5.05	24.82	30.00	5.18	H

LTE Band 4_15MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1717.50	-20.59	3.47	44.11	5.11	25.16	30.00	4.84	H
1732.50	-21.58	3.33	44.14	5.08	24.31	30.00	5.69	H
1747.50	-21.41	3.34	44.15	5.05	24.45	30.00	5.55	H

LTE Band 4_20 MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1720.00	-20.71	3.37	44.11	5.10	25.13	30.00	4.87	H
1732.50	-21.57	3.33	44.14	5.08	24.32	30.00	5.68	H
1745.00	-21.12	3.68	44.16	5.06	24.42	30.00	5.58	H

LTE Band 4_1.4MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1710.70	-21.74	3.17	44.10	5.12	24.31	30.00	5.69	H
1732.50	-22.19	3.33	44.14	5.08	23.70	30.00	6.30	H
1754.30	-20.83	3.76	44.14	5.04	24.59	30.00	5.41	H

LTE Band 4_3MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1711.50	-21.60	3.40	44.10	5.12	24.22	30.00	5.78	H
1732.50	-22.34	3.33	44.14	5.08	23.55	30.00	6.45	H
1753.50	-20.92	3.80	44.13	5.04	24.45	30.00	5.55	H

LTE Band 4_5MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1712.50	-21.24	3.66	44.10	5.12	24.32	30.00	5.68	H
1732.50	-22.33	3.33	44.14	5.08	23.56	30.00	6.44	H
1752.50	-21.04	3.82	44.14	5.05	24.33	30.00	5.67	H

LTE Band 4_10MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1715.00	-21.24	3.56	44.10	5.11	24.41	30.00	5.59	H
1732.50	-22.37	3.33	44.14	5.08	23.52	30.00	6.48	H
1750.00	-22.17	3.00	44.15	5.05	24.03	30.00	5.97	H

LTE Band 4_15MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1717.50	-21.40	3.47	44.11	5.11	24.35	30.00	5.65	H
1732.50	-22.39	3.33	44.14	5.08	23.50	30.00	6.50	H
1747.50	-22.21	3.34	44.15	5.05	23.65	30.00	6.35	H

LTE Band 4_20 MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1720.00	-21.51	3.37	44.11	5.10	24.33	30.00	5.67	H
1732.50	-22.35	3.33	44.14	5.08	23.54	30.00	6.46	H
1745.00	-21.91	3.68	44.16	5.06	23.63	30.00	6.37	H

LTE Band 4_1.4MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1710.70	-22.79	3.17	44.10	5.12	23.26	30.00	6.74	H
1732.50	-23.21	3.33	44.14	5.08	22.68	30.00	7.32	H
1754.30	-21.89	3.76	44.14	5.04	23.53	30.00	6.47	H

LTE Band 4_3MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1711.50	-22.60	3.40	44.10	5.12	23.22	30.00	6.78	H
1732.50	-23.33	3.33	44.14	5.08	22.56	30.00	7.44	H
1753.50	-21.97	3.80	44.13	5.04	23.40	30.00	6.60	H

LTE Band 4_5MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1712.50	-22.27	3.66	44.10	5.12	23.29	30.00	6.71	H
1732.50	-23.32	3.33	44.14	5.08	22.57	30.00	7.43	H
1752.50	-22.07	3.82	44.14	5.05	23.30	30.00	6.70	H

LTE Band 4_10MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1715.00	-22.24	3.56	44.10	5.11	23.41	30.00	6.59	H
1732.50	-23.35	3.33	44.14	5.08	22.54	30.00	7.46	H
1750.00	-23.22	3.00	44.15	5.05	22.98	30.00	7.02	H

LTE Band 4_15MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1717.50	-22.43	3.47	44.11	5.11	23.32	30.00	6.68	H
1732.50	-23.40	3.33	44.14	5.08	22.49	30.00	7.51	H
1747.50	-23.25	3.34	44.15	5.05	22.61	30.00	7.39	H

LTE Band 4_20 MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1720.00	-22.53	3.37	44.11	5.10	23.31	30.00	6.69	H
1732.50	-23.36	3.33	44.14	5.08	22.53	30.00	7.47	H
1745.00	-22.95	3.68	44.16	5.06	22.59	30.00	7.41	H

LTE Band 5-ERP

Limits: $\leq 38.45\text{dBm}$ (7W)

LTE Band 5_1.4MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
824.70	-25.32	2.26	45.79	0.95	2.15	17.01	38.45	21.44	H
836.50	-24.98	2.26	45.66	0.82	2.15	17.09	38.45	21.36	H
848.30	-25.25	2.27	45.55	0.80	2.15	16.68	38.45	21.77	H

LTE Band 5_3MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
825.50	-25.42	2.26	45.79	0.94	2.15	16.90	38.45	21.55	H
836.50	-25.02	2.26	45.66	0.82	2.15	17.05	38.45	21.40	H
847.50	-25.27	2.27	45.56	0.81	2.15	16.68	38.45	21.77	H

LTE Band 5_5MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
826.50	-25.36	2.25	45.77	0.93	2.15	16.94	38.45	21.51	H
836.50	-25.00	2.26	45.66	0.82	2.15	17.07	38.45	21.38	H
846.50	-25.29	2.26	45.56	0.82	2.15	16.68	38.45	21.77	H

LTE Band 5_10MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
829.00	-25.30	2.25	45.77	0.90	2.15	16.97	38.45	21.48	H
836.50	-24.90	2.26	45.66	0.82	2.15	17.17	38.45	21.28	H
844.00	-25.35	2.26	45.59	0.82	2.15	16.65	38.45	21.80	H

LTE Band 5_1.4MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
824.70	-26.04	2.26	45.79	0.95	2.15	16.29	38.45	22.16	H
836.50	-25.70	2.26	45.66	0.82	2.15	16.37	38.45	22.08	H
848.30	-26.00	2.27	45.55	0.80	2.15	15.93	38.45	22.52	H

LTE Band 5_3MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
825.50	-26.14	2.26	45.79	0.94	2.15	16.18	38.45	22.27	H
836.50	-25.74	2.26	45.66	0.82	2.15	16.33	38.45	22.12	H
847.50	-26.03	2.27	45.56	0.81	2.15	15.92	38.45	22.53	H

LTE Band 5_5MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
826.50	-26.13	2.25	45.77	0.93	2.15	16.17	38.45	22.28	H
836.50	-25.72	2.26	45.66	0.82	2.15	16.35	38.45	22.10	H
846.50	-26.14	2.26	45.56	0.82	2.15	15.83	38.45	22.62	H

LTE Band 5_10MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
829.00	-26.12	2.25	45.77	0.90	2.15	16.15	38.45	22.30	H
836.50	-25.63	2.26	45.66	0.82	2.15	16.44	38.45	22.01	H
844.00	-26.22	2.26	45.59	0.82	2.15	15.78	38.45	22.67	H

LTE Band 5_1.4MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
824.70	-27.14	2.26	45.79	0.95	2.15	15.19	38.45	23.26	H
836.50	-26.79	2.26	45.66	0.82	2.15	15.28	38.45	23.17	H
848.30	-27.06	2.27	45.55	0.80	2.15	14.87	38.45	23.58	H

LTE Band 5_3MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
825.50	-27.25	2.26	45.79	0.94	2.15	15.07	38.45	23.38	H
836.50	-26.86	2.26	45.66	0.82	2.15	15.21	38.45	23.24	H
847.50	-27.08	2.27	45.56	0.81	2.15	14.87	38.45	23.58	H

LTE Band 5_5MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
826.50	-27.21	2.25	45.77	0.93	2.15	15.09	38.45	23.36	H
836.50	-26.81	2.26	45.66	0.82	2.15	15.26	38.45	23.19	H
846.50	-27.16	2.26	45.56	0.82	2.15	14.81	38.45	23.64	H

LTE Band 5_10MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
829.00	-27.15	2.25	45.77	0.90	2.15	15.12	38.45	23.33	H
836.50	-26.73	2.26	45.66	0.82	2.15	15.34	38.45	23.11	H
844.00	-27.21	2.26	45.59	0.82	2.15	14.79	38.45	23.66	H

LTE Band 7- EIRP

Limits: ≤ 33 dBm (2W)

LTE Band 7_5MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2502.50	-25.62	3.58	45.68	6.10	22.58	33.00	10.42	H
2535.00	-25.17	3.63	44.82	6.16	22.18	33.00	10.82	H
2567.50	-25.55	3.65	44.92	6.22	21.94	33.00	11.06	H

LTE Band 7_10MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2505.00	-25.81	3.59	45.64	6.11	22.35	33.00	10.65	H
2535.00	-25.20	3.63	44.82	6.16	22.15	33.00	10.85	H
2565.00	-25.59	3.65	44.97	6.22	21.95	33.00	11.05	H

LTE Band 7_15MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2507.50	-25.19	3.59	44.92	6.11	22.25	33.00	10.75	H
2535.00	-25.21	3.63	44.82	6.16	22.14	33.00	10.86	H
2562.50	-26.17	3.65	45.67	6.21	22.06	33.00	10.94	H

LTE Band 7_20 MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2510.00	-25.65	3.58	45.36	6.12	22.25	33.00	10.75	H
2535.00	-25.15	3.63	44.82	6.16	22.20	33.00	10.80	H
2560.00	-26.19	3.64	45.98	6.21	22.36	33.00	10.64	H

LTE Band 7_5MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2502.50	-26.35	3.58	45.68	6.10	21.85	33.00	11.15	H
2535.00	-25.88	3.63	44.82	6.16	21.47	33.00	11.53	H
2567.50	-26.29	3.65	44.92	6.22	21.20	33.00	11.80	H

LTE Band 7_10MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2505.00	-26.50	3.59	45.64	6.11	21.66	33.00	11.34	H
2535.00	-25.87	3.63	44.82	6.16	21.48	33.00	11.52	H
2565.00	-26.31	3.65	44.97	6.22	21.23	33.00	11.77	H

LTE Band 7_15MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2507.50	-25.91	3.59	44.92	6.11	21.53	33.00	11.47	H
2535.00	-25.94	3.63	44.82	6.16	21.41	33.00	11.59	H
2562.50	-26.91	3.65	45.67	6.21	21.32	33.00	11.68	H

LTE Band 7_20 MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2510.00	-26.37	3.58	45.36	6.12	21.53	33.00	11.47	H
2535.00	-25.84	3.63	44.82	6.16	21.51	33.00	11.49	H
2560.00	-26.93	3.64	45.98	6.21	21.62	33.00	11.38	H

LTE Band 7_5MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2502.50	-27.45	3.58	45.68	6.10	20.75	33.00	12.25	H
2535.00	-26.97	3.63	44.82	6.16	20.38	33.00	12.62	H
2567.50	-27.36	3.65	44.92	6.22	20.13	33.00	12.87	H

LTE Band 7_10MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2505.00	-27.59	3.59	45.64	6.11	20.57	33.00	12.43	H
2535.00	-26.98	3.63	44.82	6.16	20.37	33.00	12.63	H
2565.00	-27.37	3.65	44.97	6.22	20.17	33.00	12.83	H

LTE Band 7_15MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2507.50	-27.00	3.59	44.92	6.11	20.44	33.00	12.56	H
2535.00	-27.02	3.63	44.82	6.16	20.33	33.00	12.67	H
2562.50	-27.95	3.65	45.67	6.21	20.28	33.00	12.72	H

LTE Band 7_20 MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2510.00	-27.45	3.58	45.36	6.12	20.45	33.00	12.55	H
2535.00	-26.94	3.63	44.82	6.16	20.41	33.00	12.59	H
2560.00	-28.00	3.64	45.98	6.21	20.55	33.00	12.45	H

LTE Band 12 - ERP

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

LTE Band 12_1.4MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
699.70	-21.14	1.90	44.66	0.77	2.15	20.24	34.77	14.53	H
707.50	-22.22	1.91	44.94	0.62	2.15	19.28	34.77	15.49	H
715.30	-23.74	1.92	45.26	0.50	2.15	17.95	34.77	16.82	H

LTE Band 12_3MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
700.50	-21.32	1.90	44.68	0.76	2.15	20.07	34.77	14.70	H
707.50	-22.36	1.91	44.94	0.62	2.15	19.14	34.77	15.63	H
714.50	-23.64	1.92	45.26	0.50	2.15	18.05	34.77	16.72	H

LTE Band 12_5MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
701.50	-21.57	1.90	44.81	0.74	2.15	19.93	34.77	14.84	H
707.50	-22.39	1.91	44.94	0.62	2.15	19.11	34.77	15.66	H
713.50	-23.44	1.92	45.22	0.50	2.15	18.21	34.77	16.56	H

LTE Band 12_10MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
704.00	-21.85	1.91	44.93	0.70	2.15	19.72	34.77	15.05	H
707.50	-22.38	1.91	44.94	0.62	2.15	19.12	34.77	15.65	H
711.00	-23.12	1.92	45.19	0.53	2.15	18.53	34.77	16.24	H

LTE Band 12_1.4MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
699.70	-21.86	1.90	44.66	0.77	2.15	19.52	34.77	15.25	H
707.50	-22.93	1.91	44.94	0.62	2.15	18.57	34.77	16.20	H
715.30	-24.46	1.92	45.26	0.50	2.15	17.23	34.77	17.54	H

LTE Band 12_3MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
700.50	-22.05	1.90	44.68	0.76	2.15	19.34	34.77	15.43	H
707.50	-23.07	1.91	44.94	0.62	2.15	18.43	34.77	16.34	H
714.50	-24.40	1.92	45.26	0.50	2.15	17.29	34.77	17.48	H

LTE Band 12_5MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
701.50	-22.34	1.90	44.81	0.74	2.15	19.16	34.77	15.61	H
707.50	-23.10	1.91	44.94	0.62	2.15	18.40	34.77	16.37	H
713.50	-24.22	1.92	45.22	0.50	2.15	17.43	34.77	17.34	H

LTE Band 12_10MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
704.00	-22.62	1.91	44.93	0.70	2.15	18.95	34.77	15.82	H
707.50	-23.05	1.91	44.94	0.62	2.15	18.45	34.77	16.32	H
711.00	-23.85	1.92	45.19	0.53	2.15	17.80	34.77	16.97	H

LTE Band 12_1.4MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
699.70	-22.91	1.90	44.66	0.77	2.15	18.47	34.77	16.30	H
707.50	-24.02	1.91	44.94	0.62	2.15	17.48	34.77	17.29	H
715.30	-25.52	1.92	45.26	0.50	2.15	16.17	34.77	18.60	H

LTE Band 12_3MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
700.50	-23.10	1.90	44.68	0.76	2.15	18.29	34.77	16.48	H
707.50	-24.15	1.91	44.94	0.62	2.15	17.35	34.77	17.42	H
714.50	-25.41	1.92	45.26	0.50	2.15	16.28	34.77	18.49	H

LTE Band 12_5MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
701.50	-23.36	1.90	44.81	0.74	2.15	18.14	34.77	16.63	H
707.50	-24.17	1.91	44.94	0.62	2.15	17.33	34.77	17.44	H
713.50	-25.25	1.92	45.22	0.50	2.15	16.40	34.77	18.37	H

LTE Band 12_10MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
704.00	-23.66	1.91	44.93	0.70	2.15	17.91	34.77	16.86	H
707.50	-24.16	1.91	44.94	0.62	2.15	17.34	34.77	17.43	H
711.00	-24.90	1.92	45.19	0.53	2.15	16.75	34.77	18.02	H

LTE Band 13- ERP

Limits: ≤ 34.77 dBm (3W)

LTE Band 13_5MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
779.50	-25.35	2.01	45.64	0.04	2.15	16.17	34.77	18.60	H
782.00	-25.52	2.01	45.65	0.09	2.15	16.06	34.77	18.71	V
784.50	-25.78	2.01	45.67	0.16	2.15	15.89	34.77	18.88	V

LTE Band 13_10MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
782.00	-21.62	2.01	45.65	0.09	2.15	16.00	34.77	14.81	H

LTE Band 13_5MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
779.50	-26.06	2.01	45.64	0.04	2.15	15.46	34.77	19.31	H
782.00	-26.22	2.01	45.65	0.09	2.15	15.36	34.77	19.41	V
784.50	-26.54	2.01	45.67	0.16	2.15	15.13	34.77	19.64	V

LTE Band 13_10MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
782.00	-26.30	2.01	45.65	0.09	2.15	15.28	34.77	19.49	V

LTE Band 13_5MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
779.50	-27.13	2.01	45.64	0.04	2.15	14.39	34.77	20.38	H
782.00	-27.30	2.01	45.65	0.09	2.15	14.28	34.77	20.49	V
784.50	-27.57	2.01	45.67	0.16	2.15	14.10	34.77	20.67	V

LTE Band 13_10MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
782.00	-27.36	2.01	45.65	0.09	2.15	14.22	34.77	20.55	V

LTE Band 14- ERP

Limits: ≤34.77 dBm (3W)

LTE Band 14_5MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
790.50	-26.46	2.02	45.71	0.18	2.15	15.26	34.77	19.51	H
793.00	-26.72	2.03	45.72	0.19	2.15	15.01	34.77	19.76	H
795.50	-26.98	2.03	45.74	0.20	2.15	14.78	34.77	19.99	H

LTE Band 14_10MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
793.00	-26.70	2.03	45.72	0.19	2.15	15.03	34.77	19.74	H

LTE Band 14_5MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
790.50	-27.19	2.02	45.71	0.18	2.15	14.53	34.77	20.24	H
793.00	-27.45	2.03	45.72	0.19	2.15	14.28	34.77	20.49	H
795.50	-27.70	2.03	45.74	0.20	2.15	14.06	34.77	20.71	H

LTE Band 14_10MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
793.00	-27.45	2.03	45.72	0.19	2.15	14.28	34.77	20.49	H

LTE Band 14_5MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
790.50	-28.22	2.02	45.71	0.18	2.15	13.50	34.77	21.27	H
793.00	-28.49	2.03	45.72	0.19	2.15	13.24	34.77	21.53	H
795.50	-28.53	2.03	45.74	0.20	2.15	13.23	34.77	21.54	H

LTE Band 14_10MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
793.00	-28.49	2.03	45.72	0.19	2.15	13.24	34.77	21.53	H

LTE Band 25- EIRP

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

LTE Band 25_1.4MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1850.70	-21.65	2.92	43.75	4.87	24.05	33.00	8.95	H
1882.50	-20.43	3.13	43.75	4.81	25.00	33.00	8.00	H
1914.30	-18.91	2.89	43.78	4.75	26.73	33.00	6.27	H

LTE Band 25_3MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1851.50	-21.75	2.87	43.75	4.87	24.00	33.00	9.00	H
1882.50	-20.53	3.13	43.75	4.81	24.90	33.00	8.10	H
1913.50	-19.04	2.88	43.78	4.76	26.62	33.00	6.38	H

LTE Band 25_5MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1852.50	-21.75	2.87	43.75	4.87	24.00	33.00	9.00	H
1882.50	-20.54	3.13	43.75	4.81	24.89	33.00	8.11	H
1912.50	-19.00	2.86	43.77	4.76	26.67	33.00	6.33	H

LTE Band 25_10MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1855.00	-21.70	2.88	43.74	4.86	24.02	33.00	8.98	H
1882.50	-20.46	3.13	43.75	4.81	24.97	33.00	8.03	H
1910.00	-18.95	2.88	43.77	4.76	26.70	33.00	6.30	H

LTE Band 25_15MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1857.50	-21.77	2.87	43.75	4.86	23.97	33.00	9.03	H
1882.50	-20.52	3.13	43.75	4.81	24.91	33.00	8.09	H
1907.50	-19.16	2.84	43.77	4.77	26.54	33.00	6.46	H

LTE Band 25_20 MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1860.00	-21.56	2.86	43.75	4.85	24.18	33.00	8.82	H
1882.50	-20.48	3.13	43.75	4.81	24.95	33.00	8.05	H
1905.00	-19.20	2.87	43.77	4.77	26.47	33.00	6.53	H

LTE Band 25_1.4MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1850.70	-22.37	2.92	43.75	4.87	23.33	33.00	9.67	H
1882.50	-21.18	3.13	43.75	4.81	24.25	33.00	8.75	H
1914.30	-19.66	2.89	43.78	4.75	25.98	33.00	7.02	H

LTE Band 25_3MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1851.50	-22.51	2.87	43.75	4.87	23.24	33.00	9.76	H
1882.50	-21.28	3.13	43.75	4.81	24.15	33.00	8.85	H
1913.50	-19.82	2.88	43.78	4.76	25.84	33.00	7.16	H

LTE Band 25_5MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1852.50	-22.50	2.87	43.75	4.87	23.25	33.00	9.75	H
1882.50	-21.29	3.13	43.75	4.81	24.14	33.00	8.86	H
1912.50	-19.77	2.86	43.77	4.76	25.90	33.00	7.10	H

LTE Band 25_10MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1855.00	-22.45	2.88	43.74	4.86	23.27	33.00	9.73	H
1882.50	-21.28	3.13	43.75	4.81	24.15	33.00	8.85	H
1910.00	-19.74	2.88	43.77	4.76	25.91	33.00	7.09	H

LTE Band 25_15MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1857.50	-22.48	2.87	43.75	4.86	23.26	33.00	9.74	H
1882.50	-21.28	3.13	43.75	4.81	24.15	33.00	8.85	H
1907.50	-19.99	2.84	43.77	4.77	25.71	33.00	7.29	H

LTE Band 25_20 MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1860.00	-22.32	2.86	43.75	4.85	23.42	33.00	9.58	H
1882.50	-21.22	3.13	43.75	4.81	24.21	33.00	8.79	H
1905.00	-19.95	2.87	43.77	4.77	25.72	33.00	7.28	H

LTE Band 25_1.4MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1850.70	-23.46	2.92	43.75	4.87	22.24	33.00	10.76	H
1882.50	-22.26	3.13	43.75	4.81	23.17	33.00	9.83	H
1914.30	-20.74	2.89	43.78	4.75	24.90	33.00	8.10	H

LTE Band 25_3MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1851.50	-23.68	2.87	43.75	4.87	22.07	33.00	10.93	H
1882.50	-22.34	3.13	43.75	4.81	23.09	33.00	9.91	H
1913.50	-20.90	2.88	43.78	4.76	24.76	33.00	8.24	H

LTE Band 25_5MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1852.50	-23.57	2.87	43.75	4.87	22.18	33.00	10.82	H
1882.50	-22.36	3.13	43.75	4.81	23.07	33.00	9.93	H
1912.50	-20.84	2.86	43.77	4.76	24.83	33.00	8.17	H

LTE Band 25_10MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1855.00	-23.53	2.88	43.74	4.86	22.19	33.00	10.81	H
1882.50	-22.29	3.13	43.75	4.81	23.14	33.00	9.86	H
1910.00	-20.81	2.88	43.77	4.76	24.84	33.00	8.16	H

LTE Band 25_15MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1857.50	-23.56	2.87	43.75	4.86	22.18	33.00	10.82	H
1882.50	-22.34	3.13	43.75	4.81	23.09	33.00	9.91	H
1907.50	-21.01	2.84	43.77	4.77	24.69	33.00	8.31	H

LTE Band 25_20 MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1860.00	-23.42	2.86	43.75	4.85	22.32	33.00	10.68	H
1882.50	-22.31	3.13	43.75	4.81	23.12	33.00	9.88	H
1905.00	-21.04	2.87	43.77	4.77	24.63	33.00	8.37	H

LTE Band 26(824MHz~849MHz)- ERP

Limits: ≤50dBm (100W)

LTE Band 26_1.4MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
824.70	-25.17	2.26	45.79	0.95	2.15	17.16	38.45	21.29	H
836.50	-24.89	2.26	45.66	0.82	2.15	17.18	38.45	21.27	H
848.30	-25.14	2.27	45.55	0.80	2.15	16.79	38.45	21.66	H

LTE Band 26_3MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
825.50	-25.25	2.26	45.79	0.94	2.15	17.07	38.45	21.38	H
836.50	-24.96	2.26	45.66	0.82	2.15	17.11	38.45	21.34	H
847.50	-25.26	2.27	45.56	0.81	2.15	16.69	38.45	21.76	H

LTE Band 26_5MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
826.50	-25.28	2.25	45.77	0.93	2.15	17.02	38.45	21.43	H
836.50	-24.97	2.26	45.66	0.82	2.15	17.10	38.45	21.35	H
846.50	-25.33	2.26	45.56	0.82	2.15	16.64	38.45	21.81	H

LTE Band 26_10MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
829.00	-25.23	2.25	45.77	0.90	2.15	17.04	38.45	21.41	H
836.50	-24.94	2.26	45.66	0.82	2.15	17.13	38.45	21.32	H
844.00	-25.31	2.26	45.59	0.82	2.15	16.69	38.45	21.76	H

LTE Band 26_5MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
831.50	-25.46	2.12	45.71	0.87	2.15	16.85	38.45	21.60	H
836.50	-25.02	2.26	45.66	0.82	2.15	17.05	38.45	21.40	H
841.50	-25.57	2.26	45.61	0.82	2.15	16.45	38.45	22.00	H

LTE Band 26_1.4MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
824.70	-25.90	2.26	45.79	0.95	2.15	16.43	38.45	22.02	H
836.50	-25.60	2.26	45.66	0.82	2.15	16.47	38.45	21.98	H
848.30	-25.88	2.27	45.55	0.80	2.15	16.05	38.45	22.40	H

LTE Band 26_3MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
825.50	-26.02	2.26	45.79	0.94	2.15	16.30	38.45	22.15	H
836.50	-25.67	2.26	45.66	0.82	2.15	16.40	38.45	22.05	H
847.50	-26.03	2.27	45.56	0.81	2.15	15.92	38.45	22.53	H

LTE Band 26_5MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
826.50	-26.07	2.25	45.77	0.93	2.15	16.23	38.45	22.22	H
836.50	-25.68	2.26	45.66	0.82	2.15	16.39	38.45	22.06	H
846.50	-26.20	2.26	45.56	0.82	2.15	15.77	38.45	22.68	H

LTE Band 26_10MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
829.00	-26.10	2.25	45.77	0.90	2.15	16.17	38.45	22.28	H
836.50	-25.67	2.26	45.66	0.82	2.15	16.40	38.45	22.05	H
844.00	-26.26	2.26	45.59	0.82	2.15	15.74	38.45	22.71	H

LTE Band 26_15MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
831.50	-26.30	2.12	45.71	0.87	2.15	16.01	38.45	22.44	H
836.50	-25.74	2.26	45.66	0.82	2.15	16.33	38.45	22.12	H
841.50	-26.34	2.26	45.61	0.82	2.15	15.68	38.45	22.77	H

LTE Band 26_1.4MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
824.70	-26.99	2.26	45.79	0.95	2.15	15.34	38.45	23.11	H
836.50	-26.71	2.26	45.66	0.82	2.15	15.36	38.45	23.09	H
848.30	-26.95	2.27	45.55	0.80	2.15	14.98	38.45	23.47	H

LTE Band 26_3MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
825.50	-27.07	2.26	45.79	0.94	2.15	15.25	38.45	23.20	H
836.50	-26.76	2.26	45.66	0.82	2.15	15.31	38.45	23.14	H
847.50	-27.06	2.27	45.56	0.81	2.15	14.89	38.45	23.56	H

LTE Band 26_5MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
826.50	-27.11	2.25	45.77	0.93	2.15	15.19	38.45	23.26	H
836.50	-26.77	2.26	45.66	0.82	2.15	15.30	38.45	23.15	H
846.50	-27.19	2.26	45.56	0.82	2.15	14.78	38.45	23.67	H

LTE Band 26_10MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
829.00	-27.12	2.25	45.77	0.90	2.15	15.15	38.45	23.30	H
836.50	-26.75	2.26	45.66	0.82	2.15	15.32	38.45	23.13	H
844.00	-27.28	2.26	45.59	0.82	2.15	14.72	38.45	23.73	H

LTE Band 26_15MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
831.50	-27.31	2.12	45.71	0.87	2.15	15.00	38.45	23.45	H
836.50	-26.83	2.26	45.66	0.82	2.15	15.24	38.45	23.21	H
841.50	-27.40	2.26	45.61	0.82	2.15	14.62	38.45	23.83	H

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

Limits: ≤38.45dBm (7W)

LTE Band 26_1.4MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
814.70	-25.57	2.13	45.86	0.89	2.15	16.90	50.00	33.10	H
819.00	-25.68	2.19	45.84	1.05	2.15	16.87	50.00	33.13	H
823.30	-24.86	2.24	45.79	0.55	2.15	17.09	50.00	32.91	H

LTE Band 26_3MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
815.50	-25.76	2.14	45.87	0.93	2.15	16.75	50.00	33.25	H
819.00	-25.72	2.19	45.84	1.05	2.15	16.83	50.00	33.17	H
822.50	-24.80	2.23	45.81	0.33	2.15	16.96	50.00	33.04	H

LTE Band 26_5MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
816.50	-25.88	2.16	45.88	0.98	2.15	16.67	50.00	33.33	H
819.00	-25.74	2.19	45.84	1.05	2.15	16.81	50.00	33.19	H
821.50	-25.32	2.22	45.82	0.71	2.15	16.84	50.00	33.16	H

LTE Band 26_10MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
819.00	-25.70	2.19	45.84	1.05	2.15	16.85	50.00	33.15	H

LTE Band 26_1.4MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
814.70	-26.31	2.13	45.86	0.89	2.15	16.16	50.00	33.84	H
819.00	-26.37	2.19	45.84	1.05	2.15	16.18	50.00	33.82	H
823.30	-25.55	2.24	45.79	0.55	2.15	16.40	50.00	33.60	H

LTE Band 26_3MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
815.50	-26.53	2.14	45.87	0.93	2.15	15.98	50.00	34.02	H
819.00	-26.42	2.19	45.84	1.05	2.15	16.13	50.00	33.87	H
822.50	-25.51	2.23	45.81	0.33	2.15	16.25	50.00	33.75	H

LTE Band 26_5MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
816.50	-26.65	2.16	45.88	0.98	2.15	15.90	50.00	34.10	H
819.00	-26.45	2.19	45.84	1.05	2.15	16.10	50.00	33.90	H
821.50	-26.03	2.22	45.82	0.71	2.15	16.13	50.00	33.87	H

LTE Band 26_10MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
819.00	-26.41	2.19	45.84	1.05	2.15	16.14	50.00	33.86	H

LTE Band 26_1.4MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
814.70	-27.32	2.13	45.86	0.89	2.15	15.15	50.00	34.85	H
819.00	-27.45	2.19	45.84	1.05	2.15	15.10	50.00	34.90	H
823.30	-26.67	2.24	45.79	0.55	2.15	15.28	50.00	34.72	H

LTE Band 26_3MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
815.50	-27.51	2.14	45.87	0.93	2.15	15.00	50.00	35.00	H
819.00	-27.51	2.19	45.84	1.05	2.15	15.04	50.00	34.96	H
822.50	-26.61	2.23	45.81	0.33	2.15	15.15	50.00	34.85	H

LTE Band 26_5MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
816.50	-27.69	2.16	45.88	0.98	2.15	14.86	50.00	35.14	H
819.00	-27.52	2.19	45.84	1.05	2.15	15.03	50.00	34.97	H
821.50	-27.12	2.22	45.82	0.71	2.15	15.04	50.00	34.96	H

LTE Band 26_10MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
819.00	-27.48	2.19	45.84	1.05	2.15	15.07	50.00	34.93	H

LTE band 41- EIRP

Limits: ≤33dBm (2W)

LTE Band 41_5MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2498.50	-24.38	3.58	45.59	6.10	23.73	33.00	9.27	H
2593.00	-24.17	3.69	44.93	6.27	23.34	33.00	9.66	H
2687.50	-24.73	3.73	44.98	6.44	22.96	33.00	10.04	H

LTE Band 41_10MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2501.00	-23.88	3.58	45.65	6.10	24.29	33.00	8.71	V
2593.00	-24.14	3.69	44.93	6.27	23.37	33.00	9.63	H
2685.00	-24.64	3.73	44.98	6.43	23.04	33.00	9.96	H

LTE Band 41_15MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2503.50	-24.01	3.58	45.65	6.11	24.17	33.00	8.83	H
2593.00	-24.43	3.69	44.93	6.27	23.08	33.00	9.92	H
2682.50	-25.09	3.73	44.98	6.43	22.59	33.00	10.41	H

LTE Band 41_20MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2506.00	-24.35	3.59	45.15	6.11	23.32	33.00	9.68	H
2593.00	-24.16	3.69	44.93	6.27	23.35	33.00	9.65	H
2680.00	-24.86	3.73	44.97	6.42	22.80	33.00	10.20	H

LTE Band 41_5MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2498.50	-25.47	3.58	45.59	6.10	22.64	33.00	10.36	H
2593.00	-25.04	3.69	44.93	6.27	22.47	33.00	10.53	H
2687.50	-25.69	3.73	44.98	6.44	22.00	33.00	11.00	H

LTE Band 41_10MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2501.00	-24.81	3.58	45.65	6.10	23.36	33.00	9.64	H
2593.00	-25.00	3.69	44.93	6.27	22.51	33.00	10.49	H
2685.00	-25.58	3.73	44.98	6.43	22.10	33.00	10.90	H

LTE Band 41_15MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2503.50	-25.38	3.58	45.65	6.11	22.80	33.00	10.20	H
2593.00	-25.31	3.69	44.93	6.27	22.20	33.00	10.80	H
2682.50	-26.00	3.73	44.98	6.43	21.68	33.00	11.32	H

LTE Band 41_20MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2506.00	-25.50	3.59	45.15	6.11	22.17	33.00	10.83	H
2593.00	-25.04	3.69	44.93	6.27	22.47	33.00	10.53	H
2680.00	-25.92	3.73	44.97	6.42	21.74	33.00	11.26	H

LTE Band 41_5MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2498.50	-26.37	3.58	45.59	6.10	21.74	33.00	11.26	H
2593.00	-25.80	3.69	44.93	6.27	21.71	33.00	11.29	H
2687.50	-25.92	3.73	44.98	6.44	21.77	33.00	11.23	H

LTE Band 41_10MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2501.00	-25.98	3.58	45.65	6.10	22.19	33.00	10.81	H
2593.00	-26.58	3.69	44.93	6.27	20.93	33.00	12.07	H
2685.00	-26.33	3.73	44.98	6.43	21.35	33.00	11.65	H

LTE Band 41_15MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2503.50	-26.23	3.58	45.65	6.11	21.95	33.00	11.05	H
2593.00	-26.07	3.69	44.93	6.27	21.44	33.00	11.56	H
2682.50	-26.67	3.73	44.98	6.43	21.01	33.00	11.99	H

LTE Band 41_20MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{Cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2506.00	-26.48	3.59	45.15	6.11	21.19	33.00	11.81	H
2593.00	-25.95	3.69	44.93	6.27	21.56	33.00	11.44	H
2680.00	-26.71	3.73	44.97	6.42	20.95	33.00	12.05	H

LTE Band 66- EIRP

Limits: ≤30dBm (1W)

LTE Band 66_1.4MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1710.70	-27.72	3.17	44.10	5.12	24.67	30.00	5.33	H
1745.00	-28.77	3.68	44.16	5.06	24.13	30.00	5.87	H
1779.30	-28.15	3.04	44.03	5.00	23.92	30.00	6.08	H

LTE Band 66_3MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1711.50	-28.20	3.40	44.10	5.12	24.42	30.00	5.58	H
1745.00	-29.64	3.68	44.16	5.06	23.26	30.00	6.74	H
1778.50	-28.18	3.04	44.03	5.00	23.89	30.00	6.11	H

LTE Band 66_5MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1712.50	-21.16	3.66	44.10	5.12	24.40	30.00	5.60	H
1745.00	-22.31	3.68	44.16	5.06	23.23	30.00	6.77	H
1777.50	-21.96	3.04	44.04	5.00	24.04	30.00	5.96	H

LTE Band 66_10MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1715.00	-21.12	3.56	44.10	5.11	24.53	30.00	5.47	H
1745.00	-22.26	3.68	44.16	5.06	23.28	30.00	6.72	H
1775.00	-21.76	3.05	44.05	5.01	24.24	30.00	5.76	H

LTE Band 66_15MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1717.50	-21.32	3.47	44.11	5.11	24.43	30.00	5.57	H
1745.00	-22.32	3.68	44.16	5.06	23.22	30.00	6.78	H
1772.50	-21.93	3.05	44.06	5.01	24.09	30.00	5.91	H

LTE Band 66_20MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1720.00	-21.41	3.37	44.11	5.10	24.43	30.00	5.57	H
1745.00	-22.26	3.68	44.16	5.06	23.28	30.00	6.72	H
1770.00	-21.58	3.05	44.07	5.01	24.46	30.00	5.54	H

LTE Band 66_1.4MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1710.70	-28.50	3.17	44.10	5.12	23.89	30.00	6.11	H
1745.00	-29.50	3.68	44.16	5.06	23.40	30.00	6.60	H
1779.30	-28.88	3.04	44.03	5.00	23.19	30.00	6.81	H

LTE Band 66_3MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1711.50	-28.98	3.40	44.10	5.12	23.64	30.00	6.36	H
1745.00	-30.41	3.68	44.16	5.06	22.49	30.00	7.51	H
1778.50	-28.95	3.04	44.03	5.00	23.12	30.00	6.88	H

LTE Band 66_5MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1712.50	-21.94	3.66	44.10	5.12	23.62	30.00	6.38	H
1745.00	-23.06	3.68	44.16	5.06	22.48	30.00	7.52	H
1777.50	-22.73	3.04	44.04	5.00	23.27	30.00	6.73	H

LTE Band 66_10MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1715.00	-21.90	3.56	44.10	5.11	23.75	30.00	6.25	H
1745.00	-23.00	3.68	44.16	5.06	22.54	30.00	7.46	H
1775.00	-22.50	3.05	44.05	5.01	23.50	30.00	6.50	H

LTE Band 66_15MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1717.50	-22.11	3.47	44.11	5.11	23.64	30.00	6.36	H
1745.00	-23.07	3.68	44.16	5.06	22.47	30.00	7.53	H
1772.50	-22.71	3.05	44.06	5.01	23.31	30.00	6.69	H

LTE Band 66_20MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1720.00	-22.17	3.37	44.11	5.10	23.67	30.00	6.33	H
1745.00	-23.02	3.68	44.16	5.06	22.52	30.00	7.48	H
1770.00	-22.37	3.05	44.07	5.01	23.67	30.00	6.33	H

LTE Band 66_1.4MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1710.70	-29.54	3.17	44.10	5.12	22.85	30.00	7.15	H
1745.00	-30.55	3.68	44.16	5.06	22.35	30.00	7.65	H
1779.30	-29.96	3.04	44.03	5.00	22.11	30.00	7.89	H

LTE Band 66_3MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1711.50	-30.00	3.40	44.10	5.12	22.62	30.00	7.38	H
1745.00	-31.42	3.68	44.16	5.06	21.48	30.00	8.52	H
1778.50	-29.97	3.04	44.03	5.00	22.10	30.00	7.90	H

LTE Band 66_5MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1712.50	-22.95	3.66	44.10	5.12	22.61	30.00	7.39	H
1745.00	-24.10	3.68	44.16	5.06	21.44	30.00	8.56	H
1777.50	-23.72	3.04	44.04	5.00	22.28	30.00	7.72	H

LTE Band 66_10MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1715.00	-22.91	3.56	44.10	5.11	22.74	30.00	7.26	H
1745.00	-23.99	3.68	44.16	5.06	21.55	30.00	8.45	H
1775.00	-23.51	3.05	44.05	5.01	22.49	30.00	7.51	H

LTE Band 66_15MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1717.50	-23.14	3.47	44.11	5.11	22.61	30.00	7.39	H
1745.00	-24.11	3.68	44.16	5.06	21.43	30.00	8.57	H
1772.50	-23.70	3.05	44.06	5.01	22.32	30.00	7.68	H

LTE Band 66_20MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1720.00	-23.20	3.37	44.11	5.10	22.64	30.00	7.36	H
1745.00	-24.05	3.68	44.16	5.06	21.49	30.00	8.51	H
1770.00	-23.38	3.05	44.07	5.01	22.66	30.00	7.34	H

LTE Band 71- ERP

Limits: ≤ 34.77 dBm (3W)

LTE Band 71_5MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
665.50	-20.08	1.87	44.73	0.78	2.15	21.41	34.77	13.36	V
680.50	-20.01	1.88	44.72	0.78	2.15	21.45	34.77	13.32	V
695.50	-21.58	1.89	44.67	0.77	2.15	19.82	34.77	14.95	V

LTE Band 71_10MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
668.00	-20.42	1.87	44.75	0.78	2.15	21.10	34.77	13.67	V
680.50	-19.93	1.88	44.72	0.78	2.15	21.53	34.77	13.24	V
693.00	-21.39	1.89	44.67	0.77	2.15	20.01	34.77	14.76	V

LTE Band 71_15MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
670.50	-20.38	1.88	44.75	0.78	2.15	21.12	34.77	13.65	V
680.50	-20.01	1.88	44.72	0.78	2.15	21.45	34.77	13.32	V
690.50	-21.33	1.89	44.73	0.77	2.15	20.13	34.77	14.64	V

LTE Band 71_20MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
673.00	-20.80	1.88	44.71	0.78	2.15	20.66	34.77	14.11	V
680.50	-20.59	1.88	44.72	0.78	2.15	20.87	34.77	13.90	V
688.00	-21.75	1.89	44.72	0.77	2.15	19.71	34.77	15.06	V

LTE Band 71_5MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
665.50	-20.49	1.87	44.73	0.78	2.15	21.00	34.77	13.77	V
680.50	-20.72	1.88	44.72	0.78	2.15	20.74	34.77	14.03	V
695.50	-22.41	1.89	44.67	0.77	2.15	18.99	34.77	15.78	V

LTE Band 71_10MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
668.00	-21.21	1.87	44.75	0.78	2.15	20.31	34.77	14.46	V
680.50	-20.74	1.88	44.72	0.78	2.15	20.72	34.77	14.05	V
693.00	-22.19	1.89	44.67	0.77	2.15	19.21	34.77	15.56	V

LTE Band 71_15MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
670.50	-21.03	1.88	44.75	0.78	2.15	20.47	34.77	14.30	V
680.50	-20.99	1.88	44.72	0.78	2.15	20.47	34.77	14.30	V
690.50	-22.02	1.89	44.73	0.77	2.15	19.44	34.77	15.33	V

LTE Band 71_20MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
673.00	-21.36	1.88	44.71	0.78	2.15	20.10	34.77	14.67	V
680.50	-21.16	1.88	44.72	0.78	2.15	20.30	34.77	14.47	V
688.00	-22.34	1.89	44.72	0.77	2.15	19.12	34.77	15.65	V

LTE Band 71_5MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
665.50	-21.32	1.87	44.73	0.78	2.15	20.17	34.77	14.60	V
680.50	-21.49	1.88	44.72	0.78	2.15	19.97	34.77	14.80	V
695.50	-23.23	1.89	44.67	0.77	2.15	18.17	34.77	16.60	V

LTE Band 71_10MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
668.00	-22.26	1.87	44.75	0.78	2.15	19.26	34.77	15.51	V
680.50	-21.79	1.88	44.72	0.78	2.15	19.67	34.77	15.10	V
693.00	-23.23	1.89	44.67	0.77	2.15	18.17	34.77	16.60	V

LTE Band 71_15MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
668.00	-22.19	1.88	44.75	0.78	2.15	19.31	34.77	15.46	V
680.50	-21.83	1.88	44.72	0.78	2.15	19.63	34.77	15.14	V
693.00	-23.06	1.89	44.73	0.77	2.15	18.40	34.77	16.37	V

LTE Band 71_20MHz_64QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	P _{Ag} (dB)	G _a (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
673.00	-22.51	1.88	44.71	0.78	2.15	18.95	34.77	15.82	V
680.50	-22.08	1.88	44.72	0.78	2.15	19.38	34.77	15.39	V
688.00	-23.15	1.89	44.72	0.77	2.15	18.31	34.77	16.46	V

Peak EIRP (dBm) = P_{Mea}(-25.98dBm) - G_a (-0.78dBi) - P_{Ag} (-44.71dB) - P_{cl} (1.88dB) =15.48dBm

Note: Expanded measurement uncertainty is U = 2.84 dB, k = 2.

A.2 Emission Limit

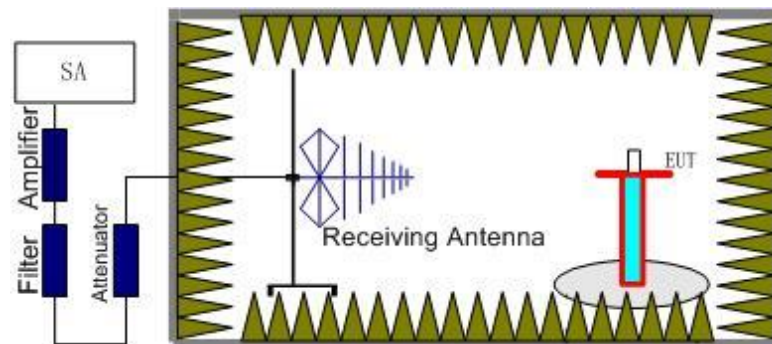
A.2.1 Measurement Method

The measurements procedures in TIA-603E-2016 are used. This measurement is carried out in fully anechoic chamber FAC-3.

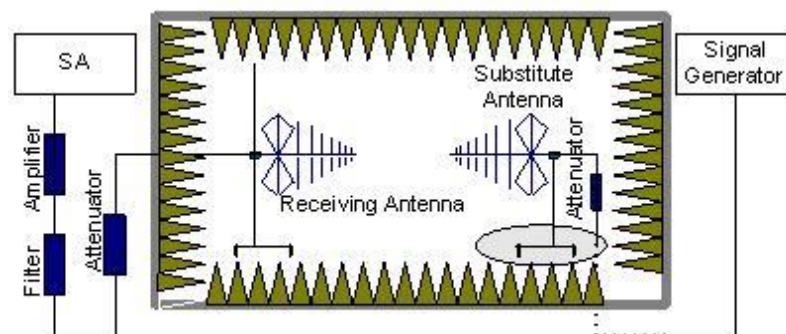
The spectrum was scanned from 9 kHz to the 10th harmonic of the highest frequency generated within the equipment, which is the transmitted carrier. The resolution bandwidth is set 1MHz. The spectrum was scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of each LTE Band.

The procedure of radiated spurious emissions is as follows:

1. EUT was placed on a 1.5-meter-high non-conductive stand at a 3-meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.5m. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT through 360 and adjusting the receiving antenna polarization. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic were measured with peak detector.



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. Adjust 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 (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 Limit

Part 22.917, Part 24.238 and Part 27.53(h) specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

The specification that emissions shall be attenuated below the transmitter power (P) by at least $43 + 10 \log(P)$ dB, translates in the relevant power range (1 to 0.001 W) to -13 dBm. At 1 W the specified minimum attenuation becomes 43 dB and relative to a 30 dBm (1 W) carrier becomes a limit of -13 dBm. At 0.001 W (0 dBm) the minimum attenuation is 13 dB, which again yields a limit of -13 dBm. In this way a translation of the specification from relative to absolute terms is carried out.

Part 27.53(m)(4) specifies for mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log(P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log(P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log(P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log(P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log(P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

Part 27.53(c) states for operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following: (1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB; (2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB; (4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log(P)$ dB in a 6.25 kHz band segment, for mobile and portable stations.

Part 27.53(g) states for operations in the 600 MHz band and the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

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

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

A.2.3 Measurement Results

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

All mode of operation were investigated and the worst case configuration results are reported in this section.



The range of evaluated frequency is from 9 kHz to 26GHz. Measurement value show only up to 6 maximum emissions noted.