



FCC RF EXPOSURE REPORT

For

Amcrest SmartHome 4MP WiFi Bullet Outdoor Security Camera

MODEL NUMBER: ASH43-W

PROJECT NUMBER: 4790425401-2.6

REPORT NUMBER: 4790425401-2.6-2

FCC ID: ZZ2-ASH43

ISSUE DATE: Aug. 12, 2022

Prepared for

Amcrest Technologies LLC.

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

Form-ULID-008536-12 V2.0

The results reported herein have been performed in accordance with the laboratory's terms of accreditation. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report apply to the test sample(s) mentioned above at the time of the testing period only and are not to be used to indicate applicability to other similar products.



Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
V0	08/12/2022	Initial Issue	



TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	4
2. TEST METHODOLOGY	5
3. FACILITIES AND ACCREDITATION	5
4. MEASUREMENT UNCERTAINTY.....	6
5. REQUIREMENT	7



1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Amcrest Technologies LLC.
Address: 16727 Park Row Dr, Houston, TX 77084, United States of America

Manufacturer Information

Company Name: Amcrest Technologies LLC.
Address: 16727 Park Row Dr, Houston, TX 77084, United States of America

EUT Description

Product Name: Amcrest SmartHome 4MP WiFi Bullet Outdoor Security Camera
Model Name: ASH43-W
Sample Number: 5040307
Data of Receipt Sample: Jun. 09, 2022
Date Tested: Jun. 09, 2022 ~ Aug. 09, 2022

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

Prepared By:

Tom Tang

Tom Tang

Reviewed By:

Leon Wu

Leon Wu

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	<p>A2LA (Certificate No.: 4829.01) UL-CCIC COMPANY LIMITED has been assessed and proved to be in compliance with A2LA.</p> <p>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.</p> <p>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.</p>
---------------------------	---

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. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
Output Power to Antenna	3.1 dB
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.	



5. 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/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/cm² 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)

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	11.0	12.59	1.79	1.51	0.0038	1
802.11g-ANT 1	12.0	15.85	1.79	1.51	0.0048	1
802.11n20-ANT 1	11.0	12.59	1.79	1.51	0.0038	1
802.11n20-ANT 2	9.0	7.94	1.79	1.51	0.0024	1
802.11n20-ANT1 + 2 (MIMO)	13.0	19.95	4.80	3.02	0.0120	1
802.11n40-ANT 1	14.5	28.18	1.79	1.51	0.0085	1
802.11n40-ANT 2	14.5	28.18	1.79	1.51	0.0085	1
802.11n40-ANT1 + 2 (MIMO)	17.5	56.23	4.80	3.02	0.0338	1

Note:

1. The output power to antenna and antenna gain are from OD.
2. The minimum separation distance of the device is greater than 20 cm.
3. All the modes and channels had been tested, but only the worst data was recorded in the report.
4. The calculated result for the sample received is <Pass> according to < 47 CFR FCC Part 2 Subpart J, section 2.1091> when <Accuracy Method> decision rule is applied.

END OF REPORT