

CERTIFICATE OF COMPLIANCE

Certificate Number 20161123-E140407
Report Reference E140407-A408-UL
Issue Date 2016-NOVEMBER-23

Issued to: PANASONIC CORPORATION OF NORTH AMERICA
PRODUCT SAFETY & COMPLIANCE DEPT
TWO RIVERFRONT PLAZA
9TH FL, NEWARK NJ 07102-5490

**This is to certify that
representative samples of**

INFORMATION TECHNOLOGY EQUIPMENT INCLUDING
ELECTRICAL BUSINESS EQUIPMENT

Network Camera

WV-S2110, WV-S2111L, WV-S2130, WV-S2131, WV-
S2131L, WV-S2211L, WV-S2231L, WV-S2511LN, WV-
S2531LN, WV-S2531LTN

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 60950-1 And CAN/CSA C22.2 No. 60950-1-07
(Information Technology Equipment - Safety - Part 1:
General Requirements)

Additional Information: See the UL Online Certifications Directory at
www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's
Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



UL TEST REPORT AND PROCEDURE

Standard:	UL 60950-1, 2nd Edition, 2014-10-14 (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)
Product:	Network Camera
Model:	WV-S2110, WV-S2111L, WV-S2130, WV-S2131, WV-S2131L, WV-S2211L, WV-S2231L, WV-S2511LN, WV-S2531LN, WV-S2531LTN, WV-S2131LPJ
Rating:	WV-S2111L, WV-S2131L, WV-S2211L, WV-S2231L, WV-S2131LPJ: 12Vdc, 560mA / PoE 48Vdc 150mA WV-S2131: 12Vdc, 460mA / PoE 48Vdc 125mA WV-S2110, WV-S2130: PoE 48Vdc 110mA WV-S2511LN, WV-S2531LN, WV-S2531LTN: 12Vdc, 750mA / PoE 48Vdc 195mA
Applicant Name and Address:	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.

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Prepared by: Yuta Iida

Reviewed by: Yusuke Enokimura

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 products tested are Network Cameras for use outdoor or indoor environment.

[For Outdoor Environment Models]

WV-S2511LN, WV-S2531LN, WV-S2531LTN (WV-S25 series)

[For Indoor Environment Models]

WV-S2110, WV-S2111L, WV-S2130, WV-S2131, WV-S2131LPJ

WV-S2131L (WV-S21 series)

WV-S2211L, WV-S2231L (WV-S22 series)

The Network Cameras are supplied from Power of Ethernet (PoE standard IEEE 802.3af) or by 24 Vac from an optional Class 2 UL Listed power supply or by 12 Vdc from an optional Class 2 UL Listed AC adaptor.

WV-S25 series is intended for outdoor use and has not been evaluated for use in burglary and theft applications.

Input/Output Connector is intended to connect in indoor location.

Model Differences

[Outdoor Models]

WV-S2531LN is basic model in this report.

WV-S2531LTN is similar to WV-S2531LN except for model designation and addition of Long Focus Lens.

WV-S2511LN is similar to WV-S2531LN except for model designation, resolution for image sensor, and deletion of Zoom function.

[Indoor Models]

WV-S2131L is similar to WV-S2531LN except for model designation, input rating, deletion of Resistor Heater, and function of enclosures (Not outdoor enclosure).

WV-S2131 is similar to WV-S2131L except for model designation, input rating, and deletion of IR-LED.

WV-S2130 is similar to WV-S2131 except for model designation, input rating, and deletion of Zoom function, IR cut Filter, SC card slot, I/O port.

WV-S2111L is similar to WV-S2131L except for model designation, resolution for image sensor, and deletion of Zoom function.

WV-S2110 is similar to WV-S2130 except for model designation and resolution for image sensor.

WV-S2231L is similar to WV-S2131L except for model designation and enclosures.

WV-S2211L is similar to WV-S2111L except for model designation and enclosures.

WV-S2131LPJ is similar to WV-S2131L except for model number and manufacturing location (Vol. X28).

Technical Considerations

- Equipment mobility : fixed
- Connection to the mains : not directly connected to the mains
- Operating condition : continuous
- Access location : operator accessible
- Over voltage category (OVC) : OVC I
- Mains supply tolerance (%) or absolute mains supply values : No direct connection
- 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 of the building installation (A) : Not connect to mains.
- Pollution degree (PD) : PD 2
- IP protection class : IP66 for WV-S25 series, IPX0 for WV-S22 series and WV-S21 series
- Altitude of operation (m) : Up to 2000
- Altitude of test laboratory (m) : less than 1000
- Mass of equipment (kg) : 1.2kg max. (camera itself)
- 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 1st edition - Equipment to be Installed Outdoors, IEC 60529, Edition 2.2 + Corr. 1:2013 + Corr. 2:2015, UL50E 2nd Edition, C22.2 No. 94.2 2nd Edition.
- The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual
- The outdoor equipment/enclosure is: Type 4X Enclosure, IP rated IP66
- The outdoor equipment/enclosure was evaluated for use in an ambient range of: -10°C to 50°C,

Additional Information

The network camera is only intended for a connection to an ethernet or PoE network without routing to the outside plant.

Additional Standards

The product fulfills the requirements of: [WV-S25 series only] UL 60950-22 1st Edition. Revised 2011-12-19, CSA C22.2 No. 60950-22-07 1st Edition, IEC 60529, Edition 2.2 + Corr. 1:2013 + Corr. 2:2015, UL50E 2nd Edition, issued 2015-10-16, C22.2 No. 94.2-15 2nd Edition

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 company's 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
Special Instructions to UL Representative WV-S2131LPJ is manufactured in Vol. X28. Other models are manufactured in Vol. X195.	

Production-Line Testing Requirements <u>Electric Strength Test Special Constructions - Refer to Generic Inspection Instructions, Part AC for further information.</u>						
Model	Component	Removable Parts	Test probe location	V rms	V dc	Test Time, s
N/A	--	--	--	--	--	--
<u>Earthing Continuity Test Exemptions - This test is not required for the following models:</u>						
All models						
<u>Electric Strength Test Exemptions - This test is not required for the following models:</u>						
All models						
<u>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:</u>						
N/A						
<u>Sample and Test Specifics for Follow-Up Tests at UL</u>						
Model	Component	Material	Test	Sample(s)	Test Specifics	
N/A	--	--	--	--	--	