



Test Report No.:
FCCSZ2023-0025-H

RF Test Report

FCC ID : 2BD97TK2
EUT : AI Care Sensor
MODEL : TK2?*(see section 2.1)
BRAND NAME : N/A
APPLICANT : TsingLan Technology (Shenzhen) Co., Ltd
Classification of Test : N/A

CVC Testing Technology (Shenzhen) Co., Ltd.

Applicant		Name : TsingLan Technology (Shenzhen) Co., Ltd Address : 602, Block A, Wanhai Building, No. 1031, Nanhai Avenue, Yanshan Communi,Shenzhen,China	
Manufacturer		Name : TsingLan Technology (Shenzhen) Co., Ltd Address : 602, Block A, Wanhai Building, No. 1031, Nanhai Avenue, Yanshan Communi,Shenzhen,China	
Equipment Under Test		Name : AI Care Sensor Model/Type: TK2?*(see section 2.1) Trade mark : N/A Serial NO.: N/A Sampe NO.: 3-1	
Date of Receipt.	2023.12.06	Date of Testing	2023.12.06~2024.01.22
Test Specification		Test Result	
FCC Part 2 (Section 2.1091) KDB 447498 D04 IEEE C95.3		PASS	
Evaluation of Test Result	The equipment under test was found to comply with the requirements of the standards applied. <div style="text-align: right;"> Seal of CVC Issue Date: 2024.01.22 </div>		
Tested by:  <u>Liang Jiatong</u> Name Signature	Tested by:  <u>Huang Meng</u> Name Signature	Approved by:  <u>Dong Sanbi</u> Name Signature	
Other Aspects: NONE.			
Abbreviations: OK, Pass= passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested			

This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.

TABLE OF CONTENTS

RELEASE CONTROL RECORD	4
1 GENERAL PRODUCT INFORMATION	5
2 RF EXPOSURE LIMITGENERAL INFORMATION	6
2.1 CLASSIFICATION	6
2.2 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (FCC)	6
2.3 CALCULATION RESULT OF MAXIMUM CONDUCTED AV POWER	7

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FCCSZ2023-0025-H	Original release	2024.01.22

1 GENERAL PRODUCT INFORMATION

PRODUCT	AI Care Sensor
BRAND	N/A
TEST MODEL	TK2?*(Note 4)
ADDITIONAL MODEL	N/A
POWER SUPPLY	AC 100-240V
STANDARDS	FCC Part 2 (Section 2.1091)
	KDB 447498 D04
	IEEE C95.3

Note:

1. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
3. "?" and "*" are wildcard. "?" and "*" is a single letter from A to Z or a number from 1 to 9, representing different versions.

2 RF EXPOSURE LIMIT GENERAL INFORMATION

2.1 CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

2.2 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (FCC)

(Option C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda / 2 \pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda / 4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

RF SOURCE FREQUENCY (MHZ)	THRESHOLD ERP(W)
0.3 -1.34	$1,920 R^2$
1.34 - 30	$3,450 R^2 F^2$
30 -300	$3.83 R^2$
300-1500	$0.0128 R^2 F$
1500-100,000	$19.2 R^2$

2.3 CALCULATION RESULT OF MAXIMUM CONDUCTED AV POWER

The measured conducted PEAK Power

Mode	PEAK Power (dBm)
BT-LE	7.93
2.4G WIFI	20.23
61.5GHz	8.57

Note: 62GHz conducted Power = EIRP - Antenna Gain

The tuned conducted Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
BT-LE	2402-2480	8	±1	7	9
2.4G WIFI	2412-2472	20	±1	19	21
62GHz	62GHz	8	±1	7	9

MAXIMUM PERMISSIBLE EXPOSURE (FCC)

Mode	Frequency (MHz)	Max Power (dBm)	Antenna Gain (dBi)	R (cm)	EIRP (dBm)	ERP (dBm)	ERP (W)	Threshold ERP(W)	Ratio
BT-LE	2402-2480	9	3.04	20	12.04	9.89	0.0097	0.77	0.013
2.4G WIFI	2412-2472	21	3.04	20	24.04	21.89	0.1545	0.77	0.201
61.5GHz	60500-62500	9	2	20	11.00	8.85	0.0077	0.77	0.010
Sum of ratio = BT-LE + 2.4G WIFI + 61.5GHz									0.224

Note1: This device can operate simultaneously in BT, WIFI and 61.5GHz.

Note2: ERP=EIRP-2.15dB

Conclusion:

Therefore, the worst-case situation is 0.224(Sum of Ratios), which is less than "1". This confirmed that the device compliance with FCC RF exposure requirements..

----- End of the Report -----

Important

- (1) The test report is valid without the official stamp of CVC;
- (2) Any part photocopies of the test report are forbidden without the written permission from CVC;
- (3) The test report is invalid without the signatures of Approval and Reviewer;
- (4) The test report is invalid if altered;
- (5) Objections to the test report must be submitted to CVC within 15 days.
- (6) Generally, commission test is responsible for the tested samples only.
- (7) As for the test result “-” or “N” means “not applicable”, “/” means “not test”, “P” means “pass” and “F” means “fail”

***The test data and test results given in this test report should only be used for purposes of scientific research, teaching and internal quality control when the CMA symbol is not presented. ***

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