

RF Exposure Evaluation Report

Product : KamiCare, Kami Fall Detect Camera
Trade mark : kami
Model/Type reference : YRS.0409, YRS.1409
Serial Number : N/A
Report Number : EED32Q81469703
FCC ID : 2BD5Y-YRS0409
Date of Issue : Nov. 15, 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:

kami vision inc.

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Prepared by:

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Nov. 15, 2024

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1 Version

Version No.	Date	Description
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3 General Information

3.1 Client Information

Applicant:	kami vision inc.
Address of Applicant:	2033 Gateway Place Suite 400, San Jose, CA 95110, USA
Manufacturer:	kami vision inc.
Address of Manufacturer:	2033 Gateway Place Suite 400, San Jose, CA 95110, USA
Factory:	Shenzhen Joining Free Technology Co., Ltd
Address of Factory:	101, 201, 301, Building A, No.6, Tianyang 7th Road,Dongfang Community, Songgang Street, Baoan District, Shenzhen China

3.2 General Description of EUT

Product Name:	KamiCare,Kami Fall Detect Camera
Model No.:	YRS.0409, YRS.1409
Test Model No.:	YRS.0409
Trade mark:	kami

3.3 Product Specification subjective to this standard

Frequency Range:	2.4G Wi-Fi: IEEE 802.11b/g/n(HT20): 2412MHz to 2462MHz IEEE 802.11n(HT40): 2422MHz to 2452MHz 5G Wi-Fi: U-NII-1: 5150-5250MHz	
Modulation Type:	2.4G Wi-Fi: IEEE for 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE for 802.11g :OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE for 802.11n(HT20 and HT40) : OFDM (64QAM, 16QAM,QPSK,BPSK) 5G Wi-Fi: IEEE 802.11a: OFDM (BPSK, QPSK, 16QAM, 64QAM) IEEE 802.11n(HT20/HT40): OFDM (BPSK, QPSK, 16QAM, 64QAM)	
Test Power Grade:	Default	
Test Software of EUT:	MobaXterm_Personal_22.1	
Antenna Type:	Internal Antenna	
Antenna Gain:	2.4G Wi-Fi: 2.13dBi 5G Wi-Fi: 3.31dBi	
Power Supply:	Adapter:	Model: TPA-418G050200UU01 Input: 100~240V, 50/60Hz Output: 5:0V2.0A
Sample Received Date:	Sep. 25, 2024	
Sample tested Date:	Sep. 25, 2024 to Oct. 28, 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. Model No.: YRS.0409, YRS.1409 Only the model YRS.0409 was tested. The add model and original model, The electrical circuit design, layout, components used and internal wiring are identical,only model name, appearance color is different.		

3.4 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

3.5 Deviation from Standards

None.

3.6 Abnormalities from Standard Conditions

None.

3.7 Other Information Requested by the Customer

None.

4 SAR Evaluation

4.1 RF Exposure Compliance Requirement

4.1.1 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.

4.1.2 Test Procedure

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

4.1.3 EUT RF Exposure Evaluation

For Stand alone:

Frequency (MHz)	Estimation distance (cm)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (mW)	MPE ratio
@2.4GHz	20	15.68	2.1300	15.66	36.8129	3060	0.0120

Frequency (MHz)	Estimation distance (cm)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (mW)	MPE ratio
@5GHz	20	17.96	3.3100	19.12	81.6582	3060	0.0267

Note:

- ① EIRP=conducted power+antenna gain;
- ② $ERP = EIRP - 2.15$;
- ③ $EIRP(dBm) = \text{Field strength of the fundamental signal}(dBuV/m@3m) - 95.23$;
- ④ $ERP(mW) = 10^{(ERP(dBm)/10)}$;
- ⑤ The estimation distance is 20cm;
- ⑥ The test data please refer to the report of EED32Q81469701, EED32Q81469702 and only the worst case data was recorded in the report.

For Simultaneous Transmission:

As MPE ratio (2.4G Wi-Fi+5G Wi-Fi)= $0.0120+0.0267=0.0387 < 1$, it's deemed to fulfil the RF exposure requirement.

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 ***