
**ENERGY EFFICIENT LIGHTING PRODUCTS
TEST METHOD SELECTION LIST**

**NOTICE TO APPLICANTS
FOR SOLID STATE LIGHTING, IES LM-79**

Effective January 1, 2015, all new applicant labs applying for NVLAP accreditation to IES LM-79, or existing NVLAP-accredited laboratories requesting addition of IES LM-79 to their scopes of accreditation, will be invoiced for a proficiency testing fee of \$3,350.00. If your laboratory has already participated in solid state (SSL) proficiency testing through NIST/NVLAP, a fee is not required to add sections of IES LM-79.

ENERGY EFFICIENT LIGHTING PRODUCTS TEST METHOD SELECTION LIST

Instruction: Check each test method for which you are requesting accreditation. Laboratories should consider selecting those test methods for which they are seeking regulatory acceptance of their test reports.

An asterisk beside the NVLAP Test Method Code indicates that proficiency testing is required. Notification will be given for the required proficiency testing by NVLAP and/or a NVLAP contractor.

NVLAP Test Method Code	Test Method Designation	Short Title
Lamps		
Color Measurements		
_____ 22/C02*	IES LM-58:1994	Spectroradiometric Measurements
_____ 22/C02a*	IES LM-58:2013	Spectroradiometric Measurements
_____ 22/C03	CIE Pub. 13.3:1995	Method of Measuring and Specifying Color Rendering of Light Sources
_____ 22/C04	CIE Pub. 13.2:1974	Method of Measuring and Specifying Color Rendering of Light Sources
_____ 22/C05	CIE Pub. 15:2004	Colorimetry
_____ 22/C06	ANSI C78.376:2001	Electric lamps - specification for the chromaticity of fluorescent lamps
Electrical Measurements		
_____ 22/E10*	IES LM-9:1988	Fluorescent Lamps - Electrical Measurements
_____ 22/E11*	IES LM-9:1999	Fluorescent Lamps - Electrical Measurements
_____ 22/E11a*	IES LM-9:2009	Fluorescent Lamps - Electrical Measurements
_____ 22/E12*	IES LM-45:1991	Incandescent Lamps - Electrical Measurements
_____ 22/E13*	IES LM-45:2000	Incandescent Lamps - Electrical Measurements
_____ 22/E13a*	IES LM-45:2009	Incandescent Lamps - Electrical Measurements
_____ 22/E14	IES LM-51:2000	High Intensity Discharge (HID) Lamps - Electrical Measurements
_____ 22/E14a	IES LM-51:2013	High Intensity Discharge (HID) Lamps - Electrical Measurements

DATE: _____

NVLAP LAB CODE: _____

_____	22/E15*	IES LM-66:1991	Single-Ended Compact Fluorescent Lamps - Electrical Measurements
_____	22/E16*	IES LM-66:2000	Single-Ended Compact Fluorescent Lamps - Electrical Measurements
_____	22/E16a*	IES LM-66:2011	Single-Ended Compact Fluorescent Lamps - Electrical Measurements
_____	22/E16b*	IES LM-66:2014	Single-Ended Compact Fluorescent Lamps - Electrical Measurements
_____	22/E17	ANSI C78.375:1991	Fluorescent Lamps - Electrical Measurements
_____	22/E18	ANSI C78.375:1997	Fluorescent Lamps - Electrical Measurements
_____	22/E19	ANSI C78.386:1989	Mercury Lamps - Measurement of Characteristics
_____	22/E20	ANSI C78.387:1987	Metal-Halide Lamps - Measurement of Characteristics
_____	22/E21	ANSI C78.388:1990	High Pressure Sodium Lamps - Measurement of Characteristics
_____	22/E22	ANSI C78.389:2004	High Intensity Discharge Lamps - Methods of Measuring Characteristics
_____	22/E23	ANSI C78.5:1997	Compact Fluorescent Lamps - Run-up and Start-up Times
_____	22/E24	ANSI C78.5:2003	Compact Fluorescent Lamps - Run-up and Start-up Times
_____	22/E25	ANSI C82.2:1984	Ballast for Fluorescent Lamps - Methods of Measurement
_____	22/E26	ANSI C82.2:2002	Ballast for Fluorescent Lamps - Methods of Measurement
_____	22/E27	ANSI C82.6:2005	Ballast for High Intensity Discharge Lamps - Methods of Measurement
_____	22/E30	ANSI C62.41.2:2002	IEEE Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and Less) AC Power Circuits
_____	22/E31	10 CFR 430 Appendix Q1 to Subpart B	Energy Conservation Program for Consumer Products
_____	22/E32	ANSI C82.77-10:2014	Harmonic Emission Limits - Related Power Quality Requirements for Lighting Equipment - Fluorescent
_____	22/E33	ANSI C82.77-10:2014	Harmonic Emission Limits - Related Power Quality Requirements for Lighting Equipment - HID
_____	22/E34	IEC 62301:2011	Household electrical appliances – Measurement of standby power

Life Tests

_____	22/L05	IES LM-40:1987	Fluorescent Lamps - Life Test Performance
_____	22/L06	IES LM-40:2001	Fluorescent Lamps - Life Test Performance

DATE: _____

NVLAP LAB CODE: _____

_____ 22/L06a	IES LM-40:2010	Fluorescent Lamps - Life Test Performance
_____ 22/L07	IES LM-47:2001	High Intensity Discharge Lamps - Life Test Performance
_____ 22/L07a	IES LM-47:2012	High Intensity Discharge Lamps - Life Test Performance
_____ 22/L08	IES LM-49:2001	Incandescent Filament Lamps - Life Test Performance
_____ 22/L08a	IES LM-49:2012	Incandescent Filament Lamps - Life Test Performance
_____ 22/L09	IES LM-65:1991	Single-Ended Compact Fluorescent Lamps - Life Test Performance
_____ 22/L10	IES LM-65:2001	Single-Ended Compact Fluorescent Lamps - Life Test Performance
_____ 22/L10a	IES LM-65:2010	Single-Ended Compact Fluorescent Lamps - Life Test Performance
_____ 22/L10b	IES LM-65:2014	Single-Ended Compact Fluorescent Lamps - Life Test Performance
_____ 22/L11	EPA CFL v. 4.2 (App. B)	ENERGY STAR® Reflector CFL Elevated Temperature Test Procedure
_____ 22/L11a	EPA CFL v. 4.3 (Annex A)	ENERGY STAR® Reflector CFL Elevated Temperature Test Procedure
_____ 22/L12	EPA Lamps v. 1.0	Ambient Temperature Life Testing
_____ 22/L13	EPA Lamps v. 1.0	Elevated Temperature Life Testing

Photometric Measurements

_____ 22/P06a*	IES LM-9:1988	Fluorescent Lamps - Total Flux Measurements
_____ 22/P06b*	IES LM-9:1988	Fluorescent Lamps - Intensity Measurements
_____ 22/P07a*	IES LM-9:1999	Fluorescent Lamps - Total Flux Measurements
_____ 22/P07b*	IES LM-9:1999	Fluorescent Lamps - Intensity Measurements
_____ 22/P07c*	IES LM-9:2009	Fluorescent Lamps - Total Flux Measurements
_____ 22/P07d*	IES LM-9:2009	Fluorescent Lamps - Intensity Measurements
_____ 22/P08a*	IES LM-20:1994	Reflector Type Lamps - Total Flux Measurements
_____ 22/P08b*	IES LM-20:1994	Reflector Type Lamps - Intensity Measurements
_____ 22/P08c*	IES LM-20:2013	Reflector Type Lamps - Total Flux Measurements
_____ 22/P08d*	IES LM-20:2013	Reflector Type Lamps - Intensity Measurements
_____ 22/P09a*	IES LM-45:1991	Incandescent Lamps - Total Flux Measurements
_____ 22/P09b*	IES LM-45:1991	Incandescent Lamps - Intensity Measurements

DATE: _____

NVLAP LAB CODE: _____

_____ 22/P10a*	IES LM-45:2000	Incandescent Lamps - Total Flux Measurements
_____ 22/P10b*	IES LM-45:2000	Incandescent Lamps - Intensity Measurements
_____ 22/P10c*	IES LM-45:2009	Incandescent Lamps - Total Flux Measurements
_____ 22/P10d*	IES LM-45:2009	Incandescent Lamps - Intensity Measurements
_____ 22/P11a	IES LM-51:2000	High-Intensity Discharge Lamps -Total Flux Measurements
_____ 22/P11b	IES LM-51:2000	High-Intensity Discharge Lamps - Intensity Measurements
_____ 22/P11c	IES LM-51:2013	High-Intensity Discharge Lamps -Total Flux Measurements
_____ 22/P11d	IES LM-51:2013	High-Intensity Discharge Lamps - Intensity Measurements
_____ 22/P12a*	IES LM-66:1991	Single-Ended Compact Fluorescent Lamps - Total Flux Measurements
_____ 22/P12b*	IES LM-66:1991	Single-Ended Compact Fluorescent Lamps - Intensity Measurements
_____ 22/P13a*	IES LM-66:2000	Single-Ended Compact Fluorescent Lamps - Total Flux Measurements
_____ 22/P13b*	IES LM-66:2000	Single-Ended Compact Fluorescent Lamps - Intensity Measurements
_____ 22/P13c*	IES LM-66:2011	Single-Ended Compact Fluorescent Lamps - Total Flux Measurements
_____ 22/P13d*	IES LM-66:2011	Single-Ended Compact Fluorescent Lamps - Intensity Measurements
_____ 22/P13e*	IES LM-66:2014	Single-Ended Compact Fluorescent Lamps - Total Flux Measurements
_____ 22/P13f*	IES LM-66:2014	Single-Ended Compact Fluorescent Lamps - Intensity Measurements
_____ 22/P14	EN/IEC 60969, Ed. 1.2: 2001	Self-Ballasted Lamps for General Lighting Services - Performance Requirements
_____ 22/P15	EPA Lamps v. 1.0	Elevated Temperature Light Output Ratio
_____ 22/P16	EPA Lamps v. 1.0	Start Time
_____ 22/P17	EPA Lamps v. 1.0	Run-Up Time
_____ 22/P19	CEI IEC 62471:2006 (Sec. 5.2.1)	Photobiological Safety of Lamps and Lamp Systems: Irradiance
_____ 22/P20	CEI IEC 62471:2006 (Sec. 5.2.2)	Photobiological Safety of Lamps and Lamp Systems: Radiance

Luminaires

_____ 22/F06	IES LM-10:1996	Photometric Testing of Outdoor Fluorescent Luminaires
_____ 22/F07	IES LM-31:1995	Photometric Testing of Roadway Luminaires
_____ 22/F08	IES LM-35:2002	Photometric Testing of Floodlights Using Incandescent Filament or Discharge Lamps
_____ 22/F09*	IES LM-41:1998	Photometric Testing of Indoor Fluorescent Luminaires
_____ 22/F09a	IES LM-41:2014	Photometric Testing of Indoor Fluorescent Luminaires
_____ 22/F10*	IES LM-46:2004	Photometric Testing of Indoor Luminaires Using High Intensity Discharge or Incandescent Filament Lamps

Solid State Lighting**Color Measurements**

_____ 22/S01*	IES LM-58:1994	Spectroradiometric Measurements
_____ 22/S01a*	IES LM-58:2013	Spectroradiometric Measurements
_____ 22/S02*	CIE Pub. 13.3:1995	Method of Measuring and Specifying Color Rendering of Light Sources
_____ 22/S03*	IES LM-79:2008 (Sec. 12)	Solid State Lighting Luminaires - Color Characteristic Measurements
_____ 22/S04*	IES LM-16:1993	Practical Guide to Colorimetry of Light Sources
_____ 22/S05*	CIE Pub. 15:2004	Colorimetry
_____ 22/S23	ANSI C78.377:2011	Specifications for the Chromaticity of Solid State Lighting Products

Electrical Measurements

_____ 22/S06*	ANSI C82.2:2002	Ballast for Fluorescent Lamps - Methods of Measurement
_____ 22/S07*	ANSI C82.77:2002	Harmonic Emission Limits - Related Power Quality Requirements for Lighting Equipment
_____ 22/S07a	ANSI C82.77-10:2014	Harmonic Emission Limits - Related Power Quality Requirements for Lighting Equipment - Solid State
_____ 22/S24	ANSI C62.41.2:2002	IEEE Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and Less) AC Power Circuits

DATE: _____

NVLAP LAB CODE: _____

_____ 22/S28 IEC 62301:2011 Household electrical appliances – Measurement of standby power

Life Tests

_____ 22/S08* IES LM-80:2008 Solid State Lighting Luminaires - Lumen Maintenance

_____ 22/S14 EPA Integral LED Lamps v. 1.4 (App. E) ENERGY STAR® Elevated Temperature Testing for Integral LED Lamps

_____ 22/S18 EPA Lamps v. 1.0 Ambient Temperature Life Testing

_____ 22/S19 EPA Lamps v. 1.0 Elevated Temperature Life Testing

_____ 22/S25 IES LM-84:2014 Approved Method for Measuring Luminous Flux and Color Maintenance of LED Lamps, Light Engines, and Luminaires

Photometric Measurements

_____ 22/S09* IES LM-79:2008 (Sec. 9) Solid State Lighting Luminaires - Total Flux Measurements (Luminous Efficacy)

_____ 22/S10* IES LM-79:2008 (Sec. 10) Solid State Lighting Luminaires - Luminous Intensity Measurements

_____ 22/S13* IES LM-82-12 Approved Method for the Characterization of LED Light Engines and LED Lamps for Electrical and Photometric Properties as a Function of Temperature

_____ 22/S20 EPA Lamps v. 1.0 Elevated Temperature Light Output Ratio

_____ 22/S21 EPA Lamps v. 1.0 Start Time

_____ 22/S26 CEI IEC 62471:2006 (Sec. 5.2.1) Photobiological Safety of Lamps and Lamp Systems: Irradiance

_____ 22/S27 CEI IEC 62471:2006 (Sec. 5.2.2) Photobiological Safety of Lamps and Lamp Systems: Radiance

Temperature Measurement

_____ 22/S15 ANSI/UL 153:2002 (Secs. 124-128A) Standard for Portable Electric Luminaires

_____ 22/S16 ANSI/UL 1574:2004 (Sec. 54) Standard for Track Lighting Systems

DATE: _____

NVLAP LAB CODE: _____

_____ 22/S17 ANSI/UL 1598:2008 Luminaires
(Secs. 19.7, 19.10-16)

Decorative Light Strings

_____ 22/D01 EPA DLS:2008 (App. A) ENERGY STAR® Program Requirements for
Decorative Light Strings Appendix A

_____ 22/D02 CIE Pub. 84:1989 Measurement of Luminous Flux

_____ 22/D05 ASTM G154:2006 Standard Practice for Operating Fluorescent Light
Apparatus for UV Exposure of Nonmetallic Materials