

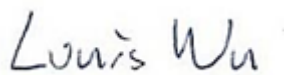


FCC EMI TEST REPORT

FCC ID : 2BSS5ROSER2401
Equipment : LTE Cat.1bis Module
Brand Name : UTA
Model Name : ROSE-R2401
Applicant : UTA WIRELESS S.R.L.
Milano (MI), Via Privata Bastia Nr. 5
Manufacturer : UTA WIRELESS S.R.L.
Milano (MI), Via Privata Bastia Nr. 5
Standard : FCC 47 CFR FCC Part 15 Subpart B Class B

The product was received on Oct. 01, 2025 and testing was performed from Oct. 14, 2025 to Oct. 15, 2025. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2014 and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.



Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issue Date
FC500138	01	Initial issue of report	Nov. 27, 2025

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
-	15.107	AC Conducted Emission	Not Required	-
3.1	15.109	Radiated Emission	Pass	-

Note: Not required means after assessing, test items are not necessary to carry out.

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.

Reviewed by: Sheng Kuo

Report Producer: Vina Su

1. General Description

1.1. Product Feature of Equipment Under Test

Product Feature
General Specs LTE, Wi-Fi 2.4GHz scan

Remark: The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.

1.2. Modification of EUT

No modifications made to the EUT during the testing.

1.3. Test Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	Sporton Site No. 03CH06-HY

FCC designation No.: TW1093

1.4. Applicable Standards

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

- ♦ FCC 47 CFR FCC Part 15 Subpart B Class B
- ♦ ANSI C63.4-2014
- ♦ ANSI C63.4a-2017

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

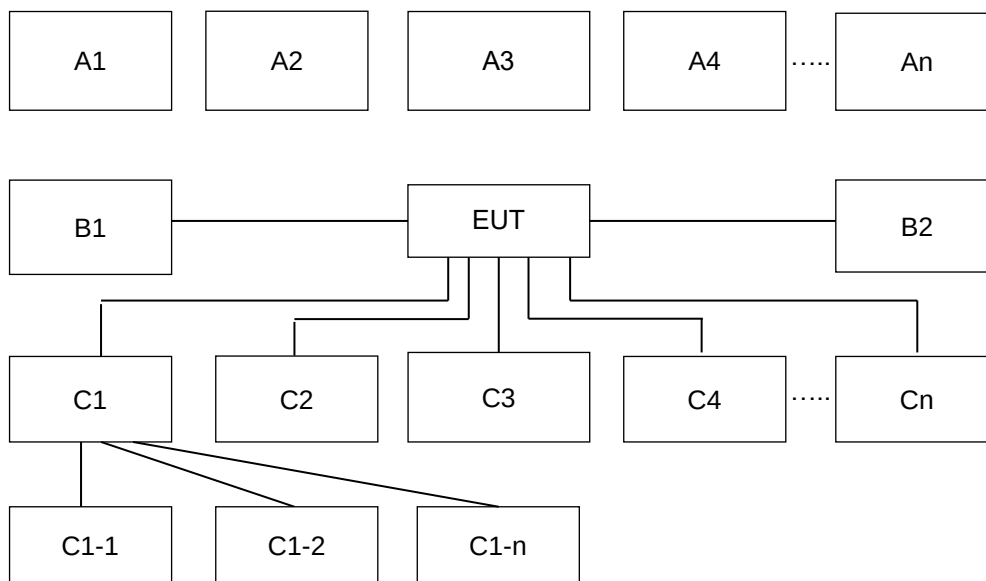
2. Test Configuration of Equipment Under Test

2.1. Test Mode

The EUT is tested along with the peripherals, operating under possible configurations in compliant with normal operation. The maximum emissions can be identified by a pre-scan carried out in different orientations of placement pursuant to ANSI C63.4-2014. Frequency range covered: Radiation Emission (30 MHz to the 5th harmonics of the highest fundamental frequency or to 40 GHz, whichever is lower).

Test Items	Functions Enabled
Radiated Emissions	Mode 1: LTE Band 5 Link + DC 3.8V Mode 2: LTE Band 12 Idle + DC 3.8V Mode 3: Wi-Fi Positioning (Scan) + connect to NB
Remark: 1. The worst case of RE is mode 3; only the test data of this mode was reported. 2. For Radiation Emission after pre-scanned the cellular band between 30MHz ~ 960MHz (LTE Band 5/12/13/14/17/71); only the worst case for cellular band test data of this mode was reported.	

2.2. Connection Diagram of Test System



Radiation Test Setup									
No.	Wireless Station	Connection Type	Test Mode						
			1	2	3				
A1	System Simulator	LTE	X	X	-				
No.	Power Source	Connection Type	1	2	3				
B1	From System	Type C Cable	-	-	X				
B2	DC : 3.8V	DC Power Cable	X	X	-				
No.	Setup Peripherals	Connection Type	1	2	3				
C1	Notebook	USB Cable	-	-	X				
C1-1	iPod	USB Cable to C1	-	-	X				
C1-2	AP router	RJ-45 Cable to C1	-	-	X				

2.3. Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8m
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8m
3.	Notebook	Dell	P152G	FCC DoC	N/A	AC I/P : Unshielded, 1.2m DC O/P : Shielded, 1.8m
4.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0m	N/A
5.	DC Power Supply	GW Instek	GEU810960	FCC DoC	N/A	N/A



2.4. EUT Operation Test Setup

The EUT is in LTE idle mode during the test. The EUT is synchronized with the BCCH, and has been continuous receiving mode by setting paging reorganization of the system simulator.

At the same time, the EUT is attached to the LTE, and the following programs installed in the EUT are programmed during the test:

1. The support unit laptop sends commands to set the EUT to the Wi-Fi Positioning (Scan) mode.

3. Test Result

3.1. Test of Radiated Emission Measurement

3.1.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

<Class B>

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.1.2. Measuring Instruments

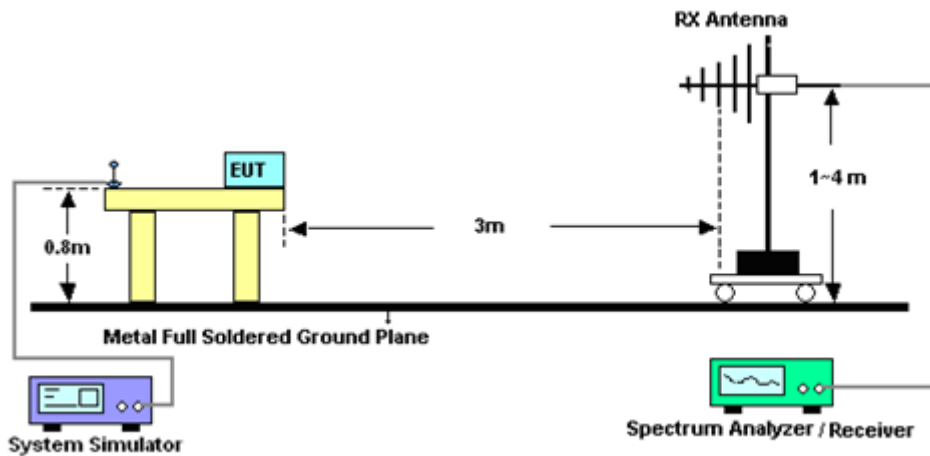
Please refer to the measuring equipment list in this test report.

3.1.3. Test Procedures

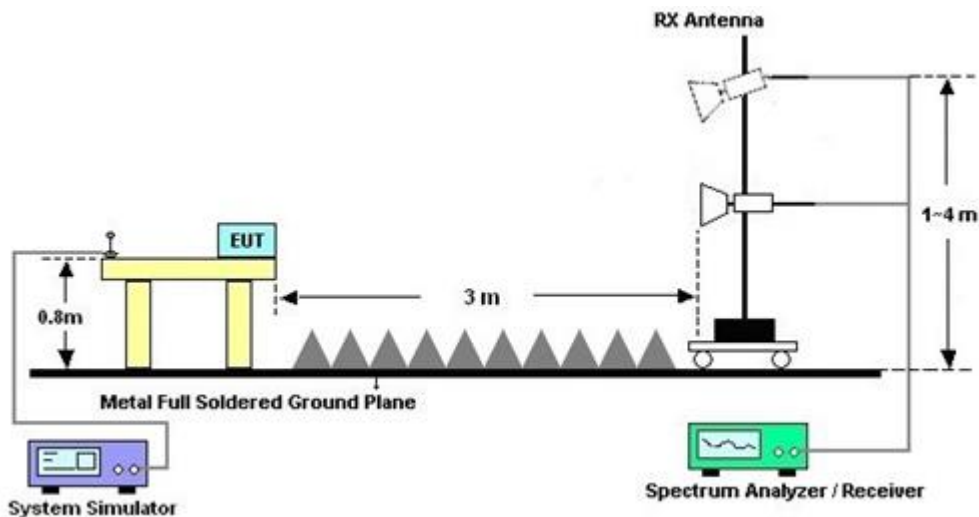
1. The EUT is placed on a turntable with 0.8 meter above ground.
2. The EUT is set 3 meters from the interference receiving antenna, which is mounted on the top of a variable height antenna tower.
3. The table is rotated 360 degrees to determine the position of the highest radiation.
4. The antenna is a Bi-Log antenna and its height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT is arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode (RBW=120 kHz/VBW=300 kHz for frequency below 1 GHz; RBW=1 MHz VBW=3 MHz (Peak), RBW=1 MHz/VBW=10 Hz (Average) for frequency above 1 GHz).
7. If the emission level of the EUT in peak mode is 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.

3.1.4. Test Setup of Radiated Emission

For Radiated Emissions from 30 MHz to 1 GHz



For Radiated Emissions above 1GHz



3.1.5. Test Result of Radiated Emission

Please refer to Appendix A.



4. List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Amplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 15, 2025	Oct. 14, 2025~ Oct. 15, 2025	Apr. 14, 2026	Radiation (03CH06-HY)
Bilog Antenna	TESEQ	CBL 6111D & N-6-06	35414 & AT-N0602	30MHz~1GHz	Oct. 04, 2025	Oct. 14, 2025~ Oct. 15, 2025	Oct. 03, 2026	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 23, 2025	Oct. 14, 2025~ Oct. 15, 2025	Jan. 22, 2026	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-02037	1GHz~18GHz	Dec. 20, 2024	Oct. 14, 2025~ Oct. 15, 2025	Dec. 19, 2025	Radiation (03CH06-HY)
Preamplifier	Jet-Power	JPA0118-55-3 03	171000180005 5006	1GHz~18GHz	Jun. 20, 2025	Oct. 14, 2025~ Oct. 15, 2025	Jun 19, 2026	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	SF104 SF102_2000m m SF102_3000m m SF102_7000m m	802433/4 532421/2 532422/2 532299/2	30MHz to 18GHz	Jul. 01, 2025	Oct. 14, 2025~ Oct. 15, 2025	Jun. 30, 2026	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	SF102_2000m m SF102_3000m m SF102_7000m m	532421/2 532422/2 532299/2	30MHz to 40GHz	Jul. 01, 2025	Oct. 14, 2025~ Oct. 15, 2025	Jun. 30, 2026	Radiation (03CH06-HY)
Hygrometer	Testo	608-H1	34893240	N/A	Nov. 01, 2024	Oct. 14, 2025~ Oct. 15, 2025	Oct. 31, 2025	Radiation (03CH06-HY)
Controller	INN-CO	EM1000	060782	Control Turn table & Ant Mast	N/A	Oct. 14, 2025~ Oct. 15, 2025	N/A	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1m~4m	N/A	Oct. 14, 2025~ Oct. 15, 2025	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	Oct. 14, 2025~ Oct. 15, 2025	N/A	Radiation (03CH06-HY)
Software	Audix	E3	N/A	N/A	N/A	Oct. 14, 2025~ Oct. 15, 2025	N/A	Radiation (03CH06-HY)

5. Measurement Uncertainty

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.8 dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.8 dB
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Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.4 dB
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.0 dB
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Appendix A. Radiated Emission Test Result

