

# Duo side optic

**Recessed fluorescent:** Intermediate brightness zone luminaire



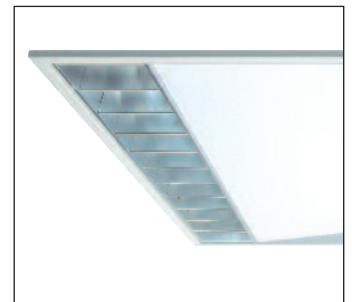
Micro Prism Optic  
(recessed)



Micro Prism Optic (lowered)



Living Louvre



Semi Specular Louvre

Duo is a high specification and efficient modular recessed luminaire with a modern clean and pure aesthetic, which delivers exceptional illumination. Duo has a range of optics and associated luminance limits and has been optimised around the T5 lamp.

## APPLICATION

- Offices
- Reception spaces
- Ambient retail lighting
- Hospital consulting rooms, waiting areas and offices
- Education classrooms and circulation spaces
- Corridors
- Board rooms
- Conference rooms

## SPECIFICATION

### Body

- Lamp Options:
  - 4 x 14w T5
  - 3 x 24w T5
- Ceiling options:
  - Exposed T 15mm and 25mm (lay in)
  - Exposed T 15mm Tegular
  - Concealed grid Spring T
  - Cut aperture Plasterboard
- High quality fully boxed and jointed body, with full flange to eliminate light spill
- Body manufactured from 0.7mm gauge steel.
- Luminaire IP20
- High frequency, DSI regulating, and DALI control gear options.
- Adjustable side support brackets
- Air handling as standard.
- Supplied less lamps

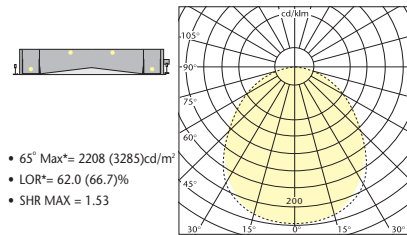
### Optics

- 3 optical options:
  - **Micro Prism** - combines micro optical cones and micro linear prisms – with feature for semi recessing to deliver further enhanced room surface ratios
  - **Micro Film** reflector 'living louvre' - vacuum metalized injection moulded and textured louvre
  - **Semi specular**, high quality zero iridescence Aluminium louvre.
- High efficiency and high output T5 lamp options
- Intermediate brightness zone technology, delivering high efficiency and controlled contrast, for a uniquely comfortable working environment.
- Plastics fully UV protected and fully TPa building regulation compliant.
- Up to 74% LOR.
- Impact resistant polycarbonate
- Positive retention to all optical elements.
- Easy access for maintenance and service.

### Options

- Biodynamic lighting technology integration - delivering enhanced well being and productivity in all occupants
- 'Duo Colour', virtual flood lighting - to flood light building from inside with LED's
- 3hr integral maintained emergency.
-  Easytest – integral self test version available

## DUO Side Cell Recessed

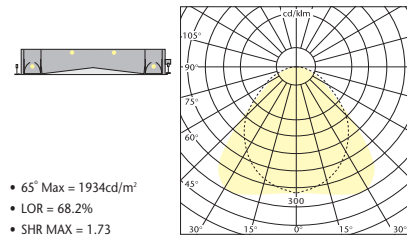
MICRO OPTIC  
4 x 14W T5

| UTILISATION FACTORS UF(F)   |      |      |      |      |      |      |      |      |      |      |      |  |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|--|
| Room Reflectance Room Index |      |      |      |      |      |      |      |      |      |      |      |  |
| C                           | W    | F    | 0.75 | 1.00 | 1.25 | 1.50 | 2.00 | 2.50 | 3.00 | 4.00 | 5.00 |  |
| 0.70                        | 0.50 | 0.20 | 0.40 | 0.45 | 0.49 | 0.52 | 0.56 | 0.59 | 0.61 | 0.63 | 0.65 |  |
| 0.50                        | 0.30 | 0.20 | 0.35 | 0.40 | 0.44 | 0.47 | 0.53 | 0.54 | 0.56 | 0.59 | 0.61 |  |
| 0.00                        | 0.00 | 0.00 | 0.31 | 0.35 | 0.39 | 0.42 | 0.46 | 0.48 | 0.50 | 0.53 | 0.55 |  |

Typical UGR (70:50:20) 4H 4H = 18

\*Cell in recessed position - Figures in brackets Cell in lowered position

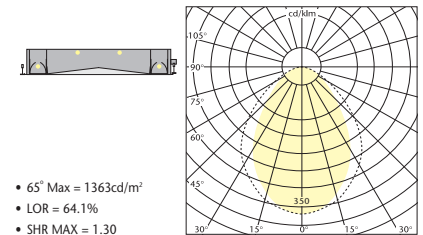
## DUO Side Cell Recessed

LIVING LOUVRE  
4 x 14W T5

| UTILISATION FACTORS UF(F)   |      |      |      |      |      |      |      |      |      |      |      |  |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|--|
| Room Reflectance Room Index |      |      |      |      |      |      |      |      |      |      |      |  |
| C                           | W    | F    | 0.75 | 1.00 | 1.25 | 1.50 | 2.00 | 2.50 | 3.00 | 4.00 | 5.00 |  |
| 0.70                        | 0.50 | 0.20 | 0.47 | 0.52 | 0.57 | 0.60 | 0.64 | 0.67 | 0.69 | 0.71 | 0.73 |  |
| 0.50                        | 0.30 | 0.20 | 0.42 | 0.47 | 0.52 | 0.55 | 0.59 | 0.62 | 0.64 | 0.67 | 0.68 |  |
| 0.00                        | 0.00 | 0.00 | 0.37 | 0.42 | 0.46 | 0.49 | 0.53 | 0.59 | 0.58 | 0.60 | 0.62 |  |

Typical UGR (70:50:20) 4H 4H = 17

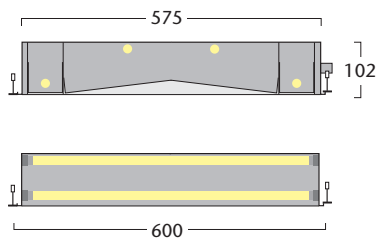
## DUO Side Cell Recessed

SEMI-SPECULAR LOUVRE  
4 x 14W T5

| UTILISATION FACTORS UF(F)   |      |      |      |      |      |      |      |      |      |      |      |  |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|--|
| Room Reflectance Room Index |      |      |      |      |      |      |      |      |      |      |      |  |
| C                           | W    | F    | 0.75 | 1.00 | 1.25 | 1.50 | 2.00 | 2.50 | 3.00 | 4.00 | 5.00 |  |
| 0.70                        | 0.50 | 0.20 | 0.44 | 0.50 | 0.54 | 0.57 | 0.61 | 0.63 | 0.65 | 0.67 | 0.68 |  |
| 0.50                        | 0.30 | 0.20 | 0.39 | 0.42 | 0.49 | 0.52 | 0.56 | 0.59 | 0.60 | 0.63 | 0.64 |  |
| 0.00                        | 0.00 | 0.00 | 0.35 | 0.41 | 0.45 | 0.47 | 0.51 | 0.53 | 0.55 | 0.57 | 0.58 |  |

Typical UGR (70:50:20) 4H 4H = 15

## DIMENSIONS



## LAMP PERFORMANCE

| WATTAGE    | IL@25°C | LAMP LIFE |
|------------|---------|-----------|
| 1 x 14W T5 | 1,200   | 20,000hrs |
| 1 x 24W T5 | 1,750   | 20,000hrs |

## WEIGHT

|                     | KG  |
|---------------------|-----|
| 600 x 600           | 4.9 |
| 600 x 600 emergency | 5.9 |

## ORDER CODES - DUO TWIN OPTIC

| OPTIC                                                                      | LAMP TYPE | ORDER CODE          |
|----------------------------------------------------------------------------|-----------|---------------------|
| <b>Luminaires for exposed tee ceilings</b><br>(supplied without lamps)     |           |                     |
| Micro Optic                                                                | 4 x 14W   | <b>DUOSH414PXT</b>  |
| Living Louvre                                                              | 4 x 14W   | <b>DUOSH414VXT</b>  |
| Living Louvre                                                              | 3 x 24W   | <b>DUOSH324VXT</b>  |
| Semi Specular Louvre                                                       | 4 x 14W   | <b>DUOSH414WXT</b>  |
| Semi Specular Louvre                                                       | 3 x 24W   | <b>DUOSH324WXT</b>  |
| <b>Luminaires with Bio Dynamic Lighting</b><br>(supplied with lamps)       |           |                     |
| Micro Optic                                                                | 6 x 14W   | <b>DUOSYS614PXT</b> |
| Living Louvre                                                              | 6 x 14W   | <b>DUOSYS614VXT</b> |
| <b>Controllers for Bio Dynamic Lighting</b>                                |           |                     |
| Bio Dynamic Controller<br>(controls up to 100 luminaires)                  |           | <b>DUOBD C</b>      |
| Bio Dynamic Controller with LED channel<br>(controls up to 100 luminaires) |           | <b>DUOBDCL</b>      |

SPRING TEE CEILING INTEGRATION Replace suffix on order codes above, e.g.

**ST** Integration with Spring Tee Ceilings, i.e. **DUOSH414PST**

T15 REGULAR CEILING INTEGRATION Additional Order Code

**DUO600BKTKIT** Bracket Kit to allow XT variants to 'pull up' onto T15 Tegular ceilings (included as standard in ST variants)

GEAR Replace suffix on order codes above, e.g.

**D** Digital DSI Gear, i.e. **DUOSD414PXT****Y** Digital DALI Gear, i.e. **DUOSY414PXT**

DUO COLOUR Add suffix to order codes above, e.g.

**/LB** LED Kit Blue, i.e. **DUOSH414PXT/LB****/LR** LED Kit Red, i.e. **DUOSH414PXT/LR****/LG** LED Kit Green, i.e. **DUOSH414PXT/LG**

EMERGENCY Add suffix to order codes above, e.g.

**/EMIN** Emergency pack, i.e. **DUOSH414PXT/EMIN**

EASYTEST OPTION Add suffix to luminaire order codes above, e.g.

**/ET** Easytest self test emergency i.e. **DUOSH414PXT/ET**

## To specify state:

Recessed T5 600mm<sup>2</sup> luminaire with dual optic configuration and Air return facility. Incorporating Intermediate Brightness Zone element to diffuse light and graduate brightness across the ceiling, manufactured in a Tp(a) rated polycarbonate, and 2 optical cells with (Micro prisms / Living Louvre / Semi spec Louvre) to control light and reduce glare – as Whitcroft Lighting DUO.