



FCC RF EXPOSURE REPORT

For

1080P HD WI-FI DETERRENCE CAMERA

MODEL NUMBER: LNWCX-C

ADDITIONAL MODEL NUMBER : LNW16XF, LNWCM23X, LNWC21X

PROJECT NUMBER: 4788580183

REPORT NUMBER: 4788580183-2

FCC ID: UCZ-LNWCX-C

IC : 8575A-LNWCXC

ISSUE DATE: Aug. 8, 2018

Prepared for

Lorex Technology Inc.

Prepared by

**UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch
Room 101, Building 10, Innovation Technology Park,
Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China
Tel: +86 769 33817100
Fax: +86 769 33244054
Website: www.ul.com**

Revision History

Rev.	Issue Date	Revisions	Revised By
--	8/8/2018	Initial Issue	

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	4
2. TEST METHODOLOGY	6
3. FACILITIES AND ACCREDITATION	6
4. REQUIREMENT	7

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 HD WI-FI DETERRENCE CAMERA
Model Name LNWCX-C
Trademark
Additional No. LNW16XF, LNWCM23X, LNWC21X
Sample Number 1699024
Data of Receipt Sample July 11, 2018
Date Tested July 12, 2018~ Aug. 07, 2018

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC Guidelines for Human Exposure IEEE C95.1	Complies

Test By : 

Denny Huang
Engineer Project Associate

Check By: 

Shawn Wen
Laboratory Leader

Approved By: 

Stephen Guo
Laboratory Manager

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 447498 D01 General RF Exposure Guidance v05.

3. FACILITIES AND ACCREDITATION

Test Location	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
Address	Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China
Accreditation Certificate	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing. The Certificate Registration Number is 4102.01. UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The Designation Number is CN1187. UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been registered and fully described in a report filed with Industry Canada. The Company Number is 21320.

Note: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites.

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 refer to the tune-up procedure or OP document)

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 SISO

WIFI (Worst case)-Antenna 1							
Test Mode	Output Power to Antenna		Antenna Gain		Power Density	Limit	Test Result
11B	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm2)	(mW/cm2)	--
	20.0	100	2	1.58	0.0315	1	Complies

WIFI (Worst case)- Antenna 2							
Test Mode	Output Power to Antenna		Antenna Gain		Power Density	Limit	Test Result
11B	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm2)	(mW/cm2)	--
	18.5	70.79	2	1.58	0.0223	1	Complies

2) For MIMO

WIFI (Worst case)- 802.11n20 MIMO							
Test Mode	Output Power to Antenna		Antenna Gain		Power Density	Limit	Test Result
11n20MIMO	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm2)	(mW/cm2)	--
	18.0	63.10	2	1.58	0.0199	1	Complies

Note: the calculated distance is 20cm.

END OF REPORT