

CERTIFICATE OF COMPLIANCE

Certificate Number 20180822-E140407
Report Reference E140407-A404-UL
Issue Date 2018-AUGUST-22

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
Model: WV-S1111, WV-S1112, WV-S1131, WV-S1132, WV-S1131PJ

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

Standard(s) for Safety: UL 60950-1 & 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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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: | NWQG, NWGQ7 (Information Technology Equipment Including Electrical Business Equipment) |
| Product: | Network Camera |
| Model: | WV-S1111, WV-S1112, WV-S1131, WV-S1132, WV-S1131PJ |
| Rating: | DC 12V, 460mA / PoE DC 48V, 120mA |
| 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 product tested is a Network Camera for use in a general office environment.
The network camera is supplied from host equipment by one of the two power sources as mentioned below.
- DC 12V, 460mA
- PoE DC 48V, 120mA

These host equipment power sources do not included within this test report evaluation, and the information details of host equipment power sources were provided in Installation Guide.
Therefore, the network camera itself was evaluated as a Class III equipment in this report.

Model Differences

The models are essentially the same in construction except for the items as listed in below.
If not stated otherwise, tests were conducted on model WV-S1132 to represent the other similar models.

| | | | | |
|----------------|--------------|----------|--------------|-----------|
| Model Name: | WV-S1111 | WV-S1112 | WV-S1131 | WV-S1132 |
| Definition: HD | HD | Full HD | Full HD | |
| Image size: | 1280x720 | 1280x720 | 1920x1080 | 1920x1080 |
| RS485: | Not provided | Provided | Not provided | Provided |

WV-S1131PJ is similar to WV-S1131 except for model number and manufacturing location (Vol. X28).

Technical Considerations

- Equipment mobility : stationary (wall or ceiling mount)
- 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 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) : N/A

- Pollution degree (PD) : PD 2
- IP protection class : IP X0
- Altitude of operation (m) : less than 2000 m
- Altitude of test laboratory (m) : up to 1000 m
- Mass of equipment (kg) : up to 1 kg (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
- LEDs provided in the product are considered low power devices: Yes
- All input/output and interface voltage of network microphone are at SELV level.
- Separation to the main voltage has to be provided by the designed power source as mentioned in Installation Guide.

Additional Information

The equipment was tested with the optional accessories as mentioned below.

- Ceiling mount kit, type WV-Q180: 221g
- Wall mount kit, type WV-Q181: 426g

Markings and instructions

| Clause Title | Marking or Instruction Details |
|---------------------------------------|---|
| Power rating - Company identification | Listee's or Recognized company's name, Trade Name, Trademark or File Number |
| Power rating - Model | Model Number |
| Replaceable batteries | "CAUTION: Risk of Explosion if Battery is replaced by an Incorrect Type. Dispose of Used Batteries According to the Instructions." |
| Power Over Ethernet | "The network camera is only intended for a connection to an ethernet or PoE network without routing to the outside plant." or equivalent in the Installation Guide. |
| 1.7.13 Replaceable batteries | "CAUTION Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the equipment manufacturer. Discard used batteries according to manufacture's instructions." or equivalent in the Service Manual. |

Special Instructions to UL Representative

WV-S1131PJ 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 | | | | | | |
| <u>Electric Strength Test Exemptions - This test is not required for the following models:</u> | | | | | | |
| All | | | | | | |
| <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 | -- | -- | -- | -- | N/A | |