FCC IC RF EXPOSURE REPORT

For

2K Outdoor Floodlight Camera

MODEL NUMBER: W452AS-Z

PROJECT NUMBER: 4790053054

REPORT NUMBER: 4790053054-7

FCC ID: UCZ-W452AS-Z

IC: 8575A-W452ASZ

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Prepared for

Lorex Technology Inc.

Prepared by

UL-CCIC COMPANY LIMITED
No. 2, Chengwan Road, Suzhou Industrial Park, People's Republic of China
Tel: + 86-512-6808 6400
Fax: + 86-512-6808 4099
Website: www.ul.com

Revision History

Rev.	Issue Date	Revisions	Revised By
V0	09/10/2021	Initial Issue	

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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name:	Lorex Technology Inc.
Address:	250 Royal crest Court, Markham, L3R 3S1, Ontario, Canada.

Manufacturer Information

Company Name:	Lorex Technology Inc.
Address:	250 Royal crest Court, Markham, L3R 3S1, Ontario, Canada.

EUT Description

Product Name:	2K Outdoor Floodlight Camera
Model Name:	W452AS-Z
Sample Number:	4113018
Data of Receipt Sample:	Aug 02, 2021
Date Tested:	Aug 02, 2021 ~ Aug 31, 2021

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC 47CFR§2.1091 KDB-447498 D01 V06	Complies

Prepared By:

Tom Tang

Tom Tang
Project Engineer

Reviewed By:

Leon Wu

Leon Wu
Senior Project Engineer

Authorized By:

Chris Zhong

Chris Zhong
Laboratory Leader

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

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 CAB No.: CN0073)** **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.**

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 OFS.

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)	PowerDensity (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/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^2 is available for this EUT.				

MPE CALCULATION METHOD

$S = PG/(4\pi R2)$

where: S = power density (in appropriate units, e.g. mW/ cm2)
P = power input to the antenna (in appropriate units, e.g., mW)
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

WIFI 2.4G (Worst case)						
Operating Mode	Output Power with tolerance		Antenna Gain		Power density	Limit
	(dBm)	(mW)	(dBi)	(num)	(mW/ cm^2)	
802.11b - ANT 1	17.5	56.23	1.55	1.43	0.016	1
802.11g - ANT 1	15.5	35.48	1.55	1.43	0.010	1
802.11n20 - ANT 1	10.5	11.22	1.55	1.43	0.003	1
802.11n20 – ANT 2	10.5	11.22	1.55	1.43	0.003	1
802.11n20 – ANT1 + 2 (MIMO)	13.5	22.39	1.55	1.43	0.006	1
802.11n40 - ANT 1	9.5	8.91	1.55	1.43	0.003	1
802.11n40 – ANT 2	10.5	11.2	1.55	1.43	0.003	1
802.11n40 – ANT1 + 2 (MIMO)	13.0	19.95	1.55	1.43	0.007	1

WIFI 5G (Worst case)						
Operating Mode	Output Power with tolerance		Antenna Gain		Power density	Limit
	(dBm)	(mW)	(dBi)	(num)	(mW/ cm^2)	
802.11a- ANT 1	12.0	15.85	3.58	2.28	0.007	1
802.11ac20 - ANT 1	9.0	7.94	3.58	2.28	0.004	1
802.11ac20 - ANT 2	8.0	6.31	3.58	2.28	0.003	1
802.11ac20 (ANT 1+2) MIMO	11.5	14.12	3.58	2.28	0.006	1
802.11ac40 - ANT 1	9.5	8.91	3.58	2.28	0.004	1
802.11ac40 - ANT 2	8.5	7.08	3.58	2.28	0.003	1
802.11ac40 (ANT1 + 2) MIMO	12.0	15.85	3.58	2.28	0.007	1
802.11ac80 - ANT 1	8.5	7.08	3.58	2.28	0.003	1
802.11ac80 - ANT 2	7.5	5.62	3.58	2.28	0.003	1
802.11ac80 (ANT 1+2) MIMO	11.0	12.59	3.58	2.28	0.006	1

Note: the calculated distance is 20cm.

END OF REPORT