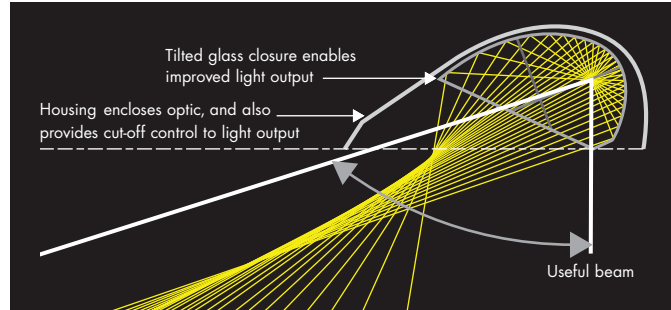


# Champion (2000W MH)

THORN

Our number one solution to floodlighting small sports stadia and general areas where the control of obtrusive light is critical



- Asymmetric floodlight for 2 kW lamps, incorporating an innovative design concept which takes the performance of asymmetric floodlights to the next level
- Champion combines many of the performance features of classic 'projectors' (high levels of light output) with those of 'flat glass' projectors (control of obtrusive light)
- Instead of having a true 'flat glass' construction, which can limit the efficiency of a flood light, Champion's front glass is inclined inside the floodlight
- The front of the body acts as a cowl for full-cut-off and provides a 'virtual' light emitting surface which remains parallel to the ground
- The optical design of Champion is unique and sets new standards for providing 'on-pitch' performance whilst minimising the number of flood lights required and the contributions to obtrusive light
- Each lamp option has a minimum of 4 lamp positions, adjustable on-site, to provide different photometries from just one installed position
- Excellent color appearance and color rendering can be achieved through the use of Metal Halide lamps\*
- Excellent glare control is provided through Champion's unique optical construction
- Additional accessories for increased control of obtrusive light available
- The inherent design features of Champion make installation and maintenance both simple and safe
- A simple 'aiming sight' is supplied with each floodlight to enable aiming in azimuth





**Accessories/Attachments**

- Lux Guillotine (front and sides)
- Lux Guillotine (rear) also known as 'adjustable visor'
- Wire guard
- Reverse mounting Yoke (required for certain mounting positions)

**Materials/Finish**

Body: copper free die-cast aluminum (ENAB 44300), unpainted  
 Glass: 0.16" tempered.  
 Screws: stainless steel.

**Installation/Mounting**

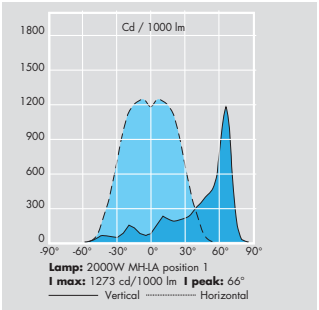
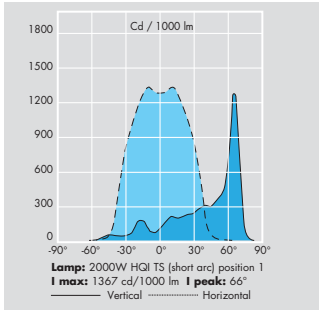
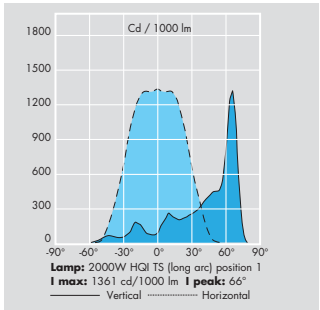
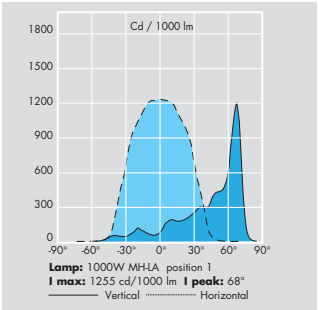
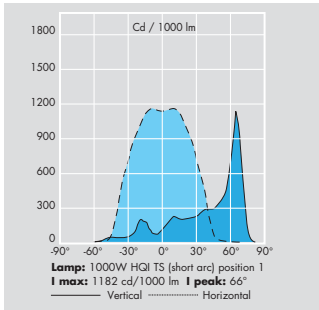
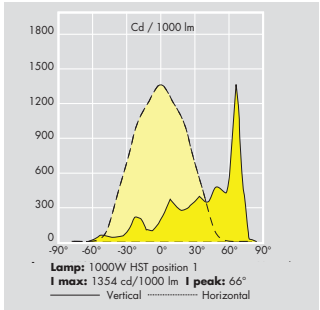
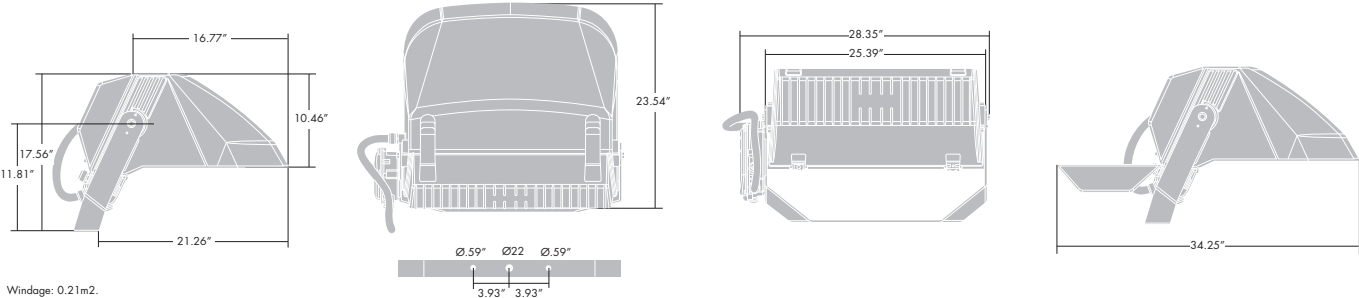
Rear access to lamp.  
 Automatic power interruption on opening of rear access door.  
 Yoke fixed by M20 bolt through 0.86" diameter hole, or through 0.59" diameter holes.  
 Ballast and capacitors to be mounted separately.

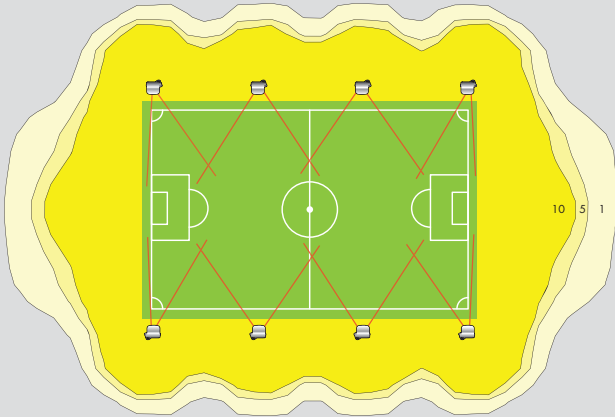
**Specification**

To specify state:  
 copper free die cast aluminum asymmetric floodlight for 2kW lamps, IP66 rated, rear lamp access, adjustable lamp position with internally inclined front glass and integral front cowl.  
 As Thorn Champion.

**Certification**

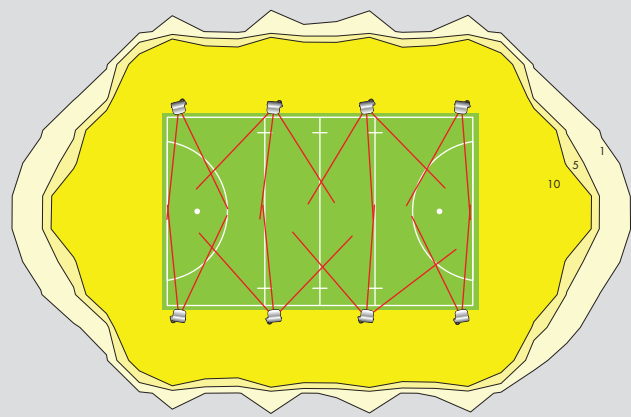
Luminaire shall be certified for Indoor/Outdoor use, wet location, to meet UL 1598 standards and CSA Std. C22.2 NO.250.





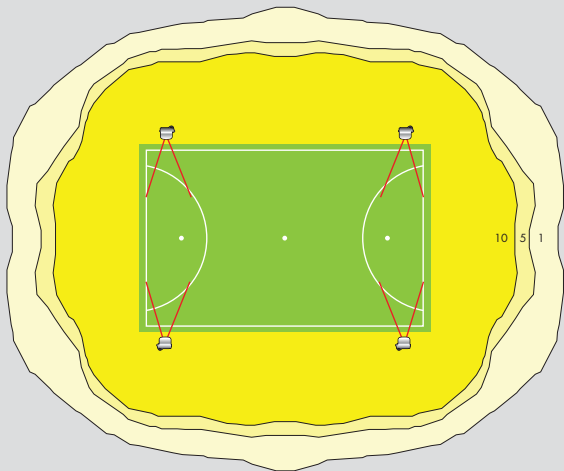
Football/Rugby Pitch (Standard used: Sport England)

Pitch dimensions	100m x 65m	Lamp type	2KW HQITSWNL	Required	Achieved
Initial lamp lumens		22500	Maintained Average Illuminance	200 lux	200.16lux
No of floodlights	16		Uniformity	0.6	0.7
No of columns	8				
Mounting height	15m				



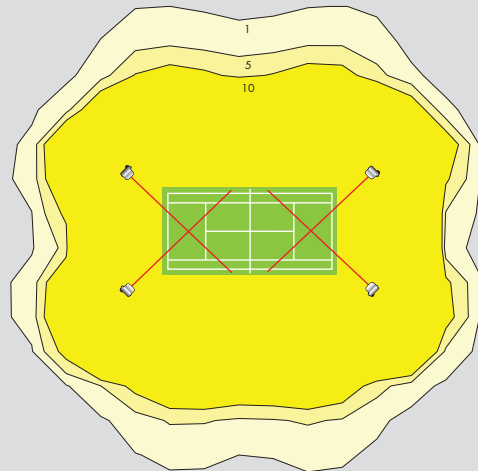
Hockey Pitch (Standard used: Sport England)

Pitch dimensions	55 x 91.4m	Lamp type	2KW HQITSL	Required	Achieved
Initial lamp lumens		22500	Maintained Average Illuminance	350 lux	354 lux
No of floodlights	20		Uniformity	0.7	0.76
No of columns	8				
Mounting height	16m				



MUGA Pitch 60m x 40m (Standard Sport of England, Class II)

Pitch dimensions	60m x 40m	Lamp type	2KW HQITSWNL	Required	Achieved
Initial lamp lumens		22000	Maintained Average Illuminance	200 lux	242 lux
No of floodlights	4		Uniformity	0.6	0.77
No of columns	4				
Mounting height	10m				



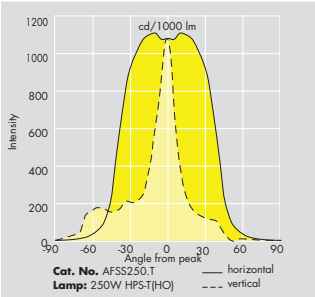
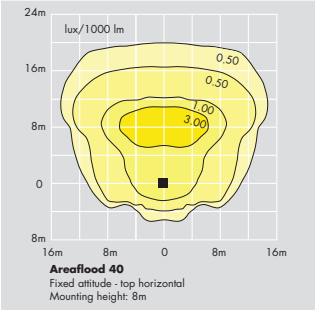
Tennis Court (Standard ITA)

Pitch dimensions	32.1x12.1m	Lamp type	2KW HQITSWNL	Required	Achieved
PPA	32.1x12.1m	22500	Maintained Average Illuminance	500 lux	565lux
TPA	36.6x15.85m		PPA	0.7	0.77
Arrangement	Single		TPA	0.6	0.71
Initial lamp lumens		22500			
No of floodlights	4				
No of columns	4				
Mounting height	10m				

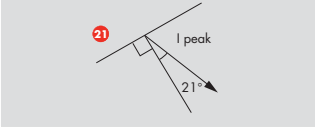
Ordering Guide

New Description		Socket	Weight (kg)	SAP Code
<b>Champion floodlight with internal ignitor</b>				
CHAMPION 1KW HST E40 WI	ALL	E40	20.6	96012471
CHAMPION 1KW HQI - TSS OS WI	FOR OSRAM (SHORT ARC) LAMP	CABLE	20.6	96012473
CHAMPION 1KW MHN - LA PH WI	FOR PHILIPS (LONG ARC) LAMP	CABLE	20.6	96012474
CHAMPION 2KW HQI - TSL OS WI	FOR OSRAM (LONG ARC) LAMP	CABLE	20.6	96012475
CHAMPION 2KW HQI - TSS OS WI	FOR OSRAM (SHORT ARC) LAMP	CABLE	20.6	96012476
CHAMPION 2KW MHN - LA PH WI	FOR PHILIPS (LONG ARC) LAMP	CABLE	20.6	96012477
<b>Champion hot restrike floodlight with internal ignitor</b>				
CHAMPION HR 1KW HQI - TSS OS WI	FOR OSRAM (SHORT ARC) LAMP	CABLE	24.6	96012478
CHAMPION HR 2KW HQI - TSS OS WI	FOR OSRAM (SHORT ARC) LAMP	CABLE	24.6	96012479
<b>Accessories</b>				
CHAMPION WG	WIRE GUARD		1.8	96012480
CHAMPION REVERSE YOKE	REVERSE YOKE ACCESSORY		4.4	96012481
CHAMPION AJ VS FRONT	ADJUSTABLE FRONT AND SIDE VISOR		1.7	96012482
CHAMPION AJ VS REAR	ADJUSTABLE REAR VISOR		0.9	96012483

Floodlight Data



Beam data	
Peak intensity (I) cd/klm	1110
Beam factor to 10% peak (I)	0.74
Beam angle to 10% of peak (I)	Horizontal: 2 x 50° Vertical: 36°/66°
Beam angle to 50% of peak (I)	Horizontal: 2 x 39° Vertical: 7°/13°
Beam angle to 1% of peak (I)	Horizontal: 2 x 67° Vertical: 49°/89°



This data is for floodlighting design.

• Intensity curve  
 Multiply the intensity by F/1000, where F is the bare lamp lumens for the intensity in candelas. The solid curve denotes the intensity in the horizontal plane. The dashed line denotes the intensity in the vertical plane, positive angles are above the peak intensity.

- Section of luminaire  
 The direction of the peak intensity is shown relative to the normal at the centre of the front glass.
- Beam data  
 The beam is the cone of light from the spotlight that is bounded by a luminous intensity that is a fixed percentage of the peak intensity.
- Peak intensity  
 Values shown are absolute based on lamp lumens from manufacturer.
- Beam factor to 10% peak intensity.  
 The ratio of the flux contained within the beam to 10% peak intensity divided by the total lamp flux.
- Beam angle to a percentage of peak intensity.  
 The horizontal angle is doubled because the angle is either side of the central peak intensity. The first vertical angle is above the peak intensity and the second vertical angle is below the peak.

