



FCC Part 96.47 TEST REPORT

FCC ID : 2ADZR5G1612WA
Equipment : Nokia FastMile 5G Gateway 3.2
Brand Name : Nokia
Model Name : 5G16-12W-A
Applicant : Nokia Shanghai Bell Co. Ltd.
Karakaari 7 02610 Espoo Finland
Manufacturer : Nokia Solutions and Networks Oy
Karakaari 7 02610 Espoo Finland
Standard : FCC Part 96.47

The product was received on Dec. 01, 2021 and testing was started from Dec. 22, 2021 and completed on Dec. 22, 2021. 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.

Approved by: Jones Tsai

Sportun International Inc. Wensan Laboratory

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan



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History of this test report



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 with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

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: Benson Chen

Report Producer: Tina Chuang



1 General Description

1.1 Product Feature of Equipment Under Test

LTE/5G NR, Wi-Fi 2.4GHz 802.11b/g/n/ax, and Wi-Fi 5GHz 802.11n/ac/ax

Product Feature	
Antenna Type	WWAN: Monopole Antenna / Dipole Antenna WLAN: Dipole Antenna

Remark: The above EUT's information was 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	Sportun 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: +886-3-327-0855s
Test Site No.	Sportun Site No.
	TH05-HY
Test Engineer	Mina Liu
Temperature	22 ~ 25 °C
Relative Humidity	41 ~ 45 %

FCC designation No.: TW3786

1.4 Applicable Standards

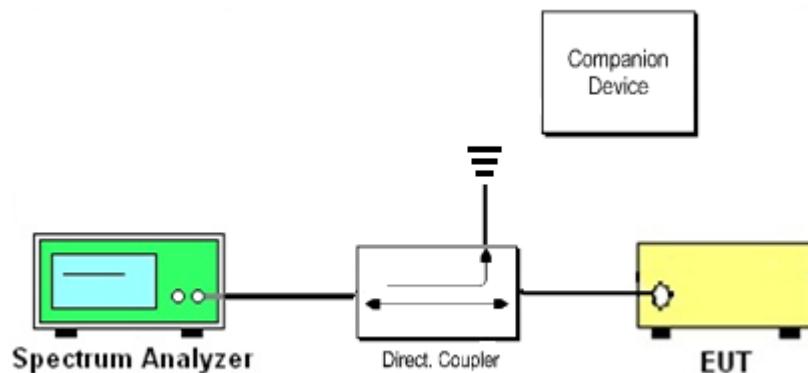
- FCC Part 96.47
- FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. 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 CBRS (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):

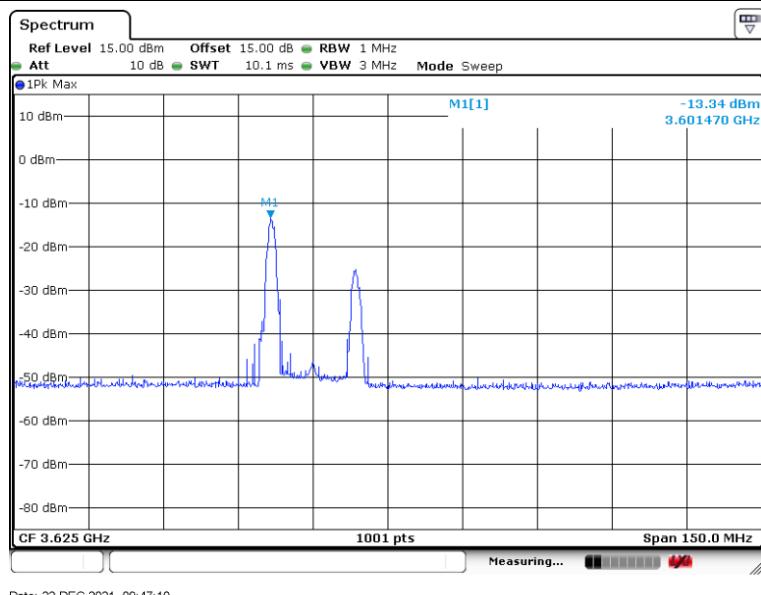
1. Setup with frequency 3600-3620MHz and power level 17dBm/MHz
2. Enable AP service from Ruckus Cloud management
3. Check EUD Tx Frequency and power
4. Disable AP service from Ruckus Cloud management
 - a. Check EUD stops transmission within 10seconds.
5. Setup with 3670-3690MHz & power level 7dBm/MHz
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

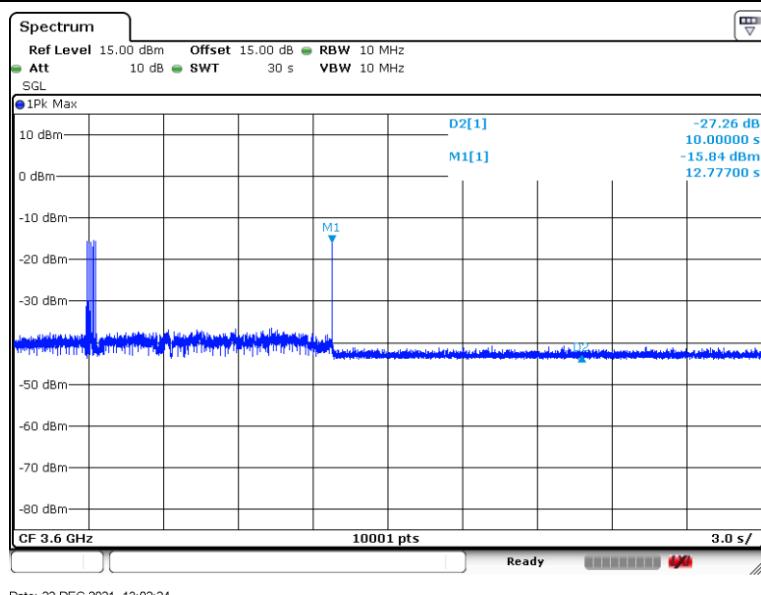
[Step 1] Setup with frequency 3600-3620MHz and power level 17dBm/MHz

[Step 3] Check EUD Tx Frequency and power



Date: 22 DEC 2021 09:47:10

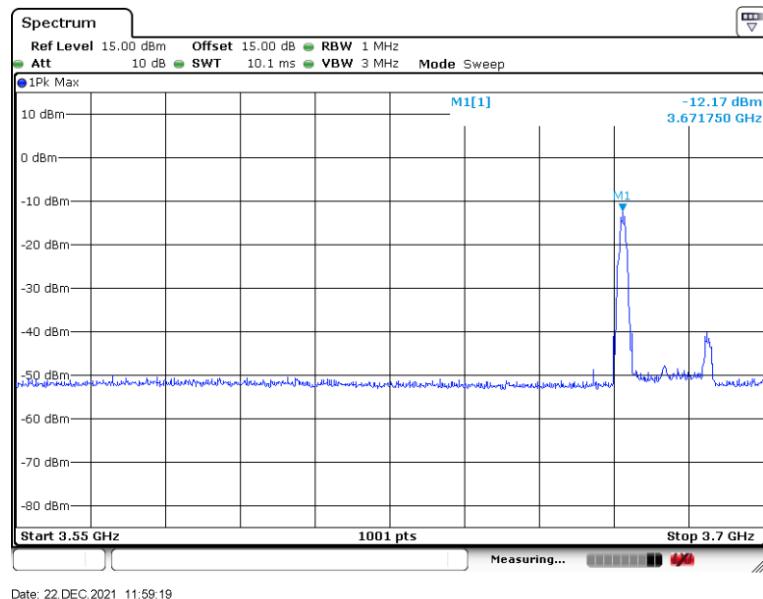
[Step 4.a.] EUD stops transmission within 10 seconds of receiving instructions from its associated CBSD.



Date: 22 DEC 2021 13:02:24

[Step 5] Setup with 3670-3690MHz & power level 7dBm/MHz

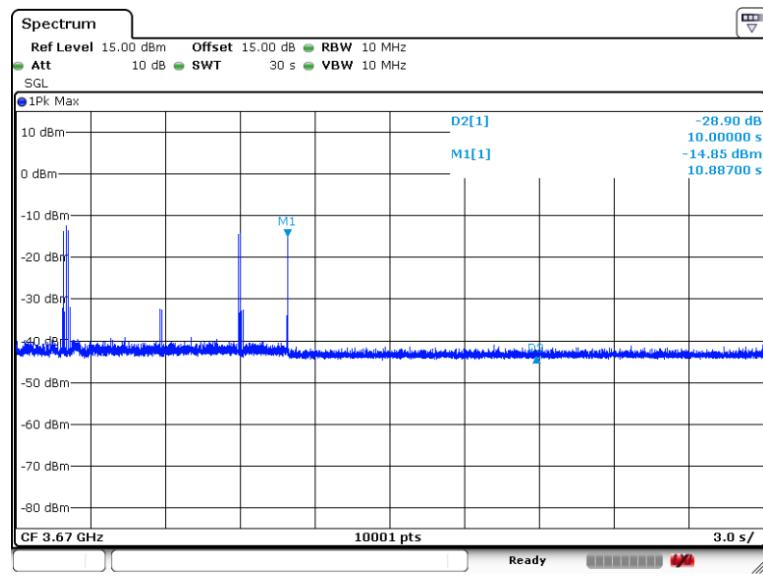
[Step 7] Check EUD Tx Frequency and power



Date: 22.DEC.2021 11:59:19

[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.



Date: 22.DEC.2021 11:52:31



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 30, 2021	Dec. 22, 2021	Aug. 29, 2022	TH05-HY