TEST REPORT

REPORT NUMBER：24B02W000002-002

ON

Type of Equipment:	**LTE Cat.1 Module**
Type of Designation:	**IQ11**
Brand Name：	**FOXX**
Manufacturer:	**Foxx Development Inc**
FCC ID:	**2AQRM-IQ11**

ACCORDING TO

Subpart B, PART 15, RADIO FREQUENCY DEVICES

Chongqing Academy of Information and Communications Technology

Month date, year
Feb.21st, 2025
Signature

Zhou Jin
Director

Note:
The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of Chongqing Academy of Information and Communications Technology.

Revision Version

Report Number	Revision	Date
24B02W000002-002	00	2025-02-21

Chongqing Academy of Information and Communications Technology
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Tel: 0086-23-88069965 FAX:0086-23-88608777

CONTENTS

1. Test Laboratory

1.1. Testing Location

Company Name:	Chongqing Academy of Information and Communications Technology
Address:	No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China
Postal Code:	401336
Telephone:	0086-23-88069965
Fax:	0086-23-88608777

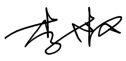
1.2. Testing Environment

Normal Temperature:	19.5℃
Relative Humidity:	48%RH

1.3. Project Data

Testing Start Date:	2025-02-05
Testing End Date:	2025-02-05

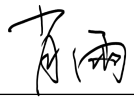
1.4. Signature



2025-02-18

Li Quan
(Prepared this test report)

Date



2025-02-19

Xiao Yu
(Reviewed this test report)

Date

2025-02-21

Zhou Jin
Director of the laboratory
(Approved this test report)

Date

2. Client Information

2.1 Applicant Information

Company name:	Foxx Development Inc
Address /Post:	3480 Preston Ridge Road Suite 500, Alpharetta, GA 30005
City:	Alpharetta
Country:	United States of America
Telephone:	（858）925-4348
Fax:	--
Email:	jamesliao@foxxusa.com
Contact Person:	James Liao

2.2 Manufacturer Information

Company name:	Foxx Development Inc
Address /Post:	3480 Preston Ridge Road Suite 500, Alpharetta, GA 30005
City:	Alpharetta
Country:	United States of America
Telephone:	（858）925-4348
Fax:	--
Email:	jamesliao@foxxusa.com
Contact Person:	James Liao

3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

EUT Description	LTE Cat.1 Module
Model name	IQ11
Brand name	FOXX
LTE Frequency Band	2/4/5/12/13/66/71
Type of modulation	QPSK/16QAM
Extreme Temperature	-40/+85℃
Nominal Test Voltage	DC 3.8V
Note：Photographs of EUT are shown in ANNEX A of this test report.	

3.2. Internal Identification of EUT used during the test

EUT ID	SN or IMEI	HW Version	SW Version	Date of receipt
25B02W000002#S3	IMEI:866234079631436	V1	IQ11v05.01b03.01	2025-01-21

*EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE used during the test

EUT ID*	SN	Description
Q1	5J002B-LTE Antenna	--

*AE ID: is used to identify the test sample in the lab internally.

1. Reference Documents

1.1. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC CFR Part 15, Subpart B，	RADIO FREQUENCY DEVICES	--

2. Test Equipments Utilized

No.	Equipment	Model	SN	HW Version	SW Version	Manufacture	Cal.Due Date
1	Test Receiver	ESU26	100367	01	4.43 SP3	R&S	2025-06-26
2	Trilog Antenna	VULB9163	01392	--	--	Schwarzbeck	2025-05-04
3	Double Ridged Guide Antenna	HF907	100357	--	--	R&S	2025-03-25
4	Preamplifier1	150A	001429	--	--	Beehive	--
5	Preamplifier2	SCU18	10141	--	--	R&S	--

Test software

No.	Name	version	SN	Manufacture
1	EMC32	V 8.51.0	--	R&S

3. Test Results

3.1. Summary of Test Results

FCC Rules	Name of Test	Result
15.109	Radiated Emission	Pass
Note: N/A means not applicable.		

4. Test Results

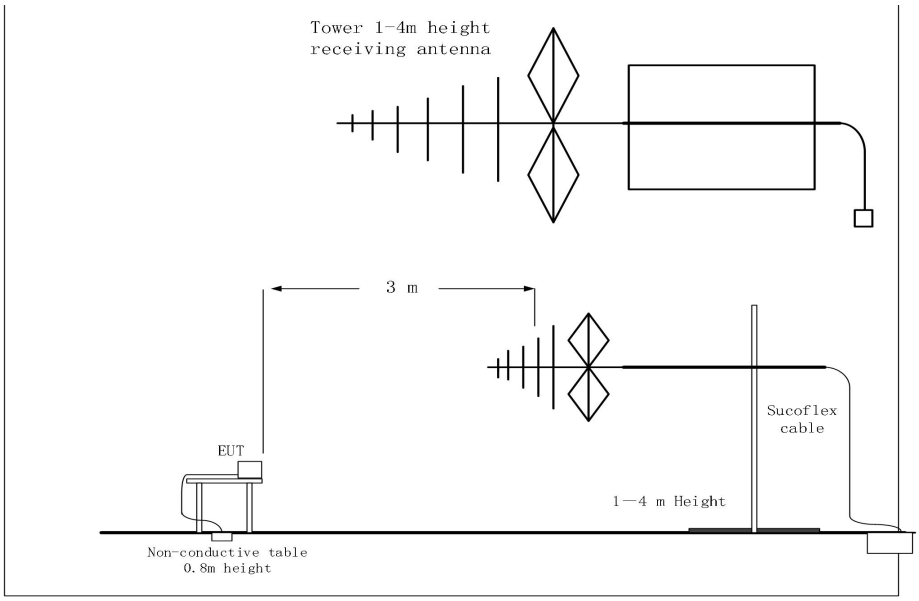
4.1. Radiated Emission

Specifications:	15.109
DUT Serial Number:	25B02W000002#S3 IMEI:866234079631436
Date of Tests	2025-02-05
Test conditions:	Ambient Temperature:19.5℃ Relative Humidity:48%RH
Test Results:	Pass

Limit Level Construction(Except for Class A digital devices):

Frequency Range (MHz)	Quasi-Peak (dBuV/m)
30-88	40
88-216	43.5
216-960	46
Above 960	54

Frequency Range (MHz)	Peak (dBuV/m)	Average (dBuV/m)
Above 1000	74	54



Test Method:

For 30-1000MHz, the EUT was placed on the top of a rotating 0.8m table above the ground at a semi-anechoic chamber. The distance between the EUT and the received antenna was 3 meters. The table was rotated 360 degree and the received antenna mounted on a variable-height antenna tower was varied from 1m to 4m to find the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna were set during the measurement. Tested in accordance with the procedures of ANSI C63.4-2014, section 8.3.

For 1000-18000MHz, the maximal emission value was acquired by adjusting the antenna height, and the table was rotated 360 degree to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna were set during the measurement.

Test Result:

A “reference path loss” is established and Corr is the attenuation of “reference path loss”, and including the factor of receive antenna , the gain of the preamplifier, the cable loss.

The measurement results are obtained as described below:

Corr（dB/m）= Cable loss（dB）+ Antenna Factor(dB/m)-Preamplifier gain（dB）

Result（dBμV/m）=PMea（dBμV）+ Corr（dB/m）

Uncertainty Measurement:

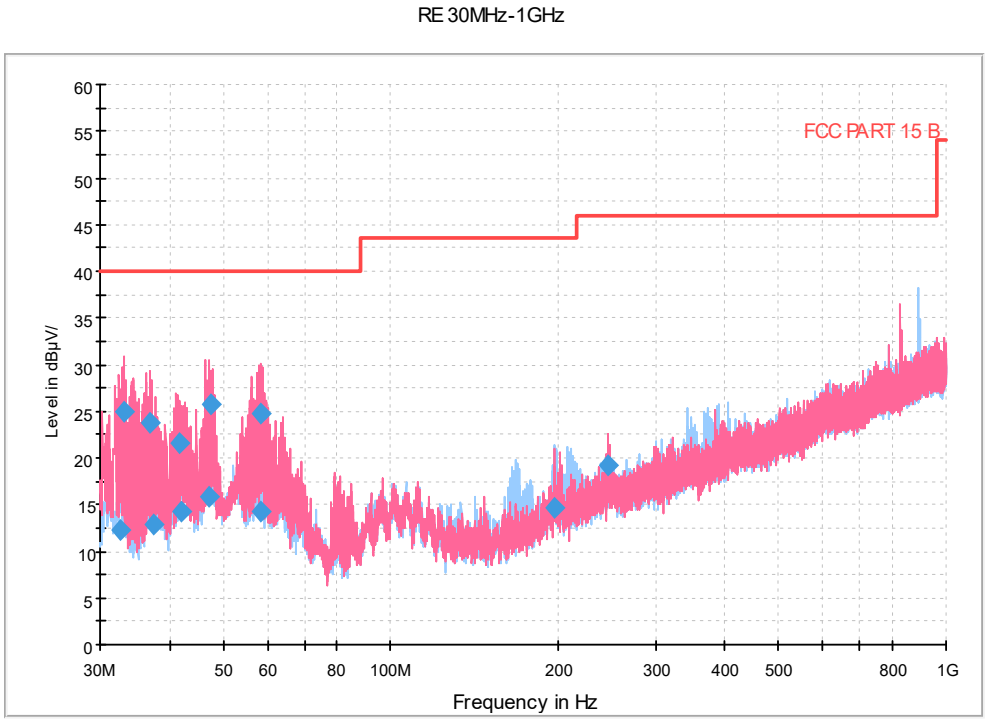
The measurement uncertainty (30MHz-150MHz) is 3.79 dB (k=2).

The measurement uncertainty (150MHz-1000MHz) is 3.51dB (k=2).

The measurement uncertainty (1000MHz-6000MHz) is 4.84 dB (k=2).

The measurement uncertainty (6000MHz-18000MHz) is 4.84 dB (k=2).

Test Data



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RE 30MHz-1GHz

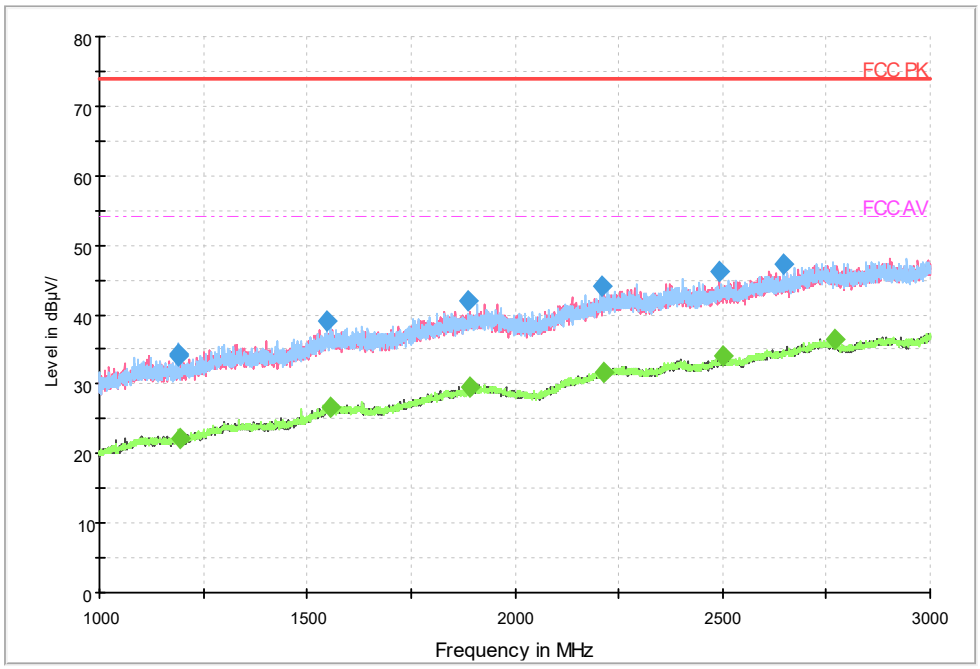
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
32.755500	12.3	5000.0	120.000	100.0	H	280.0	-14.3	27.7	40.0
33.155500	25.0	5000.0	120.000	100.0	V	190.0	-14.2	15.0	40.0
36.838500	23.8	5000.0	120.000	100.0	V	100.0	-12.7	16.2	40.0
37.378000	12.9	5000.0	120.000	115.0	H	260.0	-12.4	27.1	40.0
41.803500	21.6	5000.0	120.000	100.0	V	0.0	-11.0	18.4	40.0
42.094500	14.2	5000.0	120.000	100.0	H	10.0	-10.9	25.8	40.0
47.214500	15.9	5000.0	120.000	115.0	H	170.0	-10.1	24.1	40.0
47.451000	25.7	5000.0	120.000	115.0	V	10.0	-10.1	14.3	40.0

58.236000	**14.2**	**5000.0**	**120.000**	**100.0**	**H**	**100.0**	**-11.1**	**25.8**	**40.0**
58.415000	**24.7**	**5000.0**	**120.000**	**115.0**	**V**	**190.0**	**-11.2**	**15.3**	**40.0**
197.488500	**14.6**	**5000.0**	**120.000**	**100.0**	**H**	**0.0**	**-11.3**	**28.9**	**43.5**
246.407000	**19.3**	**5000.0**	**120.000**	**100.0**	**V**	**190.0**	**-9.9**	**26.7**	**46.0**

Note: Both H polarization and V polarization are tested. The figure shows the blue value of H polarization and the red value of V polarization synthesis

RE 1GHz-3GHz



RE 1GHz-3GHz

Final_Result 1

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
1188.400000	34.1	1500.0	120.000	100.0	H	31.0	5.2	39.9	74.0
1188.400000	34.4	1500.0	120.000	100.0	H	22.0	5.2	39.6	74.0
1546.200000	39.0	1500.0	120.000	100.0	V	191.0	9.3	35.0	74.0
1889.600000	42.1	1500.0	120.000	100.0	H	29.0	11.8	31.9	74.0
2209.600000	44.1	1500.0	120.000	100.0	H	59.0	13.7	29.9	74.0
2493.600000	46.2	1500.0	120.000	100.0	V	285.0	16.1	27.8	74.0

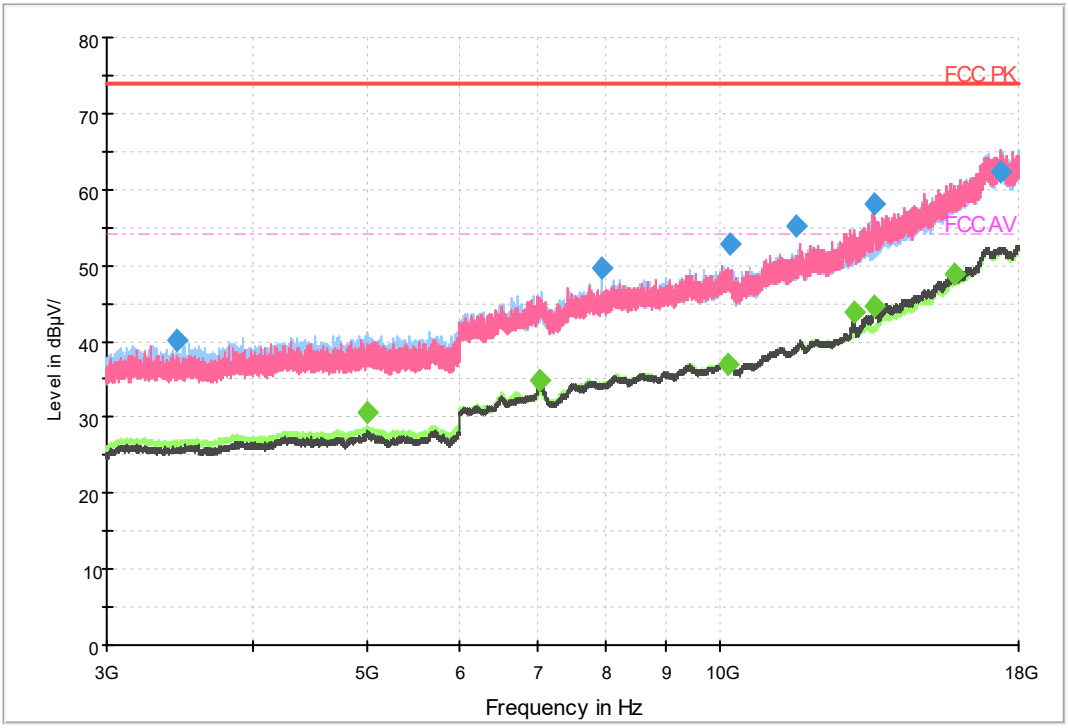
Note: Both H polarization and V polarization are tested. The figure shows the blue value of H polarization and the red value of V polarization synthesis

Final_Result 2

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1195.400000	22.1	1500.0	120.000	100.0	H	59.0	5.2	31.9	50.0
1556.200000	26.7	1500.0	120.000	100.0	H	31.0	9.4	27.3	50.0
1891.400000	29.5	1500.0	120.000	100.0	H	15.0	11.8	24.5	50.0
2213.000000	31.6	1500.0	120.000	100.0	V	125.0	13.7	22.4	50.0
2502.200000	34.1	1500.0	120.000	100.0	V	285.0	16.3	19.9	50.0
2770.000000	36.4	1500.0	120.000	100.0	V	255.0	18.7	17.6	50.0

Note: Both H polarization and V polarization are tested. The figure shows the blue value of H polarization and the red value of V polarization synthesis

RE 3GHz-18GHz



RE 3GHz-18GHz

Final_Result 1

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
3438.400000	40.3	1500.0	1000.000	100.0	H	15.0	1.0	33.7	74.0
7926.100000	49.7	1500.0	1000.000	100.0	H	0.0	9.8	24.3	74.0
10192.375000	52.9	1500.0	1000.000	100.0	V	15.0	13.3	21.1	74.0
11612.525000	55.2	1500.0	1000.000	100.0	V	15.0	15.7	18.8	74.0
13534.100000	58.0	1500.0	1000.000	100.0	V	15.0	18.3	16.0	74.0
17381.750000	62.4	1500.0	1000.000	100.0	V	15.0	28.1	11.6	74.0

Note: Both H polarization and V polarization are tested. The figure shows the blue value of H polarization and the red value of V polarization synthesis

Final_Result 2

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
4999.200000	30.5	1500.0	1000.000	100.0	H	15.0	5.0	23.5	54.0
7014.125000	35.0	1500.0	1000.000	100.0	V	0.0	7.6	19.0	54.0
10162.025000	37.0	1500.0	1000.000	100.0	H	-5.0	13.3	17.0	54.0
13009.300000	43.8	1500.0	1000.000	100.0	V	15.0	17.2	10.2	54.0
13532.575000	44.7	1500.0	1000.000	100.0	V	-5.0	18.3	9.3	54.0
15882.075000	48.7	1500.0	1000.000	100.0	V	0.0	28.2	5.3	54.0

Note: Both H polarization and V polarization are tested. The figure shows the blue value of H polarization and the red value of V polarization synthesis

5.2.1. Annex A EUT Photos

See the document” 25B02W000002-External Photos”.
See the document” 25B02W000002-Internal Photos ”.
Test photo See the document”25B02W000002_EMC Test Setup Photos”.

5.2.2. ANNEX B Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

*****END OF REPORT*****