

# Full Cutoff Sports Lighting

Community-Friendly Illumination for Sports Facilities



**lsi**  
**Courtsider  
Sports Lighting™**

# Full Cutoff, Community-Friendly Illumin



*"Full cutoff fixtures are perfect, and the developers are really happy because the light spill off is really restricted."*

*Eric Schmidhauser  
Managing Director  
Austin Tennis Academy  
Austin, TX*

Nighttime lighting at outdoor recreational facilities poses special challenges for planners, developers and facility owners. The challenge is to provide sufficient illumination for players and fans, while at the same time reducing the impact the lighting may have on surrounding residents and the quality of their nighttime environment.

Full cutoff, community-friendly sports lighting provides brilliant illumination on the playing area, while also eliminating the three most common concerns associated with typical sports floodlighting systems:

## **Glare**

The harsh brightness produced by floodlighting fixtures that can be seen from great distances (sometimes miles away).

## **Light Trespass**

The uncontrolled illumination that spills past the sports facility boundaries and into neighborhoods.

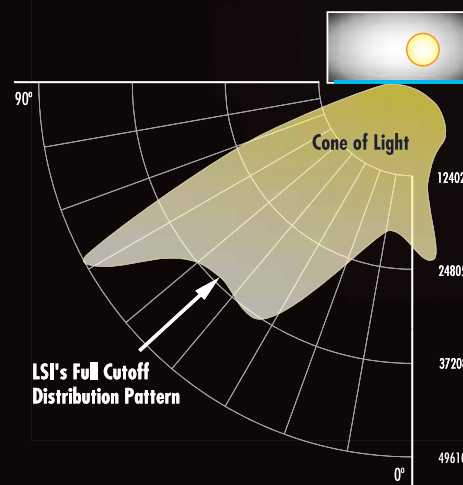
## **Sky Glow**

The illumination of the night sky caused by the upward component of the floodlight's beam.

## What is Full Cutoff Sports Lighting?

Full cutoff lighting, as defined by the Illuminating Engineering Society of North America (IESNA) is a lighting fixture that projects all of its light in a downward direction. Full cutoff lighting fixtures emit no upward component of light while providing precise, controlled illumination to the playing area.

### LSI Flat Lens Horizontal Burn Fixtures Meet or Exceed IESNA\* Full Cutoff Classification



To be considered full cutoff, the fixture must meet or exceed the IESNA full cutoff classification:

A light fixture with a light distribution where no candela (light) occurs at or above an angle of 90° above nadir. Additionally, the candela per 1000 lamp lumens does not numerically exceed 100 (10%) at a vertical angle 80° above nadir. This applies only to all lateral angles around the luminaire.

\* The Illuminating Engineering Society of North America (IESNA) is an organization dedicated to advancing knowledge and disseminating information for the improvement of the lighted environment to the benefit of society.

# ation by LSI Courtsider Sports Lighting

A full cutoff sports lighting system will typically meet or exceed community legislation or local zoning restrictions, even for residential applications.

## Full Cutoff Sports Lighting vs. Traditional Sports Floodlighting

**Full Cutoff Sports Lighting** increases the level of useable light on the playing area while addressing light impact concerns such as glare reduction, light spillage and sky glow. Full cutoff lighting systems utilize a recessed lamp in a fixture housing that is parallel with the playing surface. This design increases playing area illumination, reduces glare and light spillage in surrounding areas and eliminates upward light and sky glow.



*Full cutoff lighting produces more useable illumination.*

**Traditional floodlighting** is characterized by high levels of brightness (glare), uncontrolled illumination outside the boundaries of the facility (spill light), and a noticeable luminous haze above the playing area (sky glow). Visors, louvers and shields are often used to try to minimize the negative effects of floodlighting. These devices reduce fixture efficiency and have only limited ability to reduce glare, spillage and sky glow.



*Floodlighting produces uncontrolled light.*





Full cutoff sports lighting provides a comfortable environment for both players and surrounding residents. It removes the light source from the player's line of vision, improves surface area illumination and eliminates unwanted glare and light spillage. Proper quantity, height and location of poles and fixtures will ensure light uniformity, energy savings and maximum and minimum light levels appropriate for the level of play being performed. LSI Courtsider Sports Lighting can provide computerized footcandle charts to illustrate full cutoff illumination for your specific project.



**Aerosystem<sup>®</sup>**

**Courtsider XL<sup>®</sup>**



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