Certificate Number UL-US-L140407-26X195A6007-81200202-1

**Report Reference** E140407-20200218

Date 14-Jul-2021

Issued to: PANASONIC CORPORATION, PANASONIC

CORPORATION OF NORTH AMERICA

Product Safety & Compliance Dept

Two Riverfront Plaza 9th Fl Newark, NJ

United States 07102-5490

This is to certify that representative samples of

NWGQ - Information Technology Equipment Including

**Electrical Business Equipment** 

See Addendum Page for Product Designation(s).

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 60950-1, 2nd Ed., Issue Date: 2007-03-27, Revision

Date: 2019-05-09

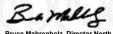
Additional Information: See the UL Online Certifications Directory at

https://iq.ulprospector.com for additional information

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.





Certificate Number UL-US-L140407-26X195A6007-81200202-1

**Report Reference** E140407-20200218

Date 14-Jul-2021

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Model	Category Description
WV-U2532Lwxyz, w: "G" or Blank (Dome Color), x: "N" or Blank (Clear Sight Coating), y: "A", "B" or Blank	Network Camera
(Combination of Software and Sensor), z: "-B" or Blank (Body Color)	
WV-U2542Lwxyz, w: "G" or Blank (Dome Color), x: "N" or Blank (Clear Sight Coating), y: "A", "B" or Blank (Combination of Software and Sensor), z: "-B" or Blank (Body Color)	Network Camera





Certificate Number UL-CA-L140407-28X195A6007-81200202-1

**Report Reference** E140407-20200218

Date 14-Jul-2021

Issued to: PANASONIC CORPORATION, PANASONIC

CORPORATION OF NORTH AMERICA

Product Safety & Compliance Dept

Two Riverfront Plaza 9th Fl Newark, NJ

United States 07102-5490

This is to certify that representative samples of

NWGQ7 - Information Technology Equipment Including Electrical Business Equipment Certified for Canada

See Addendum Page for Product Designation(s).

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: CSA C22.2 No. 60950-1 - 2nd Ed. - Issue Date: 2007-03-27

- Revision Date: 2014-10-01

Additional Information: See the UL Online Certifications Directory at

https://ig.ulprospector.com for additional information

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.





Certificate Number UL-CA-L140407-28X195A6007-81200202-1

**Report Reference** E140407-20200218

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This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Model	Category Description
WV-U2532Lwxyz, w: "G" or Blank (Dome Color), x: "N" or Blank (Clear Sight Coating), y: "A", "B" or Blank	Network Camera
(Combination of Software and Sensor), z: "-B" or Blank (Body Color)	
WV-U2542Lwxyz, w: "G" or Blank (Dome Color), x: "N" or Blank (Clear Sight Coating), y: "A", "B" or Blank	Network Camera
(Combination of Software and Sensor), z: "-B" or Blank (Body Color)	





Issue Date: 2020-02-18 Page 1 of 9 Report Reference # E140407-A6007-UL

Revision Date: 2021-07-06

## **UL TEST REPORT AND PROCEDURE**

Standard: UL 60950-1, 2nd Edition, 2019-05-09 (Information Technology

Equipment - Safety - Part 1: General Requirements)

CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10 (Information Technology Equipment - Safety - Part 1: General Requirements)

Certification Type: Listing

CCN: NWGQ, NWGQ7 (Information Technology Equipment Including

**Electrical Business Equipment)** 

Complementary CCN: N/A

**Applicant Name and Address:** 

Product: Network Camera

WV-U2532Lwxyz, WV-U2542Lwxyz "wxyz" is suffix stands for followings not effect on safety.

w: "G" or Blank (Dome Color)

x: "N" or Blank (Clear Sight Coating)

y: "A", "B" or Blank (Combination of Software and Sensor)

z: "-B" or Blank (Body Color)

WV-U2532Lwxyz: 48Vdc, 140mA (PoE) (Class0)

WV-U2542Lwxyz: 48Vdc, 150mA (PoE) (Class0)

PANASONIC CORPORATION OF NORTH AMERICA

PRODUCT SAFETY & COMPLIANCE DEPT

TWO RIVERFRONT PLAZA

9TH FL

NEWARK NJ 07102-5490

**UNITED STATES** 

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

The applicant is authorized to reproduce the referenced Test Report provided it is reproduced in its entirety.

UL authorizes the applicant to reproduce the latest pages of the referenced Test Report consisting of the first page of the Specific Technical Criteria through to the end of the Conditions of Acceptability.

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

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Revision Date: 2021-07-06

Yusuke Enokimura / Project Handler Prepared By: Reviewed By: Hidehisa Matsuda / Reviewer

Issue Date: 2020-02-18 Page 3 of 9 Report Reference # E140407-A6007-UL

Revision Date: 2021-07-06

#### **Supporting Documentation**

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

- A. Authorization The Authorization page may include additional Factory Identification Code markings.
- B. Generic Inspection Instructions
  - i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.
  - ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.
  - iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

#### **Product Description**

The Network Cameras are supplied from Power over Ethernet (PoE standard IEEE 802.3af or PoE+ standard IEEE 802.3at).

The product is intended for outdoor use and has not been evaluated for use in burglary and theft applications. Power over Ethernet cable is intended to connect in indoor location.

#### **Model Differences**

WV-U2542Lwxyz is basic model in this report.

WV-U2532Lwxyz is similar to WV-U2542Lwxyz except for model number and resolution.

"wxyz" is suffix stands for followings not effect on safety.

w: "G" or Blank (Dome Color)

x: "N" or Blank (Clear Sight Coating)

y: "A", "B" or Blank (Combination of Software and Sensor)

z: "-B" or Blank (Body Color)

Test Item Particulars				
Equipment mobility	stationary			
Connection to the mains	not directly connected to the mains			
Operating condition	continuous			
Access location	operator accessible			
Over voltage category (OVC)	N/A			
Mains supply tolerance (%) or absolute mains supply	No direct connection			
values				
Tested for IT power systems	No			
IT testing, phase-phase voltage (V)	N/A			
Class of equipment	Class III (supplied by SELV)			
Considered current rating of protective device as part	N/A			
of the building installation (A)				
Pollution degree (PD)	PD 2			

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Revision Date: 2021-07-06

IP protection class	IP 66
	Type 4X
Altitude of operation (m)	Up to 2000
Altitude of test laboratory (m)	Approximately 10 to 20
Mass of equipment (kg)	0.86kg (Model WV-U2532Lwxyz);
	0.84kg (Model WV-U2542Lwxyz)

### **Technical Considerations**

The product was submitted and evaluated for use at the maximum ambient temperature (Tma)
permitted by the manufacturer's specification of : 50°C
The product was investigated to the following additional standards : CSA/UL60950-22 - Equipment to
be Installed Outdoors, IEC 60529, Edition 2.2, Issued 2013-08 + Corr. 1:2013-10 + Corr. 2:2015-01,
UL50E Second Edition
The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual

The outdoor equipment/enclosure is: IP rated IP66, Type 4X

☐ The outdoor equipment/enclosure was evaluated for use in an ambient range of : -30°C to 50°C

□ LEDs provided in the product are considered low power devices : Yes

#### **Additional Information**

PoE circuit was evaluated as SELV circuit, because this product is connected only to PoE networks without routing to the outside plant and suitable instruction is provided in the user manual. See sub-clause 1.7.2 for details.

The LED emission from Model WV-U2542Lwxyz and WV-U2532Lwxyz were determined to be Risk Group Exempt per IEC 62471.

#### **Additional Standards**

The product fulfills the requirements of: N/A

### **Markings and Instructions**

Clause Title	Marking or Instruction Details
Power rating - Ratings	Ratings (voltage, frequency/dc, current)
Power rating - Company identification	Listee's or Recognized companys name, Trade Name, Trademark or File Number
Power rating - Model	Model Number
Outdoor Enclosure Marking	"TYPE 4X ENCLOSURE" on Rating Label
IP Code	"IP66" on Rating Label

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Safety instructions	The following cautionary statement provided in the user manual.				
	"Caution The network camera is only intended for a connection to an Ethernet or PoE network without routing to the outside plant."				
Special Instructions to UL Representative					
N/A					

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BD1.0	TABLE: Production-Line Testing Requirements					
BD1.1	Electric Strength Test Special Constructions - Refer to Generic Inspection Instructions,				structions,	
	Part AC for further information.					
Model	Component	Removable parts	Test probe	Test V rms	Test V	Test
			location		dc	Time, s
N/A						
BD1.2	Earthing Continuity Test Exemptions – This test is not required for the following models:					
	All Models					
BD1.3	Electric Strength Test Exemptions – This test is not required for the following models:					
	All Models					
BD1.4	Electric Strength Test Component Exemptions – The following solid-state components					
	may be disconnected from the remainder of the circuitry during the performance of this					
	test:					
	N/A					

BE1.0 Sample and Test Specifics for Follow-Up Tests at UL					
Model	Component	Material	Test	Sample (s)	Test Specifics
N/A					