

CBSD-EUD Test Report

Applicant : Getac Technology Corporation
 Product Name : Wireless Module
 Trade Name : Getac
 Model Number : EM9190U
 Applicable Standard : FCC 47 CFR PART 96.47
 Received Date : Jun. 26, 2023
 Test Period : Jun. 30 ~ Jul. 07, 2023
 Issued Date : Aug. 04, 2023

Issued by

Eurofins E&E Wireless Taiwan Co., Ltd.
 No. 140-1, Changan Street, Bade District,
 Taoyuan City 334025, Taiwan (R.O.C.)
 Tel : +886-3-2710188 / Fax : +886-3-2710190



Taiwan Accreditation Foundation accreditation number: 1330

Frequency Range : 9 kHz to 40 GHz

Test Firm Registration Number: 226252 (Bade test site)

Test Firm Registration Number: 191812 (Wugu test site)

Note:

1. The test results are valid only for samples provided by customers and under the test conditions described in this report.
2. This report shall not be reproduced except in full, without the written approval of Eurofins E&E Wireless Taiwan Co., Ltd.
3. The relevant information is provided by customers in this test report. According to the correctness, appropriateness or completeness of the information provided by the customer, if there is any doubt or error in the information which affects the validity of the test results, the laboratory does not take the responsibility.

Revision History

Version	Issued Date	Revisions	Revised By
00	Aug. 04, 2023	Initial Issue	Nina Lin

Verification of Compliance

Applicant : Getac Technology Corporation

Product Name : Wireless Module

Trade Name : Getac

Model Number : EM9190U

FCC ID : QYLEM9190U

Applicable Standard : FCC 47 CFR PART 96.47

Test Result : Complied

Performing Lab. : Eurofins E&E Wireless Taiwan Co., Ltd.

No. 140-1, Changan Street, Bade District,

Taoyuan City 334025, Taiwan (R.O.C.)

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Eurofins E&E Wireless Taiwan Co., Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by Eurofins E&E Wireless Taiwan Co., Ltd. based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Approved By : _____

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Appendix A. Test Setup Photographs

1 General Information

1.1. EUT Description

Applicant	Getac Technology Corporation 5F.,Building A,No.209,Sec.1 Nangang.,Rd., Taipei City, 11568, Taiwan
Product Name	Wireless Module
Trade Name	Getac
Model Number	EM9190U
FCC ID	QYLEM9190U
IMEI No.	351891305000595
Antenna Information	Refer to Section 1.4
Operate Temp. Range	-40 ~ +85 °C
EUT Power Rating	DC 3.3 V

5G NR	
Operation Band (NR):	<input checked="" type="checkbox"/> n48
Modulation type:	<input checked="" type="checkbox"/> DFT-s-OFDM PI/2-BPSK, QPSK, 16QAM, 64QAM, 256QAM
	<input checked="" type="checkbox"/> CP-OFDM QPSK, 16QAM, 64QAM, 256QAM

1.2. Testing Location

Lab Name: Eurofins E&E Wireless Taiwan Co., Ltd.

Site Address: No. 140-1, Changan Street, Bade District, Taoyuan City 334025, Taiwan (R.O.C.)

Site Address: No. 2, Wuquan 5th Rd. Wugu Dist., New Taipei City, Taiwan (R.O.C.)

1.3. Product Specification of Equipment Under Test

Band	Antenna Type	Gain (dBi)	Note
n48	PIFA Antenna	0.5	---

1.4. EUT Test Step

1	Setup the EUT shown on "Configuration of Test System Details".
2	Turn on the power of all equipment.
3	EUT run test program test.

1.5. Test Instruments

For Conducted

Test Period: Jun. 30 ~ Jul. 03, 2023

Testing Engineer: Jeremy Lin

Test Site		RF01-WG				
Use	Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
<input checked="" type="checkbox"/>	Spectrum Analyzer (10 Hz~44 GHz)	R&S	FSV3044	101255	Nov. 30, 2022	1 year

1.6. Test Site Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-30
Humidity (%RH)	25-75	45-75

1.7. Summary of Test Result

FCC Rule	Description	Result
§96.47	End user device additional requirements.	Pass

Decision Rule

- Uncertainty is not included.
- Uncertainty is included.

2 Measurement Procedure

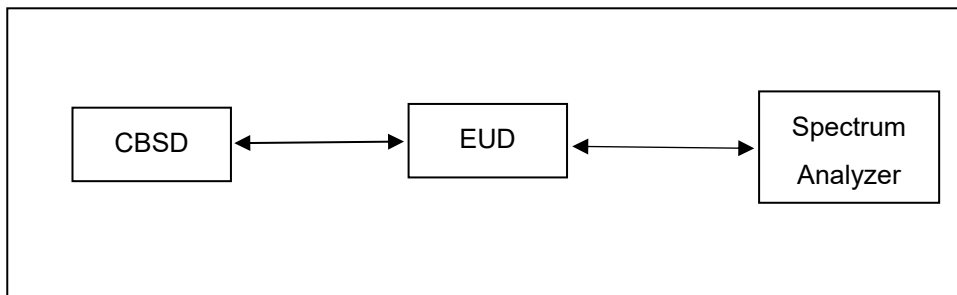
2.1. End user device additional requirements Test

■ Limit

- (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.

■ Test Setup



Note: CBSD (FCC ID: NR P27-SCE5164-n48). NR

■ Test Procedure

The EUD was connects to a certified CBSD and spectrum analyzer. The following procedure is performed by applying WINNF-TS-0122 CBRS CBSD Test Specification:

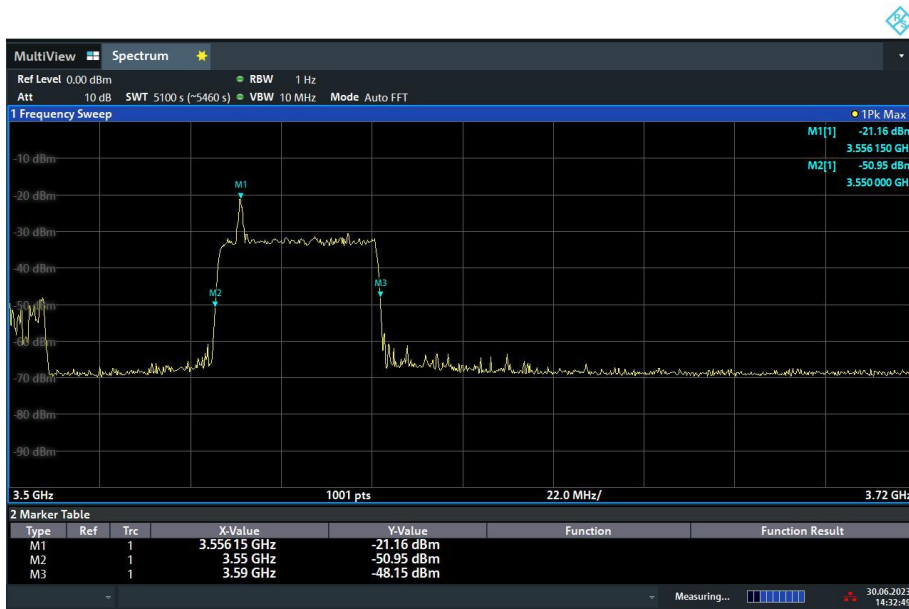
1. Setup with low channel and power level 10 dBm/MHz.
- Note. Set one of the BW supported by the DUT.
2. Enable AP service from 5GC management.
3. Check EUD Tx frequency and power.
4. Disable AP service from 5GC management.
5. Check EUD stops transmission within 10 seconds.
6. Setup with high channel and power level 15 dBm/MHz.
- Note. Set one of the BW supported by the DUT.
7. Enable AP service from 5GC management.
8. Check EUD Tx frequency and power.
9. Disable AP service from 5GC management.
10. Check EUD stops transmission within 10 seconds.

3 Test Results

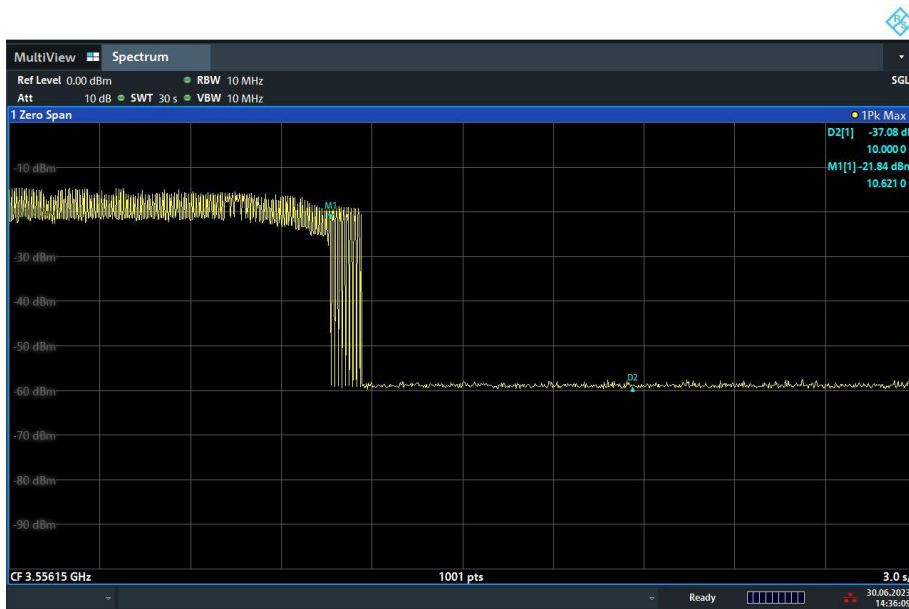
Appendix : End user device additional requirements

[Step1] Setup with frequency 3550 – 3590 MHz and Power Level 10 dBm/MHz

[Step 3] Check EUD Tx Frequency and Power

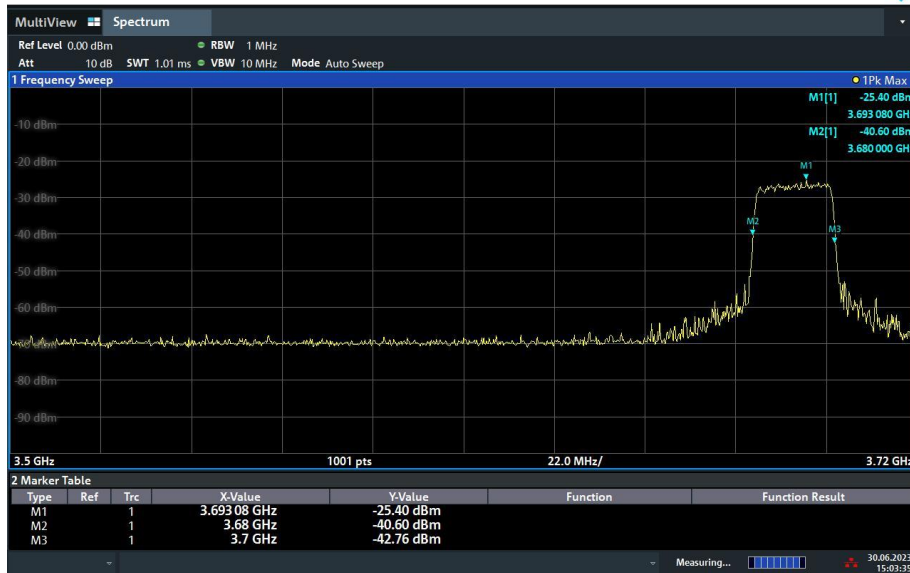


[Step 5] EUD stops transmission within 10 seconds of receiving instructions from its associated CBSD

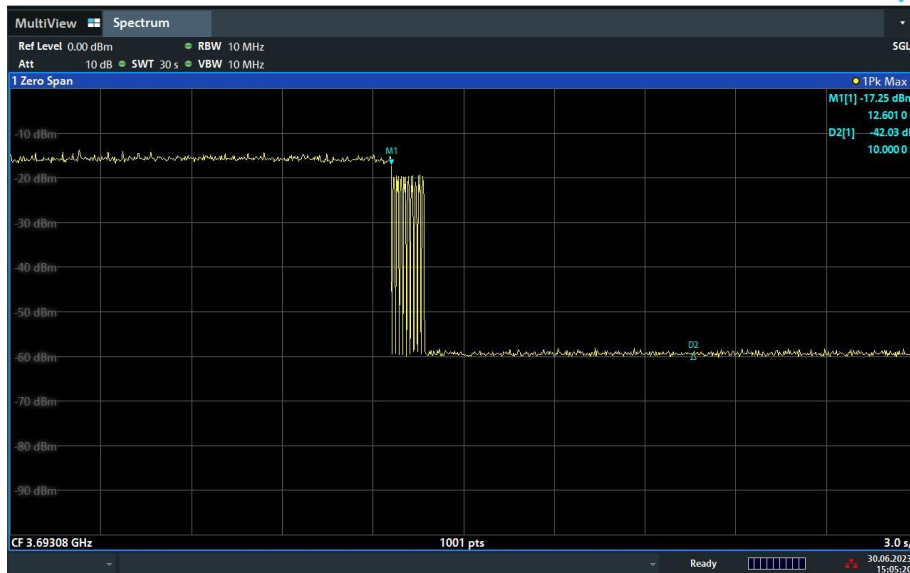


[Step 6] Setup with frequency 3680 – 3700 MHz and Power Level 15 dBm/MHz

[Step 8] Check EUD Tx Frequency and Power



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



Test Result

PASS

Notes: After changing the frequency , Power Level and Bandwidth,

The EUD discontinues operations , change frequencies , or change its operational power level within 10 seconds of receiving instructions from its associated CBSD

--- END---