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Title: Hough End Sports Village Floodlighting - Additional Information
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HESV 3G Floodlighting: mounting heights and sports areas quantity per column



HESV 3G Floodlighting: example installation (illustrative purposes only): Leicester University, image 1



HESV 3G Floodlighting: example installation (illustrative purposes only): Leicester University, image 2

THORN

Champion ^{NEW}



A high performance discharge floodlight with best in class optic for control of obtrusive light

- Compact asymmetric floodlight for 1 and 2 kW metal halide lamps, incorporating the flat glass concept and integrated visor for total control of glare and obtrusive light (0 cd at 90°), with additional accessories also available
- Maximum optical efficiency and accurate light distribution with minimum light spill
- Three lamp positions, adjustable on site, from just one installed position
- Safe, tool-free lamp access and replacement through hinged door
- Tool-free aiming in azimuth thanks to integrated aiming sights

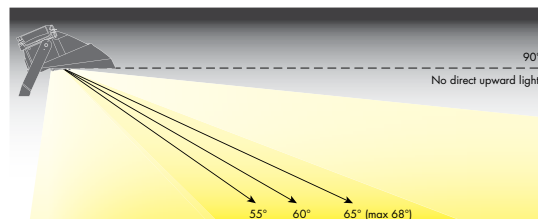
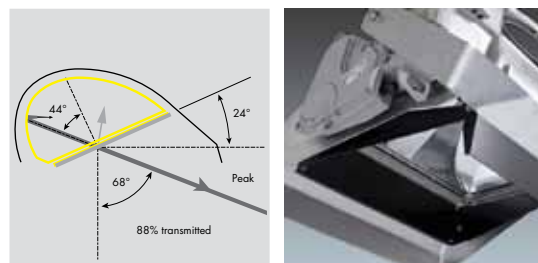
Applications

- Training grounds
- Small and medium stadia
- General purpose area floodlighting

Lamp Information

- 1/2 kW metal halide double ended (Osram, Philips) short arc
- 1/2 kW metal halide double ended (Philips) long arc
- 2 kW metal halide double ended (Osram) long arc
- 2 kW high flux / high output metal halide double ended (Osram, Philips) short arc
- 1 kW high pressure sodium tubular, cap E40
- 1 kW metal halided (Osram, Philips) tubular, cap E40

Optimised optical concept



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- Champion is designed to be installed without tilting, thereby reducing artificial sky glow, glare and intrusive light. The tilted glass inside Champion enables 88% of the emitting light to be transmitted, whilst the 'virtual' light emitting surface remains horizontal to the ground (1)
- Champion offers a variety of light distributions from one installed position. With its 3 adjustable lamp positions any aiming required to optimise uniformity can be achieved through the lamp position and not tilting (2)
- Total cut-off achieved at 75° from the perpendicular.
- The use of adjustable vertical light shields enables further control of light, in the front (usually the most critical direction) but also side and rear (3)

Standards

EN 60598 IK08 IP65 IP66



IP66 except HR versions
(IP65 ignitor box)

Lamps



Improved features for ease of installation and maintenance



1



2



3



4



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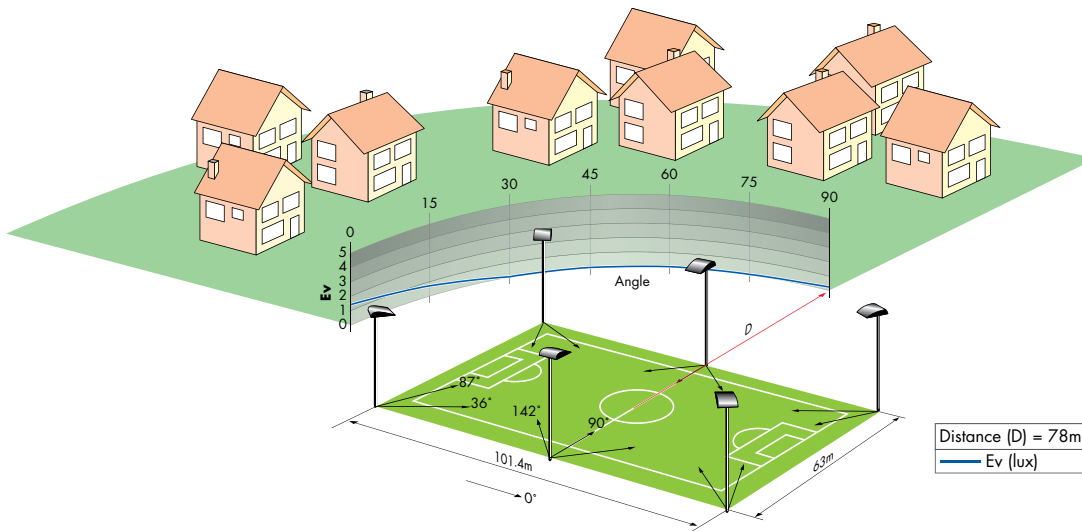


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Safety and simplicity are crucial when installing or maintaining a high power floodlight at great heights. Improved thermal management and attention to details has enabled the new Champion to be more compact and lighter, therefore easier to handle and install.

- Central handle and reduced weight to carry (1)
- Aiming sights added to the top of body in addition to the side ones on the ignitor box provides easier aiming in azimuth (2)
- Ignitor box now moved from the stirrup bracket to the body means easier manipulation and fixing of the floodlight in all positions (3)
- Tool-free door opening with automatic power disconnection (4)
- Tool-free lamp replacement (5)
- 3 lamp positions, adjustable on site from one installed position (6)

Champion lighting schemes: compliance with best practice standards with best-in class control of off-pitch lighting levels

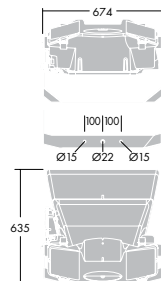
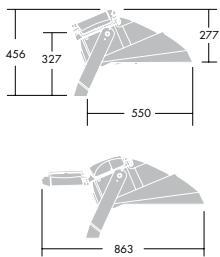
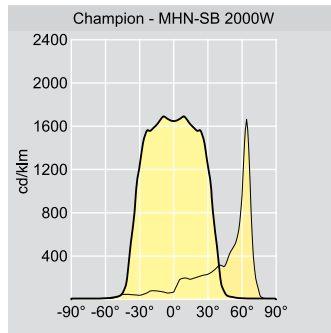
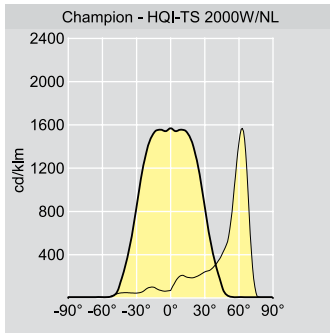


- The new and improved Champion not only retains its original success factors but now also boasts improved features for efficient handling of projects, making it the ideal choice for area and sports lighting environments where control of light is critical.
- Example: a football pitch in an urban environment. The required illuminance levels are achieved with excellent uniformity and reduced glare rating, whilst giving special attention to the surrounding environment.
- The vertical illuminance at 5m high is of critical importance, as a standard 1st floor bedroom is located at 5m above ground level. The following shows that at a distance of 78m from the pitch centre, vertical illuminance is kept to a minimum.

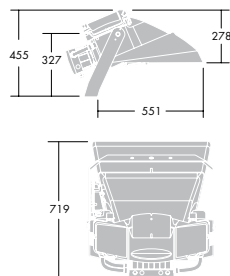
Pitch dimensions	55x91.1m
Total playing area	63x101.4m
Calculation points	11x19
Lamp type	HQI-TSL 2kW
Initial lamp lumens	230,000
Number of floodlights	14
Number of columns	6
Mounting height	15m

	Required	Achieved
Maintained average illuminance	250	269
Initial average illuminance	287	314
Uniformity (min/ave)	0.6	0.71
Uniformity (min/max)	na	0.4
Glare rating (max)	55	49

Overview



Hot Restrike version



Materials/Finish

Body: die-cast aluminium (ENAB 44300, EN AC-44300), unpainted

Glass: 4mm toughened

Wiring / ignitor box: polyamide (66 V0 Black: 20% glass fibre re-inforced).

Screws: stainless steel

Installation/Mounting

Rear access to lamp with automatic power disconnection on opening of rear access door. Tool-free installation and lamp replacement. Stirrup fixed by M20 bolt through Ø22mm hole, or through Ø15mm holes. Ballast and capacitors to be mounted separately. Cable gland for Ø7.5-13mm cable. Aiming via top (door and visor) or side (ignitor box) integrated aiming sights.

Scx = 0.19 m² max

Specification

To specify state:

Die-cast aluminium asymmetric floodlight for 1/2kW lamps, IP66 rated, tool-free lamp access and replacement, adjustable lamp position with internally inclined front glass and integral front cowl.

As Thorn Champion

Standards

EN 60598 IK08 IP65 IP66



IP66 except HR versions
(IP65 ignitor box)

Lamps



Ordering Guide

Supplied complete with gear and lamp

Lamp type		Gear type	Description	SAP Code	Description		Wt (Kg)	SAP Code
					Attachments and accessories			
Champion 1kW					CHAMPION NM WG		1.05	96261969
Long arc double-ended	MHN-LA (PH)	GT	CHPK1000PMHGT CHAMPION 1KW PHI WI	96263071	CHAMPION NM AJ VS FRONT		1.40	96261970
		GB	CHPK1000PMHGB CHAMPION 1KW PHI WI	96263072	CHAMPION NM VS REAR		0.43	96261971
	MHN-FC (PH)	GT	CHPK1000MHNFCGT CHAMPION 1KW PHI WI	96263075	CHAMPION NM AIMING DEVICE		2.08	96262065
		GB	CHPK1000MHNFCGB CHAMPION 1KW PHI WI	96263076				
Tubular E40	HST (GE)	GT	CHPK1000HPSGT CHAMPION 1KW WI	96263073	GT	Gear Tray (IP21)		
		GB	CHPK1000HPSGB CHAMPION 1KW WI	96263074	GB	Gear Box (IP65)		
	HPIT (PH)	GT	CHPK1000HPITGT CHAMPION 1KW PHI WI	96263077	GL	Gear Loose (spare capacitors and ballast)		
		GB	CHPK1000HPITGB CHAMPION 1KW PHI WI	96263078	HO	High Output		
	HQIT (O)	GT	CHPK1000HQITGT CHAMPION 1KW O WI	96263079	HF	High Flux		
		GB	CHPK1000HQITGB CHAMPION 1KW O WI	96263080	O	Osram		
Champion 2kW					PH	Philips		
Long arc double-ended	MHN-LA (PH)	GT	CHPK2000PMHGT CHAMPION 2KW PHI WI	96263081	GE	General Electric		
		GB	CHPK2000PMHGB CHAMPION 2KW PHI WI	96263082	WG	wire guard		
		KIT	CHPK2000PMHGL CHAMPION 2KW PHI WI	96263083	AJ VS	adjustable visor		
	HQI-TSL (O)	GT	CHPK2000HQITSLGT CHAMPION 2KW WI	96263084	VS	visor		
		GB	CHPK2000HQITSLGB CHAMPION 2KW WI	96263085				
		KIT	CHPK2000HQITSLGL CHAMPION 2KW WI	96263086				
	MHN-FC (PH)	GT	CHPK2000MHNFCGT CHAMPION 2KW PHI WI	96263090				
		GB	CHPK2000MHNFCGB CHAMPION 2KW PHI WI	96263091				
		KIT	CHPK2000MHNFCGL CHAMPION 2KW PHI WI	96263092				
	Short arc double-ended	HQI-TSS (O)	GT	CHPK2000HQITSGT CHAMPION 2KW O WI	96263087			
GB			CHPK2000HQITSGB CHAMPION 2KW O WI	96263088				
KIT			CHPK2000HQITSGL CHAMPION 2KW O WI	96263089				
Short arc double-ended (improved output)	MHNSB HO (PH)	GT	CHPK2000MHNSBHOGT CHAMPION 2KW PHI WI	96263093				
		GB	CHPK2000MHNSBHOGB CHAMPION 2KW PHI WI	96263094				
		KIT	CHPK2000MHNSBHOGK CHAMPION 2KW PHI WI	96263095				
	HQITS HF (O)	GT	CHPK2000HQITSHFGT CHAMPION 2KW O WI	96263096				
		GB	CHPK2000HQITSHFGB CHAMPION 2KW O WI	96263097				
		KIT	CHPK2000HQITSHFGL CHAMPION 2KW O WI	96263098				

