



FCC RF EXPOSURE REPORT

For

1080p FHD Wi-Fi Deterrence Camera

MODEL NUMBER: W281AA-Z

ADDITIONAL MODEL NUMBER: W281AA, W281AAx, W281AAx-y, (x can be blank or any letter A-Z, y can be blank or any letter A-Z)

PROJECT NUMBER: 4789059198

REPORT NUMBER: 4789059198-1

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Prepared for

LOREX Technology Inc.

Prepared by

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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: LOREX Technology Inc.
Address: 250 Royal Crest Court, Markham, ON L3R 3S1 Canada

Manufacturer Information

Company Name: LOREX Technology Inc.
Address: 250 Royal Crest Court, Markham, ON L3R 3S1 Canada

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, Dongqiao Road, Dongzhou Street, Fuyang District, Hangzhou,P.R.China.

EUT Description

Product Name 1080p FHD Wi-Fi Deterrence Camera
Model Name W281AA-Z
Additional No. W281AA, W281AAx, W281AAx-y, (x can be blank or any letter A-Z, y can be blank or any letter A-Z)
Sample Number 2369250
Data of Receipt Sample Jun. 24, 2019
Date Tested Jun. 24, 2019~ Aug. 9, 2019

APPLICABLE STANDARDS

STANDARD

FCC Guidelines for Human Exposure IEEE
C95.1

TEST RESULTS

Complies

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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 and FCC Guidelines for Human Exposure IEEE C95.1.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	A2LA (Certificate No.: 4829.01) UL-CCIC COMPANY LIMITED has been assessed and proved to be in compliance with A2LA. FCC (FCC Designation No.: CN1247) UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules. IC (IC Designation No.: 25056) UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules.
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Note 1: All tests measurement facilities use to collect the measurement data are located at No. 2, Chengwan Road, Suzhou Industrial Park, Suzhou 215122, People's Republic of China

Note 2: For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. These measurements below 30MHz had been correlated to measurements performed on an OATS.

Note 3: The test anechoic chamber in UL-CCIC COMPANY LIMITED had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

4. REQUIREMENT

LIMIT

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	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/f ²)*	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 ² 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)



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
802.11n40 MIMO	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm2)	(mW/cm2)	--
	20.0	100	7.54	5.68	0.113	1	Complies

2) For 5G

WIFI (Worst case)							
Mode	Output Power to Antenna		Antenna Gain		Power Density	Limit	Test Result
802.11ac 40 MIMO	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm2)	(mW/cm2)	--
	12.0	15.85	7.83	6.07	0.0191	1	Complies

Note: the calculated distance is 20cm.

END OF REPORT