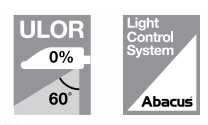




FLOODLIGHTING

# CHALLENGER® 1 AL6000



## Benefits

- Reduced light overspill and glare with excellent forward throw of light
- Multiple options for effective light distribution as the adjustable lamp holder offers three variations of peak beam elevation
- Dark skies friendly fitting ideal for projects nearby residential areas with specific light regulations, with low light pollution ULOR 0%
- Ease of maintenance via two rear doors with no requirement for tools

## Technical Features

- High powered lamp capabilities 1kW / 2kW metal halide
- 1000W and 2000W MHN-LA & MHN-FC 2200W, MH-TS2000W/XL, HQI-TS2000WNL
- High pressure die-cast aluminium type EN AC 43400
- Stainless steel clamps and fixings
- 6mm galvanised steel mounting bracket with M20 bolt hole

- 4mm tempered, low iron, high transmission glass
- IP66, IK08 ratings, CE
- Available in double asymmetric: narrow, medium and wide beam distributions
- 60° peak beam elevation as standard on all beam widths
- High purity, polished and anodised aluminium reflector system
- Lamp holder support can be adjusted for 55° and 65° peak beam elevation capabilities as standard
- Upward Light Output Ratio (ULOR): < 0% at 60° peak beam elevation

- Low light pollution resulting in a dark skies friendly lantern
- Front, rear and side cowl available
- Electrical connection box : (IP66) housing containing the ignitor and the power connection, located on the side of the stirrup
- Fitted with 2 x GORE™ membrane breathers for floodlight air pressure regulation
- Toolless lamp access via two rear doors, secured with hand operated latches

## Applications

- Sport



Fells Point Tennis Club, Ireland

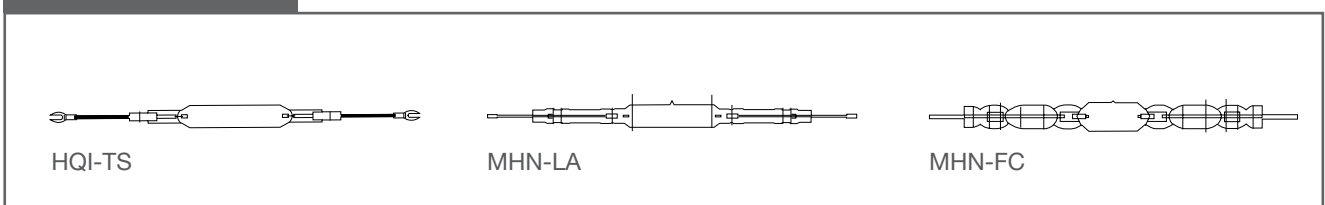
## Technical Specifications

	Wattage (kW)	Beam Type	Lamp	Lamp Manufacturer	Lamp Reference	Weight (kg)
<b>AL6001</b>	2.2	Narrow	MHN-FC/B	Philips	MHN-FC2.2KW400V/640	21.4
<b>AL6002</b>	2.2	Medium	MHN-FC/B	Philips	MHN-FC2.2KW400V/640	21.4
<b>AL6003</b>	2.2	Wide	MHN-FC/B	Philips	MHN-FC2.2KW400V/640	21.4
<b>AL6004</b>	2	Narrow	MHN-LA	Philips	MHN-LA2KW400V/842	21.4
<b>AL6005</b>	2	Medium	MHN-LA	Philips	MHN-LA2KW400V/842	21.4
<b>AL6006</b>	2	Wide	MHN-LA	Philips	MHN-LA2KW400V/842	21.4
<b>AL6007</b>	2	Narrow	HQI-TS/N/L	Osram	HQI-TS2000WNL	21.4
<b>AL6008</b>	2	Medium	HQI-TS/N/L	Osram	HQI-TS2000WNL	21.4
<b>AL6009</b>	2	Wide	HQI-TS/N/L	Osram	HQI-TS2000WNL	21.4
<b>AL6010</b>	1	Narrow	MHN-FC	Philips	MHN-FC1KW230V/740	21.4
<b>AL6011</b>	1	Medium	MHN-FC	Philips	MHN-FC1KW230V/740	21.4
<b>AL6012</b>	1	Wide	MHN-FC	Philips	MHN-FC1KW230V/740	21.4
<b>AL6013</b>	2	Narrow	MH-TS 2kW/XL	Venture	MH-TS2000W/XL/K12/745	21.4
<b>AL6014</b>	2	Medium	MH-TS 2kW/XL	Venture	MH-TS2000W/XL/K12/745	21.4
<b>AL6015</b>	2	Wide	MH-TS 2kW/XL	Venture	MH-TS2000W/XL/K12/745	21.4
<b>AL6016</b>	1	Narrow	MHN-LA 842	Philips	MHN-LA1KW230V/842	21.4
<b>AL6017</b>	1	Medium	MHN-LA 842	Philips	MHN-LA1KW230V/842	21.4
<b>AL6018</b>	1	Wide	MHN-LA 842	Philips	MHN-LA1KW230V/842	21.4
<b>AL6019</b>	1	Narrow	MHN-LA 956	Philips	MHN-LA1KW230V/956	21.4
<b>AL6020</b>	1	Medium	MHN-LA 956	Philips	MHN-LA1KW230V/956	21.4
<b>AL6021</b>	1	Wide	MHN-LA 956	Philips	MHN-LA1KW230V/956	21.4
<b>AL6022</b>	2	Narrow	MHN-LA 956	Philips	MHN-LA2KW400V/956	21.4
<b>AL6023</b>	2	Medium	MHN-LA 956	Philips	MHN-LA2KW400V/956	21.4
<b>AL6024</b>	2	Wide	MHN-LA 956	Philips	MHN-LA2KW400V/956	21.4

Lamp Manufacturer & Lamp Reference	Wattage (kW)	Colour Temp. (K)	RA	Lamp Lumen Output (Initial lm)	Current (A)	Supply Voltage (V)	Total Circuit Power (W)
<b>Venture</b>							
MH-TS2000W/XL/K12/745	2	4500	65	240000	10.3	380/400/415	2280
<b>Philips</b>							
MHN-FC2.2kW400V/640	2.2	4100	60	232000	11.0	380/400/415	2370
MHN-LA2KW400V/842	2	4100	80	220000	9.6	380/400/415	2310
MHN-LA2KW400V/956	2	5600	90	190000	10.3	380/400/415	2310
MHN-LA1KW230V/842	1	4200	70	95800	9.3	230/240	1140
MHN-LA1KW230V/956	1	5600	80	87000	9.3	230/240	1140
MHN-FC2KW400V/740	2	4200	60	210000	19.11	380/400/415	2105
MHN-FC1KW230V/740	1	4100	65	93000	8.9	230/240	1140
<b>Osram</b>							
HQI-TS2000WNL	2	4100	65	230000	10.4	380/400/415	2280

Technical information may alter dependent on control gear used

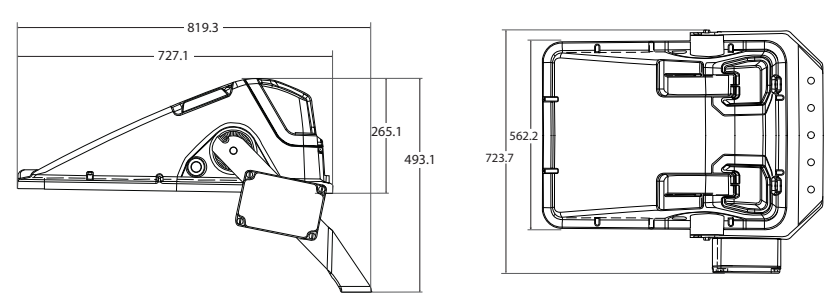
### Lamp references





## Dimensions

Dimensions in mm



**Mounting:**  
Stirrup mounted using M20 fixing.  
Stirrup adjustment +/- 140°  
**Weight:** 21.4kg.

**Front wind area:**  
@60° setting (Flat Glass) - 0.126m<sup>2</sup> 70° max setting (+10 elevation) - 0.135m<sup>2</sup>. Side wind area: 0.108m<sup>2</sup>

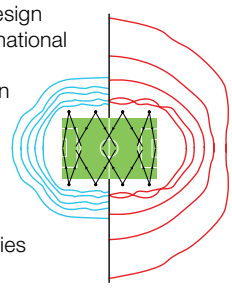
## Maintenance



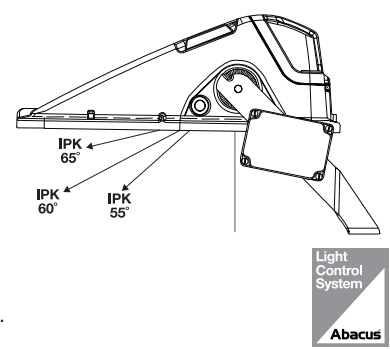
**Easy Maintenance:**  
Access to the lamp by means of opening the rear door

## Key features

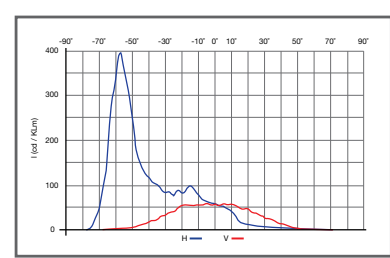
**Abacus Light Control System**  
Efficient, careful lighting design has given Abacus an international reputation for combining powerful, sharp illumination with low light pollution. Abacus' Lighting Control System – exclusive to the Challenger® 1 – features a series of complementary technologies to help achieve this.



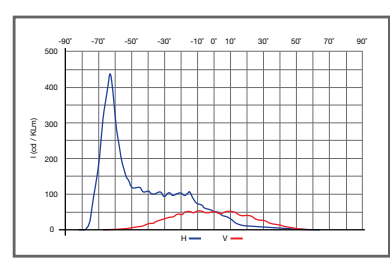
**Double Asymmetric Reflector**  
The double asymmetric reflector is designed to better concentrate and focus the light produced by each lantern. By emitting the main beam at an angle of 55, 60 or 65 degrees from the normal to the front glass, it results in a flat appearance (right), making less of the reflector visible to spectators as well minimising glare.



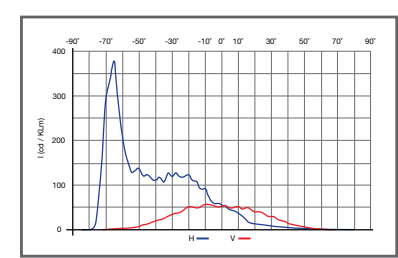
## Photometry



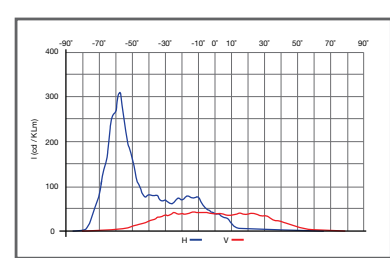
Narrow 55°



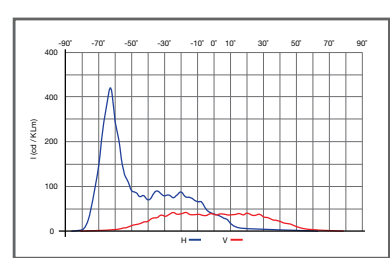
Narrow 60°



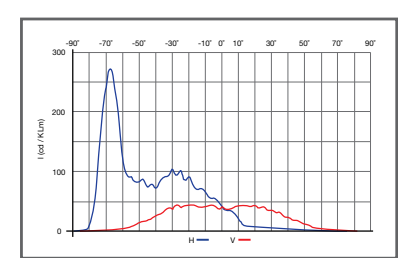
Narrow 65°



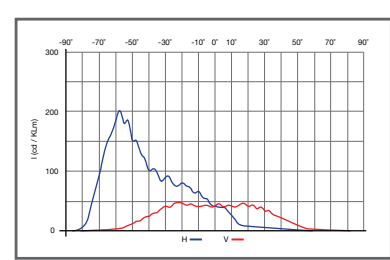
Medium 55°



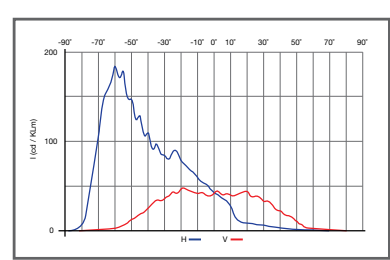
Medium 60°



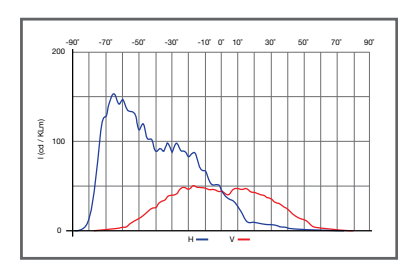
Medium 65°



Wide 55°



Wide 60°



Wide 65°