

RF Exposure Evaluation Report

Product : Aikri6490
Trade mark : N/A
Model/Type reference : Aikri-64X-90AS-8-LGA,
Aikri-64X-90LS-8-LGA
Serial Number : N/A
Report Number : EED32R81335407
FCC ID : 2ATUP-QCS6490LGA
Date of Issue : Dec. 12, 2025
Test Standards : 47 CFR Part 1.1307
47 CFR Part 1.1310
KDB 447498 D04 Interim General RF
Exposure Guidance v01
Test result : PASS

Prepared for:

eInfochips Inc

**181 Metro Drive, Suite 170, San Jose California United States,
ZIP Code: 95110**

Prepared by:

**Centre Testing International Group Co., Ltd.
Hongwei Industrial Park, Zone 70, Bao'an District,
Shenzhen, Guangdong, China**

TEL: +86-755-3368 3668

FAX: +86-755-3368 3385

Compiled by:

Frazer Li

Frazer Li

Reviewed by:

Keven Tan

Keven Tan

Approved by:

Aaron Ma

Aaron Ma

Date:

Dec. 12, 2025



Check No.: 4529300725

1 Contents

	Page
1 CONTENTS	2
2 GENERAL INFORMATION	3
2.1 CLIENT INFORMATION	3
2.2 GENERAL DESCRIPTION OF EUT	3
2.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD	3
2.4 TEST LOCATION	5
2.5 DEVIATION FROM STANDARDS	5
2.6 ABNORMALITIES FROM STANDARD CONDITIONS	5
2.7 OTHER INFORMATION REQUESTED BY THE CUSTOMER	5
3 SAR EVALUATION	6
3.1 RF EXPOSURE COMPLIANCE REQUIREMENT	6
3.1.1 Limits	6
3.1.2 Test Procedure	6
3.1.3 EUT RF Exposure Evaluation	7

2 General Information

2.1 Client Information

Applicant:	eInfochips Inc
Address of Applicant:	181 Metro Drive, Suite 170, San Jose California United States, ZIP Code: 95110
Manufacturer:	eInfochips Inc
Address of Manufacturer:	181 Metro Drive, Suite 170, San Jose California United States, ZIP Code: 95110

2.2 General Description of EUT

Product Name:	Aikri6490
Model No.(EUT):	Aikri-64X-90AS-8-LGA, Aikri-64X-90LS-8-LGA
Trade Mark:	Aikri-64X-90AS-8-LGA

2.3 Product Specification subjective to this standard

Frequency Range:	BLE/BT: 2402MHz~2480MHz 2.4G Wi-Fi: IEEE 802.11b/g/n(HT20)/ax(HE20): 2412MHz to 2462MHz IEEE 802.11n(HT40)/ax(HE40): 2422MHz to 2452MHz 5G Wi-Fi: U-NII-1: 5150-5250MHz U-NII-2A: 5250-5350MHz U-NII-2C: 5500-5700MHz U-NII-3: 5745-5825MHz 6G Wi-Fi: UNII-5: 5925 MHz ~ 6425 MHz UNII-6: 6425 MHz ~ 6525 MHz UNII-7: 6525 MHz ~ 6875 MHz UNII-8: 6875 MHz ~ 7125 MHz
Modulation Type:	BLE: GFSK BT: GFSK, $\pi/4$ DQPSK, 8DPSK 2.4G Wi-Fi IEEE for 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE for 802.11g : OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE for 802.11n(HT20 and HT40) : OFDM (64QAM, 16QAM,QPSK,BPSK) IEEE 802.11ax(HE20/HE40): OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM,1024QAM) 5G Wi-Fi: IEEE 802.11a: OFDM (BPSK, QPSK, 16QAM, 64QAM) IEEE 802.11n(HT20/HT40): OFDM (BPSK, QPSK, 16QAM, 64QAM) IEEE 802.11ac(VHT20/VHT40/VHT80/VHT160): OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) IEEE 802.11ax(HE20/HE40/HE80/HE160): OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM,1024QAM) 6G Wi-Fi: IEEE 802.11ax(HE20/HE40/HE80/HE160): OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM,1024QAM)
Test Power Grade:	Default
Test Software of EUT:	QRCT.exe
Antenna Type:	FPC Antenna
Antenna Gain:	This product offers two antenna models (FXP840.07.0055B and 1001932FT) for selection.

	No.	2.4G	5G	6G
	FXP840.07.0055B	3.35 dBi	3.37 dBi	5.31 dBi
	1001932FT	2.03 dBi	4.45 dBi	6.11 dBi
Power Supply:	DC 3.7V			
Sample Received Date:	Jul. 31, 2025			
Sample tested Date:	Jul. 31, 2025 to Dec. 12, 2025			
Remark: Model No.: Aikri-64X-90AS-8-LGA, Aikri-64X-90LS-8-LGA Only the model Aikri-64X-90AS-8-LGA was tested, Their electrical circuit design, layout, components used, and internal wiring are identical, Only the software version and model names are different. The mentioned Software versions are for two different Operating System. RF Tx power is same in both the Operating System.				
No.	Model name	Software version		Operating System
1	Aikri-64X-90AS-8-LGA	QCS6490_AND.13.0.0.El.1.3.4		Android
2	Aikri-64X-90LS-8-LGA	QCS6490_QLI.1.2.0.El.1.1.0		Linux

2.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Hongwei Industrial Park, Zone 70, Bao'an District, Shenzhen, Guangdong, China

Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

2.5 Deviation from Standards

None.

2.6 Abnormalities from Standard Conditions

None.

2.7 Other Information Requested by the Customer

None.

3 SAR Evaluation

3.1 RF Exposure Compliance Requirement

3.1.1 Limits

The SAR-based exemption formula of § 1.1307(b)(3)(i)(B), repeated here as Formula (B.2), applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold P_{th} (mW).

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by Formula

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

and f is in GHz, d is the separation distance (cm), and $ERP_{20 \text{ cm}}$ is per Formula (B.1).

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B.1})$$

The 1 mW Blanket Exemption of § 1.1307(b)(3)(i)(A) applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power of no more than 1 mW, regardless of separation distance.

3.1.2 Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

3.1.3 EUT RF Exposure Evaluation

For Stand alone:

Freq. (MHz)	Estimation distance (cm)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (mW)	MPE ratio	Result
@BLE	20	16.22	3.35	17.42	55.21	3060	0.0180	Pass
@BT	20	16.92	3.35	18.12	64.86	3060	0.0212	Pass
@2.4G Wi-Fi(SISO)	20	21.48	3.35	22.68	185.35	3060	0.0606	Pass
@2.4G Wi-Fi(MIMO)	20	24.52	6.36	28.73	746.45	3060	0.2439	Pass
@5G Wi-Fi(SISO)	20	14.85	4.45	17.15	51.88	3060	0.0170	Pass
@5G Wi-Fi(MIMO)	20	14.34	7.46	19.65	92.26	3060	0.0302	Pass
@6G Wi-Fi(SISO)	20	1.74	6.11	5.7	3.72	3060	0.0012	Pass
@6G Wi-Fi(MIMO)	20	10.61	9.12	17.58	57.28	3060	0.0187	Pass

Remark:

The report only recorded the worst data.

Note:

① EIRP=conducted power+antenna gain;

② ERP=EIRP-2.15;

③ EIRP(dBm) = Field strength of the fundamental signal(dBuV/m@3m) – 95.23;

④ ERP(mW) = $10^{(ERP(dBm)/10)}$;

⑤ The estimation distance is 20cm;

⑥ The test data please refer to the report of EED32R81335401, EED32R81335402, EED32R81335403, EED32R81335404, EED32R81335405 and EED32R81335406 only the worst case data was recorded in the report.

For Simultaneous Transmission:

As MPE ratio (BT+2.4G Wi-Fi+5G Wi-Fi+6G Wi-Fi)=0.0212+0.2439+0.0301+0.0187=0.314 < 1,
it's deemed to fulfil the RF exposure requirement.

Statement

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule stated in ILAC-G8:09/2019/CNAS-GL015:2022;
5. Without written approval of CTI, this report can't be reproduced except in full;

*** End of Report ***