

# Maximum Permissible Exposure Report

Product	:	Arlo Go 2 Wireless Security Camera
Model Name	:	VML2030
FCC ID	:	2APLE18300421
Reused FCC ID	:	2APLE18300416
Test Regulation	:	47 CFR FCC Part 2.1091
<b>Received Date</b>	:	2021/8/3
Test Date	:	2021/8/3 ~ 2021/8/10
Issued Date	:	2021/8/18
Applicant	:	Arlo Technologies Inc 2200 Faraday Avenue, Suite 150, Carlsbad, CA 92008, USA
Issued By	:	Underwriters Laboratories Taiwan Co., Ltd. Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan



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# **REVISION HISTORY**

## Original Test Report No.: 4790055266-US-R1-V0

Rev.	Test report No.	Date	Page revised	Contents
Original	Test report No. 4790055266-US-R1-V0	2021/8/18	-	Initial issue
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### 1. Attestation of Test Results

APPLICANT:	Arlo Technologies Inc 2200 Faraday Avenue, Suite 150, Carlsbad, CA 92008, USA
MANUFACTURER:	Funing Precision Component Co., Ltd. Lot B, Que Vo Industrial Zone, Van Duong Ward, Bac Ninh City, Bac Ninh Province, Vietnam
EUT DESCRIPTION:	Arlo Go 2 Wireless Security Camera
BRAND:	Arlo
MODEL:	VML2030
SAMPLE STAGE:	Engineering Verification Test sample

APPLICABLE STANDARDS		
STANDARD	Test Results	
47 CFR FCC PART 2.1091	PASS	

Underwriters Laboratories Taiwan Co., Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by Underwriters Laboratories Taiwan Co., Ltd. based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

**Note:** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by Underwriters Laboratories Taiwan Co., Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Underwriters Laboratories Taiwan Co., Ltd. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Prepared By:

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Approved and Authorized By:

Date: 2021/8/18 Mike Cai **Engineer Project Associate** 

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## 2. Test Methodology and Reference Procedures

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

## **3.** Facilities and Accreditation

Test Location	Underwriters Laboratories Taiwan Co., Ltd.
Address	Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan
Accreditation Certificate	Underwriters Laboratories Taiwan Co., Ltd. is accredited by TAF, Laboratory Code 3398. The full scope of accreditation can be viewed at <a href="http://accreditation.taftw.org.tw/taf/public/basic/viewApplyItems.action?unitNo=3398">http://accreditation.taftw.org.tw/taf/public/basic/viewApplyItems.action?unitNo=3398</a>



## 4. Equipment Under Test

#### 4.1. Description of EUT

Product Name	Arlo Go 2 Wireless	Arlo Go 2 Wireless Security Camera			
Brand Name	Arlo	Arlo			
Model Name	VML2030	VML2030			
<b>Operating Frequency</b>	WLAN	WLAN 2412MHz ~ 2462MHz			
Modulation	WLAN CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM				
Number of Channel	2.4G WLAN 2412 ~ 2462 MHz 11 for 802.11b, 802.11g, 802.11n (HT20)				
S/N	N/A				
Sample ID	4125444				
Software Version	N/A				

Note:

- 1. This report only the WLAN MPE has been evaluated.
- 2. The EUT WLAN output power test data are reused from the test report (Report No.: 4790055264-US-R1-V0).
- 3. The EUT provides one completed transmitter and one receiver.

Modulation Mode	Tx,Rx Function
802.11b	1TX,1RX
802.11g	1TX,1RX
802.11n (HT20)	1TX,1RX

4. The EUT could be supplied with rechargeable battery as the following table:

Product	Manufacturer / Trademark	Model	Description
Rechargeable Li-ion Battery	Arlo	A-14	Rating:3.6Vdc

5. The above EUT information is declared by manufacturer and for more detailed features description, please refer the manufacturer's or user's manual.

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### 4.2. Description of Available Antennas

#### For WLAN

Ant. No.	Transmitter Circuit	Brand Name	Model Name	Ant. Type	Maximum Gain (dBi)
1	Chain (0)	INPAQ	WAG-M-LA-00-062	PIFA	1.3

Note: The above antenna information was provided from customer and for more detailed features description, please refer the manufacturer's specification or user's manual.



## 5. Requirement

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 <sup>2</sup> )	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 <sup>2</sup>	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

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.

Power Density (S) is calculated by the following formula:

 $S = (P*G) / 4\pi R^2$ 

where: S = power density (in appropriate units, e.g. mW/ cm<sup>2</sup>)

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)



## 6. Radio Frequency Radiation Exposure Evaluation

#### WLAN 2.4GHz

Evaluation Frequency	Max. Average power	Directional Gain	Max. EIRP	Max. EIRP	Power density @ 20 cm	Limit
(MHz)	(dBm)	(dBi)	(dBm)	( <b>mW</b> )	(mW/cm <sup>2</sup> )	$(mW/cm^2)$
2412 ~ 2462	21.47	1.30	22.77	189.234	0.03765	1

Note:

- 1. Max. EIRP (dBm) = Max. Average power (dBm) + Antenna Gain (dBi)
- 2. Max. EIRP (mW) =  $10^{(Max. EIRP (dBm) / 10)}$
- 3. Power density  $(mW/cm^2) = Max$ . EIRP  $(mW) / [4 \times \pi \times (calculated distance)^2]$ , the calculated distance is 20 cm.

#### **Conclusion:**

According to 47 CFR §2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.

### **END OF REPORT**