

DTFA elite LED theatre

IP65/54 recessed white and green LED luminaire for operating theatres



Information

- State of the art recessed LED luminaire for healthcare application, specifically in operating theatres
- During surgery, lighting must service a number of different needs;
 - The room; room illumination to ensure complete visibility.
 - The patient; high quality colour rendering to ensure a clear and detailed view of the patient, e.g. the colouration and appearance of skin, blood and organs etc.
 - The screen; green lighting to enhance viewing of vital display screens and to eliminate glare traditionally associated with white light sources
- DTFA Elite LED Theatre has been specially designed to meet these needs, whilst also ensuring energy efficiency and a high IP rating for cleaning and infection control

Optics

- Luminaire consists of:
 - White Ra90 LEDs emitting 11,000 lumens (134W)
 - Green LEDs emitting 1400 lumens (65W)
- Two TP(a) rated optic options:
 - Prismatic acrylic above 4mm toughened glass
 - Single sheet 3mm prismatic fireguard material
- White Ra $\geq$ 90 LEDs with 4000K 'cool' white colour temperature
- Green LEDs at wavelength of 505nm
- Separate switching of white and green LEDs
- DALI as standard

Note – a glass front face resists all cleaning chemicals and is best for a sterile environment. Other TP(a) materials are selected for best chemical resistance. If advice is needed contact the Whitecroft Technical Desk.

Body

- 1200 x 600mm nominal size
- Front access only
- Welded steel body finished white
- Compatible with modular exposed T and spring T ceilings. Recessing panels are recommended on spring T ceilings to retain room integrity – Refer to ceiling compatibility matrix on Whitecroft website
- Dual IP rated – to a BSI tested and certified construction as protecting the room to IP65 from void contamination with the front frame in place and IP54 with the frame removed
- Extruded aluminium outer frame (gasketed to the T bar) and inner frame integrated in line but at an angle to eliminate a vertical gap. Concealed front frame fixings and white full gloss frames
- The diffuser clamping system is highly secure and will accept glass. The inner frame design facilitates diffuser replacement
- Robust extruded aluminium side arm cam brackets adjusted from outside the sealed body



White Ra $\geq$ 90 LEDs

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Order Codes

Optic	DALI	3 hr Emergency
Prismatic acrylic above 4mm toughened glass,	D9AGAGY14K	D9AGAGY14KEM
Prismatic TP(a) single sheet	D9AGKY14K	D9AGKY14KEM

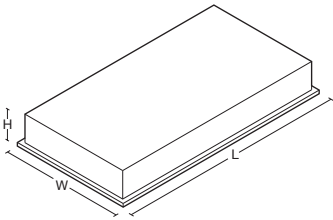
Accessories

1200 x 600mm recessing panel	RP600X1200
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Options

COMEPS	Add suffix /EP	i.e. D9AGAGY14K/EP
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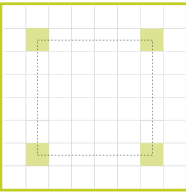
Dimensions



Version	W	L	H	KG	KG/m²
Acrylic above glass	1198	598	124	27.5	28.5
Single sheet	1198	598	124	18.5	19.5

Performance Guide

Lamps	Illuminance	Spacing
134W LED	1150 lux	3.0m x 3.0m



Maintenance: 0.8
Reflectance: 70/50/20
Ceiling Height: 2.7m
Working Plane: 0.8m

Ceiling Integration

Refer to common ceiling compatibility matrix – See page 404

Exposed T Grids

T15/T25 Pull up

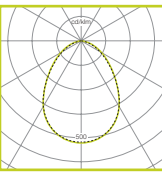
Spring T Grids

SAS – 150/120
Armstrong – Orcal 1800/3000
Burgess – Clip in/Abar
Dampa – Clip in

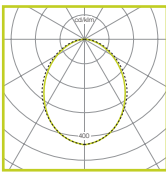
LED Performance

LEDs	Colour Temp	Ra (CRI)	Life Expectancy	Colour Consistency
White	4000K	≥ 90	L ₈₀ (50,000hrs)	MacAdam 3 SDCM
Green	–	–	L ₇₀ (50,000hrs)	–

Photometric Performance



DTFA Elite Green LED
1400 lumens, 65W
• LOR = 100%
• SHR MAX = 1.46



DTFA Elite White LED
11,000 lumens, 134W
• LOR = 100%
• SHR MAX = 1.46

Utilisation Factors UF(F)

Room Reflectance			Room Index		
C	W	F	1.00	3.00	5.00
0.70	0.50	0.20	0.70	0.97	1.04

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To Specify

Recessed modular LED luminaire to a BSI tested and certified construction as IP65 frame on IP54 frame off with twin in line extruded aluminium frames with angled integration and concealed front frame fixings, suspension via robust aluminium cam brackets adjusted from outside the luminaire. White ra90 and green separately switched LEDs specifically for Healthcare environments – as Whitecroft Lighting DTFA ELITE LED THEATRE.