HOW TO READ AN LM-79 DISTRIBUTION REPORT

Polar Candela Distribution \& Intensity Candlepower Summary


The Polar Candela Distribution graph (left) and Candlepower Summary (below) matrix portrays luminous intensity, and is measured in candelas. It's valuable for providing an understanding of the shape and intensity of light that will emit from the LED tape light/luminaire.


For example, according to this matrix (above), at a $25^{\circ}$ vertical angle the Candlepower of this luminaire is 38 candelas. Between the $20-25^{\circ}$ angle the total light output is 9 lumens. This plot is marked on the graph (left) by the green circle.

## Zonal Lumens \& Percentages

| ZONAL LUMENS AND |
| :--- |
| Vertical Zone |
| Lumens |
| $0-30$ 41 \%Luminaire <br> $0-40$ 68 21.72 <br> $0-60$ 124 65.05 <br> $0-90$ 165 87.02 <br> $40-90$ 97 50.97 <br> $60-90$ 41 21.50 <br> $90-180$ 25 12.98 <br> $0-180$ 190 100.00 |

[^0]The Zonal Lumens \& Percentages matrix (left) provides data of the luminaires' Lumens and Total Luminaire Output in a specific Vertical Zone. It is specifically used for determining qualifications for energy efficiency programs such as Energy Star, CEC Title 24, and Design Lights Consortium.

## Example Image



In the Example Image (above) you can see the highlighted zone 0-40. According to the Zonal Lumens \& Percentages matrix (left) there are a total of 68 lumens in this zone and emits $36.05 \%$ of the total luminaire's light output.

| Mounting Height <br> (Feet) | Footcandles at <br> Nadir | Diameter (Feet) |
| :---: | :---: | :---: |
| 4.00 | 2.65 | 4.92 |
| 6.00 | 1.18 | 7.38 |
| 8.00 | 0.664 | 9.84 |
| 10.0 | 0.425 | 12.3 |
| 12.0 | 0.295 | 14.8 |
| 14.0 | 0.217 | 17.2 |
| 16.0 | 0.166 | 19.7 |
| $\mathbf{H}$ | $\mathbf{N}$ | $\mathbf{D}$ |



The Cone of Light matrix (far left) is helpful for providing a representation of max illuminance (footcandles) and diameter of beam spread at different distances away from the luminaire. It's useful for determining how far away the fixture should be mounted from the illuminated object.

For example, if the luminaire is mounted at 8 ft ., the diameter of the beam spread is 9.84 ft ., which produces 0.664 footcandles at nadir.

## Spacing Criterion (SC)

Spacing Criterion indicates how far apart luminaires can be spaced while providing acceptable uniformity of illuminance to the working plane (surface).

## Luminaire Spacing = SC (Along) x Mounting Height



## Spacing Criterion Along Fixture



## Luminaire Spacing = SC (Across) x Mounting Height



## Spacing Criterion Across Fixture




[^0]:    $\square$ AdVertisaldZonlae Along Luminaire $\square$ Data at defined zone

