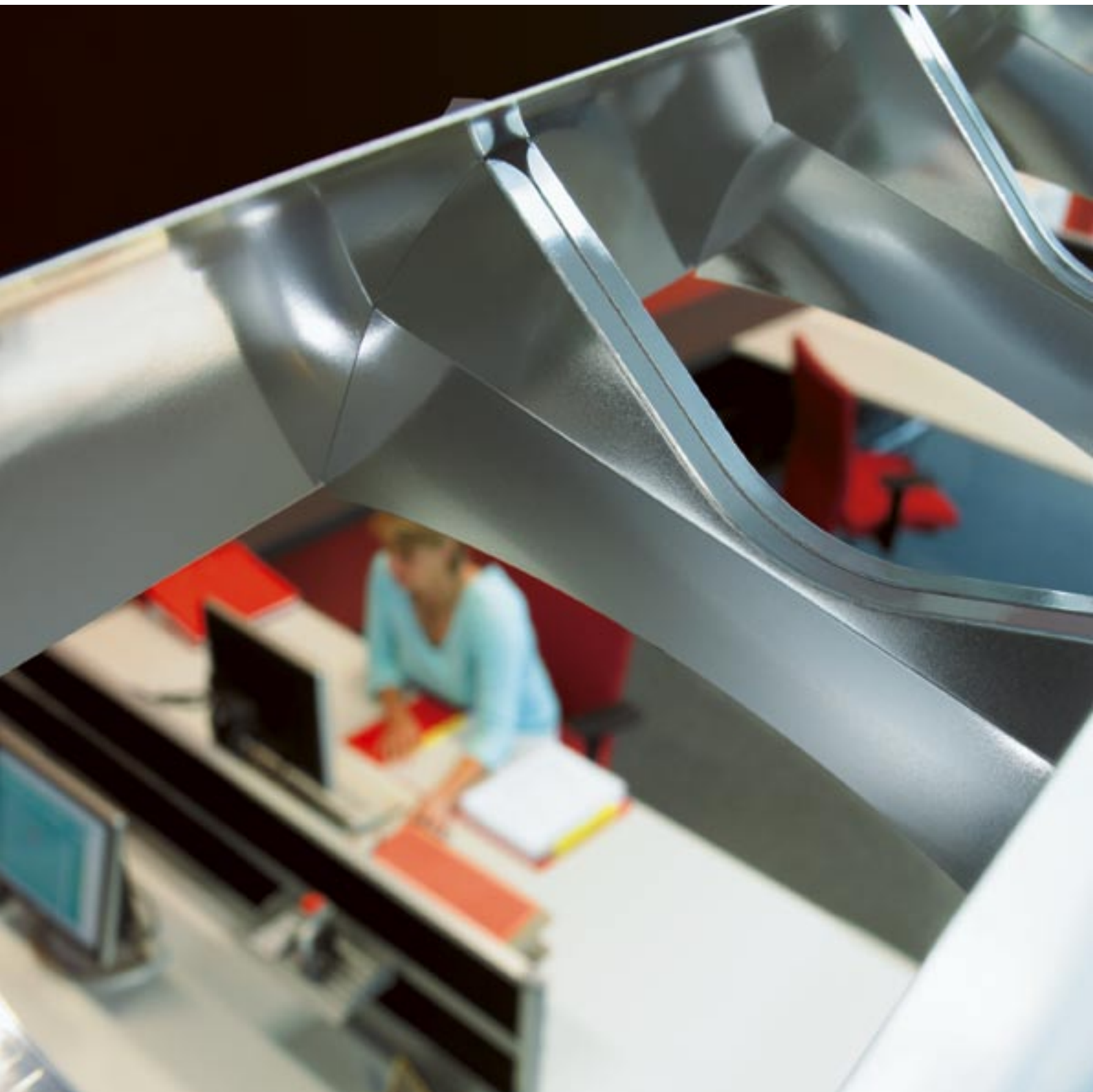


# U5

The most effective way of delivering excellent lighting



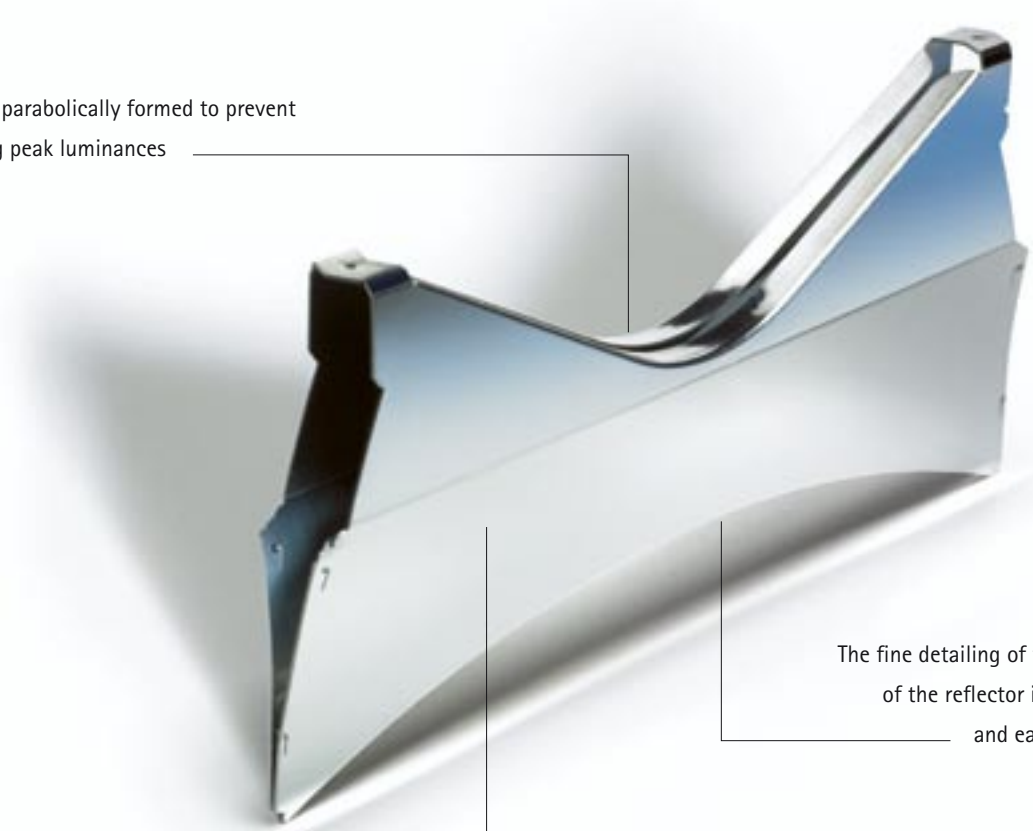
### The best reflector available

Luminaires need to direct the light to where it is needed, shield it where it is not needed and have a high efficiency. Aluminium reflectors are still the best way to achieve these goals.

Designing reflectors has been one of ETAP's core competencies for more than 40 years. The U5 reflector offers the best combination of light distribution, shielding and efficiency available with the current state of lighting technology.

The design specifications of the U5 reflector were: design reflectors for T5 lamps in keeping with the EN 12464 standard for workplace lighting.

U5 luminaires offer the highest efficiencies in their class, which means less luminaires need to be used. The excellent luminance control – which can be customised to 200 cd/m<sup>2</sup> or 1000 cd/m<sup>2</sup> at 55° or 65° – and the fully eliminated peak luminances ensure maximum comfort. The uniform cut-off angle in all directions mean you can arrange a room any way you like. ETAP's U5 reflector sets a new benchmark.



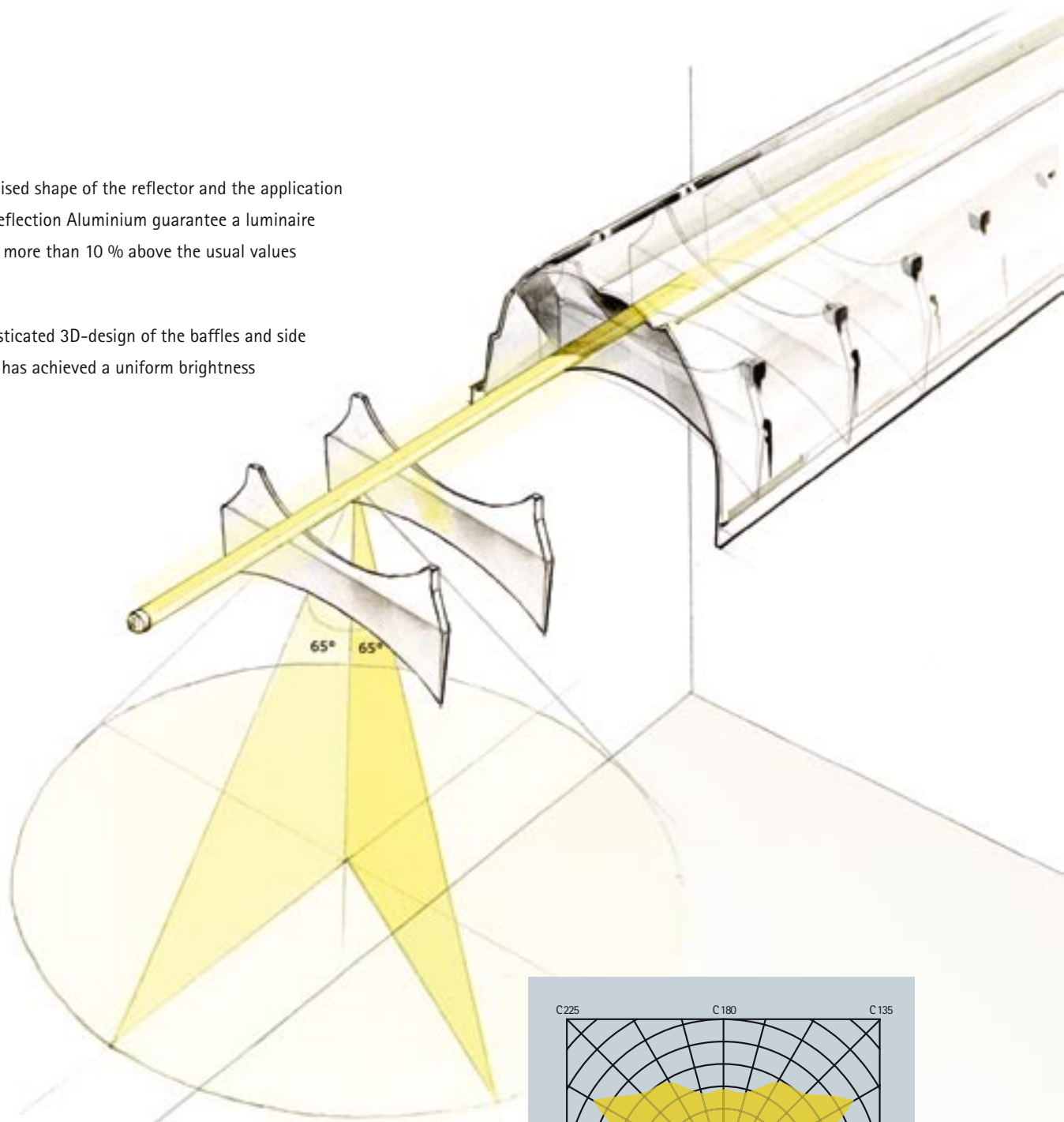
The top is parabolically formed to prevent interfering peak luminances

The fine detailing of the underside of the reflector is uncluttered and easy on the eye

The satin-anodised aluminium avoids interfering reflections in the reflector, particularly in the case of movement

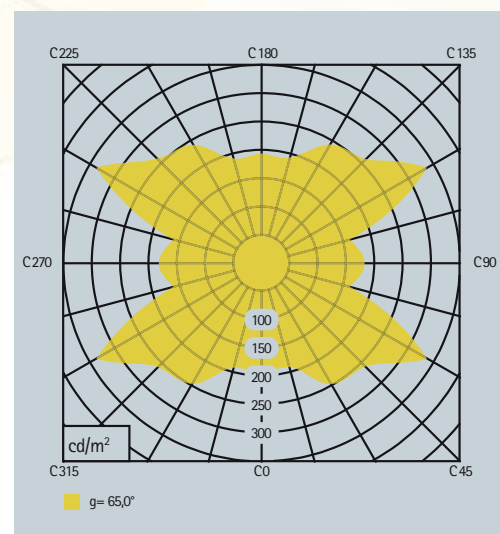
The optimised shape of the reflector and the application of High Reflection Aluminium guarantee a luminaire efficiency more than 10 % above the usual values

The sophisticated 3D-design of the baffles and side reflectors has achieved a uniform brightness

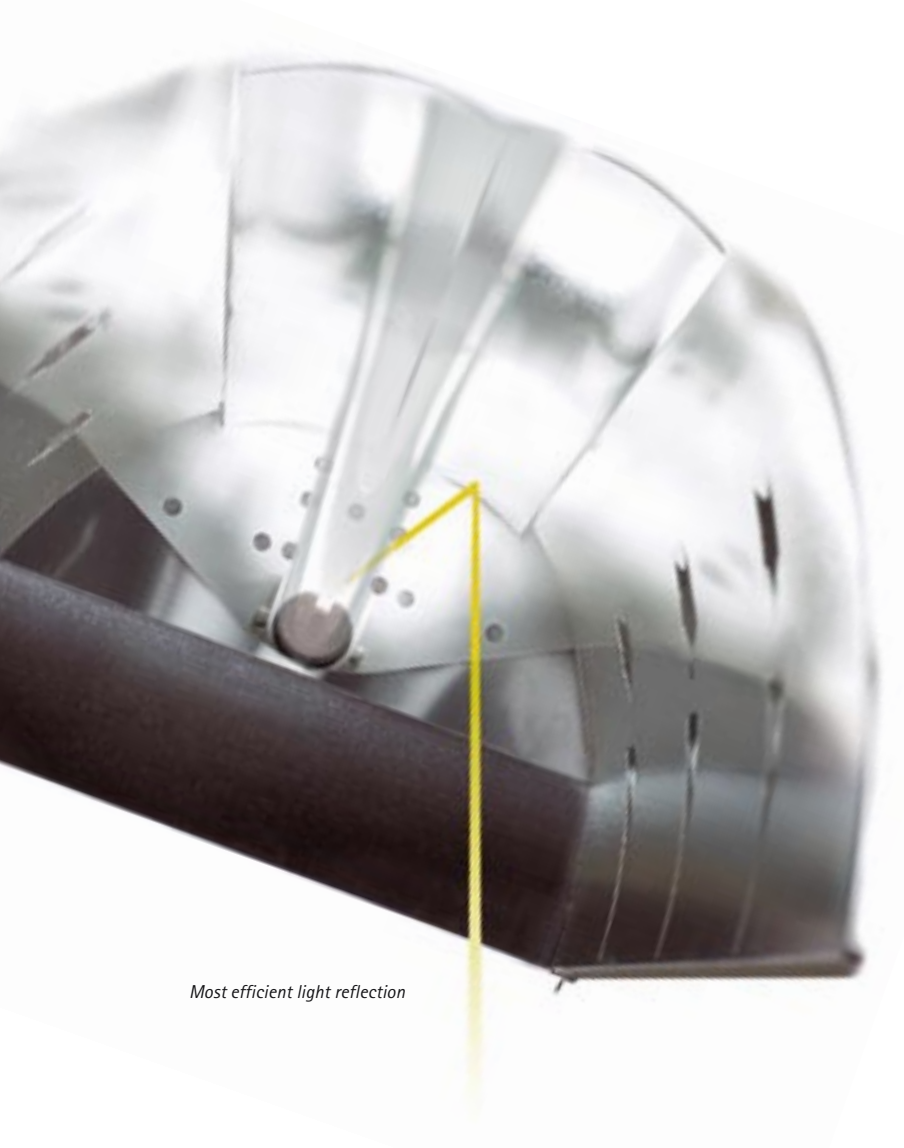


The typical EQUILUM® shape ensures a uniform cut-off angle in all directions, allowing you to arrange a room any way you like

The wide angle distribution guarantees a high contrast rendering factor and good modelling



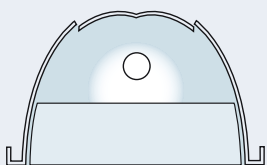
The EQUILUM® reflector allows the U5 to limit the luminances evenly in all directions at 65°.



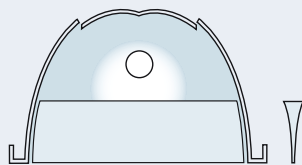
*Most efficient light reflection*

U5 stands for maximum luminaire efficiency thanks to a sophisticated reflector design in High Reflection Aluminium and a luminaire design with an operating temperature that optimises the lumen output. The nine different lamp positions allow you to choose the light distribution in the transverse direction to suit your requirements. The longitudinal cut-off can be changed by choosing a different reflector. U5 offers many possibilities to control the amount of light coming from the luminaire. You can choose from a wide range of lamps (high efficiency or high output lamps) with different luminous fluxes and one or two lamps can be installed per reflector.

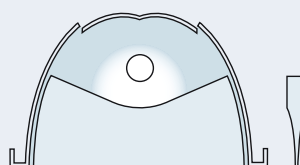
### ETAP developments in reflector design



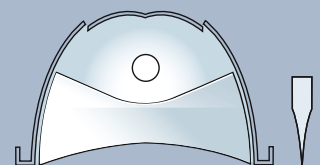
> white baffle



> SLL baffle  
*Average luminance control*



> ISOLUM® baffle  
*Elimination of interfering peak luminances*

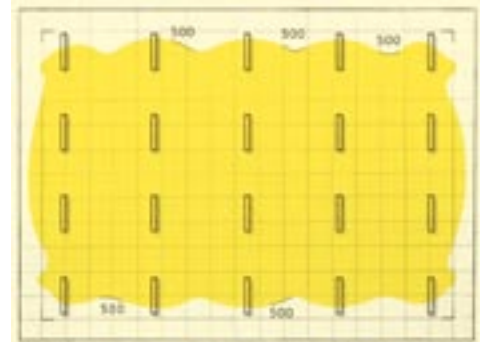


> EQUILUM® baffle  
*Uniform cut-off angle in all directions of view*

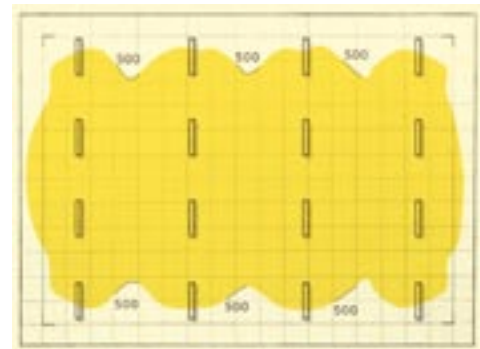
All these parameters allow us to work out the most energy-efficient lighting solution for you. These energy savings translate into less luminaires because of the wider spacing and a lower installed power. You can benefit from this high efficiency by achieving a favorable energy banding in the context of the Building Regulations 2006.

### Lighting control systems mean even more savings

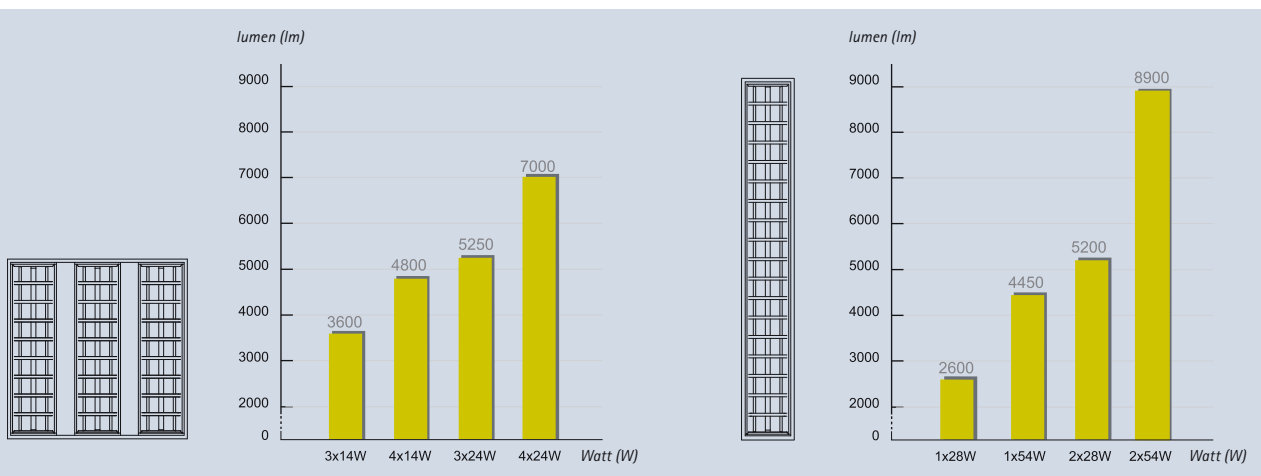
Even more energy can be saved with the use of local light controls or controls integrated into the luminaire, even in a DALI environment. Switching or dimming depends on the amount of daylight or is based on movement detection. Infrared remote control is also possible.



*Typical market solution:  
20 luminaires (2x28W); Em: 531; uniformity: 0,84;  
specific power: 1,90 W/m<sup>2</sup>/100lx*



*U5 lighting solution:  
16 luminaires (2x28W); Em: 523; uniformity: 0,81;  
specific power: 1,50 W/m<sup>2</sup>/100lx*



For the different lamp lengths the U5 range always has different luminous fluxes.





### Flexibility

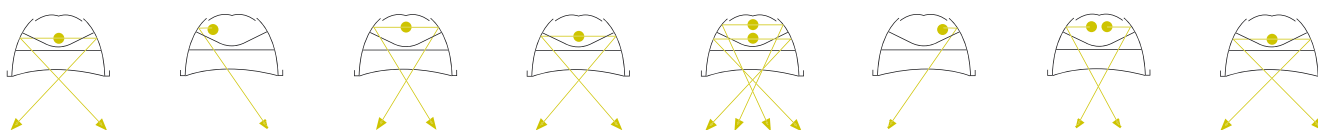
The U5 range offers lighting solutions for each office and desk task(s), as specified in the European standard EN 12464-1 "The Lighting of Workplaces".

The flexibility of the range can be demonstrated in a comprehensive installation design. The U5 has various reflectors: the basic reflector offers a luminance control of  $1000 \text{ cd/m}^2$  in all directions with a cut-off angle of  $65^\circ$ , the "comfort" reflector restricts the luminance to  $200 \text{ cd/m}^2$  with the same angle and for critical visual tasks the "CAD" reflector offers this luminance control up to  $200 \text{ cd/m}^2$  in all directions at  $55^\circ$ .

The U5's light distribution provides a high contrast rendering factor and good modeling. To achieve the optimum solution either one or two lamps can be fitted in a reflector. You can combine single and twin lamp luminaires in the same area and they match. For instance, with the same reflector you can opt for a wide-angle, narrow-angle or asymmetric-beam distribution depending on the application.

Even after installation, the U5 is very flexible. The wide angle distribution and the uniform cut-off angle in all directions give you maximum freedom to furnish the room. To adapt the light distribution to the specific situation, the lamp positions can be changed. And if the room is given another purpose, the lighting can be adapted in accordance with the standard by fitting another reflector.

*Because of the 9 lamp positions, many different light distribution patterns are possible.*





For distribution in the longitudinal direction, you can select the 55° or 65° reflector.

### Bespoke options can be the solution

The U5 recessed luminaire can be used for all common ceiling systems. For other ceilings we will work out the best solution for you. The symmetrical reflector edge fits closely against the housing for a neat and clean appearance. U5 reflectors are hinged to the housing. Lamp replacement is simple and fingerprints on reflectors are avoided. The ballast is also easily accessible.

The U5 uses the temperature sensitive T5 lamp. Where air is extracted over the lamp, the light output can be reduced by 30 %. This is why the U5 is available with patented air extraction slots that extract the air via a separate compartment in order to maintain the maximum light output.

If there is a preference for a bright ceiling that avoids the cavern effect, then Spatial 360™ reflects approximately 10 % of the light back on to the ceiling making it considerably brighter. When combined with inter-reflectance from walls and other surfaces approx. 30 % of working plane lux is on the ceiling. Spatial 360™ is a standard option for square models.

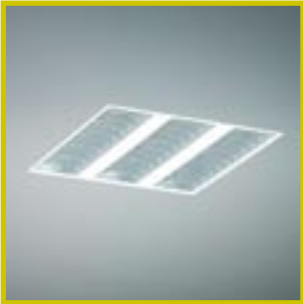
Emergency lighting can be unobtrusively integrated in the U5 with the K9 module, comprising batteries, electronics and a cooled high-power-LED. The optimised photometry of K9 results in substantially less emergency fittings being required than if conventional conversion units are used.



Available in 1 and 2 lamp models with a cut-off angle of 55° or 65°; a suitable solution for each UGR class



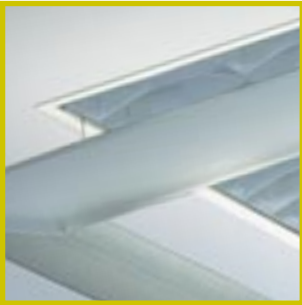
Four lamp luminaire with four reflectors



U5 with three reflectors, available in three and four lamp model



Air extraction without loss of efficiency, available for long and square luminaires



Lighting of wall and ceiling using recessed luminaires thanks to Spatial 360™



Discreet K9 emergency lighting in U5



## U5

- Very high efficiency up to 92 %
- Uniform cut-off angle in all directions, without peak luminances with optimised EQUILUM® reflector
- High flexibility through 9 lamp positions
  - wide angle distribution, narrow angle distribution or asymmetric distribution pattern
  - one or two lamps in the same reflector

ETAP Lighting, U.K. Branch ▪ Unit A ▪ Hamilton Close ▪ Houndmills ▪ Basingstoke ▪ Hampshire RG21 6YT  
Tel. +44 (0)1256-818818 ▪ Fax +44 (0)1256-363358 ▪ e-mail: [enquiries@etaplighting.com](mailto:enquiries@etaplighting.com) ▪ [www.etaplighting.com](http://www.etaplighting.com)

