



# 2019 FACILITIES FORUM







Pasterfield Community Centre – 9th November 2019





# **Sports Lighting Types**



**Asymmetrical LED Floodlight** 



**Standard LED Floodlight** 



**HPS Floodlight** 



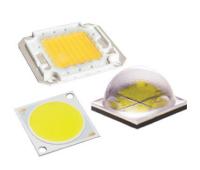
MH Floodlight





## **Lighting Performance**

- 1000w Metal Halide light has an AVG life of 6000-15000 hours
- 1000w LED has an AVG life of 50,000 hours
- Metal Halide can depreciate up to 20% in the first year

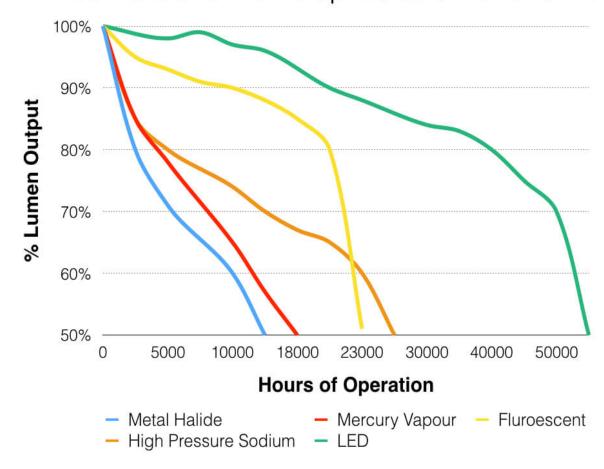






**Metal Halide** 

Estimated lumen depreciation over time







## **LED Life Test**

# • 4 hours a day | 7 days a week | 52 weeks a year

4hrs/day	1 year	5 years	10 years	15 years	20 years	25 years
Hours	1460 hrs	7300 hrs	14600 hrs	21900 hrs	29200 hrs	36500 hrs
<b>Total days</b>	60.83 days	304.17 days	608.33 days	912.50 days	1216.67 days	1520.83 days
% of original output	97%	95%	92%	88%	85%	79%





# Lighting



**Asymmetrical LED Floodlight** 



**Standard LED Floodlight** 

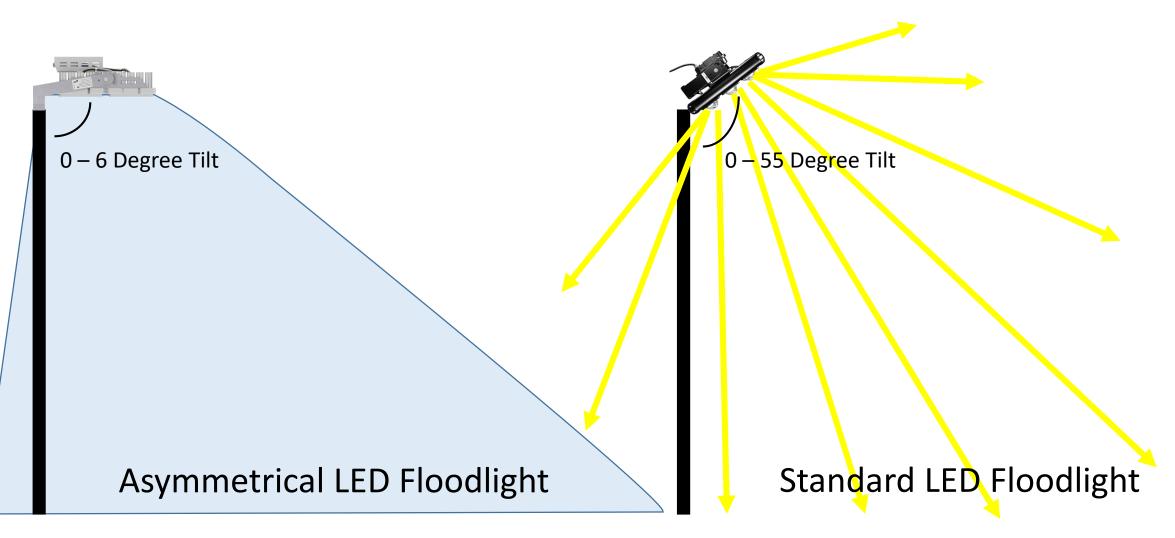


**Shielded Standard LED Floodlight** 





## **Light Distribution Comparison**

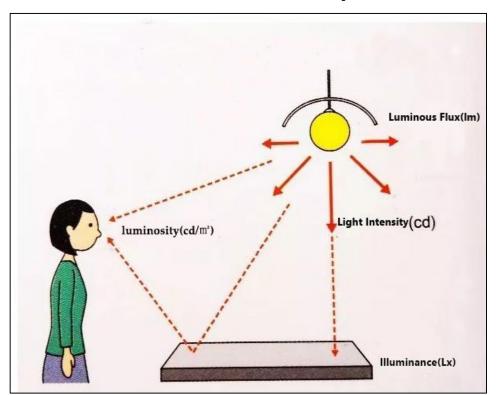




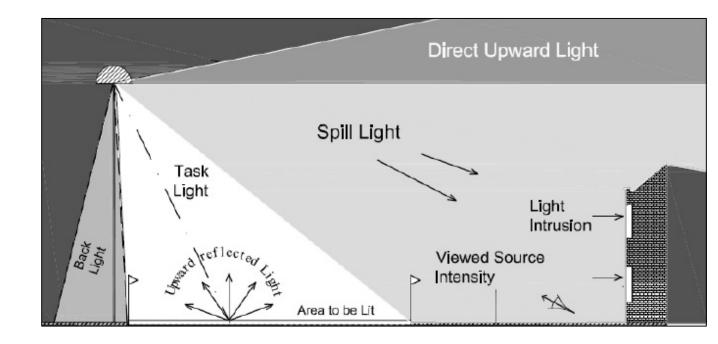


## **Luminous Intensity & Light Spill**

#### **Luminous Intensity**



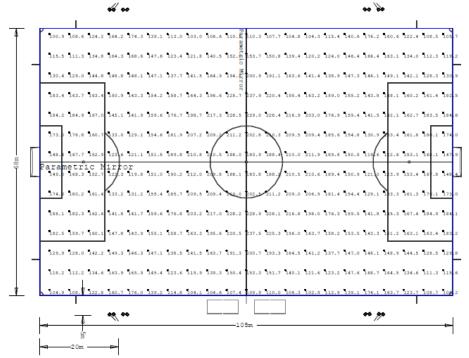
**Light Spill** 





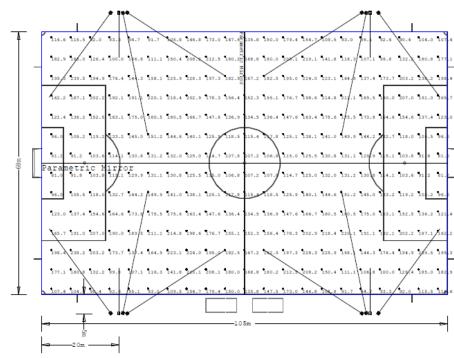
# Football Field 100 Lux, 0.5 Uniformity Light Design Comparison

#### Asymmetrical LED Floodlight



- **16** x IWE-P4Z-1280w Eclipse LED Fittings
- **158** Avg Lux
- **№** .63 Uniformity
- 3 lux Max Light Spill
- 10189 CD Luminous Intensity





- **16** x IWE-PL20F-1200 LED Fittings
- **196** Avg Lux
- **₹ .54** Uniformity
- 12.2 lux Max Light Spill
- 41370 CD Luminous Intensity A new era in illumination



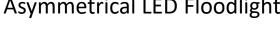


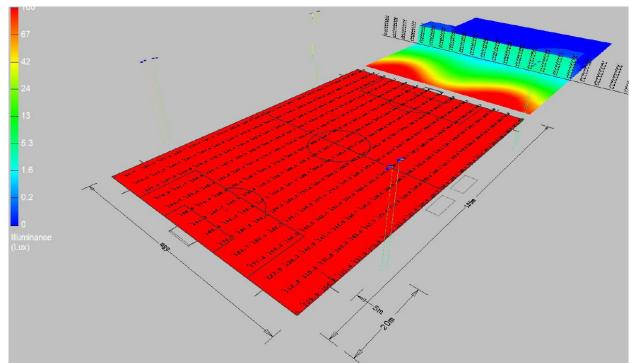




## Football Field 100 Lux, 0.5 Uniformity Light Spill Comparison

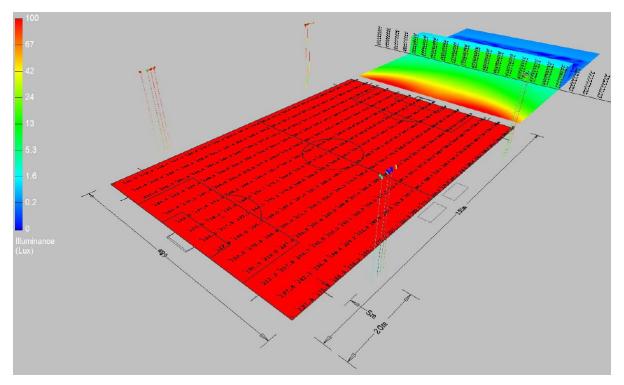
#### Asymmetrical LED Floodlight





- **16** x IWE-P4Z-1280w Eclipse LED Fittings
- **158** Avg Lux
- **3** Lux Maximum Light Spill

#### Standard LED Floodlight

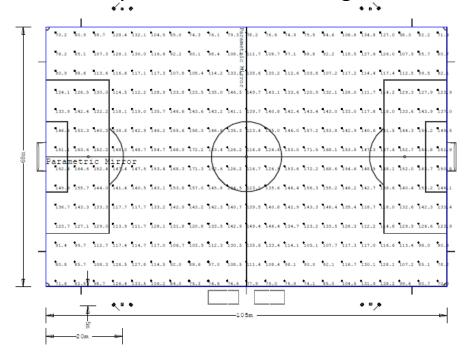


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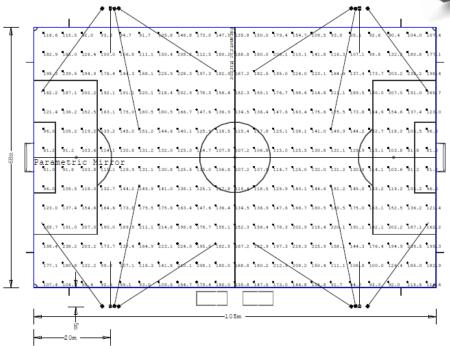
## Football Field 100 Lux, 0.5 Uniformity Light Design Comparison

#### Asymmetrical LED Floodlight



- **12** x IWE-P4Z-1280w Eclipse LED Fittings
- **124** Avg Lux
- **№** .56 Uniformity
- 2.6 lux Max Light Spill
- 10189 CD Luminous Intensity





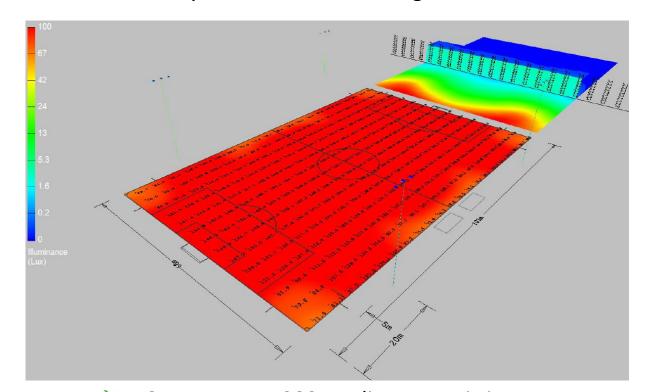
- **16** x Shielded IWE-PL20F-1200 LED Fittings
- **150** Avg Lux
- **₹ .54** Uniformity
- 9.8 lux Max Light Spill
- **30417** CD Luminous Intensity A new era in illumination





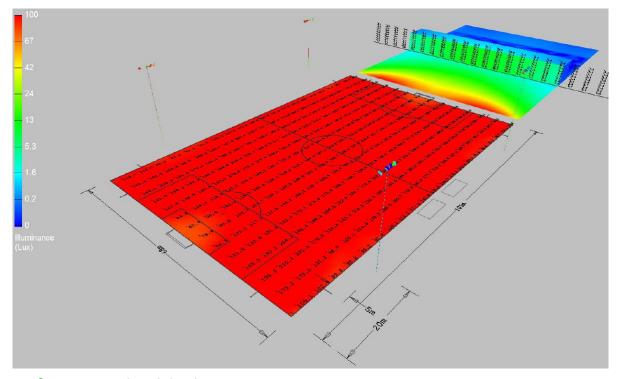
## Football Field 100 Lux, 0.5 Uniformity Light Spill Comparison

#### Asymmetrical LED Floodlight



- **12** x IWE-P4Z-1280w Eclipse LED Fittings
- **124** Avg Lux
- 2.6 Lux Maximum Light Spill

Standard Shielded LED Floodlight



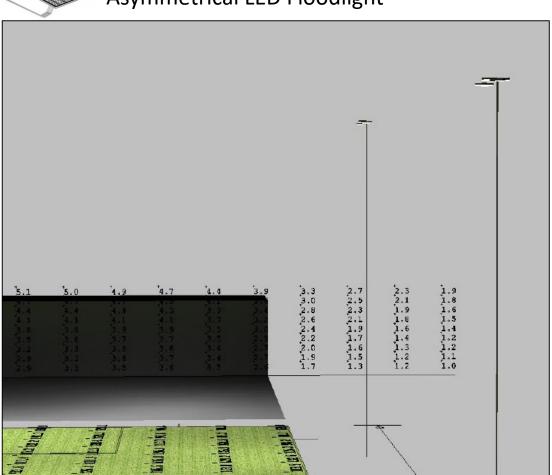
- ↑ This is a strain of the property of
- **150** Avg Lux
- **9.8 lux Maximum Light Spill** A new era in illumination



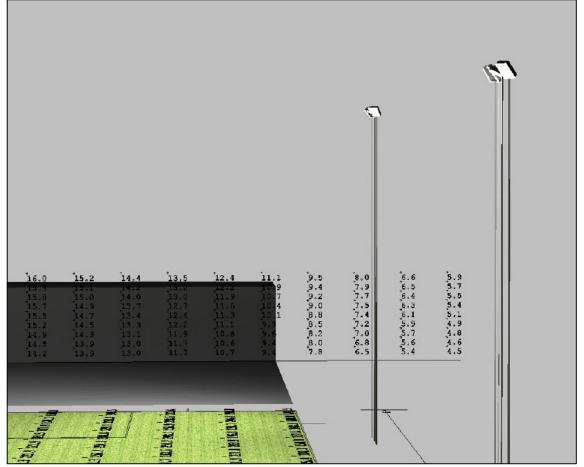
## **Light Tilt and Spill Comparison**



Asymmetrical LED Floodlight



Standard LED Floodlight



A new era in illumination





## Asymmetrical Vs Standard LED Floodlight

#### **Asymmetrical LED Floodlight**



- Low wind sail area
- Remote mount drivers
- Less weight
- Better control of Luminous Intensity and Light Spill
- Direct light for better lux and uniformity

#### **Standard LED Floodlight**



- Less expensive LED fitting
- Integral drivers
- More flexible in pole configurations and heights
- Quicker install







A new era in illumination