

RF Exposure Evaluation Report

Product : Pudu CM1
Trade mark : 
Model/Type reference : CMMC01
Serial Number : N/A
Report Number : EED32O80416501
FCC ID : 2AXDW-CMMC01
Date of Issue : Jun. 11, 2022
Test Standards : 47 CFR Part 1.1307
47 CFR Part 2.1093
KDB447498D01 General RF Exposure Guidance v06
Test result : PASS

Prepared for:

SHENZHEN PUDU TECHNOLOGY CO., LTD.

Room 501, Building A, Block 1, Phase 1, Shenzhen International Inno Valley, Dashi 1st Road, Nanshan District, Shenzhen, 518057, China

Prepared by:

Centre Testing International Group Co., Ltd.

Hongwei Industrial Zone, Bao'an 70 District,

Shenzhen, Guangdong, China

TEL: +86-755-3368 3668

FAX: +86-755-3368 3385

Compiled by:

Frazer Li

Frazer Li

Reviewed by:

Tom Chen

Tom Chen

Approved by:

Aaron Ma

Aaron Ma

Date:

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2 Version

Version No.	Date	Description
00	Jun. 11, 2022	Original

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4 General Information

4.1 Client Information

Applicant:	SHENZHEN PUDU TECHNOLOGY CO., LTD.
Address of Applicant:	Room 501, Building A, Block 1, Phase 1, Shenzhen International Inno Valley, Dashi 1st Road, Nanshan District, Shenzhen, 518057, China
Manufacturer:	SHENZHEN PUDU TECHNOLOGY CO., LTD.
Address of Manufacturer:	Room 501, Building A, Block 1, Phase 1, Shenzhen International Inno Valley, Dashi 1st Road, Nanshan District, Shenzhen, 518057, China
Factory:	SHENZHEN WABONY ELECTRONIC CO., LTD.
Address of Factory:	Floor 1-5, Building 12#. An Tuo Shan High Tech Park, Xin Sha Road, Sha Er community, Sha Jing Street, Bao An District, Shenzhen, P.R.C

4.2 General Description of EUT

Product Name:	Pudu CM1
Model No.:	CMMC01
Trade mark:	
EUT Supports Radios application:	2.4GHz wireless

4.3 Product Specification subjective to this standard

Frequency Range:	2466-2480MHz
Modulation Type:	CCK
Test Power Grade:	Default
Antenna Type	Helical antenna
Antenna Gain	0.7dBi

Function :	☒ SISO ☐ 2x2 MIMO ☐ 3x3 MIMO ☐ 4x4MIMO
Power Supply:	DC3.3V by USB port
Max Conducted Peak Output Power:	2.4G DTS:2.64dBm; 2.4G DSS:2.71dBm
	The Max Conducted Peak Output Power data refer to the report EED32O80416501 and EED32O80416502.
Sample Received Date:	Apr. 26, 2022
Sample tested Date:	Apr. 26, 2022 to May 30, 2022
Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.	

4.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

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

No tests were sub-contracted.

FCC Designation No.: CN1164

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 RF Exposure Evaluation

5.1 RF Exposure Compliance Requirement

Given $E = \frac{\sqrt{30 \times P \times G}}{d}$ & $S = \frac{E^2}{377}$

Where E = Field strength in Volts / meter

P = Power in Watts

G = Numeric antenna gain

d = Distance in meters

S = Power density in milliwatts / square centimeter

Combining equations and re-arranging the terms to express the distance as a function of the remaining variables yields:

$$S = \frac{30 \times P \times G}{377 d^2}$$

Changing to units of mW and cm, using:

$$P \text{ (mW)} = P \text{ (W)} / 1000 \text{ and}$$

$$d \text{ (cm)} = d \text{ (m)} / 100$$

Yields

$$S = \frac{30 \times (P/1000) \times G}{377 \times (d/100)^2} = 0.0796 \times \frac{P \times G}{d^2} \quad \text{Equation 1}$$

Where d = Distance in cm

P = Power in mW

G = Numeric antenna gain

S = Power density in mW / cm²

5.2 Maximum Permissible Exposure

Substituting the MPE safe distance using $d = 20$ cm into Equation 1:

$$S = 0.000199 \times P \times G$$

Where P = Power in mW

G = Numeric antenna gain

S = Power density in mW / cm²

2.4G DTS:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm ²)
8	2473	1.837	1.175	20	0.0004	1

2.4G DSS:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm ²)
8	2473	1.866	1.175	20	0.0004	1

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

*** End of Report ***