

CERTIFICATE OF COMPLIANCE

Certificate Number 20160829-E140407
Report Reference E140407-A385-UL
Issue Date 2016-AUGUST-29

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-SFV781L, WV-SPV781L
WV-SFV781LPJ, WV-SPV781LPJ

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 standard
for 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, Assistant Chief Engineer, Global Inspection and Field Services

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, 2011-12-19 (Information Technology Equipment - Safety - Part 1: General Requirements) CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2011-12 (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-SFV781L, WV-SPV781L WV-SFV781LPJ, WV-SPV781LPJ
Rating:	12Vdc, 1050 mA PoE 48Vdc, 265 mA
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.

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

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Prepared by: Hong Ung

Reviewed by: Lesley Green

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 Main Model tested is a Network Camera for use outdoor or in an office environment. Similarity Model for Indoor use only.

The Network Cameras are supplied from Power of Ethernet (PoE standard IEEE 802.3af) that does not extend beyond the building (SELV) or by 12 Vdc from an optional Class 2 UL Listed power supply.

The equipment has not been evaluated for use in Alarm, burglary and theft applications.

Model Differences

Model WV-SFV781L is the basic model described in this report.

Model WV-SFV781LPJ is identical to Model WV-SFV781L except for only model number.

Model WV-SPV781L,WV-SPV781LPJ is identical to the basic model except for enclosure.

Technical Considerations

- Equipment mobility : stationary
- Connection to the mains : N/A
- Operating condition : continuous
- Access location : operator accessible
- Over voltage category (OVC) : OVC II
- Mains supply tolerance (%) or absolute mains supply values : No direct connection
- Tested for IT power systems : Yes
- IT testing, phase-phase voltage (V) : No
- Class of equipment : Indoor/ Outdoor: Class III supplied by LPS or Class 2 power supply
- Considered current rating of protective device as part of the building installation (A) : See models and ratings
- Pollution degree (PD) : PD 2
- IP protection class : IP 66
- Altitude of operation (m) : less than 2000 meters
- Altitude of test laboratory (m) : less than 1000 meters
- Mass of equipment (kg) : WV-SFV781L(PJ): 3.7 kg (with base), WV-SPV781L(PJ): 3.1 kg (with base)
- The product was submitted and evaluated for use at the maximum ambient temperature (T_{ma}) permitted by the manufacturer's specification of: 50°C
- The product was investigated to the following additional standards: For Model WV-SFV781L: IEC/CSA/UL60950-22 - Equipment to be Installed Outdoors, UL50e, and IEC60529.
- The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual
- The outdoor equipment/enclosure was evaluated for use in an ambient range of: For Model WV-SFV781L: -45 °C to +50 °C max
- The outdoor equipment/enclosure is: IP rated 66

Additional Information

The network cameras in this report are designed to be operated using a PC on a network

(10BASE-T/100BASE-TX).

These network cameras are only intended for a connection to an ethernet or PoE network without routing to the outside plant and is mounted under a building eave.

Models WV-SFV781L(PJ) and WV-SPV781L(PJ) have also been evaluated for Outdoor use to UL50 with a type 4X rating, and to IEC60529, IP66 outdoor use rating accepted and reviewed by a handler and reviewer in the applicable categories.

Additional Standards

The product fulfills the requirements of: UL50E 1st Ed Dated September 2007, IEC 60529 Edition 2.2 Revised 2013-10-01, UL 60950-22 1st Ed Issued 2007-04-23, CSA C22.2 No. 60950-1-03

Markings and instructions

Clause Title	Marking or Instruction Details
Power rating - Ratings	Ratings (voltage, frequency/dc, current)
Power rating - Model	Model Number
Power rating - Company identification	Listee's or Recognized company's name, Trade Name, Trademark or File Number
Fuses - Non-operator access/soldered-in fuses	Unambiguous reference to service documentation for instructions for replacement of fuses replaceable only by service personnel
Installation Instructions	The network cameras are designed to operate using a PC on a network (10BASE-T/100BASE-TX).
Installation Instructions:	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

Production-Line Testing Requirements

Electric Strength Test Special Constructions - Refer to Generic Inspection Instructions, Part AC for further information.

Model	Component	Removable Parts	Test probe location	V rms	V dc	Test Time, s
N/A	N/A	N/A	N/A	N/A	N/A	N/A

Earthing Continuity Test Exemptions - This test is not required for the following models:

ALL

Electric Strength Test Exemptions - This test is not required for the following models:

ALL

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:

ALL

Sample and Test Specifics for Follow-Up Tests at UL

Model	Component	Material	Test	Sample(s)	Test Specifics
N/A					