

LIGHTING DISTRIBUTION

CLASSIFICATION GUIDE

OUTDOOR LIGHTING BEAM TYPE CLASSIFICATION GUIDE

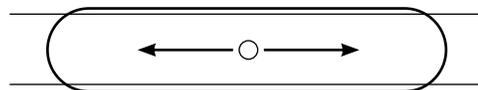
One of the most common outdoor fixture classifications is BEAM TYPE (also known as Roadway Classification). It was developed by the IES-NA (Illuminating Engineering Society of North America). This system uses Roman Numerals to categorize the shape of the area that is lit up by the fixture. It is used by some landscape designers, architects, and engineers as a way to describe and design how they want to create area, parking, and roadway lighting.

There are six basic IES roadway beam distributions. Let's review their basic patterns, and standard applications:

TYPE I

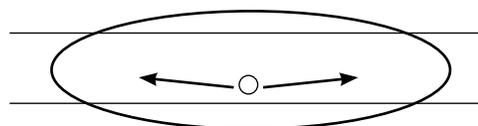
Type I is a two-way distribution, long and narrow, with light beams that illuminate in essentially opposite directions. Type I distributions are best suited for the middle median of a highway or road, to provide light on both sides of traffic. General mounting height is approximately equal to the roadway width.

Type I light patterns are great for narrow roadways, sidewalks, and paths.



TYPE II

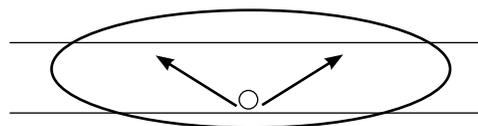
Type II also is a two-way distribution, long and narrow, but with slightly asymmetric light beams that shine in essentially opposite directions, with a little more forward throw than Type I, so it can be used for wider roads and paths, or any place that requires narrow lighting or larger areas. Type II fixtures are usually mounted near the roadside, not in the median. General coverage depth is up to 1.75 times the mounting height.



TYPE III

Type III is an oval-shaped asymmetric pattern meant for general roadway lighting, as well as parking lots and other areas where a deeper area of lighting is required.

Type III fixtures are mounted to the side of the area to be lit, shining out to light up the area. Its pattern is deeper than Type II, but not as wide side-to-side. General coverage depth is up to 2.75 times the mounting height.

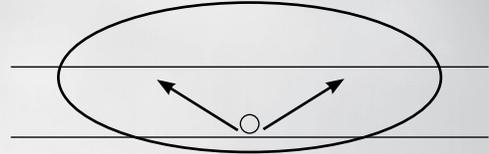


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TYPE IV

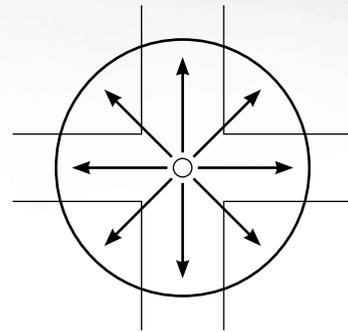
Type IV is more of a deeper asymmetric (think egg-shaped) pattern, best used for the sides of wide roads, around the sides of parking lots, or around (or on the sides of) buildings.

The light projects farther out from the fixture, but not as wide as Type III. General coverage depth is up to 3.7 times the mounting height.



TYPE V

Type V fixtures produce a circular pattern with essentially symmetrical light distribution at all directions under the light fixture. This type of light can be mounted in the middle of parking lots for broad uniform coverage, or near the center of roadways or medians, or center islands of roundabouts, the center of intersections, or anywhere broad light coverage is needed. This light pattern is also representative of most types of round indoor high bay light patterns.



TYPE VS

Type VS fixtures create a square-ish 360° pattern with essentially symmetrical light distribution at all quadrants. This type of light is great for parking lot lighting, medians or roadways or roundabouts, intersections, or anywhere broad light coverage is needed.

