



# FCC Part 96.47 TEST REPORT

**FCC ID** : A4RGE2AE  
**Equipment** : Phone  
**Model Name** : GE2AE, GFE4J  
**Applicant** : Google LLC  
1600 Amphitheatre Parkway,  
Mountain View, California, 94043 USA  
**Standard** : FCC Part 96.47  
**RF Interface** : LTE B48

The product was received on Mar. 31, 2022 and testing was performed from Apr. 27, 2022 to Apr. 27, 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 from 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 (R.O.C.)



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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 (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:

1. The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity.
2. The GE2AE and GFE4J are 100% identical in Hardware / Software to each other, and only have different model names for marketing purposes. The test sample are all model GE2AE.

Reviewed by: William Chen

Report Producer: Ruby Zou



## 1 General Description

### 1.1 Product Feature of Equipment Under Test

Product Feature	
<b>Equipment</b>	Phone
<b>Model Name</b>	GE2AE, GFE4J
<b>FCC ID</b>	A4RGE2AE
<b>EUT supports Radios application</b>	GSM/EGPRS/WCDMA/HSPA/LTE/5G NR/NFC/GNSS/ WPC/WPT/UWB WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80/VHT160 WLAN 11ax HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE

**Remark:** The above EUT's information was declared by manufacturer.

EUT Information List	
S/N	Performed Test Item
23221FDH300009	Conducted Measurement

### 1.2 Modification of EUT

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



### 1.3 Testing Location

<b>Test Site</b>	Sportun International Inc. Wensan Laboratory
<b>Test Site Location</b>	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
<b>Test Site No.</b>	<b>Sportun Site No.</b> TH05-HY
<b>Test Engineer</b>	Mina Liu
<b>Temperature</b>	22 ~ 25°C
<b>Relative Humidity</b>	41 ~ 45 %

FCC designation No.: TW3786

### 1.4 Applicable Standards

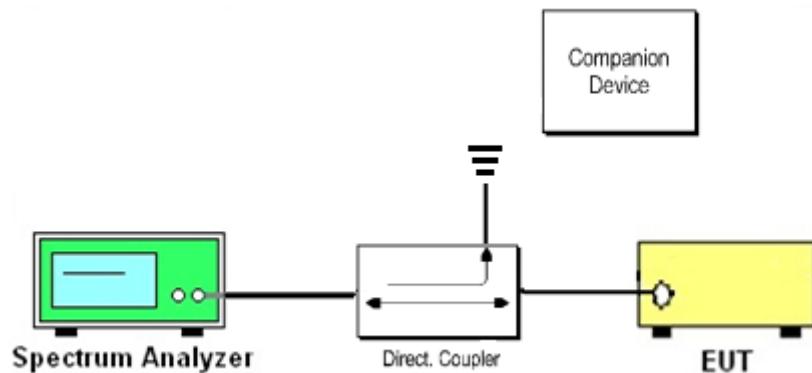
- ♦ FCC Part 96.47
- ♦ FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- ♦ WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification

**Remark:**

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. 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

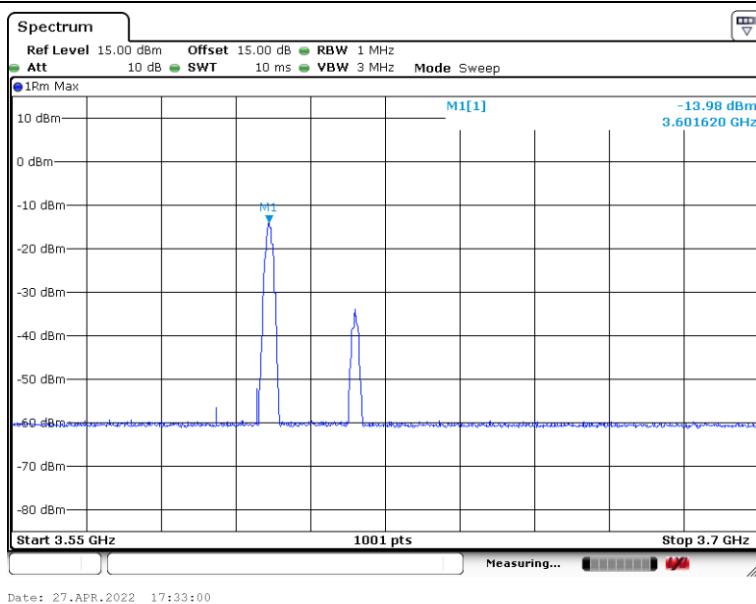
Following procedure can be done by applying WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification, use the certified Ruckus CBSD (FCC ID: S9GQ710US02) as companion device to show compliance with Part 96.47 requirement for End User Device (EUD):

1. Setup with frequency 3600-3620MHz and power level 7dBm/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 17dBm/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.

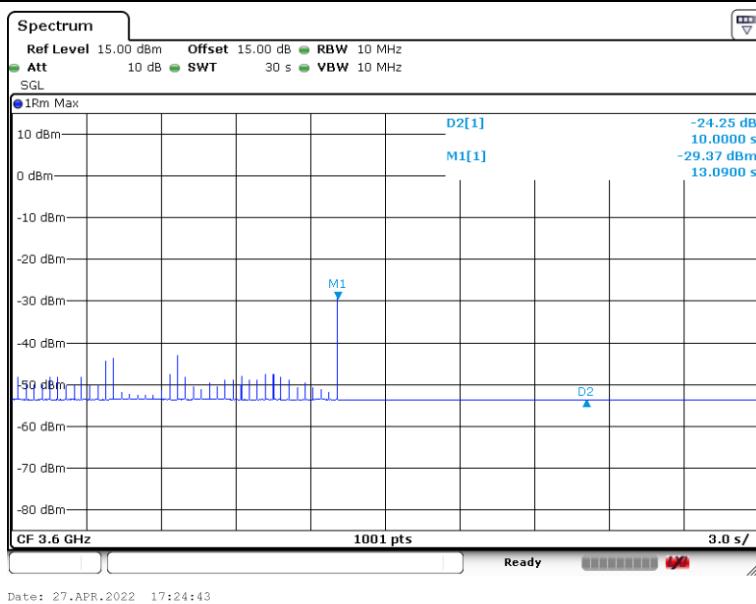
### 3.3 Test Result

[Step 1] Setup with frequency 3600-3620MHz and power level 7dBm/MHz

[Step 3] Check EUD Tx Frequency and power



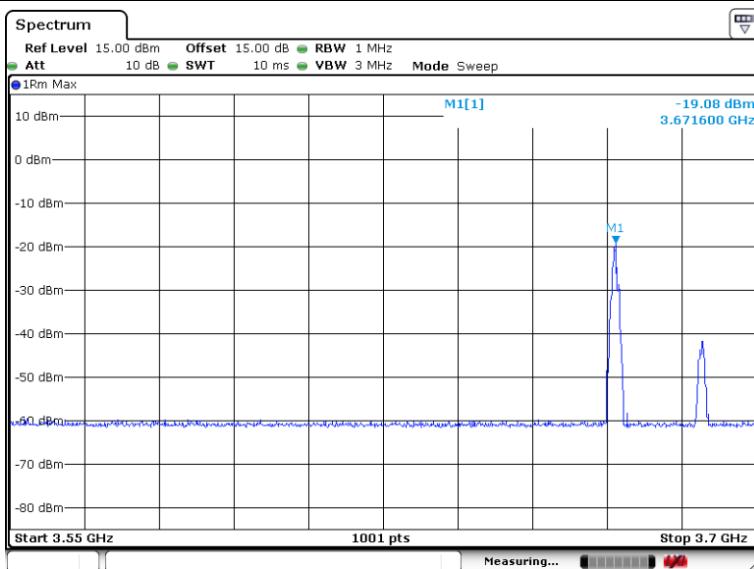
[Step 4.a.] EUD stops transmission within 10 seconds of receiving instructions from its associated CBSD.





## [Step 5] Setup with 3670-3690MHz &amp; power level 17dBm/MHz

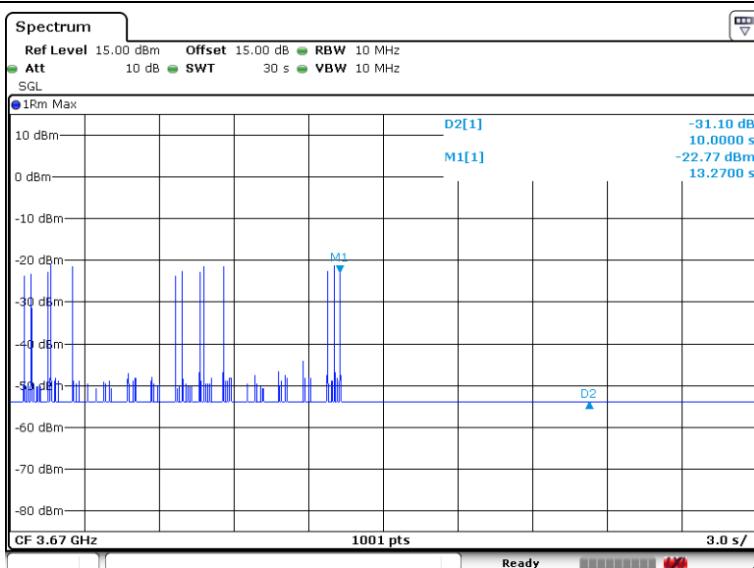
## [Step 7] Check EUD Tx Frequency and power



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## [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.



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## 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	Apr. 27, 2022	Aug. 29, 2022	Conducted (TH05-HY)

—————THE END—————