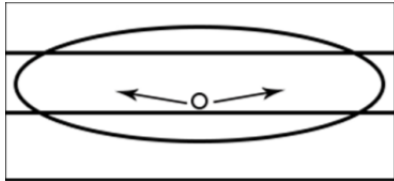


The term "distribution type" defines how far forward of the luminaire (i.e., on the streetside) the effective output reaches. The specific classification of distribution types is based on locating the luminaires effective major output pattern on a grid representing distances in units of Mounting Height (MH) from the luminaire. This pattern is defined by tracing an area representing light distribution at 50% of maximum candela. By measuring where the bulk of this pattern falls on the grid, a luminaire can be classified as follows and as shown in the following figures.

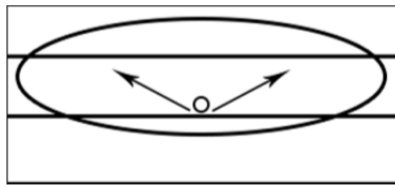
**TYPE II**

Type II optics is typically used for narrow roadways, walking paths, and any driving area where a narrow longitudinal throw is required. Most shoe-box style fixtures are available with Type II distribution along with traditional cobra-head style. Type II can also be used for sport applications such as batting cage light systems. You'll find this type of lighting mostly on smaller side streets. They are generally applicable to luminaires located at or near the side of relatively narrow roadways, where the width of the roadway does not exceed 1.75 times the designed mounting height.



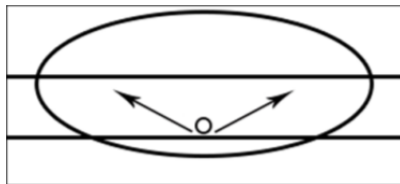
**TYPE III**

Type III optics are used in roadway applications where the street is wide. This distribution also works very well in many parking lot lighting situations where perimeter pole placement is needed. This distribution is intended for luminaires mounted at or near the side of medium width roadways or areas, where the width of the roadway or area does not exceed 2.75 times the mounting height.



**TYPE IV**

Type IV optics are designed to maximize the amount of light going forward from the fixture, typically in long narrow patterns. This optic type is used around the perimeters of parking lots where there is no desire for wasted light behind the pole. Type IV distribution is also used quite often in sport applications such as tennis, volleyball, and basketball court lighting where poles are situated outside the playing areas while high light levels are required. This distribution is intended for side-of-road mounting and is generally used on wide roadways where the roadway width does not exceed 3.7 times the mounting height.



**TYPE V**

Type V distribution is designed to produce an all-around pattern of light. Sometimes circular or square, this optical pattern is mainly used on the interior of parking lots. Type V fixtures are commonly used in parking lot applications and areas where wide symmetrical pattern of light is required.

