

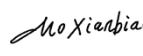


Test Report No.:  
**FCCSZ2024-0080-H**

## RF Test Report

**FCC ID** : 2A7HDIRM231  
**NAME OF SAMPLE** : mmWave Radar module  
**APPLICANT** : Nanjing Chuhang Technology Co., Ltd.  
**CLASSIFICATION OF TEST** : N/A

**CVC Testing Technology (Shenzhen) Co., Ltd.**

<b>Applicant</b>		Name : Nanjing Chuhang Technology Co., Ltd. Address : 12F, Building A, No. 9, Yunzheng Street, Nanjing, China	
<b>Manufacturer</b>		Name : Nanjing Chuhang Technology Co., Ltd. Address : 12F, Building A, No. 9, Yunzheng Street, Nanjing, China	
<b>Equipment Under Test</b>		Name : mmWave Radar module Model/Type: IRM2.31 Trade mark :  Serial NO.:N/A Sampe NO.:2-1	
Date of Receipt.	2024.11.25	Date of Testing	2024.11.25~2024.12.02
<b>Test Specification</b>		<b>Test Result</b>	
FCC Part 2 (Section 2.1091) KDB 447498 D04v01, IEEE C95.3		PASS	
<b>Evaluation of Test Result</b>		The equipment under test was found to comply with the requirements of the standards applied.	
Seal of CVC <b>Issue Date: 2024-12-02</b>			
Compiled by:   Liang Jiatong Name      Signature	Reviewed by:   Mo Xianbiao Name      Signature	Approved by:   Dong Sanbi Name      Signature	
<b>Other Aspects: NONE.</b>			
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 POWER .....	7

**RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FCCSZ2024-0080-H	Original release	2024.12.02

## 1 GENERAL PRODUCT INFORMATION

PRODUCT	mmWave Radar module
BRAND	N/A
TEST MODEL	IRM2.31
ADDITIONAL MODEL	N/A
POWER SUPPLY	DC 9~16V
STANDARDS	FCC Part 2 (Section 2.1091)
	KDB 447498 D04v01
	IEEE C95.3

Note:

1. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

## 2 RF EXPOSURE LIMITGENERAL 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  $\lambda$  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	$19.2R^2$

## 2.3 CALCULATION RESULT OF MAXIMUM POWER

### The measured PEAK EIRP Power

Test Mode	Frequency(GHz)	PEAK EIRP(dBm)
TM1	76~77	28.35

### The tuned EIRP Power (declared by client)

Test Mode	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
TM1	28	±1	27	29

### MAXIMUM PERMISSIBLE EXPOSURE (FCC)

Test Mode	R (cm)	EIRP (dBm)	ERP (dBm)	ERP (W)	Threshold ERP(W)	Ratio
TM1	20	29	26.85	0.484	0.77	0.629

Note: ERP=EIRP-2.15dB

### Conclusion:

This confirmed that the device compliance with FCC RF exposure requirements.

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

## Important

- (1) The test report is invalid 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”

Address: No. 1301-14&16, Guanguang Road, Xinlan Community, Guanlan Subdistrict, Longhua District, Shenzhen, Guangdong, China

Post Code: 518110 Tel: 0755-23763060-8805

Fax: 0755-23763060 E-mail: sz-kf@cvc.org.cn

<http://www.cvc.org.cn>