NVLAP TESTING
NVLAP LAB CODE 600338-0

BACL Bay Area Compliance Labs Corp.

FCC PART 27

FCC PART 22H, PART 24E

TEST REPORT

For

Waylens Inc.

2711 Centerville Road - Suite 400, Wilmington, Delaware, United States 19808

FCC ID: 2AKAF-MDM01

Report Type:	**Product Name:**
Original Report	LTE CAT.1 Module

Report Number:	RSHA240408005-00A
Report Date:	2024-07-05
Reviewed By:	Jenny Yang
Approved By:	Kyle Xu
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Kunshan) No.248 Chenghu Road, Kunshan, Jiangsu Province, China Tel: +86-512-86175000 Fax: +86-512-88934268 www.baclcorp.com.cn

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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	RSHA240408005-00A	R1V1	2024-07-05	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Waylens Inc.
Tested Model:	MDM01
Product Name:	LTE CAT.1 Module
Power Supply:	DC 3.8V
Maximum Conducted Output Power:	Band 2: 24.04 dBm; Band 4: 24.82 dBm; Band 5: 24.66 dBm; Band 12: 24.78 dBm; Band 17: 23.93 dBm; Band 66: 22.86 dBm
RF Function:	LTE
Operating Band/Frequency:	LTE Band 2: 1850-1910 MHz(TX), 1930-1990 MHz(RX) LTE Band 4: 1710-1755 MHz(TX), 2110-2155 MHz(RX) LTE Band 5: 824-849 MHz(TX), 869-894 MHz(RX) LTE Band 12: 699-716 MHz(TX), 729-746 MHz(RX) LTE Band 17: 704-716 MHz(TX), 734-746 MHz(RX) LTE Band 66: 1710-1780 MHz(TX), 2110-2200 MHz(RX)
Modulation Type:	QPSK, 16QAM
Antenna Type:	Rod Antenna
★Maximum Antenna Gain:	Band 2: 2.06 dBi; Band 4: 1.75 dBi; Band 5: -0.22 dBi; Band 12: -0.14 dBi; Band 17: -0.14 dBi; Band 66: 1.75 dBi
★Maximum Cable Loss:	0.2dB(Below 1GHz), 0.4dB(Above 1GHz)

Note: The maximum antenna gain and cable loss is provided by the applicant.

All measurement and test data in this report was gathered from production sample serial number: RSHA240408005-1 (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2024-04-08.)

Objective

This type approval report is prepared for *Waylens Inc.* in accordance with Part 2, Part 22-Subpart H and Part 24-Subpart E, Part 27 of the Federal Communication Commission's rules.

The objective is to determine the compliance of EUT with FCC rules for output power, modulation characteristic, occupied bandwidth, and spurious emission at antenna terminal, spurious radiated emission, frequency stability, and band edge.

Test Methodology

All tests and measurements indicated in this document were performed in accordance with the Code of Federal Regulations Title 47 Part 2, Sub-Part J as well as the following parts:

Part 22 Subpart H - Public Mobile Services
Part 24 Subpart E - Personal Communication Services
Part 27 – Miscellaneous wireless communications services
Applicable Standards: ANSI C63.26-2015.

Measurement Uncertainty

Item		Uncertainty
RF conducted test		0.9dB
Radiated emission	9 kHz~150 kHz	3.8dB
	150 kHz~30 MHz	3.4dB
	30MHz~1GHz	5.91dB
	1GHz~6GHz	4.68dB
	6GHz~18GHz	4.92dB
	18GHz~40GHz	5.21dB
Occupied Bandwidth		0.5kHz
Temperature		1.0℃
Humidity		6%

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu province, China.

Bay Area Compliance Laboratories Corp. (Kunshan) is accredited in accordance with ISO/IEC 17025:2017 by NVLAP (Lab code: 600338-0), and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No. : CN5055.

SYSTEM TEST CONFIGURATION

Justification

The EUT was configured for testing according to ANSI C63.26-2015.

The final qualification test was performed with the EUT operating at normal mode.

Channel List

Mode		Channel	Frequency (MHz)
LTE Band 2	1.4M	Low	1850.7
		Middle	1880.0
		High	1909.3
	3M	Low	1851.5
		Middle	1880.0
		High	1908.5
	5M	Low	1852.5
		Middle	1880.0
		High	1907.5
	10M	Low	1855.0
		Middle	1880.0
		High	1905.0
	15M	Low	1857.5
		Middle	1880.0
		High	1902.5
	20M	Low	1860.0
		Middle	1880.0
		High	1900.0

Mode		Channel	Frequency (MHz)
LTE Band 4	1.4M	Low	1710.7
		Middle	1732.5
		High	1754.3
	3M	Low	1711.5
		Middle	1732.5
		High	1753.5
	5M	Low	1712.5
		Middle	1732.5
		High	1752.5
	10M	Low	1715.0
		Middle	1732.5
		High	1750.0
	15M	Low	1717.5
		Middle	1732.5
		High	1747.5
	20M	Low	1720.0
		Middle	1732.5
		High	1745.0
LTE Band 5	1.4M	Low	824.7
		Middle	836.5
		High	848.3
	3M	Low	825.5
		Middle	836.5
		High	847.5
	5M	Low	826.5
		Middle	836.5
		High	846.5
	10M	Low	829.0
		Middle	836.5
		High	844.0

Mode		Channel	Frequency (MHz)
LTE Band 12	1.4M	Low	699.7
		Middle	707.5
		High	715.3
	3M	Low	700.5
		Middle	707.5
		High	714.5
	5M	Low	701.5
		Middle	707.5
		High	713.5
	10M	Low	704.0
		Middle	707.5
		High	711.0
LTE Band 17	5M	Low	706.5
		Middle	710.0
		High	713.5
	10M	Low	709.0
		Middle	710.0
		High	711.0
LTE Band 66	1.4M	Low	1710.7
		Middle	1745.0
		High	1779.3
	3M	Low	1711.5
		Middle	1745.0
		High	1778.5
	5M	Low	1712.5
		Middle	1745.0
		High	1777.5
	10M	Low	1715.0
		Middle	1745.0
		High	1775.0
	15M	Low	1717.5
		Middle	1745.0
		High	1772.5
	20M	Low	1720.0
		Middle	1745.0
		High	1770.0

Equipment Modifications

No modifications were made to the EUT.

Support Equipment List and Details

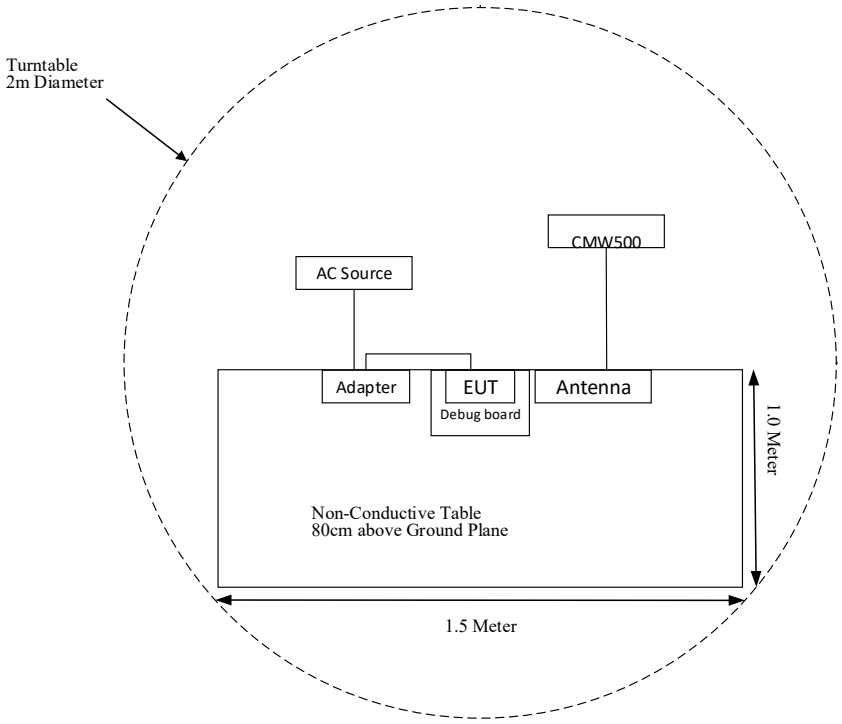
Manufacturer	Description	Model	Serial Number
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	104478
/	Debug Board	/	/
/	Adapter	/	/

External I/O Cable

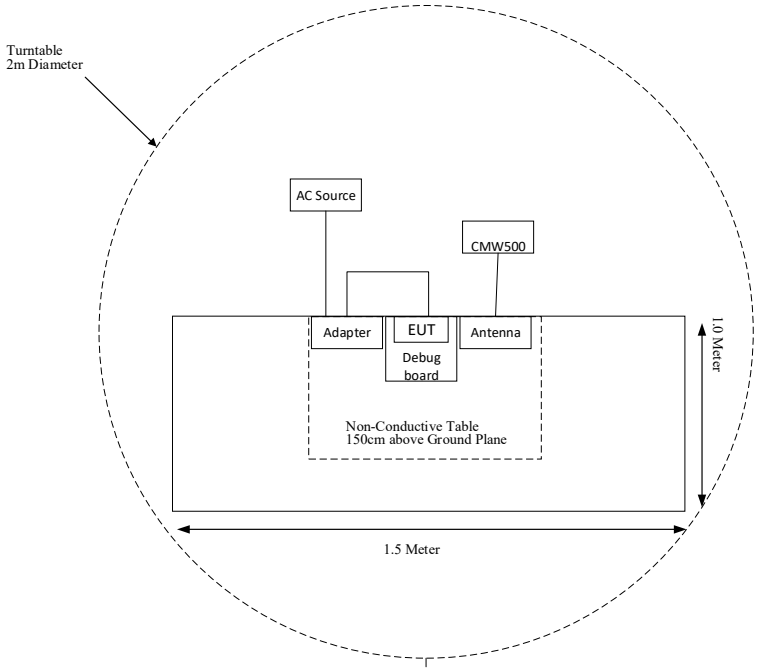
Cable Description	Length (m)	From Port	To Port
USB Cable	0.3	Debug Board	Adapter
Power Cable	2.0	Adapter	AC Source

Block Diagram of Test Setup

For Radiated Emissions (Below 1GHz):



For Radiated Emissions (Above 1GHz):



TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2024-4-23	2025-4-22
Keysight	Signal Generator	N5183A	MY47420304	2024-4-24	2025-4-23
Sunol Sciences	Hybrid Antenna	JB3	A090314-1	2023-11-11	2024-11-10
Sunol Sciences	Hybrid Antenna	JB3	A090314-2	2023-01-12	2026-01-11
Sonoma Instrument	Amplifier	310N	171205	2024-4-23	2025-4-22
Rohde & Schwarz	Auto Test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-7	007	2024-4-25	2025-4-24
MICRO-COAX	Coaxial Cable	Cable-8	008	2024-4-23	2025-4-22
MICRO-COAX	Coaxial Cable	Cable-9	009	2024-4-23	2025-4-22
MICRO-COAX	Coaxial Cable	Cable-10	010	2024-4-23	2025-4-22
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	104478	2024-4-24	2025-4-23
Rohde & Schwarz	EMI Test Receiver	ESU40	100207/040	2024-4-25	2025-4-24
ETS-LINDGREN	Horn Antenna	3115	9207-3900	2023-06-27	2026-06-26
ETS-LINDGREN	Horn Antenna	3115	6229	2023-01-16	2026-01-15
ETS-LINDGREN	Horn Antenna	3116	2516	2023-12-08	2024-12-07
ETS-LINDGREN	Horn Antenna	3116	84159	2023-12-08	2024-12-07
A.H.Systems,inc	Amplifier	PAM-0118P	512	2024-4-25	2025-4-24
EM Electronics Corporation	Amplifier	EM18G40G	060726	2024-4-25	2025-4-24
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-6	006	2024-4-25	2025-4-24
MICRO-COAX	Coaxial Cable	Cable-11	011	2024-4-25	2025-4-24
MICRO-COAX	Coaxial Cable	Cable-12	012	2024-4-25	2025-4-24
MICRO-COAX	Coaxial Cable	Cable-13	013	2024-4-25	2025-4-24
Wi	Band reject filter	SN1	WRCGV5-804-824-849-869-30SS	2023-05-23	2024-05-22
Wi	Band reject filter	SN1	WRCGV6-1830-1850-1910-1930-30SS	2023-05-23	2024-05-22
Wi	Band reject filter	SN1	WRCGV8-1695-1710-1755-1770-30SS	2023-05-23	2024-05-22
Wi	Band reject filter	SN2	WRCT16-697-699-716-718-60SS	2023-05-23	2024-05-22

RF Conducted Test					
R&S	EMI Test Receiver	FSV40-N	103298	2024-4-24	2025-4-23
BACL	Temperature & Humidity Chamber	BTH-150	30023	2024-04-25	2025-04-24
EAST	Regulated DC Power Supply	MCH-303D-II	14070562	2023-10-10	2024-10-09
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	104478	2024-4-24	2025-4-23
Narda	Attenuator	10dB	010	2024-4-24	2025-4-23
MACOM	Power Splitter	2090-6214-00	96341	2024-4-24	2025-4-23
XHFDZ	RG316 Coaxial Cable	SMA-316	XHF-1175	Each time	N/A
Unknown	RF Cable	RF Cable C01	C01	Each Time	N/A

Statement of Traceability: Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§2.1046; § 22.913 (a); §24.232 (c); §27.50 (c)(d)	RF Output Power	Compliant
§ 2.1047	Modulation Characteristics	Not Applicable
§2.1049; §22.905; §22.917; §24.238; §27.53	Occupied Bandwidth	Compliant
§2.1051; §22.917 (a); §24.238 (a); §27.53 (g) (h)	Spurious Emissions at Antenna Terminal	Compliant
§2.1053; §22.917 (a) §24.238 (a); §27.53 (g) (h)	Spurious Radiated Emissions	Compliant
§22.917 (a); §24.238 (a); §27.53 (g) (h)	Band Edge	Compliant
§2.1055; §22.355; §24.235; §27.54	Frequency stability	Compliant

FCC §2.1047 - MODULATION CHARACTERISTIC

According to FCC § 2.1047(d), Part 22H & 24E, Part 27 there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

FCC §2.1046; § 22.913 (a); §24.232 (c); §27.50 (c) (d) - RF OUTPUT POWER

Applicable Standards

According to FCC §2.1046 and §22.913 (a), the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts (38.45dBm).

According to FCC §2.1046 and §24.232 (c), mobile and portable stations are limited to 2 watts (33dBm) EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

According to §27.50(c), Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP

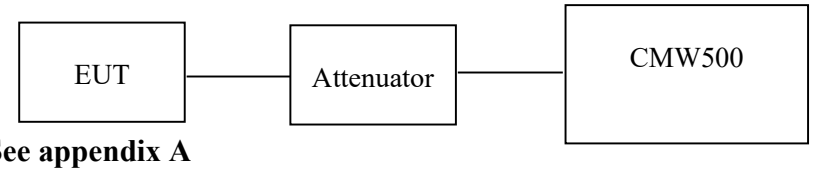
According to §27.50(d), the maximum EIRP must not exceed 1Watts (30dBm) for 1710-1780MHz.

Test Procedure

According to CFR Part 2.1046, ANSI C63.26-2015 Section 5.2.5.5:

Conducted method:

The RF output of the transmitter was connected to the CMW500 through sufficient attenuation.



Test Data: See appendix A

FCC §2.1049, §22.917, §22.905 &§24.238, §27.53 - OCCUPIED BANDWIDTH

Applicable Standards

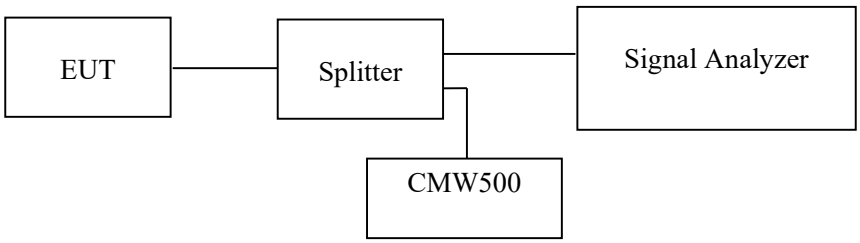
FCC 47 §2.1049, §22.917, §22.905; §24.238; §27.53.

Test Procedure

According to CFR Part 2.1049, ANSI C63.26-2015 Section 5.4.4

The RF output of the transmitter was connected to the simulator and the spectrum analyzer through sufficient attenuation.

The resolution bandwidth of the spectrum analyzer was set at 20 kHz/50 kHz/100 kHz/200 kHz (LTE), and the 26 dB & 99% bandwidth was recorded.



Test Data: Appendix A&Appendix C

FCC § 2.1051; § 22.917 (a); § 24.238 (a); §27.53 (g) (h) - SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Applicable Standards

FCC §2.1051, §22.917(a), §24.238(a), §27.53 (g) (h).

The spectrum was to be investigated to the tenth harmonics of the highest fundamental frequency as specified in § 2.1051.

According to §22.917(a),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.

24.238 (a) Out of band emissions. 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.

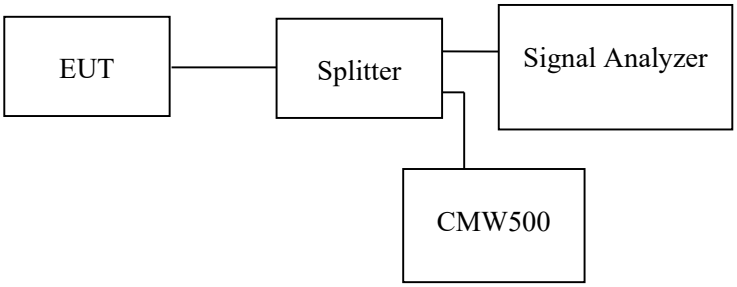
27.53 (g)
For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance 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

27.53 (h) AWS emission limits —
(1) General protection levels. Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log10 (P) dB.

Test Procedure

According to ANSI C63.26-2015 Section 5.7.4:

The RF output of the transceiver was connected to a spectrum analyzer and simulator through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 100 kHz for below 1GHz & 1MHz for above 1GHz. sufficient scans were taken to show any out of band emissions up to 10th harmonic.



Test Data: See Appendix D

FCC § 2.1053; § 22.917 (a); § 24.238 (a) & §27.53 (g) (h) - SPURIOUS RADIATED EMISSIONS

Applicable Standards

FCC § 2.1053, §22.917(a) and § 24.238(a), § 27.53 (g) (h)

22.917 (a) Out of band emissions. 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.

24.238 (a) Out of band emissions. 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.

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

27.53 (g)
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

27.53 (h) AWS emission limits —
(1) General protection levels. Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log10 (P) dB.

Test Procedure

According to ANSI C63.26-2015 Section 5.5.3:

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to tenth harmonic of the fundamental frequency was investigated.

Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Spurious emissions in dB = 10 lg (TX pwr in Watts/0.001) – the absolute level

Spurious attenuation limit in dB = 43 + 10 Log_{10} (power out in Watts)

Test Data: See Appendix A

FCC § 22.917 (a); § 24.238 (a); § 27.53 (g) (h) - BAND EDGES

Applicable Standards

22.917 (a) Out of band emissions. 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.

24.238 (a) Out of band emissions. 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.

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

27.53 (g)
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

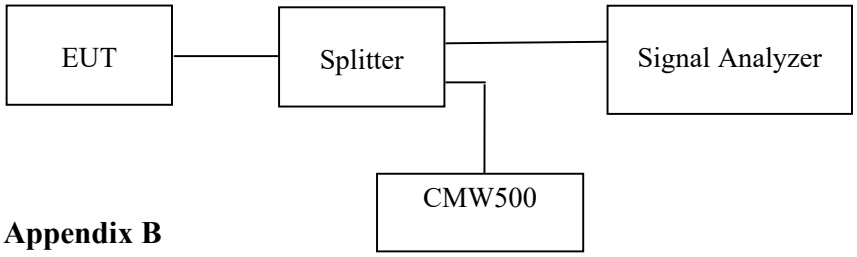
27.53 (h) AWS emission limits —
(1) General protection levels. Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log10 (P) dB.

Test Procedure

According to ANSI C63.26-2015 Section 5.7.3:

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

The center of the spectrum analyzer was set to block edge frequency.



Test Data: See Appendix B

FCC § 2.1055; § 22.355; § 24.235; §27.54 - FREQUENCY STABILITY

Applicable Standards

FCC § 2.1055, §22.355, §24.235, §27.54.

According to FCC §2.1055, the frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

According to §22.355, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table below:

Frequency Tolerance for Transmitters in the Public Mobile Services

Frequency Range (MHz)	Base, fixed (ppm)	Mobile > 3 watts (ppm)	Mobile ≤ 3 watts (ppm)
25 to 50	20.0	20.0	50.0
50 to 450	5.0	5.0	50.0
450 to 512	2.5	5.0	5.0
821 to 896	1.5	2.5	2.5
928 to 929.	5.0	N/A	N/A
929 to 960.	1.5	N/A	N/A
2110 to 2220	10.0	N/A	N/A

According to §24.235, the frequency stability shall be sufficient to ensure that the fundamental emissions stays within the authorized frequency block.

According to §27.54 Frequency stability, the frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

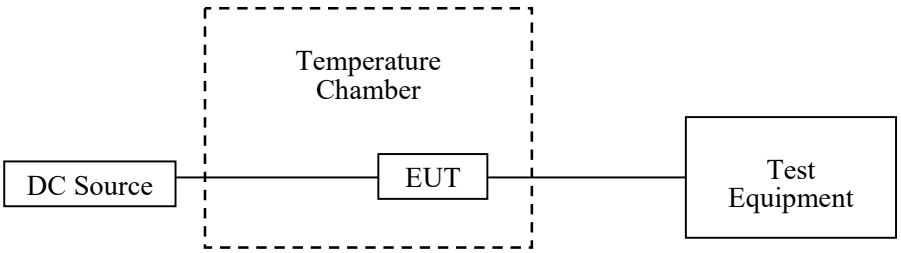
Test Procedure

According to ANSI C63.26-2015 Section 5.6:

Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and the RF output was connected to communication test set via feed-through attenuators. The EUT was placed inside the temperature chamber. The DC leads and RF output cable exited the chamber through an opening made for the purpose.

After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from the communication test set.

Frequency Stability vs. Voltage: For hand carried, battery powered equipment; reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.



Test Data: See appendix A

EUT PHOTOGRAPHS

Please refer to the attachment EXHIBIT A-EUT EXTERNAL PHOTOGRAPHS and EXHIBIT B-EUT INTERNAL PHOTOGRAPHS.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment EXHIBIT C-TEST SETUP PHOTOGRAPHS.

APPENDIX A - TEST DATA

Environmental Conditions & Test Information

Test Item:	FREQUENCY STABILITY	TRANSMITTER OUTPUT POWER	OCCUPIED BANDWIDTH	TRANSMITTER UNWANTED EMISSIONS	SPURIOUS RADIATED EMISSIONS	Band Edge
Test Date:	2024-05-06	2024-05-06 to 2024-05-07	2024-05-09 to 2024-07-05	2024-05-09 to 2024-06-25	2024-05-09 to 2024-05-14	2024-05-09 to 2024-07-05
Temperature:	19.3 ℃	19.3-21.5 ℃	19.8-22.3 ℃	19.8-21.7 ℃	19.8-21.7 ℃	19.8-22.3 ℃
Relative Humidity:	48 %	48-51 %	46-52 %	48-51 %	48-51 %	46-52 %
ATM Pressure:	101.8 kPa	101.6-101.8 kPa	101.8-102.1 kPa	101.8-102.0 kPa	101.8-102.0 kPa	101.8-102.1 kPa
Test Result:	Pass	Pass	Pass	Pass	Pass	Pass
Test Engineer:	Jenny Yang	Hardy Huang	Hardy Huang & Jason Lu	Hardy Huang & Jason Lu	Hardy Huang & Jenny Yang	Hardy Huang & Jason Lu

RF OUTPUT POWER

LTE Band 2

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	1#0	23.73	23.77	23.43	25.39	25.43	25.09
		1#3	23.86	23.86	23.59	25.52	25.52	25.25
		1#5	23.69	23.76	23.48	25.35	25.42	25.14
		3#0	**23.87**	23.74	23.57	25.53	25.40	25.23
		3#3	23.84	23.73	23.62	25.50	25.39	25.28
		6#0	22.88	22.61	22.63	24.54	24.27	24.29
	16QAM	1#0	22.62	22.98	22.32	24.28	24.64	23.98
		1#3	22.75	**23.11**	22.50	24.41	24.77	24.16
		1#5	22.61	22.98	22.35	24.27	24.64	24.01
		3#0	22.98	22.94	22.63	24.64	24.60	24.29
		3#3	22.99	23.02	22.73	24.65	24.68	24.39
		6#0	22.05	21.59	21.80	23.71	23.25	23.46
3	QPSK	1#0	**24.04**	23.62	23.58	25.70	25.28	25.24
		1#8	24.00	23.57	23.61	25.66	25.23	25.27
		1#14	23.98	23.57	23.64	25.64	25.23	25.30
		8#0	22.85	22.69	22.67	24.51	24.35	24.33
		8#7	22.81	22.62	22.67	24.47	24.28	24.33
		15#0	22.79	22.66	22.66	24.45	24.32	24.32
	16QAM	1#0	**23.21**	22.54	22.59	24.87	24.20	24.25
		1#8	23.20	22.46	22.60	24.86	24.12	24.26
		1#14	23.16	22.43	22.57	24.82	24.09	24.23
		8#0	21.99	21.68	21.73	23.65	23.34	23.39
		8#7	21.92	21.66	21.68	23.58	23.32	23.34
		15#0	21.85	21.66	21.71	23.51	23.32	23.37

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	1#0	23.79	23.68	23.54	25.45	25.34	25.20
		1#12	**23.99**	23.87	23.78	25.65	25.53	25.44
		1#24	23.67	23.62	23.52	25.33	25.28	25.18
		12#0	22.88	22.74	22.69	24.54	24.40	24.35
		12#13	22.83	22.74	22.64	24.49	24.40	24.30
		25#0	22.83	22.73	22.67	24.49	24.39	24.33
	16QAM	1#0	22.82	22.70	23.20	24.48	24.36	24.86
		1#12	22.98	22.92	**23.43**	24.64	24.58	25.09
		1#24	22.72	22.66	23.18	24.38	24.32	24.84
		12#0	21.94	21.74	21.75	23.60	23.40	23.41
		12#13	21.86	21.77	21.69	23.52	23.43	23.35
		25#0	21.86	21.74	21.75	23.52	23.40	23.41
10	QPSK	1#0	23.77	23.70	23.83	25.43	25.36	25.49
		1#25	23.84	23.84	**23.95**	25.50	25.50	25.61
		1#49	23.62	23.64	23.79	25.28	25.30	25.45
		25#0	22.92	22.75	22.65	24.58	24.41	24.31
		25#25	22.78	22.75	22.60	24.44	24.41	24.26
		50#0	22.87	22.76	22.64	24.53	24.42	24.30
	16QAM	1#0	22.67	22.70	23.03	24.33	24.36	24.69
		1#25	22.71	22.75	**23.14**	24.37	24.41	24.80
		1#49	22.50	22.61	22.95	24.16	24.27	24.61
		12#0	22.04	21.85	21.75	23.70	23.51	23.41
		12#38	21.91	21.82	21.68	23.57	23.48	23.34
		27#0	21.92	21.78	21.62	23.58	23.44	23.28
15	QPSK	1#0	23.90	23.70	23.82	25.56	25.36	25.48
		1#37	**24.01**	23.86	23.97	25.67	25.52	25.63
		1#74	23.73	23.59	23.73	25.39	25.25	25.39
		36#0	22.92	22.80	22.73	24.58	24.46	24.39
		36#39	22.83	22.74	22.65	24.49	24.40	24.31
		75#0	22.88	22.78	22.70	24.54	24.44	24.36
	16QAM	1#0	22.91	22.70	**23.36**	24.57	24.36	25.02
		1#37	23.04	22.84	23.28	24.70	24.50	24.94
		1#74	22.75	22.58	22.64	24.41	24.24	24.30
		12#0	21.88	21.79	22.02	23.54	23.45	23.68
		12#63	21.84	21.74	21.67	23.50	23.40	23.33
		27#0	21.84	21.76	21.83	23.50	23.42	23.49

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
20	QPSK	1#0	23.62	23.50	**23.94**	25.28	25.16	25.60
		1#49	23.60	23.85	23.90	25.26	25.51	25.56
		1#99	23.30	23.83	23.14	24.96	25.49	24.80
		50#0	22.68	22.58	22.89	24.34	24.24	24.55
		50#50	22.54	22.73	22.54	24.20	24.39	24.20
		100#0	22.58	22.69	22.74	24.24	24.35	24.40
	16QAM	1#0	22.97	23.16	23.31	24.63	24.82	24.97
		1#49	22.87	**23.55**	23.25	24.53	25.21	24.91
		1#99	22.65	23.52	22.49	24.31	25.18	24.15
		12#0	21.64	21.63	21.94	23.30	23.29	23.60
		12#88	21.51	21.78	21.61	23.17	23.44	23.27
		27#0	21.61	21.70	21.74	23.27	23.36	23.40

Note:
EIRP=Conducted Power +Antenna Gain –Cable Loss
Limit: EIRP≤33dBm

LTE Band 4

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	1#0	22.48	23.22	24.42	23.83	24.57	25.77
		1#3	22.62	23.45	**24.47**	23.97	24.80	25.82
		1#5	22.43	23.28	24.33	23.78	24.63	25.68
		3#0	22.61	23.47	24.29	23.96	24.82	25.64
		3#3	22.58	23.49	24.25	23.93	24.84	25.60
		6#0	21.62	22.43	23.25	22.97	23.78	24.60
	16QAM	1#0	21.38	22.17	23.57	22.73	23.52	24.92
		1#3	21.50	22.30	**23.73**	22.85	23.65	25.08
		1#5	21.34	22.24	23.52	22.69	23.59	24.87
		3#0	21.76	22.60	23.58	23.11	23.95	24.93
		3#3	21.72	22.64	23.57	23.07	23.99	24.92
		6#0	21.78	21.59	22.14	23.13	22.94	23.49
3	QPSK	1#0	22.53	23.38	**24.23**	23.88	24.73	25.58
		1#8	22.43	23.58	24.15	23.78	24.93	25.50
		1#14	22.34	23.72	24.09	23.69	25.07	25.44
		8#0	21.54	22.32	23.33	22.89	23.67	24.68
		8#7	21.43	22.46	23.19	22.78	23.81	24.54
		15#0	21.51	22.39	23.24	22.86	23.74	24.59
	16QAM	1#0	21.46	22.60	**23.17**	22.81	23.95	24.52
		1#8	21.28	22.76	23.03	22.63	24.11	24.38
		1#14	21.19	22.96	22.90	22.54	24.31	24.25
		8#0	21.52	21.46	22.27	22.87	22.81	23.62
		8#7	21.43	21.56	22.22	22.78	22.91	23.57
		15#0	21.46	21.40	22.23	22.81	22.75	23.58

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	1#0	22.51	23.04	24.29	23.86	24.39	25.64
		1#12	22.65	23.54	**24.45**	24.00	24.89	25.80
		1#24	22.16	23.50	24.07	23.51	24.85	25.42
		12#0	21.58	22.26	23.41	22.93	23.61	24.76
		12#13	21.42	22.47	23.24	22.77	23.82	24.59
		25#0	21.47	22.39	23.31	22.82	23.74	24.66
	16QAM	1#0	21.56	22.08	23.93	22.91	23.43	25.28
		1#12	21.71	22.60	**24.11**	23.06	23.95	25.46
		1#24	21.22	22.56	23.74	22.57	23.91	25.09
		12#0	21.05	21.28	22.45	22.40	22.63	23.80
		12#13	21.17	21.52	22.34	22.52	22.87	23.69
		25#0	21.08	21.43	22.42	22.43	22.78	23.77
10	QPSK	1#0	22.53	21.83	24.63	23.88	23.18	25.98
		1#25	22.36	22.95	**24.73**	23.71	24.30	26.08
		1#49	22.14	23.49	24.38	23.49	24.84	25.73
		25#0	21.53	23.80	23.44	22.88	25.15	24.79
		25#25	21.32	22.27	23.38	22.67	23.62	24.73
		50#0	21.39	22.64	23.44	22.74	23.99	24.79
	16QAM	1#0	21.42	21.83	23.81	22.77	23.18	25.16
		1#25	21.09	22.47	**23.96**	22.44	23.82	25.31
		1#49	21.05	22.79	23.56	22.40	24.14	24.91
		12#0	21.24	21.35	22.54	22.59	22.70	23.89
		12#38	21.20	21.71	22.40	22.55	23.06	23.75
		27#0	21.11	21.46	22.44	22.46	22.81	23.79
15	QPSK	1#0	22.66	22.71	24.49	24.01	24.06	25.84
		1#37	22.42	23.48	**24.82**	23.77	24.83	26.17
		1#74	22.54	23.97	24.37	23.89	25.32	25.72
		36#0	21.46	22.21	23.41	22.81	23.56	24.76
		36#39	21.44	22.82	23.42	22.79	24.17	24.77
		75#0	21.48	22.52	23.47	22.83	23.87	24.82
	16QAM	1#0	21.64	21.57	23.65	22.99	22.92	25.00
		1#37	21.35	22.47	**23.97**	22.70	23.82	25.32
		1#74	21.29	22.95	23.53	22.64	24.30	24.88
		12#0	21.38	21.15	22.43	22.73	22.50	23.78
		12#63	21.36	21.82	22.44	22.71	23.17	23.79
		27#0	21.40	21.51	22.47	22.75	22.86	23.82

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
20	QPSK	1#0	22.52	22.32	23.63	23.87	23.67	24.98
		1#49	22.34	23.31	**24.36**	23.69	24.66	25.71
		1#99	22.84	24.09	23.99	24.19	25.44	25.34
		50#0	21.29	21.99	23.12	22.64	23.34	24.47
		50#50	21.55	22.89	23.41	22.90	24.24	24.76
		100#0	21.40	22.48	23.30	22.75	23.83	24.65
	16QAM	1#0	22.20	21.60	22.98	23.55	22.95	24.33
		1#49	21.92	22.76	**23.83**	23.27	24.11	25.18
		1#99	22.46	23.49	23.39	23.81	24.84	24.74
		12#0	21.28	21.05	22.09	22.63	22.40	23.44
		12#88	21.54	21.90	22.40	22.89	23.25	23.75
		27#0	21.41	21.49	22.31	22.76	22.84	23.66

Note:
EIRP=Conducted Power +Antenna Gain –Cable Loss
Limit: EIRP≤30dBm

LTE Band 5

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	1#0	24.46	23.66	24.15	21.89	21.09	21.58
		1#3	24.62	23.79	24.33	22.05	21.22	21.76
		1#5	24.43	23.59	24.14	21.86	21.02	21.57
		3#0	24.59	23.88	24.09	22.02	21.31	21.52
		3#3	**24.66**	23.79	24.13	22.09	21.22	21.56
		6#0	23.64	22.78	23.03	21.07	20.21	20.46
	16QAM	1#0	23.46	22.64	23.36	20.89	20.07	20.79
		1#3	23.54	22.76	23.51	20.97	20.19	20.94
		1#5	23.38	22.59	23.35	20.81	20.02	20.78
		3#0	23.79	23.04	23.32	21.22	20.47	20.75
		3#3	**23.85**	23.02	23.44	21.28	20.45	20.87
		6#0	22.82	22.02	22.02	20.25	19.45	19.45
3	QPSK	1#0	**24.56**	23.75	24.08	21.99	21.18	21.51
		1#8	24.49	23.68	24.18	21.92	21.11	21.61
		1#14	24.33	23.64	24.20	21.76	21.07	21.63
		8#0	23.64	22.74	22.89	21.07	20.17	20.32
		8#7	23.53	22.72	22.99	20.96	20.15	20.42
		15#0	23.60	22.80	22.97	21.03	20.23	20.40
	16QAM	1#0	**23.55**	22.80	23.25	20.98	20.23	20.68
		1#8	23.40	22.71	23.35	20.83	20.14	20.78
		1#14	23.22	22.64	23.37	20.65	20.07	20.80
		8#0	22.64	21.85	22.08	20.07	19.28	19.51
		8#7	22.54	21.78	22.15	19.97	19.21	19.58
		15#0	22.59	21.84	22.05	20.02	19.27	19.48

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	1#0	24.54	23.75	23.71	21.97	21.18	21.14
		1#12	**24.59**	23.89	24.06	22.02	21.32	21.49
		1#24	24.15	23.56	23.88	21.58	20.99	21.31
		12#0	23.62	22.70	22.92	21.05	20.13	20.35
		12#13	23.34	22.82	23.08	20.77	20.25	20.51
		25#0	23.50	22.82	23.05	20.93	20.25	20.48
	16QAM	1#0	23.62	22.87	23.33	21.05	20.30	20.76
		1#12	**23.69**	23.00	23.71	21.12	20.43	21.14
		1#24	23.23	22.65	23.50	20.66	20.08	20.93
		12#0	22.70	21.80	22.06	20.13	19.23	19.49
		12#13	22.40	21.90	22.19	19.83	19.33	19.62
		25#0	22.49	21.86	22.18	19.92	19.29	19.61
10	QPSK	1#0	**24.41**	23.87	23.78	21.84	21.30	21.21
		1#25	24.16	23.74	24.11	21.59	21.17	21.54
		1#49	23.60	23.57	24.18	21.03	21.00	21.61
		25#0	23.53	22.73	22.96	20.96	20.16	20.39
		25#25	22.88	22.78	23.02	20.31	20.21	20.45
		50#0	23.28	22.77	22.98	20.71	20.20	20.41
	16QAM	1#0	**23.40**	22.93	23.00	20.83	20.36	20.43
		1#25	23.11	22.81	23.33	20.54	20.24	20.76
		1#49	22.58	22.58	23.33	20.01	20.01	20.76
		12#0	22.65	21.85	22.03	20.08	19.28	19.46
		12#38	22.01	21.90	22.15	19.44	19.33	19.58
		27#0	22.35	21.80	22.02	19.78	19.23	19.45

Note:
ERP= conducted power +antenna gain-2.15-Cable Loss
Limit≤38.45dBm

LTE Band 12

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	1#0	24.70	23.37	23.27	22.21	20.88	20.78
		1#3	**24.78**	23.46	23.42	22.29	20.97	20.93
		1#5	24.57	23.27	23.30	22.08	20.78	20.81
		3#0	24.63	23.49	23.47	22.14	21.00	20.98
		3#3	24.55	23.50	23.50	22.06	21.01	21.01
		6#0	23.51	22.47	22.41	21.02	19.98	19.92
	16QAM	1#0	23.89	22.27	22.20	21.40	19.78	19.71
		1#3	**23.94**	22.38	22.32	21.45	19.89	19.83
		1#5	23.73	22.24	22.26	21.24	19.75	19.77
		3#0	23.85	22.63	22.59	21.36	20.14	20.10
		3#3	23.79	22.62	22.61	21.30	20.13	20.12
		6#0	22.44	21.69	21.62	19.95	19.20	19.13
3	QPSK	1#0	**24.50**	23.62	23.45	22.01	21.13	20.96
		1#8	24.33	23.44	23.60	21.84	20.95	21.11
		1#14	24.06	23.41	23.62	21.57	20.92	21.13
		8#0	23.49	22.59	22.35	21.00	20.10	19.86
		8#7	23.30	22.47	22.45	20.81	19.98	19.96
		15#0	23.38	22.55	22.41	20.89	20.06	19.92
	16QAM	1#0	**23.43**	22.63	22.66	20.94	20.14	20.17
		1#8	23.12	22.49	22.81	20.63	20.00	20.32
		1#14	22.87	22.40	22.87	20.38	19.91	20.38
		8#0	22.48	21.65	21.51	19.99	19.16	19.02
		8#7	22.22	21.52	21.55	19.73	19.03	19.06
		15#0	22.36	21.62	21.41	19.87	19.13	18.92

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	1#0	**24.48**	23.69	23.18	21.99	21.20	20.69
		1#12	24.32	23.69	23.46	21.83	21.20	20.97
		1#24	23.80	23.31	23.33	21.31	20.82	20.84
		12#0	23.43	22.64	22.42	20.94	20.15	19.93
		12#13	23.05	22.54	22.43	20.56	20.05	19.94
		25#0	23.23	22.59	22.40	20.74	20.10	19.91
	16QAM	1#0	**23.45**	22.77	22.83	20.96	20.28	20.34
		1#12	23.31	22.72	23.09	20.82	20.23	20.60
		1#24	22.87	22.36	22.96	20.38	19.87	20.47
		12#0	22.51	21.69	21.52	20.02	19.20	19.03
		12#13	22.12	21.61	21.51	19.63	19.12	19.02
		25#0	22.26	21.60	21.53	19.77	19.11	19.04
10	QPSK	1#0	**24.46**	24.05	23.79	21.97	21.56	21.30
		1#25	23.94	23.62	23.61	21.45	21.13	21.12
		1#49	23.29	23.33	23.62	20.80	20.84	21.13
		25#0	23.37	22.82	22.40	20.88	20.33	19.91
		25#25	22.78	22.46	22.33	20.29	19.97	19.84
		50#0	23.12	22.68	22.34	20.63	20.19	19.85
	16QAM	1#0	**23.30**	22.99	23.01	20.81	20.50	20.52
		1#25	22.80	22.64	22.82	20.31	20.15	20.33
		1#49	22.22	22.27	22.82	19.73	19.78	20.33
		12#0	22.47	21.95	21.46	19.98	19.46	18.97
		12#38	21.89	21.59	21.43	19.40	19.10	18.94
		27#0	22.18	21.70	21.37	19.69	19.21	18.88

Note:
ERP= conducted power +antenna gain-2.15–Cable Loss
Limit≤34.77dBm

LTE Band 17

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	1#0	**23.69**	23.34	23.27	21.20	20.85	20.78
		1#12	23.68	23.38	23.45	21.19	20.89	20.96
		1#24	23.22	23.16	23.36	20.73	20.67	20.87
		12#0	22.66	22.32	22.38	20.17	19.83	19.89
		12#13	22.54	22.22	22.40	20.05	19.73	19.91
		25#0	22.59	22.25	22.35	20.10	19.76	19.86
	16QAM	1#0	**23.30**	22.38	22.30	20.81	19.89	19.81
		1#12	23.29	22.41	22.47	20.80	19.92	19.98
		1#24	22.91	22.17	22.42	20.42	19.68	19.93
		12#0	21.75	21.39	21.41	19.26	18.90	18.92
		12#13	21.63	21.28	21.44	19.14	18.79	18.95
		25#0	21.72	21.28	21.41	19.23	18.79	18.92
10	QPSK	1#0	**23.93**	23.54	23.54	21.44	21.05	21.05
		1#25	23.67	23.30	23.38	21.18	20.81	20.89
		1#49	23.49	23.21	23.39	21.00	20.72	20.90
		25#0	22.52	22.42	22.31	20.03	19.93	19.82
		25#25	22.24	22.22	22.32	19.75	19.73	19.83
		50#0	22.38	22.31	22.33	19.89	19.82	19.84
	16QAM	1#0	**23.10**	22.45	22.53	20.61	19.96	20.04
		1#25	22.86	22.22	22.37	20.37	19.73	19.88
		1#49	22.67	22.15	22.39	20.18	19.66	19.90
		12#0	21.60	21.53	21.45	19.11	19.04	18.96
		12#38	21.50	21.49	21.45	19.01	19.00	18.96
		27#0	21.45	21.35	21.36	18.96	18.86	18.87

Note:
ERP= conducted power +antenna gain-2.15–Cable Loss
Limit≤34.77dBm

LTE Band 66:

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	1#0	22.49	22.31	22.24	23.84	23.66	23.59
		1#3	**22.62**	22.60	22.19	23.97	23.95	23.54
		1#5	22.09	22.21	22.37	23.44	23.56	23.72
		3#0	22.19	22.44	22.28	23.54	23.79	23.63
		3#3	22.48	22.53	22.52	23.83	23.88	23.87
		6#0	22.39	22.59	22.34	23.74	23.94	23.69
	16QAM	1#0	22.18	22.19	**22.86**	23.53	23.54	24.21
		1#3	22.08	22.43	22.34	23.43	23.78	23.69
		1#5	22.67	22.28	22.42	24.02	23.63	23.77
		3#0	22.45	22.42	22.18	23.80	23.77	23.53
		3#3	22.23	22.33	22.37	23.58	23.68	23.72
		6#0	22.38	22.48	22.46	23.73	23.83	23.81
3	QPSK	1#0	22.19	22.29	22.38	23.54	23.64	23.73
		1#8	22.27	22.39	22.29	23.62	23.74	23.64
		1#14	22.20	22.26	22.49	23.55	23.61	23.84
		8#0	22.34	22.43	**22.67**	23.69	23.78	24.02
		8#7	22.18	22.51	22.49	23.53	23.86	23.84
		15#0	22.12	22.19	22.38	23.47	23.54	23.73
	16QAM	1#0	22.09	22.24	22.19	23.44	23.59	23.54
		1#8	22.19	22.47	22.44	23.54	23.82	23.79
		1#14	22.49	22.38	22.28	23.84	23.73	23.63
		8#0	22.37	22.19	22.34	23.72	23.54	23.69
		8#7	22.34	22.38	22.41	23.69	23.73	23.76
		15#0	22.39	**22.61**	22.37	23.74	23.96	23.72

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	1#0	22.15	22.37	22.38	23.50	23.72	23.73
		1#13	22.37	22.51	22.19	23.72	23.86	23.54
		1#24	22.41	22.46	22.43	23.76	23.81	23.78
		15#0	22.35	22.34	22.52	23.70	23.69	23.87
		15#10	22.46	**22.57**	22.48	23.81	23.92	23.83
		25#0	22.19	22.18	22.32	23.54	23.53	23.67
	16QAM	1#0	22.51	22.34	22.46	23.86	23.69	23.81
		1#13	**22.72**	22.65	22.18	24.07	24.00	23.53
		1#24	22.46	22.52	22.64	23.81	23.87	23.99
		15#0	22.38	22.49	22.38	23.73	23.84	23.73
		15#10	22.29	22.52	22.42	23.64	23.87	23.77
		25#0	22.15	22.43	22.19	23.50	23.78	23.54
10	QPSK	1#0	**22.71**	22.18	22.34	24.06	23.53	23.69
		1#25	22.65	22.31	22.38	24.00	23.66	23.73
		1#49	22.48	22.42	22.19	23.83	23.77	23.54
		25#0	22.31	22.29	22.24	23.66	23.64	23.59
		25#25	22.18	22.37	22.29	23.53	23.72	23.64
		50#0	22.24	22.43	22.31	23.59	23.78	23.66
	16QAM	1#0	22.47	22.61	22.38	23.82	23.96	23.73
		1#25	22.59	22.47	22.19	23.94	23.82	23.54
		1#49	22.37	22.43	22.24	23.72	23.78	23.59
		12#0	**22.68**	22.28	22.37	24.03	23.63	23.72
		12#38	22.38	22.34	22.20	23.73	23.69	23.55
		27#0	22.25	22.37	22.15	23.60	23.72	23.50

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP (dBm)		
			Low	Mid	High	Low	Mid	High
15	QPSK	1#0	22.49	22.47	22.49	23.84	23.82	23.84
		1#38	22.31	22.31	22.37	23.66	23.66	23.72
		1#74	22.48	22.52	22.18	23.83	23.87	23.53
		36#0	22.37	22.43	22.24	23.72	23.78	23.59
		36#39	22.54	**22.61**	22.42	23.89	23.96	23.77
		75#0	22.61	22.18	22.34	23.96	23.53	23.69
	16QAM	1#0	**22.74**	22.29	22.51	24.09	23.64	23.86
		1#37	22.62	22.16	22.63	23.97	23.51	23.98
		1#74	22.40	22.19	22.55	23.75	23.54	23.90
		12#0	22.18	22.34	22.43	23.53	23.69	23.78
		12#63	22.35	22.28	22.19	23.70	23.63	23.54
		27#0	22.14	22.48	22.37	23.49	23.83	23.72
20	QPSK	1#0	22.31	22.34	22.41	23.66	23.69	23.76
		1#50	22.42	22.53	22.38	23.77	23.88	23.73
		1#99	22.51	22.42	22.29	23.86	23.77	23.64
		50#0	22.37	22.49	22.46	23.72	23.84	23.81
		50#50	22.49	22.18	22.37	23.84	23.53	23.72
		100#0	22.19	22.35	22.59	23.54	23.70	23.94
	16QAM	1#0	22.37	22.46	22.27	23.72	23.81	23.62
		1#49	22.54	22.29	22.34	23.89	23.64	23.69
		1#99	22.33	22.34	22.53	23.68	23.69	23.88
		12#0	22.49	22.47	22.19	23.84	23.82	23.54
		12#88	**22.57**	22.38	22.46	23.92	23.73	23.81
		27#0	22.15	22.51	22.37	23.50	23.86	23.72

Note: EIRP (dBm) = Conducted Power + Antenna Gain–Cable Loss
Limit: EIRP≤30dBm

Peak-to-average ratio (PAR)（worst case）:

LTE Band 2

Mode	Value (dB)	Limit (dB)
20MHz_Low_16QAM_1@0	5.86	13.00
20MHz_Low_16QAM_27@0	5.88	13.00
20MHz_Low_QPSK_1@0	5.36	13.00
20MHz_Low_QPSK_100@0	4.29	13.00
20MHz_Middle_16QAM_1@0	6.43	13.00
20MHz_Middle_16QAM_27@0	5.80	13.00
20MHz_Middle_QPSK_1@0	5.19	13.00
20MHz_Middle_QPSK_100@0	4.06	13.00
20MHz_High_16QAM_1@0	6.38	13.00
20MHz_High_16QAM_27@0	5.88	13.00
20MHz_High_QPSK_1@0	5.28	13.00
20MHz_High_QPSK_100@0	4.17	13.00

LTE Band 4

Mode	Value (dB)	Limit (dB)
20MHz_Low_16QAM_1@0	5.51	13.00
20MHz_Low_16QAM_27@0	5.54	13.00
20MHz_Low_QPSK_1@0	4.96	13.00
20MHz_Low_QPSK_100@0	3.86	13.00
205MHz_Middle_16QAM_1@0	4.75	13.00
20MHz_Middle_16QAM_27@0	5.74	13.00
20MHz_Middle_QPSK_1@0	4.09	13.00
20MHz_Middle_QPSK_100@0	4.03	13.00
20MHz_High_16QAM_1@0	5.77	13.00
20MHz_High_16QAM_27@0	5.77	13.00
20MHz_High_QPSK_1@0	4.93	13.00
20MHz_High_QPSK_100@0	4.17	13.00

LTE Band 5

Mode	Value (dB)	Limit (dB)
10MHz_Low_16QAM_1@0	6.09	13.00
10MHz_Low_16QAM_27@0	6.38	13.00
10MHz_Low_QPSK_1@0	5.68	13.00
10MHz_Low_QPSK_50@0	5.45	13.00
10MHz_Middle_16QAM_1@0	6.14	13.00
10MHz_Middle_16QAM_27@0	6.26	13.00
10MHz_Middle_QPSK_1@0	5.68	13.00
10MHz_Middle_QPSK_50@0	5.39	13.00
10MHz_High_16QAM_1@0	6.84	13.00
10MHz_High_16QAM_27@0	6.35	13.00
10MHz_High_QPSK_1@0	5.45	13.00
10MHz_High_QPSK_50@0	5.39	13.00

LTE Band 12

Mode	Value (dB)	Limit (dB)
10MHz_Low_16QAM_1@0	5.77	13.00
10MHz_Low_16QAM_27@0	6.06	13.00
10MHz_Low_QPSK_1@0	4.90	13.00
10MHz_Low_QPSK_50@0	5.04	13.00
10MHz_Middle_16QAM_1@0	5.51	13.00
10MHz_Middle_16QAM_27@0	5.97	13.00
10MHz_Middle_QPSK_1@0	4.46	13.00
10MHz_Middle_QPSK_50@0	5.13	13.00
10MHz_High_16QAM_1@0	5.30	13.00
10MHz_High_16QAM_27@0	6.17	13.00
10MHz_High_QPSK_1@0	4.72	13.00
10MHz_High_QPSK_50@0	5.28	13.00

LTE Band 17

Mode	Value (dB)	Limit (dB)
10MHz_Low_16QAM_1@0	4.84	13.00
10MHz_Low_16QAM_27@0	6.12	13.00
10MHz_Low_QPSK_1@0	4.43	13.00
10MHz_Low_QPSK_50@0	5.28	13.00
10MHz_Middle_16QAM_1@0	5.45	13.00
10MHz_Middle_16QAM_27@0	6	13.00
10MHz_Middle_QPSK_1@0	4.52	13.00
10MHz_Middle_QPSK_50@0	5.19	13.00
10MHz_High_16QAM_1@0	5.86	13.00
10MHz_High_16QAM_27@0	6.03	13.00
10MHz_High_QPSK_1@0	8.49	13.00
10MHz_High_QPSK_50@0	5.13	13.00

LTE Band 66

Test Modulation		Test Bandwidth	Low Channel (dB)	Middle Channel (dB)	High Channel (dB)	Limit(dB)
QPSK	1 RB	20M	7.22	7.05	7.29	≤ 13
	100 RB		7.16	7.09	7.33	≤ 13
16-QAM	1 RB	20M	8.06	8.19	8.33	≤ 13
	27 RB		8.99	8.24	8.15	≤ 13

OCCUPIED BANDWIDTH

EUT operation mode: Transmitting

LTE Band 66:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW	26dB EBW	OBW	26dB EBW	OBW	26dB EBW
		(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)
1.4 MHz	QPSK	1.09	1.29	1.09	1.25	1.10	1.25
	16QAM	1.09	1.26	1.09	1.25	1.10	1.27
3 MHz	QPSK	2.68	2.87	2.68	2.86	2.68	2.86
	16QAM	2.68	2.87	2.68	2.87	2.68	2.86
5 MHz	QPSK	4.50	4.89	4.50	4.84	4.49	4.85
	16QAM	4.50	4.85	4.50	4.82	4.49	4.92
10 MHz	QPSK	8.91	9.37	8.92	9.40	8.94	9.42
	16QAM	4.85	5.39	4.85	5.50	4.85	5.43
15 MHz	QPSK	13.43	14.35	13.42	14.32	13.43	14.32
	16QAM	5.05	5.86	5.10	5.86	4.99	5.75
20 MHz	QPSK	17.85	18.86	17.84	18.81	17.86	18.70
	16QAM	5.07	5.79	5.14	5.79	5.07	5.86

SPURIOUS RADIATED EMISSIONS

Test mode: Transmitting (Pre-scan with 1RB of all the bandwidth, and worst case as below)

30 MHz ~ 10 GHz:

LTE Band 5:

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Submitted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
QPSK 1.4MHz Bandwidth Low Channel										
34.97	34.30	3	200	H	-41.56	0.17	-24.55	-66.28	-13	53.28
34.97	43.25	26	100	V	-41.28	0.17	-24.55	-66.00	-13	53.00
1649.40	49.12	333	150	H	-64.22	0.84	8.44	-56.62	-13	43.62
1649.40	49.69	281	150	V	-63.65	0.84	8.44	-56.05	-13	43.05
QPSK 1.4MHz Bandwidth Middle Channel										
34.97	34.71	212	150	H	-41.15	0.17	-24.55	-65.87	-13	52.87
34.97	43.96	154	100	V	-40.57	0.17	-24.55	-65.29	-13	52.29
1673.00	49.66	190	150	H	-63.51	0.84	8.48	-55.87	-13	42.87
1673.00	49.98	307	100	V	-63.19	0.84	8.48	-55.55	-13	42.55
QPSK 1.4MHz Bandwidth High Channel										
132.89	45.35	19	100	H	-60.37	0.36	-6.12	-66.85	-13	53.85
132.89	40.06	159	100	V	-59.81	0.36	-6.12	-66.29	-13	53.29
1696.60	48.56	193	150	H	-64.45	0.84	8.52	-56.77	-13	43.77
1696.60	48.35	111	100	V	-64.66	0.84	8.52	-56.98	-13	43.98

LTE Band 12:

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Submitted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
QPSK 1.4MHz Bandwidth Low Channel										
34.61	34.38	283	150	H	-40.91	0.17	-24.84	-65.92	-13	52.92
34.61	43.44	127	150	V	-40.62	0.17	-24.84	-65.63	-13	52.63
1399.40	44.89	157	100	H	-69.28	0.82	7.92	-62.18	-13	49.18
1399.40	44.62	175	100	V	-69.55	0.82	7.92	-62.45	-13	49.45
QPSK 1.4MHz Bandwidth Middle Channel										
800.06	39.49	70	150	H	-58.72	0.62	-1.25	-60.59	-13	47.59
800.06	40.14	143	150	V	-58.28	0.62	-1.25	-60.15	-13	47.15
1415.00	44.58	17	150	H	-69.62	0.82	7.96	-62.48	-13	49.48
1415.00	44.77	142	150	V	-69.43	0.82	7.96	-62.29	-13	49.29
QPSK 1.4MHz Bandwidth High Channel										
265.35	36.07	143	100	H	-67.13	0.45	-2.22	-69.80	-13	56.80
265.35	41.25	317	150	V	-67.32	0.45	-2.22	-69.99	-13	56.99
1430.60	43.74	333	150	H	-70.49	0.82	8.01	-63.30	-13	50.30
1430.60	65.71	81	150	V	-48.52	0.82	8.01	-41.33	-13	28.33

LTE Band 17:

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Submitted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
QPSK 5MHz Bandwidth Low Channel										
33.88	33.16	344	150	H	-41.00	0.16	-25.43	-66.59	-13	53.59
33.88	42.68	186	150	V	-40.43	0.16	-25.43	-66.02	-13	53.02
1413.00	43.84	340	100	H	-70.36	0.82	7.96	-63.22	-13	50.22
1413.00	43.58	306	150	V	-70.62	0.82	7.96	-63.48	-13	50.48
QPSK 5MHz Bandwidth Middle Channel										
800.06	40.04	282	150	H	-58.17	0.62	-1.25	-60.04	-13	47.04
800.06	40.56	59	150	V	-57.86	0.62	-1.25	-59.73	-13	46.73
1420.00	44.68	107	150	H	-69.53	0.82	7.98	-62.37	-13	49.37
1420.00	44.41	202	100	V	-69.80	0.82	7.98	-62.64	-13	49.64
QPSK 5MHz Bandwidth High Channel										
263.65	37.27	215	100	H	-65.73	0.45	-2.22	-68.40	-13	55.40
263.65	42.58	103	100	V	-66.12	0.45	-2.22	-68.79	-13	55.79
1427.00	45.06	299	100	H	-69.16	0.82	8.00	-61.98	-13	48.98
1427.00	45.23	288	200	V	-68.99	0.82	8.00	-61.81	-13	48.81

30 MHz ~ 20 GHz:

LTE Band 2:

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Submitted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
QPSK 1.4MHz Bandwidth Low Channel										
34.61	34.02	355	150	H	-41.27	0.17	-24.84	-66.28	-13	53.28
34.61	43.10	257	200	V	-40.96	0.17	-24.84	-65.97	-13	52.97
3701.40	45.32	35	200	H	-61.64	0.95	9.78	-52.81	-13	39.81
3701.40	45.67	29	100	V	-61.29	0.95	9.78	-52.46	-13	39.46
QPSK 1.4MHz Bandwidth Middle Channel										
800.06	40.24	248	200	H	-57.97	0.62	-1.25	-59.84	-13	46.84
800.06	40.78	54	200	V	-57.64	0.62	-1.25	-59.51	-13	46.51
3760.00	44.54	172	100	H	-62.24	0.95	9.74	-53.45	-13	40.45
3760.00	44.72	58	150	V	-62.06	0.95	9.74	-53.27	-13	40.27
QPSK 1.4MHz Bandwidth High Channel										
59.83	43.04	194	100	H	-58.72	0.27	-10.83	-69.82	-13	56.82
59.83	46.92	57	150	V	-58.24	0.27	-10.83	-69.34	-13	56.34
3818.60	39.55	22	200	H	-67.04	0.96	9.71	-58.29	-13	45.29
3818.60	39.20	325	100	V	-67.39	0.96	9.71	-58.64	-13	45.64

LTE Band 4:

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Submitted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
QPSK 1.4MHz Bandwidth Low Channel										
34.73	35.00	10	150	H	-40.48	0.17	-24.74	-65.39	-13	52.39
34.73	44.10	348	150	V	-40.12	0.17	-24.74	-65.03	-13	52.03
3421.40	52.86	334	200	H	-55.08	0.93	9.82	-46.19	-13	33.19
3421.40	53.07	110	100	V	-54.87	0.93	9.82	-45.98	-13	32.98
QPSK 1.4MHz Bandwidth Middle Channel										
159.13	39.39	207	100	H	-65.52	0.38	-5.75	-71.65	-13	58.65
159.13	35.63	265	200	V	-65.84	0.38	-5.75	-71.97	-13	58.97
3465.00	51.99	96	150	H	-55.76	0.93	9.87	-46.82	-13	33.82
3465.00	52.33	354	100	V	-55.42	0.93	9.87	-46.48	-13	33.48
QPSK 1.4MHz Bandwidth High Channel										
800.06	41.65	119	150	H	-56.56	0.62	-1.25	-58.43	-13	45.43
800.06	41.53	259	150	V	-56.89	0.62	-1.25	-58.76	-13	45.76
3508.60	46.23	245	100	H	-61.34	0.93	9.89	-52.38	-13	39.38
3508.60	45.89	229	100	V	-61.68	0.93	9.89	-52.72	-13	39.72

LTE Band 66:

Frequency (MHz)	Receiver Reading (dBμV)	Turntable Angle Degree	Rx Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (cm)	Polar (H/V)	Submitted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBd/dBi)			
QPSK 1.4MHz Bandwidth Low Channel										
30.61	30.19	109	150	H	-38.87	0.14	-28.06	-67.07	-13	54.07
30.61	39.60	95	200	V	-39.25	0.14	-28.06	-67.45	-13	54.45
3421.40	49.72	160	150	H	-57.24	0.92	9.95	-48.21	-13	35.21
3421.40	49.95	85	200	V	-57.01	0.92	9.95	-47.98	-13	34.98
QPSK 1.4MHz Bandwidth Middle Channel										
499.97	41.90	307	100	H	-61.22	0.58	-1.95	-63.75	-13	50.75
499.97	41.29	28	100	V	-60.79	0.58	-1.95	-63.32	-13	50.32
3490.00	47.94	78	200	H	-58.84	0.93	9.91	-49.86	-13	36.86
3490.00	48.25	64	150	V	-58.53	0.93	9.91	-49.55	-13	36.55
QPSK 1.4MHz Bandwidth High Channel										
233.58	44.32	227	150	H	-58.48	0.43	-2.81	-61.72	-13	48.72
233.58	49.38	346	100	V	-58.80	0.43	-2.81	-62.04	-13	49.04
3558.60	42.75	220	150	H	-63.81	0.93	9.87	-54.87	-13	41.87
3558.60	43.27	53	150	V	-63.29	0.93	9.87	-54.35	-13	41.35

Note:
1) Absolute Level (dBm) = Submitted Level (dBm) - Cable loss (dB) + Antenna Gain (dBd/dBi)
2) Margin (dB) = Limit (dBm) - Absolute Level (dBm)

FREQUENCY STABILITY

EUT operation mode: Transmitting（worst case）

LTE Band 2:

20.0 MHz low channel& high channel(QPSK)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	1851.038	1908.992	1850	1910
-20		1851.022	1908.943	1850	1910
-10		1851.011	1908.957	1850	1910
0		1851.035	1908.964	1850	1910
10		1851.005	1908.012	1850	1910
20		1851.059	1908.941	1850	1910
30		1851.003	1908.999	1850	1910
40		1851.013	1908.925	1850	1910
50		1851.005	1908.912	1850	1910
20	L.V.=3.40	1851.009	1908.009	1850	1910
	H.V.=4.50	1851.004	1908.012	1850	1910

20.0 MHz low channel& high channel (16-QAM)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	1850.426	1909.452	1850	1910
-20		1850.444	1909.448	1850	1910
-10		1850.423	1909.494	1850	1910
0		1850.415	1909.425	1850	1910
10		1850.434	1909.495	1850	1910
20		1850.478	1909.486	1850	1910
30		1850.441	1909.423	1850	1910
40		1850.426	1909.485	1850	1910
50		1850.411	1909.421	1850	1910
20	L.V.=3.40	1850.429	1909.446	1850	1910
	H.V.=4.50	1850.435	1909.409	1850	1910

LTE Band 4:

20.0 MHz low channel& high channel(QPSK)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	1711.038	1753.992	1710	1755
-20		1711.022	1753.943	1710	1755
-10		1711.011	1753.957	1710	1755
0		1711.035	1753.964	1710	1755
10		1711.005	1754.012	1710	1755
20		1711.008	1753.946	1710	1755
30		1711.003	1753.999	1710	1755
40		1711.013	1753.925	1710	1755
50		1710.005	1753.912	1710	1755
20	L.V.=3.40	1710.009	1754.009	1710	1755
	H.V.=4.50	1710.004	1754.012	1710	1755

20.0 MHz low channel& high channel (16-QAM)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	1711.026	1753.952	1710	1755
-20		1711.044	1753.948	1710	1755
-10		1711.023	1753.994	1710	1755
0		1711.015	1753.925	1710	1755
10		1711.034	1753.995	1710	1755
20		1711.022	1753.942	1710	1755
30		1711.041	1754.023	1710	1755
40		1711.026	1754.085	1710	1755
50		1710.011	1753.821	1710	1755
20	L.V.=3.40	1710.029	1753.846	1710	1755
	H.V.=4.50	1710.035	1754.009	1710	1755

LTE Band 5:

10.0 MHz Middle Channel, f_o =836.5MHz (QPSK)				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	3.8	18	0.02152	2.5
-20		15	0.01793	2.5
-10		16	0.01913	2.5
0		11	0.01315	2.5
10		18	0.02152	2.5
20		14	0.01674	2.5
30		16	0.01913	2.5
40		13	0.01554	2.5
50		18	0.02152	2.5
20	L.V.=3.40	16	0.01913	2.5
	H.V.=4.50	12	0.01435	2.5

10.0 MHz Middle Channel, f_o =836.5MHz (16-QAM)				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	3.8	17	0.02032	2.5
-20		16	0.01913	2.5
-10		18	0.02152	2.5
0		12	0.01435	2.5
10		11	0.01315	2.5
20		18	0.02152	2.5
30		14	0.01674	2.5
40		16	0.01913	2.5
50		20	0.02391	2.5
20	L.V.=3.40	15	0.01793	2.5
	H.V.=4.50	13	0.01554	2.5

LTE Band 12:

10.0 MHz low channel& high channel(QPSK)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	699.523	715.554	699	716
-20		699.513	715.231	699	716
-10		699.648	715.511	699	716
0		699.529	715.248	699	716
10		699.732	715.266	699	716
20		699.495	715.497	699	716
30		699.520	715.349	699	716
40		699.581	715.425	699	716
50		699.534	715.499	699	716
20	L.V.=3.40	699.689	715.594	699	716
	H.V.=4.50	699.584	715.499	699	716

10.0 MHz low channel& high channel (16-QAM)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	699.511	715.468	699	716
-20		699.549	715.425	699	716
-10		699.582	715.419	699	716
0		699.517	715.446	699	716
10		699.449	715.483	699	716
20		699.286	715.467	699	716
30		699.482	715.449	699	716
40		699.388	715.467	699	716
50		699.459	715.497	699	716
20	L.V.=3.40	699.328	715.567	699	716
	H.V.=4.50	699.476	715.559	699	716

LTE Band 17:

10.0 MHz low channel& high channel (QPSK)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	704.429	715.504	704	716
-20		704.446	715.495	704	716
-10		704.495	715.485	704	716
0		704.482	715.476	704	716
10		704.467	715.427	704	716
20		704.429	715.446	704	716
30		704.449	715.425	704	716
40		704.375	715.437	704	716
50		704.509	715.448	704	716
20	L.V.=3.40	704.439	715.508	704	716
	H.V.=4.50	704.429	715.528	704	716

10.0 MHz low channel& high channel (16-QAM)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	704.422	715.483	704	716
-20		704.415	715.494	704	716
-10		704.439	715.499	704	716
0		704.469	715.503	704	716
10		704.429	715.485	704	716
20		704.495	715.468	704	716
30		704.482	715.498	704	716
40		704.415	715.512	704	716
50		704.422	715.499	704	716
20	L.V.=3.40	704.439	715.508	704	716
	H.V.=4.50	704.498	715.534	704	716

LTE Band 66:

20.0 MHz low channel& high channel (QPSK)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	1710.948	1779.019	1710	1780
-20		1710.946	1779.027	1710	1780
-10		1710.994	1779.008	1710	1780
0		1710.948	1779.019	1710	1780
10		1710.946	1779.022	1710	1780
20		1710.982	1779.009	1710	1780
30		1710.974	1779.018	1710	1780
40		1710.934	1779. 034	1710	1780
50		1710.946	1779.028	1710	1780
20	L.V.=3.40	1710.973	1779.017	1710	1780
	H.V.=4.50	1710.946	1779.012	1710	1780

20.0 MHz low channel& high channel (16-QAM)					
Temperature	**Power Supplied**	**F_L**	**F_H**	**F_L Limit**	**F_H Limit**
(℃)	**(V_{DC})**	**(MHz)**	**(MHz)**	**(MHz)**	**(MHz)**
-30	3.8	1710.928	1779.004	1710	1780
-20		1710.946	1779.046	1710	1780
-10		1710.916	1779.088	1710	1780
0		1710.918	1779.018	1710	1780
10		1710.922	1779.037	1710	1780
20		1710.937	1779.048	1710	1780
30		1710.946	1779.004	1710	1780
40		1710.998	1779.048	1710	1780
50		1710.956	1779.024	1710	1780
20	L.V.=3.40	1710.946	1779.014	1710	1780
	H.V.=4.50	1710.942	1779.022	1710	1780

Declarations

1. The laboratory is not responsible for the authenticity of any information provided by the applicant. Information from the applicant that may affect test results is marked with "★".

2. The test data was only valid for the test sample(s).

3. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

4. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

5. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor k=2 with the 95.45% confidence interval.

******* END OF REPORT *******