

Page: 1 of 7

## 1 Cover Page

RF Exposure Evaluation Report

Application No.: KSCR2411002241AT FCC ID: 2AL8S-0235C9TF

Applicant: Zhejiang Uniview Technologies Co., Ltd.

Address of Applicant:

No. 369, Xietong Road, Xixing Sub-district, Binjiang District, Hangzhou

City, 310051, Zhejiang Province, China Zhejiang Uniview Technologies Co., Ltd.

Address of Manufacturer: No. 369, Xietong Road, Xixing Sub-district, Binjiang District, Hangzhou

City, 310051, Zhejiang Province, China

Factory: Zhejiang Uniview System Technology Co., Ltd.

No.1277 Qingfeng South Road (South), Tongxiang Economic

Address of Factory: Development Zone, Tongxiang City, Jiaxing City, 314500, Zhejiang,

China

**Equipment Under Test (EUT):** 

EUT Name: IP Camera

IPC2A14LP-ADF40KC-4G-US,IPC2A14LP-ADF60KC-4G-

Model No.: US,IPC2A14LP-xxxxxxxx-yyyyyyyy-zzzz-mmmm (where "x","y","z","m"

may be 0-9 A-Z a-z or blank, or -. "-" is optional. The differences no

impact safety related constructions and EMC)

Standard(s): FCC Rules 47 CFR §2.1091

KDB 447498 D04 interim General RF Exposure Guidance v01

**Date of Receipt:** 2024-11-07

**Date of Test:** 2024-12-16 to 2024-12-24

**Date of Issue:** 2024-12-26

Test Result: Pass\*

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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Compliance Certification Services (Kunshan) Inc. 程智电子科技(昆山)有限公司

No.10 Weiye Road, Development Zone, Kunshan, Jiangsu, China 中国・江苏省昆山开发区伟业路 10 号 215301

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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



Page: 2 of 7

Revision Record							
Version	Description	Date	Remark				
00	Original	2024-12-26	/				

Authorized for issue by:		
Tested By	Maker Qi /Project Engineer	
Approved By	Terry Hou /Reviewer	



Page: 3 of 7

# 2 Contents

			Page
1	Cov	er Page	1
2	Con	tents	3
3	Gen	eral Information	4
	3.1	General Description of E.U.T.	4
	3.2	Details of E.U.T.	4
	3.3	Test Location	5
	3.4	Test Facility	5
4	FCC	Radiofrequency radiation exposure limits	6
5	surement and Calculation	7	
	5.1	Maximum transmit power	7
	5.2	MPE Calculation	7



Page: 4 of 7

# **3** General Information

# 3.1 General Description of E.U.T.

Dower cupply:	DC 12V/1A
Power supply:	DC 12V/1A

## 3.2 Details of E.U.T.

4G

Operation Frequency:	LTE Band 2,4,5,12,13,14,66,71				
Modulation Type:	QPSK/16QAM				
Antenna Type:	Dipole Antenna				
	Band 2: 5.2dBi (Provided by the manufacturer)				
	Band 4: 4.4dBi (Provided by the manufacturer)				
	Band 5: 0.8dBi (Provided by the manufacturer)				
Antenna Gain:	Band 12: 1.2dBi (Provided by the manufacturer)				
Antenna Gain.	Band 13: 0.8dBi (Provided by the manufacturer)				
	Band 14: 0.8dBi (Provided by the manufacturer)				
	Band 66: 4.4dBi (Provided by the manufacturer)				
	Band 71: 1.2dBi (Provided by the manufacturer)				



Page: 5 of 7

### 3.3 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weive Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

- 1.SGS is not responsible for wrong test results due to incorrect information (e.g. max. clock frequency, highest internal frequency, antenna gain, cable loss, etc.) is provided by the applicant. (if applicable).
- 2.SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (if applicable).
- 3. Sample source: sent by customer.

## 3.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

#### A2I A

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

#### • FCC

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

## • ISED

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory. Company Number: 2324E

#### VCCI

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.



Page: 6 of 7

# 4 FCC Radiofrequency radiation exposure limits

According to §1.1310, The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in part1.1307(b)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	ength density					
(i) Limits for Occupational/Controlled Exposure								
0.3-3.0	614	1.63	*(100)	≤6				
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	<6				
30-300	61.4	0.163	1.0	<6				
300-1,500			f/300	<6				
1,500- 100,000			5	<6				
(ii) Limits for General Population/Uncontrolled Exposure								
0.3-1.34	614	1.63	*(100)	<30				
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	<30				
30-300	27.5	0.073	0.2	<30				
300-1,500			f/1500	<30				
1,500- 100,000			1.0	<30				



Page: 7 of 7

#### 5 **Measurement and Calculation**

## **Maximum transmit power**

The Power Data is based on the RF Test Report R2203A0238-R1, R2203A0238-R2, R2203A0238-R3, R2203A0238-R4.

## 5.2 MPE Calculation

According to the formula  $S=P/4\pi R^2$ , we can calculate S which is MPE. Note:

P (mW)
 R = distance to the center of radiation of antenna (in centimeter)

For FCC

101100									
Band	Frequency Band (MHz)	Max power (dBm)	Ant Gain (dBi)	EIRP (dBm)	Max EIRP (mW)	Limit (mW)	Distance R (cm)	Result	Ratio
LTE-B2	1850 ~ 1910	25	5.2	30.2	1047.13	3060	20	Pass	0.34
LTE-B4	1710 ~ 1755	25	4.4	29.4	870.96	3060	20	Pass	0.28
LTE-B5	824 ~ 849	25	0.8	25.8	380.19	1681	20	Pass	0.23
LTE-B12	699 ~ 716	25	1.2	26.2	416.87	1426	20	Pass	0.29
LTE-B13	777 ~ 787	25	0.8	25.8	380.19	1585	20	Pass	0.24
LTE-B14	788 ~ 798	25	8.0	25.8	380.19	1608	20	Pass	0.24
LTE-B66	1710 ~ 1780	25	4.4	29.4	870.96	3060	20	Pass	0.28
LTE-B71	663 ~ 698	25	1.2	26.2	416.87	1353	20	Pass	0.31

-- End of the Report--