



BUREAU
VERITAS



FCC RF Exposure Test Report

Report No. : PSU-QBJ2512030110SA01
Applicant : FOXX Development Inc
Address : 3480 Preston Ridge Road Suite 500, Alpharetta, GA 30005
Product : REDCAP MODULE
FCC ID : 2AQRM-IQ50
Brand : FOXX
Model No. : IQ50
Standards : FCC Part 2 (Section 2.1091)
KDB 447498 D01 General RF Exposure Guidance v06
Sample Received Date : Dec. 05, 2025
Date of Testing : Dec. 05, 2025 ~Dec. 31, 2025
Test Lab : The FCC Site Registration No. is 434559; The Designation No. is CN1325.
Issued By : Huarui 7layers High Technology (Suzhou) Co., Ltd.
Address : Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City,
Anhui Province, China

CERTIFICATION: The above equipment have been tested by **Huarui 7Layers High Technology (Suzhou) Co., Ltd.**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's SAR characteristics under the conditions specified in this report. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product certification, approval, or endorsement by A2LA or any government agencies.

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TABLE OF CONTENTS

RELEASE CONTROL RECORD.....	3
1. DESCRIPTION OF EQUIPMENT UNDER TEST	4
2. MPE(MAXIMUM PERMISSIBLE EXPOSURE) ASSESSMENT	5
2.1 INTRODUCTION.....	5
2.2 RF RADIATION EXPOSURE LIMITS.....	5
2.3 MPE ASSESSMENT METHOD.....	6
2.4 MPE CALCULATION FOR STANDALONE OPERATIONS.....	6
3. INFORMATION ON THE TESTING LABORATORIES.....	8



Release Control Record

Report No.	Reason for Change	Date Issued
PSU-QBJ2512030110SA01	Original release	Dec. 31, 2025



1. Description of Equipment Under Test

EUT Type*	Redcap Module
Brand Name*	FOXX
Model Name*	IQ50
Tx Frequency Bands (Unit: MHz)	1850.7MHz ~ 1909.3MHz (FOR LTE Band2) 1710.7MHz ~ 1754.3MHz (FOR LTE Band4) 824.7MHz ~ 848.3MHz (FOR LTE Band5) 2502.5MHz ~ 2567.5MHz (FOR LTE Band7) 699.7MHz ~ 715.3MHz (FOR LTE Band12) 779.5MHz ~ 784.5MHz (FOR LTE Band13) 790.5MHz ~ 795.5MHz (FOR LTE Band14) 706.5MHz ~ 713.5MHz (FOR LTE Band17) 1850.7MHz ~ 1914.3MHz (FOR LTE Band25) 814.7MHz ~ 848.3MHz (FOR LTE Band26) 2307.5 MHz ~ 2312.5 MHz (FOR LTE Band30) 2572.5MHz ~ 2617.5MHz (FOR LTE Band38) 2498.5MHz ~2687.5MHz (FOR LTE Band41) 3452.5MHz ~3597.5MHz (FOR LTE Band42) 3602.5MHz ~3697.5MHz (FOR LTE Band43) 3552.5MHz ~3697.5MHz (FOR LTE Band48) 1710.7MHz ~ 1779.3MHz (FOR LTE Band66) 665.5MHz ~ 695.5MHz (FOR LTE Band71) SA/NSA: n2 (1852.5MHz ~1907.5MHz) n5(826.5MHz ~ 846.5MHz) n7(2502.5MHz ~ 2567.5MHz) n12(701.5MHz ~ 713.5MHz) n13(779.5MHz ~ 784.5MHz) n14(790.5MHz ~ 795.5MHz) n25(1852.5MHz ~ 1912.5MHz) n26(816.6MHz ~ 846.5MHz) n30(2307.5MHz ~ 2312.5MHz) n38(2575MHz ~ 2615MHz) n41(2501.01MHz ~ 2685MHz) n48(3555MHz ~ 3694.98MHz) n66(1712.5 MHz ~ 1777.5MHz) n70(1697.5 MHz ~ 1707.5) n71(665.5 MHz~ 695.5MHz) n77(Part27Q)(3455.01MHz ~ 3544.98MHz) n77(Part27O)(3705MHz ~ 3974.97MHz) n78(Part27Q)(3455.01MHz ~ 3544.98MHz) n78(Part 27O) (3705MHz ~ 3794.97MHz)
Uplink Modulations*	LTE : QPSK, 16QAM, 64QAM 5G NR: DFT-s-OFMA($\pi/2$ BPSK,QPSK,16QAM,64QAM,256QAM); CP-OFMA(QPSK,16QAM,64QAM,256QAM)
HW VERSION*	SRM813Q-NA_MB_V1.00
SW VERSION*	SRM813Q-NA_2.0.2_EQ100
Antenna Type*	WWAN: External Antenna
EUT Stage*	Production Unit

Note:

- *Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information , Test Lab is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.
- The above EUT information is declared by manufacturer and for more detailed features description please refers to the manufacturer's specifications or User's Manual.



2. MPE(Maximum Permissible Exposure) Assessment

2.1 Introduction

According to 47 CFR §2.1091, a mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 cm is normally maintained between the transmitting antenna and the body of the user or nearby persons. In this context, the term “fixed location” means that the device is physically secured at one location and is not able to be easily moved to another location. Transmitting devices designed to be used by consumers or workers that can be easily re-located, such as wireless devices associated with a personal computer, are considered to be mobile devices if they meet the 20 cm separation requirement. The limits to be used for MPE evaluation are specified in §1.1310. All unlicensed personal communications service (PCS) devices and unlicensed NII devices shall be subject to the limits for general population/uncontrolled exposure.

2.2 RF Radiation Exposure Limits

According to 47 CFR §1.1310, the criteria listed in below table shall be used to evaluate the environmental impact of human exposure to RF radiation as specified in §1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of §2.1093.

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (min)
(A) Limits for Occupational / Controlled Exposures				
0.3 – 3.0	614	1.63	100	6
3.0 – 30	1842/f	4.89/f	900/f ²	6
30 – 300	61.4	0.163	1.0	6
300 – 1500	-	-	f/300	6
1500 – 100000	-	-	5	6
(B) Limits for General Population / Uncontrolled Exposures				
0.3 – 1.34	614	1.63	100	30
1.34 – 30	824/f	2.19/f	180/f ²	30
30 – 300	27.5	0.073	0.2	30
300 – 1500	-	-	f/1500	30
1500 – 100000	-	-	1.0	30

Limits for maximum permissible exposure (MPE)

Notes:

1. f = frequency in MHz
2. Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided they are made aware of the potential for exposure.
3. General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.



2.3 MPE Assessment Method

Calculations can be made to predict RF field strength and power density levels around typical RF sources. For example, in the case of a single radiating antenna, a prediction for power density in the far-field of the antenna can be made by use of the general Equations below. This equation is generally accurate in the far-field of an antenna but will over-predict power density in the near field, where they could be used for making a "worst case" or conservative prediction.

$$\text{Power Density (S)} = \frac{PG}{4\pi R^2} = \frac{\text{EIRP}}{4\pi R^2}$$

Where

S = Power Density, unit in mW/cm²

P = Power input to the antenna, unit in mW

G = Power gain of the antenna in the direction of interest relative to an isotropic radiator

R = Distance to the center of radiation of the antenna, unit in cm

EIRP = Effective isotropically radiated power

2.4 MPE Calculation for Standalone Operations

The manufacturer expects that the radiated component of this device will not close to the human body during normal usage and the warning statement was also stated in the user instruction. Since the transmitting antenna will be kept at least 20 cm away from the human body, the MPE level is calculated based on this condition and the result is listed in below table.

**BUREAU VERITAS** FCC RF Exposure Test Report

CALCULATION FOR MAXIMUM E.I.R.P

Band	Antenna Gain (dBi)	Maximum Power (dBm)	Average EIRP (mW)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Power Density / Limit	Result (PASS / FAIL)
LTE Band 2	1.35	25.7	506.991	0.101	1.000	0.101	Pass
LTE Band 4	2.15	25.7	609.537	0.121	1.000	0.121	Pass
LTE Band 5	1.87	25.7	571.479	0.114	0.550	0.207	Pass
LTE Band 7	0.88	25.7	454.988	0.091	1.000	0.091	Pass
LTE Band 12	1.23	25.7	493.174	0.098	0.466	0.210	Pass
LTE Band 13	1.18	25.7	487.528	0.097	0.520	0.187	Pass
LTE Band 14	1.21	25.7	490.908	0.098	0.527	0.185	Pass
LTE Band 17	1.42	25.7	515.229	0.103	0.471	0.218	Pass
LTE Band 25	1.22	25.7	492.040	0.098	1.000	0.098	Pass
LTE Band 26 (Part 22)	2.06	25.7	597.035	0.119	0.550	0.216	Pass
LTE Band 26 (Part 90s)	2.06	25.7	597.035	0.119	0.543	0.219	Pass
LTE Band 30	-0.41	25.7	338.065	0.067	1.000	0.067	Pass
LTE Band 38	1.17	25.7	486.407	0.097	1.000	0.097	Pass
LTE Band 41	1.34	25.7	505.825	0.101	1.000	0.101	Pass
LTE Band 42(Part 27Q)	-0.63	25.7	321.366	0.064	1.000	0.064	Pass
LTE Band 42(Part 96)	-0.63	25.7	321.366	0.064	1.000	0.064	Pass
LTE Band 43	-0.77	25.7	311.172	0.062	1.000	0.062	Pass
LTE Band 48	-0.63	25.7	321.366	0.064	1.000	0.064	Pass
LTE Band 66	1.12	25.7	480.839	0.096	1.000	0.096	Pass
LTE Band 71	1.86	25.7	570.164	0.113	0.444	0.256	Pass
NR Band n2	1.35	25.7	506.991	0.101	1.000	0.101	Pass
NR Band n5	2.11	25.7	603.949	0.120	0.551	0.218	Pass
NR Band n7	0.97	25.7	464.515	0.092	1.000	0.092	Pass
NR Band n12	1.89	25.7	574.116	0.114	0.468	0.244	Pass
NR Band n13	1.5	25.7	524.807	0.104	0.520	0.201	Pass
NR Band n14	1.46	25.7	519.996	0.104	0.527	0.196	Pass
NR Band n25	1.35	25.7	506.991	0.101	1.000	0.101	Pass
NR Band n26 (814-824)	2.06	25.7	597.035	0.119	0.544	0.218	Pass
NR Band n26(824-849)	2.06	25.7	597.035	0.119	0.544	0.218	Pass
NR Band n30	-0.41	25.7	338.065	0.067	1.000	0.067	Pass
NR Band n38	0.97	25.7	464.515	0.092	1.000	0.092	Pass
NR Band n41/n41 HPUE	1.3	25.7	501.187	0.100	1.000	0.100	Pass
NR Band n48	-0.56	25.7	326.588	0.065	1.000	0.065	Pass
NR Band n66	2.11	25.7	603.949	0.120	1.000	0.120	Pass
NR Band n70	1.69	25.7	548.277	0.109	1.000	0.109	Pass
NR Band n71	2.2	25.7	616.595	0.123	0.444	0.277	Pass
NR Band n77 (Part27Q)	2.32	25.7	633.870	0.126	1.000	0.126	Pass
NR Band n77 (Part27O)	2.32	29	1355.189	0.270	1.000	0.270	Pass
NR Band n78 (Part27Q)	2.32	25.7	633.870	0.126	1.000	0.126	Pass
NR Band n78(Part27O)	2.32	29	1355.189	0.270	1.000	0.270	Pass



3. Information on the Testing Laboratories

We, Huarui 7layers High Technology (Suzhou) Co., Ltd. ,were founded in 2020 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

Huarui 7Layers High Technology (Suzhou) Co., Ltd.

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Accredited Test Lab Cert 6613.01

If you have any comments, please feel free to contact us at the following:

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