

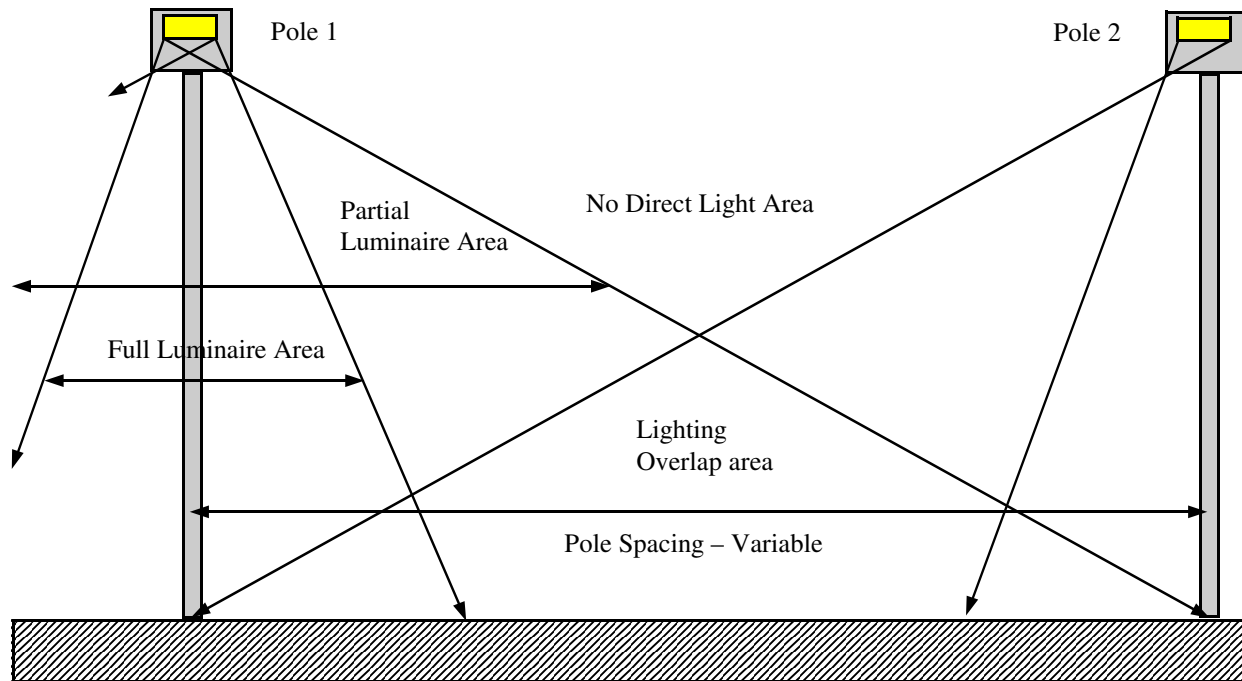
# LEC– Compliant Streetlight Specifications –



Street Lighting Front View – Conceptual Drawing Only

- may be adapted/applied to various heights and pole-pole distances

NOTE: dimensions and angles not to scale

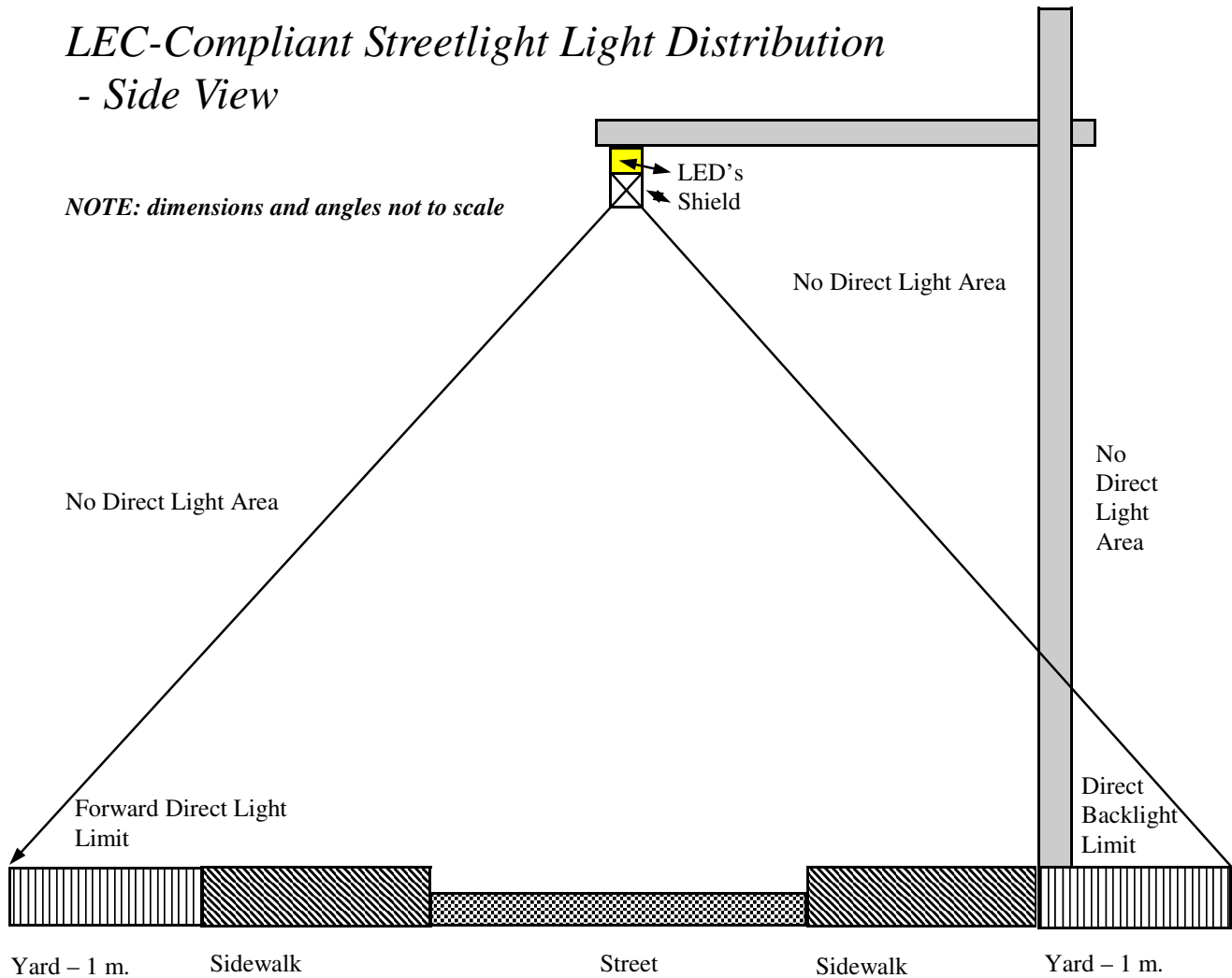


- Side View – Conceptual Diagram Only – not to scale!

- Objectives: to reduce waste light, light trespass and glare to a **minimum**
- **Direct light** (glare) is light coming directly from the LED's and lenses but not including reflected light from luminaire interiors. Acceptable luminaires have **LED's and lenses very well recessed**. Direct light should only reach from one light pole to the base of the next (150 ft.).
- The direct light overlap area exists from one pole to the next (Ex.:150 ft. in both directions) and is restricted to roads and sidewalks (see Page 2).
- The "No Direct Light" area falls well below the luminaire's horizon line. From the base of the next pole the luminaire is seen at an angle of approximately 9.5 degrees, (assuming 25 ft. poles placed 150 ft. apart – a common streetlighting situation.)
- Luminaires have recessed LED's and lenses sufficient to create desired cut-off angles. The inside of the luminaire is anodized **flat black** to reduce further reflection from the inside surface of the luminaire.
- The luminaire is designed to restrict back-light as much as possible. (Page 2).
- Note: The luminaire goes far beyond IDA-approved specifications (no light above the horizon line) to meet Edmonton LEC Policy specifications.



## LEC-Compliant Streetlight Light Distribution - Side View



**Note:** From this direction glare into pedestrian and driver's eyes is greatly reduced, improving seeing, safety and security. Direct light (glare) only reaches from the luminaire to 1 metre beyond the sidewalk to the same on the opposite side of the street.

Although this luminaire should be used throughout the community, LEC-Compliant lighting is particularly important to residential areas where waste light, light trespass and light pollution are of vital concern due to the many serious, negative effects they have on health and sleeping patterns. The colour temperature of the LED's should preferably be 2700K or below.

Streetlights in neighbourhoods must also have dimming and sensor capabilities in order to reduce the light as much as possible at night while maintaining safety and security. This also serves to reduce power usage as much as possible.

Also see LEC document *“Which Light is Right?”* for photos and information.