



FCC Part 96.47 TEST REPORT

FCC ID : PGR-WMD3M91QTA
Equipment : CBRS GW WITH DUAL BAND 11AC WIFI AND VOIP
Brand Name : ARRIS
Model Name : NVG558CH
Marketing Name : CBRS GW WITH DUAL BAND 11AC WIFI AND VOIP
Applicant : ARRIS
2500 Walsh Avenue, Santa Clara, California, United States 95051
Manufacturer : ARRIS
2500 Walsh Avenue, Santa Clara, California, United States 95051
Standard : FCC Part 96.47

The product was received on Oct. 07, 2019 and testing was started from Oct. 21, 2019 and completed on Oct. 21, 2019. We, Sporton International (USA) Inc., 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 report must not be used by the client to claim product certification, approval, or endorsement by A2LA or any agency of government.

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

Approved by: Ken Chen

Sporton International (USA) Inc.
1175 Montague Expressway, Milpitas, CA 95035



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Product Feature of Equipment Under Test.....	5
1.2 Modification of EUT	5
1.3 Testing Location	5
1.4 Applicable Standards.....	5
2 Test Configuration of Equipment Under Test	6
2.1 Connection Diagram of Test System.....	6
3 End User Device additional requirement	7
3.1 Test Requirement	7
3.2 Test Procedure	7
3.3 Test Result.....	8
4 List of Measuring Equipment.....	10
Appendix A Test Setup Photo	



History of this test report

Report No.	Version	Description	Issued Date
FG191007001	01	Initial issue of report	Jul. 21, 2020

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 declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.



1 General Description

1.1 Product Feature of Equipment Under Test

LTE

Product Specification subjective to this standard	
Antenna Type	Fixed Internal Antenna Fixed External Antenna

1.2 Modification of EUT

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

1.3 Testing Location

Sporton Lab is accredited to ISO 17025 by A2LA (A2LA code : 5029.01).

Test Site	Sporton International (USA) Inc.
Test Site Location	1175 Montague Expressway, Milpitas, CA 95035 TEL : 408 9043300
Test Site No.	Sporton Site No. TH01-CA
Test Engineer	Jordan Huang
Temperature	22~25℃
Relative Humidity	42~48%

Note: The test site complies with ANSI C63.4 2014 requirement.

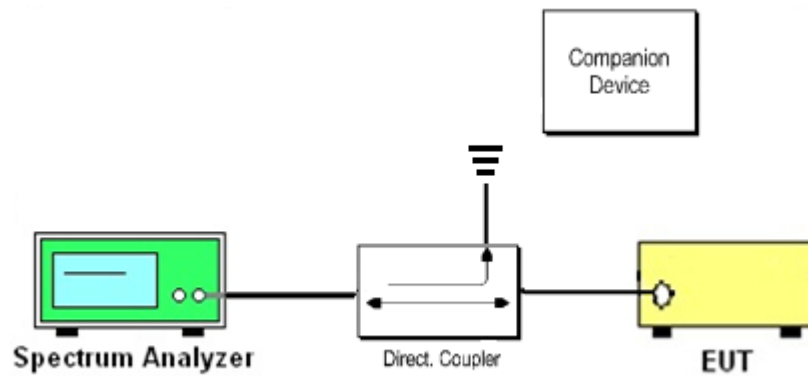
1.4 Applicable Standards

- ♦ FCC Part 96.47
- ♦ FCC KDB 940660 D01 Part 96 CBRS Eqpt v02
- ♦ WINNF-TS-0122-V1.0.1 CBRS CBSD Test Specification

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 Connection Diagram of Test System



The companion device is certified CBRS (FCC ID: S9GQ910US00)

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

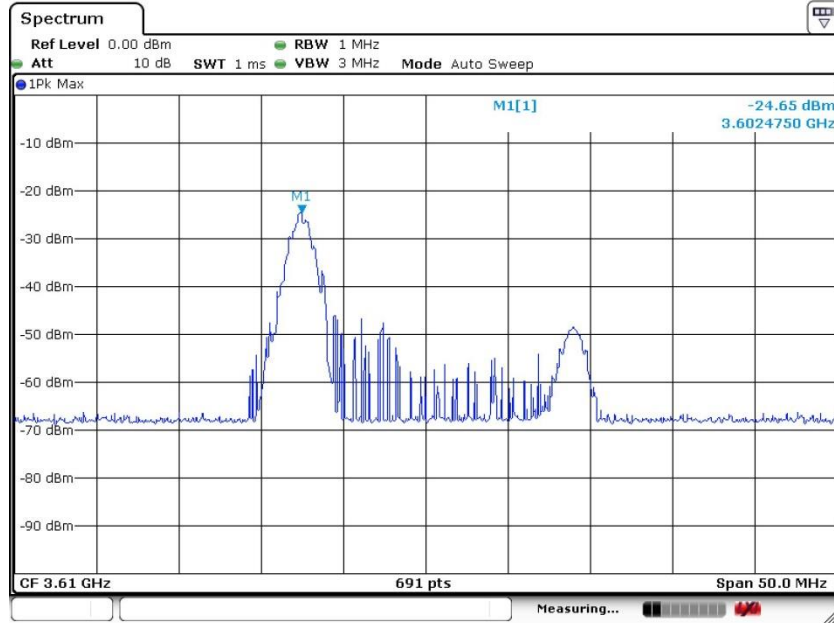
Following procedure can be done by applying WINNF-TS-0122-V1.0.1 CBRS CBSD Test Specification, use the certified Ruckus CBSD (FCC ID: S9GQ910US00) as companion device to show compliance with Part 96.47 requirement for End User Device (EUD):

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 8dBm/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

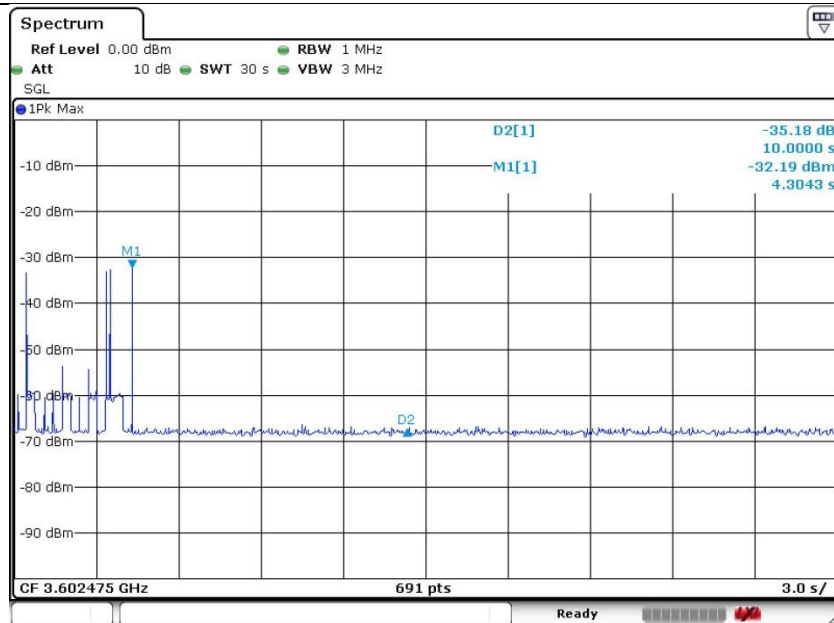
[Step 1] Setup with frequency 3600-3620MHz and power level 17dBm/MHz

[Step 3] Check EUD Tx Frequency and power

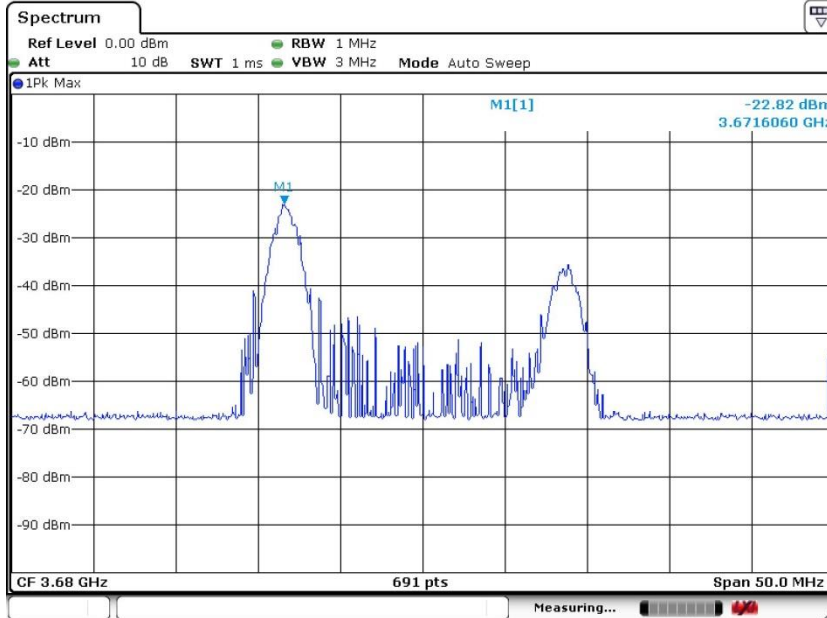


Date: 21.OCT.2019 18:20:21

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

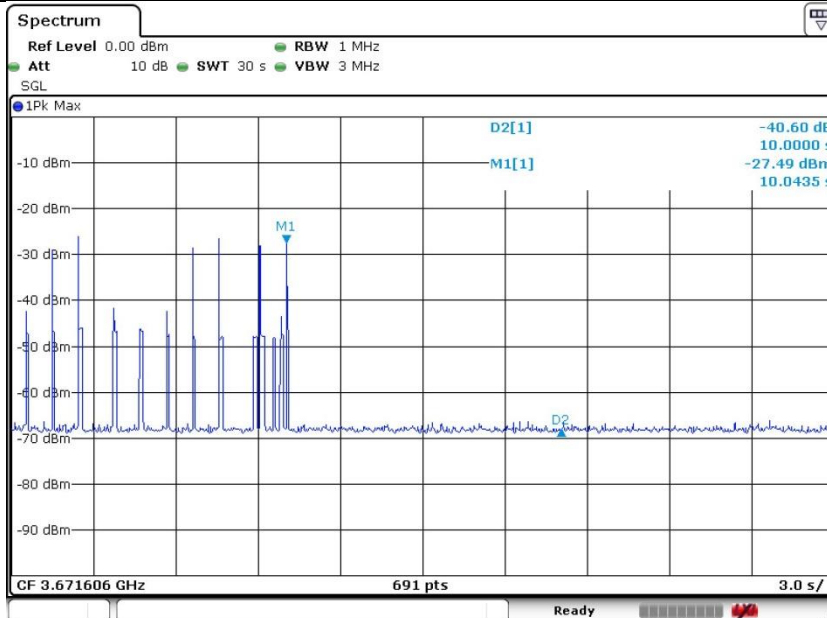


Date: 21.OCT.2019 21:13:25

[Step 5] Setup with 3670-3690MHz & power level 8dBm/MHz
[Step 7] Check EUD Tx Frequency and power


Date: 21.OCT.2019 22:05:29

[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: 21.OCT.2019 22:15:15



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	Rohde & Schwarz	FSV 40	101545	10Hz~40GHz	May 17, 2019	Oct. 21, 2019	May 16, 2020	Conducted (TH01-CA)