

# PERFORMANCE TESTING

Traditional and LED Lighting Luminaires

**As the leading independent, thirdparty testing and certification organization for the lighting industry, Intertek offers global capabilities for clients needing photometric testing. From our Centers of Excellence in Chicago, Cortland and Shanghai, to our new Photometry Testing Lab in Hong Kong, Intertek's primary focus is building your success and strengthening your product's competitive edge.**



Intertek is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for photometry testing, and can produce IESNA (Illuminating Engineering Society of North America) and CIE (International Commission on Illumination) Photometric Files for customers who are seeking to evaluate the photometric performance of their lighting products.

We are also a CALiPER-Qualified Laboratory accredited for LM-79 goniophotometry, which allows us to generate IES Files, reports for Lighting Facts Program and reports for Design Light Consortium.

With years of product expertise and a lighting testing heritage dating back to Thomas Edison in 1896, Intertek provides a broad scope of local services that help you meet requirements for markets around the world.

## Performance Testing of Lighting Products

As leaders in the lighting industry, Intertek offers a wide scope of performance testing services for general lighting products, transportation, airport, aircraft, automotive, traffic control, and railway lighting.

- Photometry Testing
- Energy Efficiency Testing
- Electrical Performance
- Environmental Testing
- EMC Testing and More

## Photometric Testing Capabilities

Intertek utilizes High-Speed Type A and Type C Goniophotometers to conduct performance Photometry Testing of various LED and traditional lighting sources and fixtures, and offers full spectral radiometric testing capabilities to cover a wide range of UV, Visible, and IR testing needs.

Following a photometric performance evaluation, Intertek can produce IESNA and CIE Photometric Files.

Typical measurements include:

- Candela Tabulation
- Polar Candela Plots
- Beam Spread
- Zonal Lumen Output
- Coefficient of Utilization Curves
- Total Efficiency

## Performance Testing Standards

- Electrical and Photometric Testing of Solid- State Lighting Devices, IESNA LM-79:2008
- Spectroradiometric Measurements, IESNA LM-58:1994
- Compact Fluorescent Lamps, IESNA LM-66:2000
- Incandescent Lamps, IESNA LM-45:2000
- Incandescent Filament Lamps, IESNA LM-49:2001
- Photobiological Testing of LED Light Sources, IEC/EN 62471 and More



## Performance Evaluations to FAA Standards

In partnership with the Federal Aviation Administration (FAA), Intertek provides complete performance testing solutions through our Airport Lighting Equipment Certification program. In fact, we are the only FAA-Approved third-party certifier for runway, taxiway, approach, and obstruction lighting equipment in accordance with the FAA 150/5345 series of Advisory Circulars.

In addition, we test to ICAO, IEC, NATO and military requirements, and have developed the Traffic Control Equipment Certification Program to evaluate various types of traffic control equipment, including LEDs, incandescent traffic signals, and pedestrian signals according to requirements from municipal and proprietary organizations.

## Energy Efficiency Testing

Intertek holds multiple accreditations from energy efficiency certification programs such as CEC, Design Light Consortium, NRCan and others.

As an EPA Recognized Certification Body, we conduct the following test methods for both Lamps (CFL, LED, HID, Incandescent) and Luminaires (CFL LED, Fluorescent, HID, Incandescent) to ENERGY STAR® requirements:

- Lumen Output and Efficacy Measurements
- Rapid Cycle Stress Test
- Starting Time and Run-Up Time
- EMI Testing per FCC Title 47-Part 18
- Transient Protection Testing
- Life Testing

## About Intertek

Intertek is a leading Total Quality Assurance provider to industries worldwide. Our network of more than 1,000 laboratories and offices and over 43,000 people in more than 100 countries delivers innovative and bespoke Assurance, Testing, Inspection and Certification solutions for our customers' operations and supply chains. Intertek Total Quality Assurance expertise, delivered consistently, with precision, pace and passion, enabling our customers to power ahead safely.

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