



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Independent Testing Laboratories, Inc.

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**ENERGY EFFICIENT LIGHTING
PRODUCTS**

NVLAP LAB CODE 200925-0

Lamps

Color Measurements

<u>Code</u>	<u>Designation</u>	<u>Description</u>
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
22/C06a	ANSI C78.376:2014	Electric Lamps - Specification for the Chromaticity of Fluorescent Lamps <i>Testing also performed at 609 14th St. SW, Loveland, Co. 80537</i>

Electrical Measurements

<u>Code</u>	<u>Designation</u>	<u>Description</u>
22/E10	IES LM-9:1988	Fluorescent Lamps - Electrical Measurements
22/E11	IES LM-9:1999	Fluorescent Lamps - Electrical Measurements

For the National Voluntary Laboratory Accreditation Program



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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/E13b	IES LM-45:2015	Incandescent Lamps - Electrical Measurements
		<i>Testing also performed at 609 14th St. SW, Loveland, Co. 80537</i>
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
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/E32	ANSI C82.77-10:2014	Harmonic Emission Limits - Related Power Quality Requirements for Lighting Equipment - Fluorescent
22/E34	IEC 62301:2011	Household Electrical Appliances - Measurement of Standby Power



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22/E36 10 CFR 431.324 Uniform Test Method for the Measurement of Energy Efficiency and Standby Mode Energy Consumption of Metal Halide Lamp Ballasts

Life Tests

Table with 3 columns: Code, Designation, Description. Lists various life tests for fluorescent and incandescent lamps.

Photometric Measurements

Table with 3 columns: Code, Designation, Description. Lists photometric measurements for fluorescent lamps.



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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
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/P10e	IES LM-45:2015	Incandescent Lamps - Total Flux Measurements
		<i>Testing also performed at 609 14th St. SW, Loveland, Co. 80537</i>
22/P10f	IES LM-45:2015	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



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Table with 3 columns: Code, Designation, and Description. Rows include 22/P13e, 22/P13f, 22/P14, 22/P15, 22/P16, 22/P17, and 22/P18.

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Luminaires

Table with 3 columns: Code, Designation, and Description. Rows include 22/F06, 22/F07, 22/F08, 22/F09, 22/F09a, and 22/F10.

Solid State Lighting

Table with 3 columns: Code, Designation, and Description. Row includes 22/S30.

SSL Color Measurements

Table with 3 columns: Code, Designation, and Description. Rows include 22/S01 and 22/S01a.



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Table with 3 columns: Code, Designation, Description. Rows include 22/S02, 22/S03, 22/S04, 22/S05, 22/S11, 22/S23, 22/S23a.

SSL Electrical Measurements

Table with 3 columns: Code, Designation, Description. Rows include 22/S06, 22/S07, 22/S28.

SSL Life Tests

Table with 3 columns: Code, Designation, Description. Rows include 22/S14, 22/S18, 22/S19, 22/S25.

SSL Photometric Measurements

Table with 3 columns: Code, Designation, Description. Rows include 22/S09, 22/S10.

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22/S13	IES LM-82-12	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

SSL Temperature Measurement

<u>Code</u>	<u>Designation</u>	<u>Description</u>
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
22/S17	ANSI/UL 1598:2008 (Secs. 19.7, 19.10-16)	Luminaires