

RF Exposure Evaluation Report

Product : YI 2K Pan-Tilt Outdoor Solar Camera
Trade mark : YI
Model/Type reference : YPS.3023
Serial Number : N/A
Report Number : EED32Q80027802
FCC ID : 2AFIB-YPS3023
Date of Issue : Jan. 24, 2024
Test Standards : 47 CFR Part 1.1307
47 CFR Part 1.1310
47 CFR Part 2.1091
47 CFR Part 2.1093
KDB 447498 D04 Interim General RF
Exposure Guidance v01
Test result : PASS

Prepared for:

Yi Technology Co.,Ltd
No.366 Shangke Road, No.18 Lane 55 Chuanhe Road, China (Shanghai)
Pilot Free Trade Zone, 201203

Prepared by:

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2 Version

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4 General Information

4.1 Client Information

Applicant:	Yi Technology Co.,Ltd
Address of Applicant:	No.366 Shangke Road, No.18 Lane 55 Chuanhe Road, China (Shanghai) Pilot Free Trade Zone, 201203
Manufacturer:	Yi Technology Co.,Ltd
Address of Manufacturer:	No.366 Shangke Road, No.18 Lane 55 Chuanhe Road, China (Shanghai) Pilot Free Trade Zone, 201203
Factory:	Yi Technology Co.,Ltd
Address of Factory:	No.366 Shangke Road, No.18 Lane 55 Chuanhe Road, China (Shanghai) Pilot Free Trade Zone, 201203

4.2 General Description of EUT

Product Name:	YI 2K Pan-Tilt Outdoor Solar Camera
Model No.(EUT):	YPS.3023
Trade Mark:	YI

4.3 Product Specification subjective to this standard

Frequency Range:	IEEE 802.11b/g/n(HT20): 2412MHz to 2462MHz
Modulation Type:	IEEE for 802.11b:DSSS(CCK,DQPSK,DBPSK) IEEE for 802.11g:OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE for 802.11n(HT20):OFDM (64QAM, 16QAM,QPSK,BPSK)
Test Power Grade:	Default
Test Software of EUT:	SSCOM
Antenna Type:	FPC Antenna
Antenna Gain:	3.96 dBi
Power Supply:	Battery DC 3.7V
Sample Received Date:	Jan. 08, 2024
Sample tested Date:	Jan. 08, 2024 to Jan.18, 2024
Remark:	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 SAR Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Limits

The SAR-based exemption formula of § 1.1307(b)(3)(i)(B), repeated here as Formula (B.2), applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold P_{th} (mW).

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by Formula

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

and f is in GHz, d is the separation distance (cm), and $ERP_{20 \text{ cm}}$ is per Formula (B.1).

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B.1})$$

The 1 mW Blanket Exemption of § 1.1307(b)(3)(i)(A) applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power of no more than 1 mW, regardless of separation distance.

5.1.2 Test Procedure

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

5.1.3 EUT RF Exposure Evaluation

For Stand alone:

For 2.4G Wi-Fi

Frequency (MHz)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (mW)	Result
2462	19.56	3.96	21.37	137.088	≤3060	PASS

Note:

- ① EIRP=conducted power+antenna gain;
- ② ERP=EIRP-2.15
- ③ The separation distance is 20cm.
- ④ The test data refer to report of No. EED32Q80027801. Only the worst case data was recorded in the report.

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 ***