

LIGHTING GLOSSARY

A

Accent Lighting

Directional lighting to emphasize a particular object or draw attention to a part of the field of view.

B

Ballast

An auxiliary device consisting of induction windings wound around a metal core and sometimes includes a capacitor for power correction. It is used with fluorescent and HID lamps to provide the necessary starting voltage and to limit the current during operation.

Base

The bottom of a stand used for mounting luminaires; the part of a lamp to which the electrical connections are made, i.e., the part with the contacts. It is often the mechanical support and/or heat sink for the lamp; the flat, bottom support for some luminaires.

Bollard

A short, thick post with a light at its top, used for grounds and outdoor walkway lighting.

Bulb

A loose way of referring to a lamp. "Bulb" refers to the outer glass bulb containing the light source.

D

Dimmable

Whether or not the lamp lumens can be varied while maintaining reliability.

Dimmer, Dimming Control

A device used to lower the light output of a source, usually by reducing the wattage it is being operated at. Dimming controls are increasing in popularity as energy conserving devices.

E

Efficacy

A measurement of how effective the light source is in converting electrical energy to LUMENS of visible light. Expressed in LUMENS-PER-WATT (LPW) this measure gives more weight to the yellow region of the spectrum and less weight to the blue and red region where the eye is not as sensitive.

Euro Style Wall Brackets

Fixtures that are sleek and elongated with a nautical-like style

F

Flood

Used to refer to the beam pattern of a reflector lamp, which disperses the light over a wide beam angle, typically 20 degrees or more. ("Flood" as opposed to "spot")

Fluorescent Lamp

A high efficiency lamp utilizing an electric discharge through low pressure mercury vapor to produce ultraviolet (UV) energy. The UV excites phosphor materials applied as a thin layer on the inside of a glass tube which makes up the structure of the lamp. The phosphors transform the UV to visible light.

Frequency (Nominal Operations)

The stated operating frequency in Hz of a discharge lamp

G

Gooseneck Lighting

Any fixture on an arm used to light a sign.

H

Halogen Lamp

A halogen lamp is an incandescent lamp with a filament that is surrounded by halogen gases, such as iodine or bromine. Halogen gases allow the filaments to be operated at higher temperatures and higher efficacies. The halogen participates in a tungsten transport cycle, returning tungsten to the filament and prolonging lamp life.

High Intensity Discharge (HID) Lamp

A general term for mercury, metal halide and high-pressure sodium lamps. HID lamps contain compact arc tubes which enclose various gases and metal salts operating at relatively high pressures and temperatures.

High-Pressure Sodium (HPS) Lamp

HPS lamps are high intensity discharge light sources that produce light by an electrical discharge through sodium vapor operating at relatively high pressures and temperatures.

I

Incandescent Lamp

A light source that generates light utilizing a thin filament wire (usually of tungsten) heated to white heat by an electric current passing through it.

Indirect Lighting

The method of lighting a space by directing the light from luminaires upwards towards the ceiling. The light scattered off the ceiling produces a soft, diffuse illumination for the entire area.

L

Lamp

The term used to refer to the complete light source package, including the inner parts as well as the outer bulb or tube. "Lamp", of course, is also commonly used to refer to a type of small light fixture such as a table lamp.

Lamp Types

Filament lamps: Incandescent, Halogen, Halogen-IR.

Discharge Lamps: Fluorescent, HID (High Intensity Discharge)

HID Lamps: Mercury, HPS (High Pressure Sodium), MH (Metal Halide) and CMH (Ceramic Metal Halide)

Lens

A transparent or semi-transparent element which controls the distribution of light by redirecting individual rays. Luminaires often have lenses in addition to reflectors.

Light

Radiant energy that is capable of exciting the retina and producing a visual sensation. The visible portion of the electromagnetic spectrum extends from about 380 to 770 nm.

Light Emitting Diode (LED)

A solid that directly converts electrical impulses into light. Some LED's today incorporate fluorescent materials to change the color characteristics of the emitted light.

Louver

A series of baffles used to shield a source from view at certain angles or to absorb unwanted light. The baffles usually are arranged in a geometric pattern.

Lumens

A measure of the luminous flux or quantity of light emitted by a source. For example, a dinner candle provides about 12 lumens. A 60-watt Soft White incandescent lamp provides about 840 lumens.

Luminaire

A complete lighting unit consisting of a lamp or lamps together with the parts designed to distribute the light, to position and protect the lamps and to connect the lamps to the power supply.

M

Medium Base

Usually refers to the screw base typically used in household incandescent lamps.

Metal Halide Lamp

A high intensity discharge light source in which the light is produced by the radiation from mercury, plus halides of metals such as sodium, scandium, indium and dysprosium. Some lamp types may also utilize phosphor coatings.

Mounting Height

Distance from the bottom of the fixture to either the floor or work plane, depending on usage.

O

Overall Height (OAH)

Maximum overall height of a light fixture, including the stem and fixture.

P

Post Light

Any lighting fixture designed to be on top of a post and light an area.

R

Reflection

Light bouncing off a surface. In specular reflection the light strikes and leaves a surface at the same angle. Diffuse-reflected light leaves a surface in all directions.

Refraction

The process by which the direction of a ray of light changes as it passes obliquely from one medium to another in which its speed is different.

S

Surface Mounted Luminaire

A luminaire that is mounted directly on a ceiling.

Suspended (Pendant) Luminaire

A luminaire that is hung from a ceiling by supports. The different types offered by Primelite Manufacturing are:

- Stem Mount, Cord Mount, Chain Mount

U

Underwriters Laboratories (UL)

A private organization which tests and lists electrical (and other) equipment for electrical and fire safety according to recognized UL and other standards.

V

Voltage

A measurement of the electromotive force in an electrical circuit or device expressed in volts. Voltage can be thought of as being analogous to the pressure in a waterline.

W

Watt

A unit of electrical power. Lamps are rated in watts to indicate the rate at which they consume energy.

Wall Bracket Fixture

A lighting fixture that can be mounted to a wall.