

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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ENERGY EFFICIENT LIGHTING PRODUCTS

NVLAP LAB CODE 200823-0

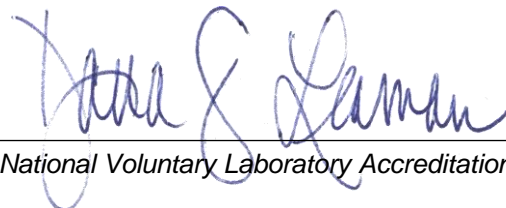
Lamps

Color Measurements

| <u>Code</u> | <u>Designation</u> | <u>Description</u> |
|-------------|--------------------|---|
| 22/C02 | IES LM-58:1994 | 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 |

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 |
| 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 |



For the National Voluntary Laboratory Accreditation Program

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|---------|-----------------|---|
| 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/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 |

Life Tests

| <u>Code</u> | <u>Designation</u> | <u>Description</u> |
|--------------------|---------------------------|--|
| 22/L05 | IES LM-40:1987 | Fluorescent Lamps - Life Test Performance |
| 22/L06 | IES LM-40:2001 | Fluorescent Lamps - Life Test Performance |
| 22/L06a | IES LM-40:2010 | Fluorescent 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/L11a | EPA CFL v. 4.3 (Annex A) | ENERGY STAR® Reflector CFL Elevated Temperature Test Procedure |

Photometric Measurements

| <u>Code</u> | <u>Designation</u> | <u>Description</u> |
|--------------------|---------------------------|---|
| 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 |

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|---------|--------------------------------|---|
| 22/P07d | IES LM-9:2009 | Fluorescent Lamps - Intensity Measurements |
| 22/P08a | IES LM-20:1994 | Reflector Type Lamps -Total Flux 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/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/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/P14 | EN/IEC 60969, Ed. 1.2: 2001 | Self-Ballasted Lamps for General Lighting Services - Performance Requirements |

Luminaires

| <u>Code</u> | <u>Designation</u> | <u>Description</u> |
|-------------|--------------------|--|
| 22/F07 | IES LM-31:1995 | Photometric Testing of Roadway Luminaires |
| 22/F09 | IES LM-41:1998 | 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

SSL Color Measurements

| <u>Code</u> | <u>Designation</u> | <u>Description</u> |
|-------------|-----------------------------|---|
| 22/S01 | IES LM-58:1994 | 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 |

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|--------|------------------|---|
| 22/S04 | IES LM-16:1993 | Practical Guide to Colorimetry of Light Sources |
| 22/S05 | CIE Pub. 15:2004 | Colorimetry |

SSL Electrical Measurements

| <u>Code</u> | <u>Designation</u> | <u>Description</u> |
|--------------------|---------------------------|--|
| 22/S07 | ANSI C82.77:2002 | Harmonic Emission Limits - Related Power Quality Requirements for Lighting Equipment |

SSL Life Tests

| <u>Code</u> | <u>Designation</u> | <u>Description</u> |
|--------------------|---------------------------|---|
| 22/S08 | IES LM-80:2008 | Solid State Lighting Luminaires - Lumen Maintenance |

SSL Photometric Measurements

| <u>Code</u> | <u>Designation</u> | <u>Description</u> |
|--------------------|---------------------------|--|
| 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 | Characterization of LED Light Engines and LED Lamps for Electrical and Photometric Properties as a Function of Temperature |

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 |

Decorative Light Strings

| <u>Code</u> | <u>Designation</u> | <u>Description</u> |
|--------------------|---------------------------|------------------------------|
| 22/D02 | CIE Pub. 84:1989 | Measurement of Luminous Flux |