FCC Part 96.47 TEST REPORT

FCC ID	:	GKRRMLN1T
Equipment	:	5G LGA Module
Brand Name	:	COMPAL
Model Name	:	RML-N1t
Marketing Name	:	5G LGA Module
Applicant	:	Compal Electronics, Inc. No.581 & 581-1, Ruiguang Rd., Neihu District, Taipei, (114) Taiwan
Manufacturer	:	Compal Electronics, Inc. No.581 & 581-1, Ruiguang Rd., Neihu District, Taipei, (114) Taiwan
Standard	:	FCC Part 96.47
RF Interface	:	LTE B48

The product was received on Dec. 15, 2022 and testing was performed from Dec. 22, 2022 to Dec. 22, 2022. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures 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 of Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.

Jones Tsai

Approved by: Jones Tsai

Sporton International Inc. Wensan Laboratory
No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issue Date
FG2N2510-01C	01	Initial issue of report	Mar. 15, 2023

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3	96.47	End User Device additional requirement	Pass	-

Declaration of Conformity:
The test results (PASS/FAIL) with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
Comments and Explanations:
The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Keven Cheng

Report Producer: Rachel Hsieh

1 General Description

1.1 Product Feature of Equipment Under Test

LTE/5G NR and GNSS

Product Feature	
Antenna Type	WWAN: Monopole Antenna GPS: Monopole Antenna

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

1.2 Modification of EUT

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

1.3 Testing Location

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	TH05-HY
Test Engineer	Thomas Chen
Temperature	22 ~ 25 ℃
Relative Humidity	41 ~ 45 %

FCC designation No.: TW3786

1.4 Applicable Standards

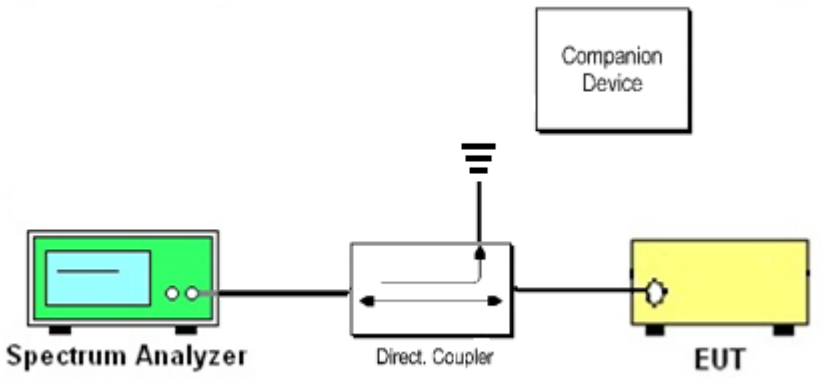
- FCC Part 96.47
- FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification

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.
3. The TAF code is not including all the FCC KDB listed without accreditation.

2 Test Configuration of Equipment Under Test

2.1 Connection Diagram of Test System



The companion device is certified CBSD (FCC ID: S9GQ710US02)

3 End User Device additional requirement

3.1 Test Requirement

FCC Part 96.47

(a) End User Devices may operate only if they can positively receive and decode an authorization signal transmitted by a CBSD, including the frequencies and power limits for their operation.

(1) An End User Device must discontinue operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD.

3.2 Test Procedure

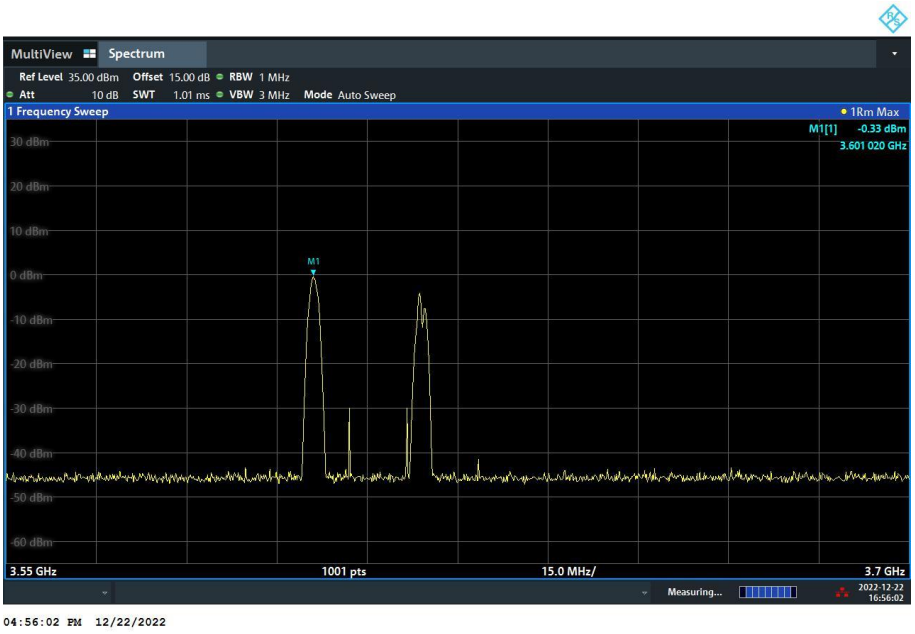
Following procedure can be done by applying WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification, use the certified Ruckus CBSD (FCC ID: S9GQ710US02) as companion device to show compliance with Part 96.47 requirement for End User Device (EUD):

1. Setup with frequency 3600-3620MHz and power level 20dBm/MHz
2. Enable AP service from Ruckus Cloud management
3. Check EUD Tx Frequency and power
4. Disable AP service from Ruckus Cloud management
    a. Check EUD stops transmission within 10seconds.

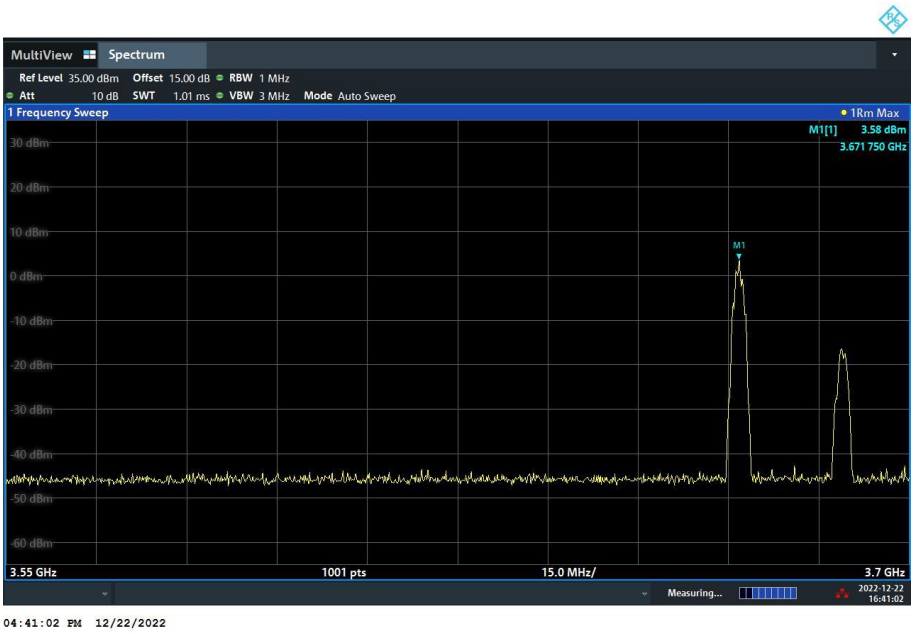
5. Setup with 3670-3690MHz & power level 10dBm/MHz
6. Enable AP service from Ruckus Cloud management
7. Check EUD Tx Frequency and power
8. Disable AP service from Ruckus Cloud management
    a. Check EUD stops transmission within 10seconds.

3.3 Test Result

[Step 1] Setup with frequency 3600-3620MHz and power level 20dBm/MHz
[Step 3] Check EUD Tx Frequency and power



[Step 4.a.] EUD stops transmission within 10 seconds of receiving instructions from its associated CBSD.

[Step 5] Setup with 3670-3690MHz & power level 10dBm/MHz
[Step 7] Check EUD Tx Frequency and power

[Step 8.a.] After changing the frequency and power level, The module (EUT) discontinues operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD. Test result is PASS.


4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV3044	101434	10Hz~44GHz	Oct. 28, 2022	Dec. 22, 2022	Oct. 27, 2023	Conducted (TH05-HY)