

TERMS

ANSI (American National Standards Institute)

The organization that develops voluntary guidelines and produces performance standards for the electrical industry and various other industries.

ARC TUBE A sealed quartz or ceramic tube where the electrical discharge (arc) occurs and light is generated.

BALLAST Electrical device used with fluorescent and high intensity discharge lamps to provide the necessary starting and operating power conditions.

BEAM SPREAD The angle of a beam from a light source to the measured plane.

BASE The base mechanically holds the lamp in place in the application. The lamp base directly or indirectly conducts electricity for the circuit to the lamp.

BULB Common term for an electrical light source or "lamp"; the glass outer shell of the lamp.

CANDELA A unit of luminous intensity.

COLOR RENDERING INDEX (CRI) Color rendering is the ability of a light source to produce color in objects. The CRI is expressed on a scale from 0-100 with 100 being natural outdoor light. The higher the index, the more true to life colors appear.

COLOR TEMPERATURE Expressed in degrees Kelvin, color temperature indicates the color of a light source. Rather than being the actual temperature, it is the color the light appears to be. The higher the temperature, the cooler (blueish white) the light source appears and the lower the temperature, the warmer (yellowish) the light appears.

DLC (The DesignLights Consortium®) The DLC is a project of Northeast Energy Efficiency Partnerships (NEEP), a regional non-profit which has been bringing stakeholders together since 1996 to accelerate efficiency solutions to create lasting change in the marketplace.

EFFICACY The rate at which a lamp is able to convert electrical power (watts) into light (lumens). This is expressed in terms of lumens per watt (LPW).

ELECTRIC DISCHARGE LAMP A light source that produces light by passing a current between electrodes through a vapor or gas; includes fluorescent, HID and other types of lamps.

ENERGY STAR Energy Star is an international standard for energy efficient consumer products originated in the United States. It was created in 1992 by the Environmental Protection Agency and the Department of Energy.

FILAMENT A tungsten wire positioned in a light bulb, that when electrically heated, emits light.

FLUORESCENCE Light resulting from the action of ultraviolet or other forms of energy on phosphors. Fluorescence only occurs while energy is being absorbed by the fluorescing material.

FOOTCANDLE A unit of direct illumination; the amount of light produced by one candela on a square foot of surface. A lumen per square foot.

HID Acronym for high intensity discharge. A generic term used to describe mercury vapor, metal halide, high/low pressure sodium and other varied luminaires.

IESNA Acronym for Illumination Engineering Society of North America.

ILLUMINANCE The density of light on a surface measured in footcandles (one lumen per square foot) or lux (lumens per square meter).

ILLUMINATION The lighting in an area, or the result of the use of light. Also, the intensity of light per unit or square (illumination).

INCANDESCENT Light emission by a heated filament or coil.

INTENSITY The light emitted from a source. Intensity most often varies given the direction at which one views the source. Intensity does not vary with distance.

KELVIN SCALE A scale of temperature measured in degrees Celsius. Used in determining color temperature.

KILOWATT A unit of electrical power, equal to 1000 watts.

LAMP Industry term for a light bulb.

LCL (Light Center Length) LCL is the measurement from the base plane to the middle of the filament (or light field if not a Filament bulb).

LED A light-emitting diode (LED) is a two-lead semiconductor light source. It resembles a basic pn-junction diode, which emits light when activated.

LIGHT The term generally applied to visible energy emitted by a source, usually measured in lumens or candle power.

LUMEN The unit of measure for the light energy which flows in air. The total light output from an electrical source.

LUMEN DEPRECIATION The decrease in lumen output of a light source over time; every lamp type has a unique lumen depreciation curve depicting the pattern of decreasing light output.

LUMEN MAINTENANCE A measure of how well a lamp maintains its light output over time.

LUMINANCE The term used to describe the specific light which come off a surface, whether off a filament, light bulb, lens, tabletop et cetera.

MAXIMUM OVERALL LENGTH (MOL) The total length of a lamp, from the top of the bulb to the bottom of the base.

MEAN LUMENS Lumen output of a light source after the source has been used. Mean lumens for fluorescent and HID lamps are typically measured at 40% of their rated lives. Most HPS and mercury vapor lamps are measured at 50% of their rated lives.

MERCURY is a chemical element with the symbol Hg and atomic number 80. Mercury poisoning can result from exposure to water-soluble forms of mercury (such as mercuric chloride or methylmercury), inhalation of mercury vapor, or eating seafood contaminated with mercury.

MOL (Maximum Overall Length) MOL of bulb is measured from top of bulb to bottom of Bulb base.

MORTALITY CURVE Lamps have a rated or expected life but individual failures occur earlier and some lamps will last longer. The mortality curve depicts the expected percent surviving in a group of lamps at various points between zero hours and rated life.

NOMINAL WATTS Wattage used to describe a lamp.

OPERATING POSITIONS Some lamps are specifically designed to be operated in certain positions (horizontal, base-up, base down, universal).

PAR LAMP PAR is an acronym for parabolic aluminized reflector. A PAR lamp may utilize either an incandescent filament, a halogen filament tube or an HID arc tube and is a precision pressed-glass reflector lamp.

PHOSPHOR An inorganic chemical compound processed into a powder and deposited on the inner glass surface of fluorescent tubes and some mercury and metal halide lamps. Phosphors are designed to absorb short wavelength ultraviolet radiation and transform it into visible light.

PHOTOMETRY The measurement of light and related quantities.

POWER The rate at which energy is taken from an electrical system or dissipated by a load, expressed in watts (W). Power that is typically expressed in volt-amperes (VA).

POWER FACTOR A measure of the effectiveness with which an electrical device converts volt-amperes to watts.

ROHS Restriction of Use of Hazardous Substances

TCLP Toxicity characteristic leaching procedure.

VOLTAGE (V) A measure of electrical potential expressed in volts. Voltage is the “force” that pushes electrical current through a conductor.

WATT (W) Unit used to measure the power consumption of lamps.