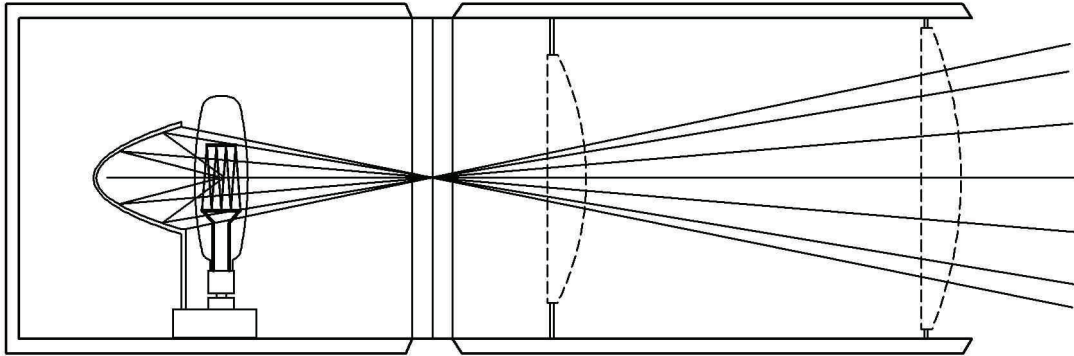


Profiles are lamps equipped with an ellipsoidal reflector. This reflector creates an adjustable focal plane inside the lamp. Any image placed at this plane (in the 'gate') will be projected by the lamp, albeit upside down and back to front. In some parts of the world they are known as ERS (Ellipsoidal reflector spotlights) or 'lekos'.

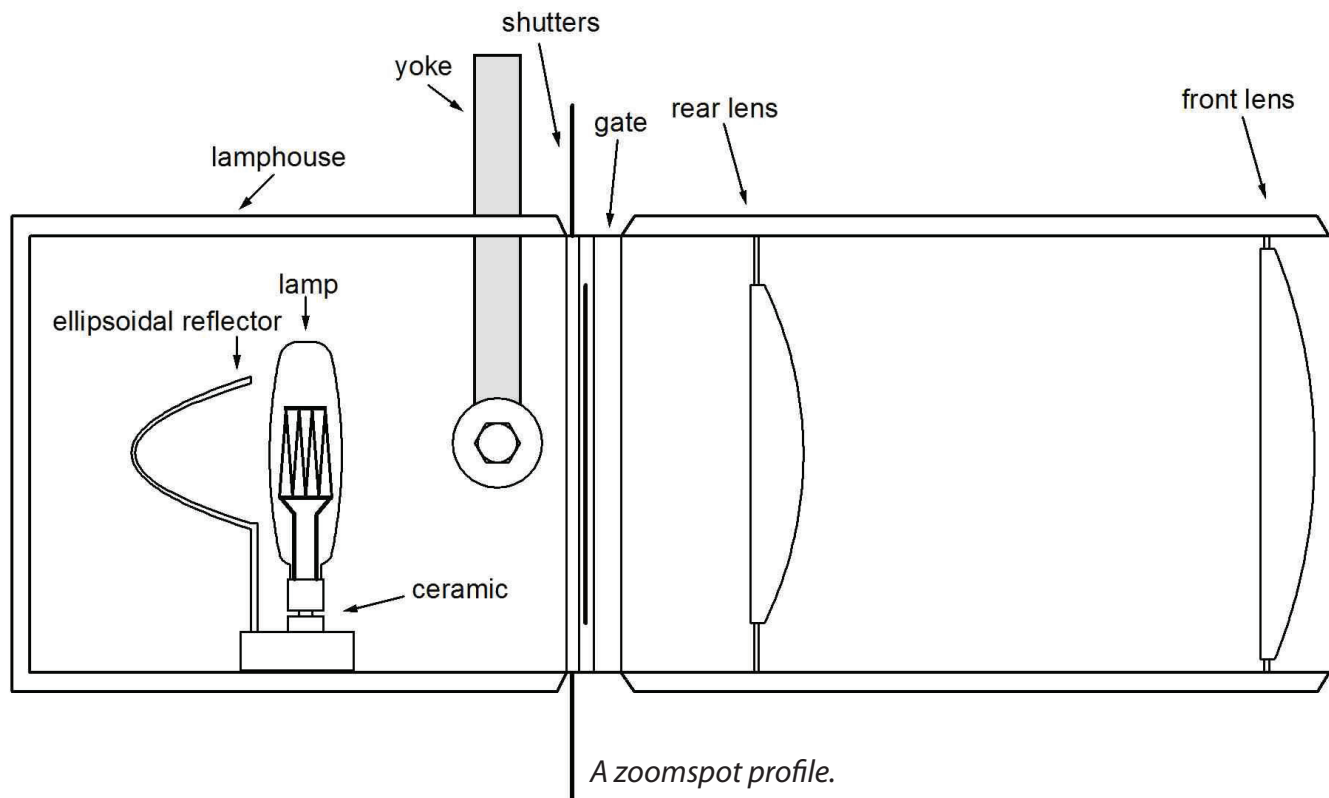


*The ellipsoidal reflector creating a focal plane at the gate.*

*Note how the upper beams become the lower beams (and vice versa) as they leave the lamp.*

*This causes the 'upside down, back to front' phenomenon.*

Single lens profiles have a fixed beam angle, adjusting the lens will change the edge (focus) of the beam, between sharp and soft. Dual lens profiles (zoomspots) can change both beam edge and zoom (beam size) by adjusting both lenses. Adjusting the position of the lamp will change the light distribution in the beam from peak to flat.

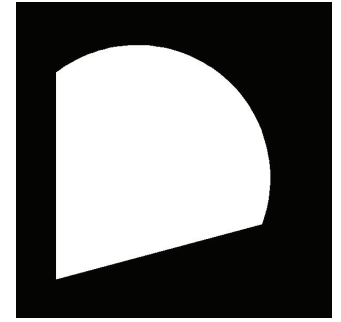
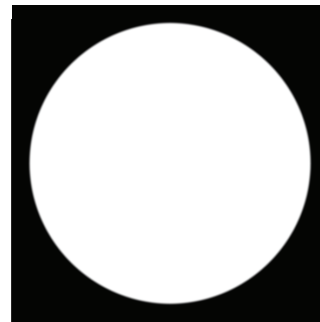
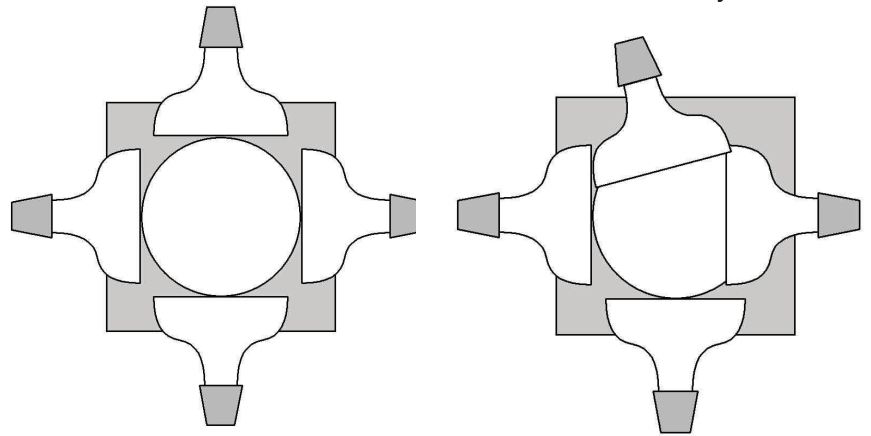


*A zoomspot profile.*

**Use** Profiles come in a variety of fixed beam angles and zoomspot ranges. Some models have interchangeable lens tubes that allow you to retain the same body for each lamp. A fixture model range may include fresnels, pcs and profiles in one family with a similar lamphouse (I.E Selecon 'Acclaim' range). Profiles can be recognised by their extended front lens section.

# Profile Data Sheet

**Accessories** Most profiles are equipped with four *shutters* which sit in the gate. Like barndoors they shape the beam. However unlike barndoors shutters can provide a hard edge and can be angled independently of each other. Shuttered shots are vital for precise work, often lining up with existing edges of the set or stage. The adjustable softness (edge) means that shuttered shots can still be subtle despite having obtuse shapes. Where a smaller circular beam is required an additional accessory called an *iris* is placed in the gate.



The effect of shutters on a profile beam.

Note that the resulting image is upside down and back to front.



The effect of gobos on a profile beam.

**Gobos** are images placed in the gate. Most are metal stencils but glass and, in certain lights, plastic gobos can be used. In all cases they must be able to withstand the high operating temperature present in the gate. Gobos come in fixed sizes (A size, B size and M size are common) and must be fitted into a *gobo holder* particular to the light in question before they are installed. The word gobo is short for 'go-between', as the stencil goes between the lamp and lenses. Other accessories for profiles are *gobo rotators* and *animation wheels*, which can be used to create moving textures.

**Application** Their flexibility means profiles are found in all roles. Their most obvious use is for specials and other isolated shots, but they can also be found creating FOH washes, as well as for tight, discrete boom lighting where spill can be shuttered off the floor and set. Gobos can be used for textural effects (breakups and swirls) as well as literal setting (clouds, city skylines).

**Reference** McGrath, Ian. 1991. *An approach to stage lighting*. Corrimal East, N.S.W. : I. McGrath.