

#### **FCC RF EXPOSURE REPORT**

For

#### 4MP Dual Band Pan/Tilt Wireless IP Camera

MODEL NUMBER: IP4M-1051B
ADDITIONAL MODEL NUMBER: IP4M-1051B-\*\*; IP4M-1051W; IP4M-1051W-\*\*; IP4M-1051W-\*\*;

"\*" can be "A-Z", or "0-9", or blank

**PROJECT NUMBER: 4788435051** 

REPORT NUMBER: 4788435051-5

FCC ID: ZZ2-AMC047

ISSUE DATE: June. 1, 2018

Prepared for

Amcrest Technologies LLC

Prepared by

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## 1. ATTESTATION OF TEST RESULTS

**Applicant Information** 

Company Name: Amcrest Technologies LLC

Address: 16727 Park Row Dr, Houston, TX 77084

**Manufacturer Information** 

Company Name: Amcrest Technologies LLC

Address: 16727 Park Row Dr, Houston, TX 77084

**Factory Information** 

Company Name: ZHEJIANG DAHUA VISION TECHNOLOGY CO.,LTD

Address: No.1199, Bin'an road, Binjiang District, Hangzhou,

P.R.China.

Company Name: ZHEJIANG DAHUA ZHILIAN CO.,LTD.

Address: No.28, Donggiao Road, Dongzhou Street, Fuyang District,

Hangzhou, P.R. China.

**EUT Description** 

Product Name 4MP Dual Band Pan/Tilt Wireless IP Camera

Model Name IP4M-1051B

IP4M-1051B-\*\*; IP4M-1051B-\*\*\*; Additional No.

IP4M-1051W; IP4M-1051W-\*\*; IP4M-1051W-\*\*\*;

"\*" can be "A-Z", or "0-9", or blank

Sample Number 1542101-001 April. 24, 2018 Data of Receipt Sample

**Date Tested** April. 25, 2018 ~ May. 25, 2018

#### APPLICABLE STANDARDS

**STANDARD** 

**TEST RESULTS** 

FCC Guidelines for Human Exposure IEEE

C95.1

Complies

Shemples

Tested By:

Check By:

**Denny Huang** 

**Engineer Project Associate** 

Shawn Wen Laboratory Leader

Approved By:

Stephen Guo

Laboratory Manager

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## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 447498 D01 General RF Exposure Guidance v06.

## 3. FACILITIES AND ACCREDITATION

	A2LA (Certificate No.: 4102.01)				
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.				
	has been assessed and proved to be in compliance with A2LA.				
	IAS (Lab Code: TL-702)				
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.				
	has demonstrated compliance with ISO/IEC Standard 17025:2005,				
	General requirements for the competence of testing and calibration				
	laboratories				
	FCC (FCC Designation No.: CN1187)				
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.				
	Has been recognized to perform compliance testing on equipment subject				
Accreditation	to the Commission's Delcaration of Conformity (DoC) and Certification				
Certificate	rules				
	IC(Company No.: 21320)				
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.				
	has been registered and fully described in a report filed with				
	Industry Canada. The Company Number is 21320.				
	VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)				
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.				
	has been assessed and proved to be in compliance with VCCI, the				
	Membership No. is 3793.				
	Facility Name:				
	Chamber D, the VCCI registration No. is G-20019 and R-20004				
	Shielding Room B, the VCCI registration No. is C-20012 and T-20011				

Note: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

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# FCC ID: ZZ2-AMC047 4. REQUIREMENT

#### LIMIT

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure								
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Strength (E) Strength (H)		Averaging Time $ E ^2$ , $ H ^2$ or S (minutes)				
0.3-1.34	614	1.63	(100)*	30				
1.34-30	824/f	2.19/f	(180/f2)*	30				
30-300	27.5	0.073	0.2	30				
300-1500			f/150	30				
1500-100,000			1.0	30				

Note 1: f = frequency in MHz, \* means Plane-wave equivalent power density

Note 2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Note 3: The limit value 1.0mW/cm<sup>2</sup> is available for this EUT.

#### **MPE CALCULATION METHOD**

 $S = PG/(4\pi R^2)$ 

where: S = power density (in appropriate units, e.g. mW/ cm2)

P = power input to the antenna (in appropriate units, e.g., mW) (the measured power value see Report: F12124 Section 6.6)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

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#### **CALCULATED RESULTS**

Radio Frequency Radiation Exposure Evaluation

1) For 2.4G

WIFI (Worst case)									
Mode	Output Power to Antenna		Antenna Gain		Power Density	Limit	Test Result		
11B	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm2)	(mW/cm2)	1		
	15.5	35.48	1.68	1.47	0.0104	1	Complies		

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## 2) For 5.1G

WIFI (Worst case)								
Mode	Output Power to Antenna		Antenna Gain		Power Density	Limit	Test Result	
11ac 20	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm2)	(mW/cm2)		
	18	63.10	1.99	1.58	0.0195	1	Complies	

## 3) For 5.8G

WIFI (Worst case)								
Mode	Output Power to Antenna		Antenna Gain		Power Density	Limit	Test Result	
11n40	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm2)	(mW/cm2)		
	20	100	1.99	1.58	0.0315	1	Complies	

Note: the calculated distance is 20cm.

## **END OF REPORT**