



FCC RF Test Report

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : XT2623-1
FCC ID : IHDT56AT1
STANDARD : 47 CFR Part 22(H), 24(E), 27(L) , 27(M) , 27(F)
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S) : Nov. 03, 2025

We, Sporton International Inc. (Shenzhen), would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Shenzhen), the test report shall not be reproduced except in full.

Fly Liang

Approved by: Fly Liang



Sporton International Inc. (ShenZhen)

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG482104-18B	Rev. 01	Initial issue of report	Nov. 21, 2025



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§27.53(c)(2) §27.53(f)	Radiated Spurious Emission (Band 13)	$< 43 + 10 \log_{10}(P[\text{Watts}])$	PASS	Under limit 23.10 dB at 1559.50 MHz

Note:

This is a variant report for XT2623-1. The change note could be referred to XT2623-1_Operational Description of Product Equality Declaration which is exhibit separately. Based on the similarity between current and previous project, only the worse test cases of RSE were verified from original report (Sporton Report Number FG482104B).

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty"

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.



1 General Description

1.1 Applicant

Motorola Mobility LLC

222 W, Merchandise Mart Plaza, Chicago IL 60654, USA

1.2 Manufacturer

Motorola Mobility LLC

222 W, Merchandise Mart Plaza, Chicago IL 60654, USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2623-1
FCC ID	IHDT56AT1
IMEI Code	Radiation: 350084460004674/350084460004682 for Sample 1 350084460013097/350084460013105 for Sample 2 350084460018252/350084460018260 for Sample 3
HW Version	DVT2
SW Version	VVTB35.5
EUT Stage	Identical Prototype

Note: There are four types of EUT, the differences could be referred to the XT2623-1_Operational Description of Product Equality Declaration which is exhibit separately. According to the difference, we chose sample 1 to perform full test and the sample 2/3 is verified for the difference, the sample 4 is no tested.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 2 : 1850 MHz ~ 1910 MHz LTE Band 4 : 1710 MHz ~ 1755 MHz LTE Band 5 : 824 MHz ~ 849 MHz LTE Band 7 : 2500 MHz ~ 2570 MHz LTE Band 13 : 777 MHz ~ 787 MHz LTE Band 26 : 824 MHz ~ 849 MHz LTE Band 38 : 2570 MHz ~ 2620 MHz LTE Band 66 : 1710 MHz ~ 1780 MHz
Rx Frequency	LTE Band 2 : 1930 MHz ~ 1990 MHz LTE Band 4 : 2110 MHz ~ 2155 MHz LTE Band 5 : 869 MHz ~ 894 MHz LTE Band 7 : 2620 MHz ~ 2690 MHz LTE Band 13 : 746 MHz ~ 756 MHz LTE Band 26 : 869 MHz ~ 894 MHz LTE Band 38 : 2570 MHz ~ 2620 MHz LTE Band 66 : 2110 MHz ~ 2180 MHz
Bandwidth	LTE Band 13 : 5MHz / 10MHz
Antenna Gain	<Ant.0> LTE Band 13 : -3.6 dBi
Type of Modulation	QPSK / 16QAM / 64QAM

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Testing Location

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	03CH03-SZ 03CH04-SZ	CN1256	421272

1.7 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH03-SZ	AUDIX	E3	6.2009-8-24
2.	03CH04-SZ	AUDIX	E3	6.2009-8-24

1.8 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR Part 22(H), 24(E), 27(L) , 27(M) , 27(F)
- ♦ ANSI C63.26-2015
- ♦ FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

1.9 Specification of Accessory

Specification of Accessory				
AC Adapter 1(US)	Brand Name	Motorola(AOHAI)	Model Name	MC-201L
AC Adapter 1(EU)	Brand Name	Motorola(AOHAI)	Model Name	MC-202L
AC Adapter 1(UK)	Brand Name	Motorola(AOHAI)	Model Name	MC-203L
AC Adapter 1(IN)	Brand Name	Motorola(AOHAI)	Model Name	MC-204
AC Adapter 1(AU)	Brand Name	Motorola(AOHAI)	Model Name	MC-205L
AC Adapter 1(AR)	Brand Name	Motorola(AOHAI)	Model Name	MC-206L
AC Adapter 1(PRC)	Brand Name	Motorola(AOHAI)	Model Name	MC-208L
AC Adapter 1(CHILE)	Brand Name	Motorola(AOHAI)	Model Name	MC-209L
AC Adapter 2(US)	Brand Name	Motorola(SALCOMP)	Model Name	MC-201L
AC Adapter 2(EU)	Brand Name	Motorola(SALCOMP)	Model Name	MC-202L
AC Adapter 2(UK)	Brand Name	Motorola(SALCOMP)	Model Name	MC-203L
AC Adapter 2(AU)	Brand Name	Motorola(SALCOMP)	Model Name	MC-205L
AC Adapter 2(AR)	Brand Name	Motorola(SALCOMP)	Model Name	MC-206L
AC Adapter 2(BR)	Brand Name	Motorola(SALCOMP)	Model Name	MC-207L
AC Adapter 2(PRC)	Brand Name	Motorola(SALCOMP)	Model Name	MC-208L
AC Adapter 2(CHILE)	Brand Name	Motorola(SALCOMP)	Model Name	MC-209L
AC Adapter 3(US)	Brand Name	Motorola(CHENYANG)	Model Name	MC-201L
AC Adapter 3(EU)	Brand Name	Motorola(CHENYANG)	Model Name	MC-202L
AC Adapter 3(AR)	Brand Name	Motorola(CHENYANG)	Model Name	MC-206L
AC Adapter 3(BR)	Brand Name	Motorola(CHENYANG)	Model Name	MC-207L
Battery 1	Brand Name	Motorola(ATL)	Model Name	RL52
Battery 2	Brand Name	Motorola(COSMX)	Model Name	RL52
Battery 3	Brand Name	Motorola(SUNWODA)	Model Name	RL52
USB Cable 1	Brand Name	Motorola(Yihuaxing)	Model Name	T365-020 T365-020-01 T365-020-02
USB Cable 2	Brand Name	Motorola(WASHIN)	Model Name	HX-TL-01 HX-TL-08 HX-TL-07
USB Cable 3	Brand Name	Motorola(Juwei)	Model Name	JWUB1614-T03H JWUB1705-T03H JWUB1856-T03H
USB Cable 4	Brand Name	Motorola(I-SHENG)	Model Name	SC18D38574

2 Test Configuration of Equipment Under Test

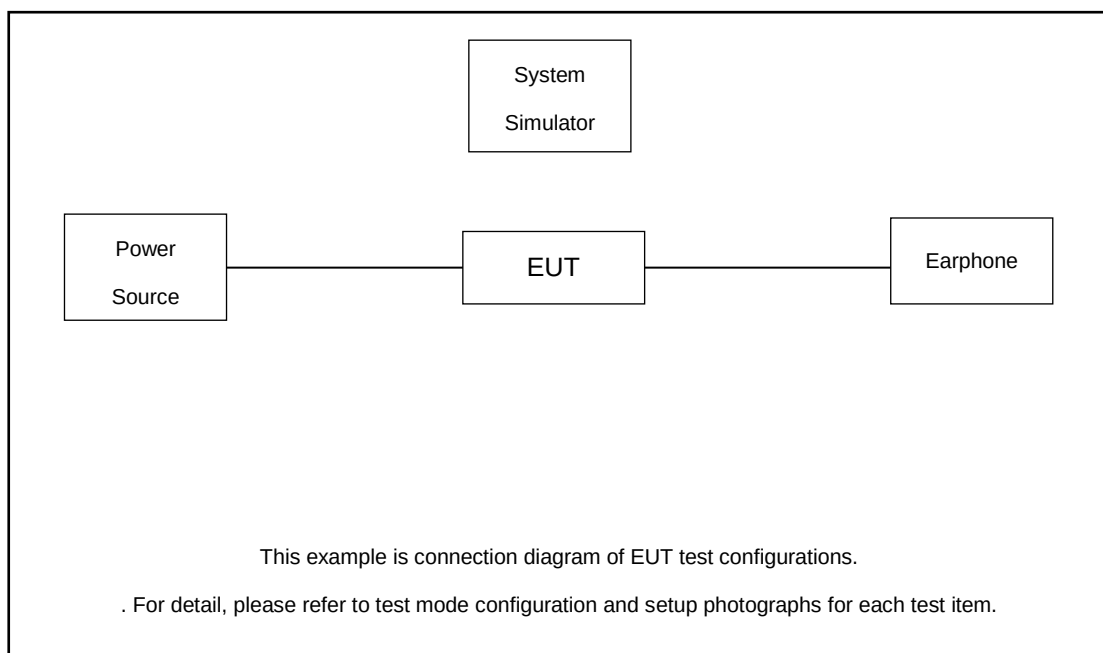
2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

Test Items	Band	Bandwidth (MHz)						Modulation			RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Radiated Spurious Emission	13	Worst Case													v	
Note	1. The mark “v” means that this configuration is chosen for testing 2. The mark “-“ means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.															

2.2 Connection Diagram of Test System





2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	Earphone	N/A	N/A	N/A	N/A	N/A

2.4 Frequency List of Low/Middle/High Channels

LTE Band 13 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	-	23230	-
	Frequency	-	782	-
5	Channel	23205	23230	23255
	Frequency	779.5	782	784.5

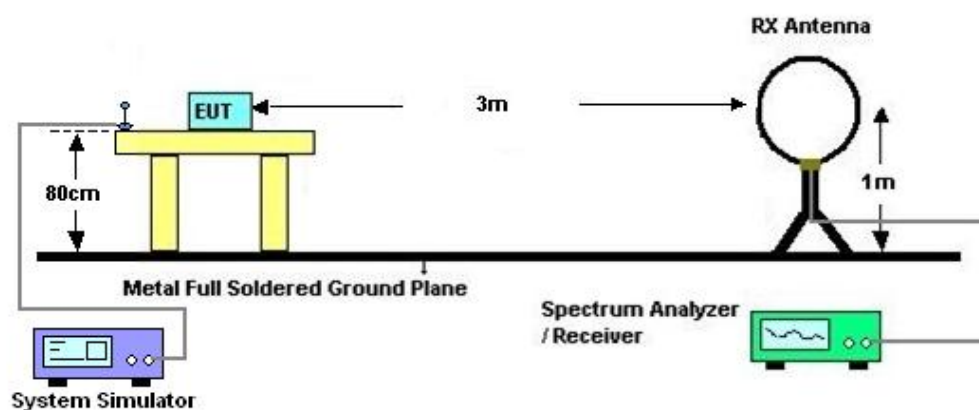
3 Radiated Test Items

3.1 Measuring Instruments

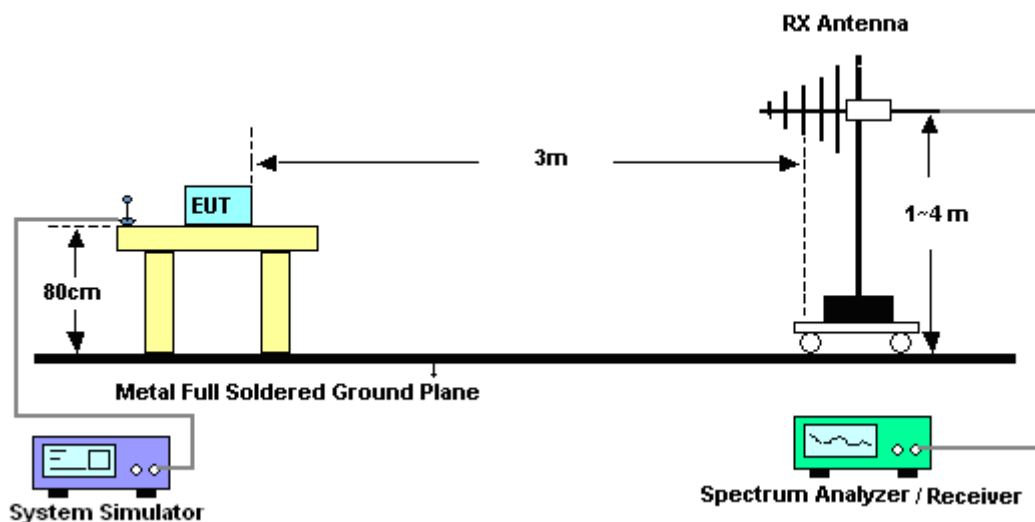
See list of measuring instruments of this test report.

3.2 Test Setup

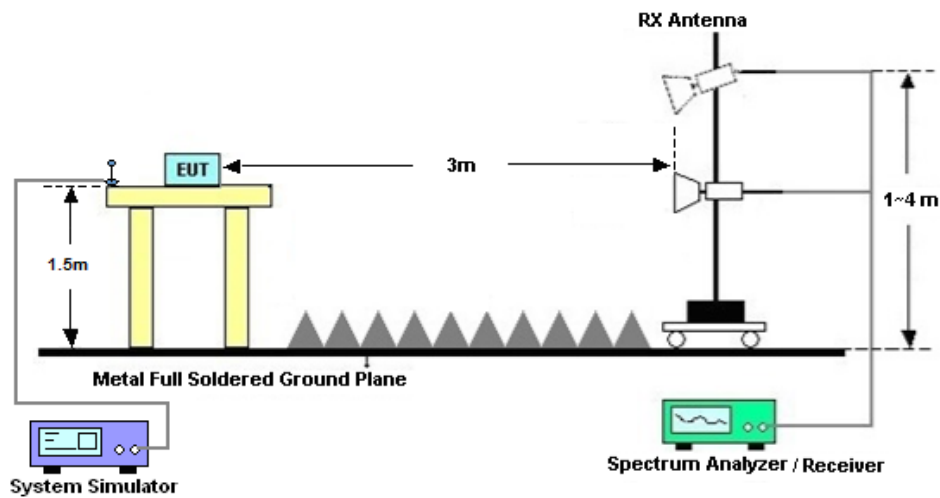
3.2.1 For radiated test below 30MHz



3.2.2 For radiated test from 30MHz to 1GHz



3.2.3 For radiated test above 1GHz



3.3 Test Result of Radiated Test

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

Please refer to Appendix A.



3.4 Radiated Spurious Emission

3.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

For LTE Band 13

For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. $\text{EIRP (dBm)} = \text{S.G. Power} - \text{Tx Cable Loss} + \text{Tx Antenna Gain}$
11. $\text{ERP (dBm)} = \text{EIRP} - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)] \text{ (dB)}$
 $= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$
 $= -13\text{dBm}.$



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY54450083	20Hz~8.4GHz	Apr. 02, 2025	Nov. 03, 2025	Apr. 01, 2026	Radiation (03CH03-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 28, 2024	Nov. 03, 2025	Dec. 27, 2025	Radiation (03CH03-SZ)
EXA Signal Analyzer	KEYSIGHT	N9010B	MY59071191	10KHz~44GHz	Apr. 02, 2025	Nov. 03, 2025	Apr. 01, 2026	Radiation (03CH03-SZ)
Bilog Antenna	TeseQ	CBL6112D	35408	30MHz~2GHz	Aug. 20, 2025	Nov. 03, 2025	Aug. 19, 2026	Radiation (03CH03-SZ)
Double Ridge Guide Antenna	ETS-Lindgren	Burgeon-31 17	00240107	1GHz~18GHz	Jul. 13, 2025	Nov. 03, 2025	Jul. 12, 2026	Radiation (03CH03-SZ)
Amplifier	EM Electronics	EM330	060756	0.01Hz ~3000MHz	Apr. 02, 2025	Nov. 03, 2025	Apr. 01, 2026	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 03, 2025	Nov. 03, 2025	Jul. 02, 2026	Radiation (03CH03-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18GHz~40GHz	Apr. 03, 2025	Nov. 03, 2025	Apr. 02, 2026	Radiation (03CH03-SZ)
HF Amplifier	Keysight	83017A	MY53270357	500MHz~26.5GHz	Apr. 02, 2025	Nov. 03, 2025	Apr. 01, 2026	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	61601000272 9	N/A	Oct. 18, 2025	Nov. 03, 2025	Oct. 17, 2026	Radiation (03CH03-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Nov. 03, 2025	NCR	Radiation (03CH03-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Nov. 03, 2025	NCR	Radiation (03CH03-SZ)
EMI Test Receiver	R&S	ESR7	101404	9kHz~7GHz	Oct. 14, 2025	Nov. 03, 2025	Oct. 13, 2026	Radiation (03CH04-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 03, 2025	Nov. 03, 2025	Jul. 02, 2026	Radiation (03CH04-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 28, 2024	Nov. 03, 2025	Dec. 27, 2025	Radiation (03CH04-SZ)
Bilog Antenna	TeseQ	CBL6111D	41909	30MHz~1GHz	Apr. 21, 2025	Nov. 03, 2025	Apr. 20, 2026	Radiation (03CH04-SZ)
Double Ridge Guide Antenna	ETS-Lindgren	Burgeon-31 17	00240057	1GHz~18GHz	Jul. 03, 2025	Nov. 03, 2025	Jul. 02, 2026	Radiation (03CH04-SZ)
Horn Antenna	SCHWARZBECK	BBHA9170	9170#679	15GHz~40GHz	Jul. 04, 2025	Nov. 03, 2025	Jul. 03, 2026	Radiation (03CH04-SZ)
LF Amplifier	EM Electronics	EM330	060773	20MHz~3GHz	Apr. 02, 2025	Nov. 03, 2025	Apr. 01, 2026	Radiation (03CH04-SZ)
HF Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P-R	1943528	1GHz~18GHz	Oct. 14, 2025	Nov. 03, 2025	Oct. 13, 2026	Radiation (03CH04-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 03, 2025	Nov. 03, 2025	Jul. 02, 2026	Radiation (03CH04-SZ)
Amplifier	Agilent Technologies	83017A	MY57280136	500MHz~26.5GHz	Jul. 03, 2025	Nov. 03, 2025	Jul. 02, 2026	Radiation (03CH04-SZ)
AC Power Source	APC	AFV-S-600B	F119050019	N/A	Oct. 14, 2025	Nov. 03, 2025	Oct. 13, 2026	Radiation (03CH04-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Nov. 03, 2025	NCR	Radiation (03CH04-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Nov. 03, 2025	NCR	Radiation (03CH04-SZ)

NCR: No Calibration Required



5 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage $K=2$ to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

03CH03

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.0dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.6dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.8dB
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03CH04

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.8dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.1dB
---	-------

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.9dB
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----- THE END -----



Appendix A. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	ZhangXu	Temperature :	22~25°C
		Relative Humidity :	48~52%

LTE Band 13 / 5MHz / QPSK / Ant.0								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1559.5	-65.25	-42.15	-23.10	-68.50	4.00	9.40	H
	2339.25	-64.72	-13	-51.72	-68.29	4.88	10.60	H
	3119	-61.90	-13	-48.90	-66.83	5.52	12.60	H
	1559.5	-65.92	-42.15	-23.77	-69.17	4.00	9.40	V
	2339.25	-64.78	-13	-51.78	-68.35	4.88	10.60	V
	3119	-62.11	-13	-49.11	-67.04	5.52	12.60	V

For Sample 2:

LTE Band 13 / 5MHz / QPSK / Ant.0								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1559.5	-65.32	-42.15	-23.17	-68.57	4.00	9.40	H
	2339.25	-64.44	-13	-51.44	-68.01	4.88	10.60	H
	3119	-61.68	-13	-48.68	-66.61	5.52	12.60	H
	1559.5	-65.43	-42.15	-23.28	-68.68	4.00	9.40	V
	2339.25	-64.80	-13	-51.80	-68.37	4.88	10.60	V
	3119	-62.06	-13	-49.06	-66.99	5.52	12.60	V

For Sample 3:

LTE Band 13 / 5MHz / QPSK / Ant.0								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1559.5	-65.33	-42.15	-23.18	-68.58	4.00	9.40	H
	2339.25	-64.08	-13	-51.08	-67.65	4.88	10.60	H
	3119	-62.06	-13	-49.06	-66.99	5.52	12.60	H
	1559.5	-65.67	-42.15	-23.52	-68.92	4.00	9.40	V
	2339.25	-64.41	-13	-51.41	-67.98	4.88	10.60	V
	3119	-62.09	-13	-49.09	-67.02	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.