



# Bid Specification Sheet

## 500W / 650W "Acclaim" Fresnel

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**This is a specification for a 110mm Fresnel luminaire, complete with all accessories.**

The 500W / 650W Fresnel Spot shall comply with the following performance specifications when using a T/27 650W, 240V 15,000 lumens lamp.

Beam angle (defined as 2:1 variation from centre peak) – Spot 6° and Wide Flood 60°.

**Minimum light output:**

Spot angle 6°  
72,500 Candela

Flood angle 60°  
5,700 Candela

The FRESNEL shall be a purpose-built luminaire designed for interior stage, studio and display lighting applications. The lamp house of the Fresnel luminaire shall have rounded corners and edges with no sharp edges. It shall be constructed from aluminium and engineering plastics.

The sides of the Fresnel luminaire shall be constructed from extruded aluminium for strength, lower weight and no noise during the expansion and contraction period when the Fresnel luminaire is heating up. Sides constructed from sheet metal shall not be accepted. Ventilation of the Fresnel luminaire shall be maximised by not less than five convection slots running the entire length of the lamp house.

The front and rear of the Fresnel luminaire shall be constructed from high temperature and impact resistant engineering plastic mouldings for strength, lower weight and no noise during the expansion and contraction period when the Fresnel luminaire is heating up. Front and rear castings constructed of metal shall not be accepted.

There shall be a rear grab handle mounted on the rear of the Fresnel luminaire. The grab handle shall be constructed from high heat and impact resistant engineering plastic, and shall have a warning label formed as an integral part of the handle.

There shall be a cable connector compartment located on the outside back moulding of the Fresnel luminaire. The power supply cable shall be terminated in this compartment and not in the main body of the luminaire. For ease of service it shall be possible to gain access to the interior of the cable connector compartment by the removal

of three screws and the cable connector compartment cover.

The Fresnel shall incorporate an integral safety bond that can be retracted into the luminaire when not in use. The safety bond shall be rated for the weight of the luminaire.

The Fresnel beam will have a soft edge with minimal spill.

The Fresnel shall use a 110mm Fresnel lens, mounted inside the luminaire secured with stainless steel spring "T" clips. These clips shall hold the lens in position and allow for movement caused by heat expansion.

The Fresnel shall have a spherical reflector, manufactured from 99.99% super pure aluminium anodised and polished to provide a pure specular reflector.

The lens and reflector shall be quickly accessed for cleaning in the lamp housing by means of a side hinged bottom tray held closed with a sprung "push in" finger locking clip.

The focus system shall comprise of the lamp base and reflector assembly moving in relation to the fixed lens. The focus action shall be direct slide action on machined brass bearings to minimise vibration. The focus fastening system shall be by a simple heat resistant low maintenance screw knob.

The luminaire shall be designed for use with a 500W or 650W 'T' (theatre) or 'CP' (studio) class lamp with a GY 9.5 lamp base. Access to the lamp assembly shall be via a hinged bottom tray fastened with a sprung "push in" finger locking clip.

Relamping shall be possible without having to change the focus position of the luminaire. Suitable lamps for the unit shall be:

M/38 300W, M/40 500W

T/18 500W, T/25 500W, T/26 650W, T/27 650W  
CP82 500W, CP89 650W

Tilt adjustment shall be by means of a screw lock system secured by a hand sized insulated "T" handle which also allows one handed or pole adjustment. Base tension shall be generated by adjustment of the locknut pivot mount.

The luminaire is provided with a formed aluminium yoke with a central hole for an M10



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suspension bolt set comprising M10 set screw, nut and two washers.

The four-leaf Barndoor accessory shall be constructed from high heat and impact resistant engineering plastic and lightweight steel sheet for each leaf. It shall be possible to rotate the barndoor leaves 360° to facilitate the beam masking. The leaf tension shall be adjustable to suit the operator's preference. The barndoor shall have safety chain anchor points provided which are integral to the barndoor mounting plate.

A safety lock spring is to be provided to securely attach this to the luminaire when in use.

Provision must be made for the fitting of a standard DIN plate.

When the lamp tray is opened mains power shall automatically be disconnected.

The luminaire shall comply with the international safety standards EN60598/IEC598.

The luminaire is to be supplied with:-

1.0 metre of high heat resistant cable (.75mm<sup>2</sup> 3 conductor) firmly clamped and protected with a cast trumpet gland at point of entry

Separate safety bond anchor point

125mm<sup>2</sup> DIN Standard hard tooled colour frame with no sharp edges, secured in position with a safety retention clip

Two mounting slots for colour frames and barndoor accessories

A nut and bolt set for attachment to a hook clamp

Accessories to be available for the 500W/650W Fresnel will include:-

Lens safety mesh

4 leaf barndoor

Suspension hook clamp

TV barrel clamp

Colourscroller

Focus position reference scale

The Fresnel luminaire shall be supplied with a limited three-year warranty when used in normal theatrical applications.

Full warranty details shall available for download from the manufacturer's website at:  
[www.seleconlight.com](http://www.seleconlight.com)

This information is available for download via:  
[www.seleconlight.com/acclaimfresnel](http://www.seleconlight.com/acclaimfresnel)