

Test Report No.: FCCSZ2024-0029-H

# **RF Test Report**

FCC ID : 2BGFXCTLRR230PRO

EUT : Millimeter Wave Radar

MODEL : CTLRR-230 Pro

BRAND NAME :

APPLICANT : Shenzhen Cheng-Tech Co., Ltd.

Classification of Test : Commission Test

CVC Testing Technology (Shenzhen) Co., Ltd.

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Applicant		Name : Shenzhen Cheng-Tech Co., Ltd.				
		Address :Room 601, Building 2, Sunmax Technology Park,Keyuan Avenue,Nanshan District, Shenzhen				
Manufacturer		Name : Shenzhen Cheng-Tech Co., Ltd.				
		Address :Room 601, Building 2, Sunmax Technology Park,Keyuan Avenue,Nanshan District, Shenzhen				
		Name :Millimeter Wave Radar				
		Model/Typ	e:CTLRR-	230 Pro		
Equipment Under Test		Trade mark :  Serial NO.:N/A  Sampe NO.:2-1				
Date of Receipt.	2024.04.10		Date o	f Testing	2024.04.10~2024.04.2	4
	Test Specificati	ion			Test Result	
FCC Part 2 (Section KDB 447498 D04, IEE						
		The equipment under test was found to comply with the				
	requirements of the standards applied.					
Evaluation of Tes	st Result	Seal of CVC		of CVC		
					Issue Date:	2024.04.25
Tested	l by:	Reviewed by: Approved		Approved b	py:	
Lion Jia try		Mo Xianbiao Mo		,		
<u>Liang Jiatong</u>		Mo Xianbiao		<u>Dong Sanbi</u>		
Name	o Name Oig		nature	Name Sig	gnature	
Other Aspects: N	IUNE.					
Abbreviations:OK, Pas	ss= passed	Fail = failed	N/A= not ap	pplicable	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.

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### **RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED	
FCCSZ2024-0029-H	Original release	2024.04.25	

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### 1 GENERAL PRODUCT INFORMATION

PRODUCT	Millimeter Wave Radar		
BRAND			
TEST MODEL	CTLRR-230 Pro		
ADDITIONAL MODEL	N/A		
POWER SUPPLY	DC 12V		
	FCC Part 2 (Section 2.1091)		
STANDARDS	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.

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#### 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 <sup>2</sup>		
1.34 - 30	3,450 R <sup>2</sup> F <sup>2</sup>		
30 -300	3.83 R <sup>2</sup>		
300-1500	0.0128 R <sup>2</sup> F		
1500-100,000	19.2R <sup>2</sup>		

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#### 2.3 CALCULATION RESULT OF MAXIMUM POWER

#### The measured PEAK EIRP Power

Test Mode	Freqyency(GHz)	PEAK EIRP(dBm)
TM1	76.2~76.6	23.35
TM2	76.12~76.87	23.36

Note:conducted Average Power = EIRP - Antenna Gain

The tuned EIRP Power (declared by client)

Test Mode	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
TM1	24	±1	23	25
TM2	24	±1	23	25

MAXIMUM PERMISSIBLE EXPOSURE (FCC)

Test Mode	R (cm)	EIRP (dBm)	ERP (dBm)	ERP (W)	Threshold ERP(W)	Ratio
TM1	20	25	23.85	0.242	0.77	0.314
TM2	20	25	23.85	0.242	0.77	0.314

Note: ERP=EIRP-2.15dB

#### **Conclusion:**

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

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

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## **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"

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