



Compliance Certification Services (Kunshan) Inc.
Shenzhen Branch

Report No.: FYCR220300002102

Page: 1 of 8

RF Exposure Evaluation Report

Application No.: FYCR2203000021AT
Applicant: Sichuan AI-Link Technology Co.,Ltd.
Address of Applicant: Anzhou Industrial Park, Mianyang, Sichuan, P.R.C
Manufacturer: Sichuan AI-Link Technology Co.,Ltd.
Address of Manufacturer: Anzhou Industrial Park, Mianyang, Sichuan, P.R.C
Factory: Sichuan AI-Link Technology Co.,Ltd.
Address of Factory: Anzhou Industrial Park, Mianyang, Sichuan, P.R.C
Equipment Under Test (EUT):
Product Name: WIFI Module
Model No.: WF-M620-RSC1
Trade mark: AI-Link
FCC ID: 2AOKI-WFM620RSC1
Standards: 47 CFR Part 2.1091
47 CFR Part 1.1307
47 CFR Part 1.1310
Date of Receipt: 2022-03-11
Date of Test: 2022-03-15 to 2022-03-21
Date of Issue: 2022-03-24

Test Result :	PASS*
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* In the configuration tested, the EUT complied with the standards specified above.

Kidd Yang
EMC Laboratory Manager



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2 Version

Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2022-03-24		Original

Authorized for issue by:				
				
		Tree Zhan/Project Engineer		
				
		Winkey Wang/Reviewer		



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4 General Information

4.1 General Description of EUT

Power supply:	RF Chip: DC3.3V Main Board: Powered by Micro USB port
Modulation Type:	802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Number of Channels:	802.11b/g/n(HT20):13
Operation Frequency:	802.11b/g/n(HT20): 2412MHz to 2472MHz
Channel Spacing:	5MHz
Antenna Type:	PCB Antenna
Antenna Gain:	1.77dBi

Remark:

Model No.: WF-M620-RSC1

This test report (Ref. No.: FYCR220300002102) is only valid with the original test report (Ref. No.: SZEM190301214702).

Review this report and original report, this report just changed the EUT name and changed the antenna.

According to the declaration from the applicant, the models in this report and models in original report were identical, only difference with being changed the antenna.

Considering to the difference, pre-scan were performed on the sample in this report to find the items which can be influential to the result in the original test report for fully retest.

Therefore in this report the section 2 items were fully retested on model and shown the data in this report, other tests please refer to original report SZEM190301214702.





4.2 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc. Shenzhen branch.

Fuyong lab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistrict, Bao'an, Shenzhen, China

Tel: +86 755 8866 3988 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **A2LA (Certificate No. 6606.01)**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 6606.01.

- **FCC –Designation Number: CN1322**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch has been recognized as an accredited testing laboratory.

Designation Number: CN1322. Test Firm Registration Number: 718073

- **Innovation, Science and Economic Development Canada**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0129.

IC#: 28189.



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4.4 Deviation from Standards

None.

4.5 Abnormalities from Standard Conditions

None.

4.6 Other Information Requested by the Customer

None.



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5 RF Exposure Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Limits

According to FCC Part1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in part1.1307(b)

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(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
1500–100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
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
1500–100,000			1.0	30

F= Frequency in MHz

Friis Formula

Friis transmission formula: $P_d = (P_{out} * G) / (4 * \pi * R^2)$

Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

P_d is the limit of MPE, 1 mW/cm². If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

5.1.2 Test Procedure

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



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4.1.3 EUT RF Exposure Evaluation

Antenna Gain: 1.77dBi

Antenna Gain: The maximum Gain measured in fully anechoic chamber is 1.5 in linear scale.

Output Power Into Antenna & RF Exposure Evaluation Distance:

Channel	Frequency (MHz)	Max Conducted Peak Output Power (dBm)	Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm ²)	Limit	Result
Highest	2462	17.40	54.95	0.0164	1.0	PASS

Note: Refer to report No. FYCR220300002101 for EUT test Max Conducted Peak Output Power value.
The distance r (4th column) calculated from the Fries transmission formula is far greater than 20 cm separation requirement.

- End of the Report -



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