

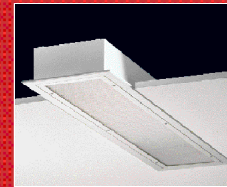
HOSPITAL LIGHTING TO DHSS SPECIFICATION

The lighting requirements of a hospital are both varied and, for some applications, extremely exacting. Whitecroft has many years' experience in this field and offers products developed to suit almost every situation, including specialist luminaires for bedded wards and operating theatres.

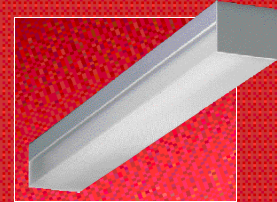
Until recently, the luminaire types applicable to the health industry were largely defined by DHSS specifications, which provided recognised standards for manufacturer and specifier alike.

Whilst compliance with these specifications is no longer a requirement, many lighting designers continue to specify DHSS luminaire type references or CIBSE recommendations. Whitecroft supports this approach through the continued design and manufacture of luminaires to DHSS specifications.

These products, are specifically for use in hospitals with more general applications appearing throughout the catalogue.



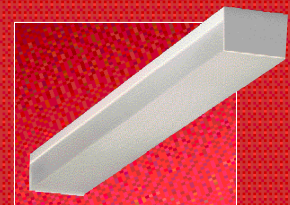
DTFA II 65/54
CROSS REFERENCE
GO TO PAGE 230
FOR PRODUCT DETAILS



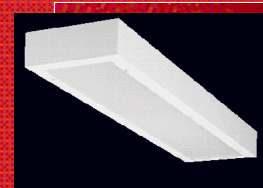
RAPIER
PAGE 218



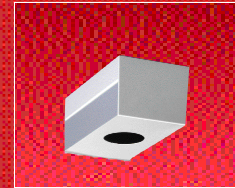
PASTEUR II 65/65
CROSS REFERENCE
GO TO PAGE 225
FOR PRODUCT DETAILS



STILETTO
PAGE 219



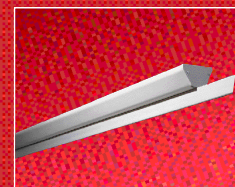
DTBY 54
CROSS REFERENCE
GO TO PAGE 231
FOR PRODUCT DETAILS



RAPIER NIGHTLIGHT
PAGE 220



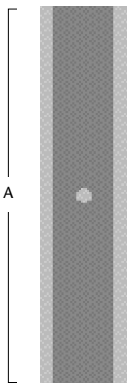
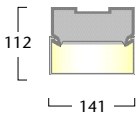
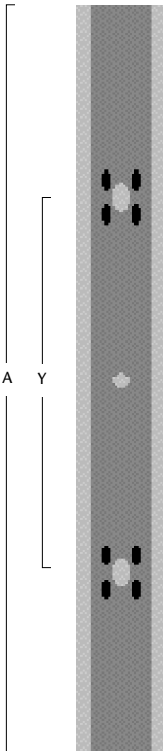
SENTRY WATCH
PAGE 221



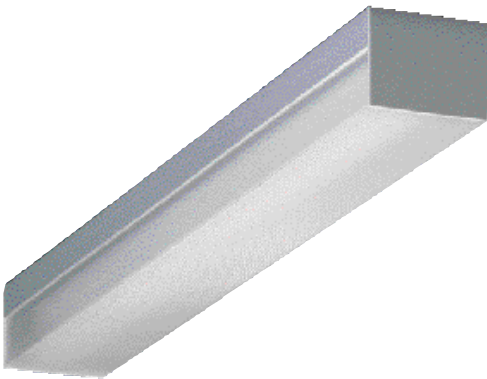
WARDLIGHT
PAGE 222

Rapier

ACRYLIC LENS
PREVIOUSLY DHSS TYPE A



RAC/S/1218/AR
RAC/S/2218/AR



RAC/S/1218/AR

SPECIFICATION

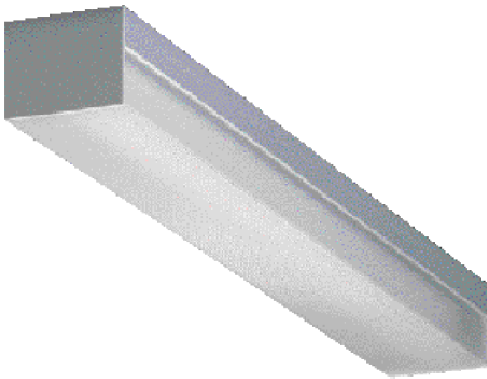
- Aluminium extruded body with unique profile retains the diffuser along its entire length for excellent dust exclusion.
- Body has threaded keyways for fixing all control gear thus eliminating the need for gear trays.
- Specular aluminium reflector/gear cover affords maximum efficiency.

SPECIFICATION

- Acrylic lens with reeded sides and prismatic base in one width for both single and twin lamp fixtures.
- Optional styrene lens with opal sides and prismatic base.

EMERGENCY CODE	
EM2BR	All 18/20W lamp luminaires
EM45IN	All 36/58W lamp luminaires
EM6IN	All 65W and 70/75W lamp luminaires

**REFRACTOR-CENTRE
WARD SURFACE LUMINAIRE**
PREVIOUSLY DHSS TYPE B

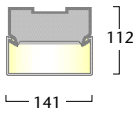
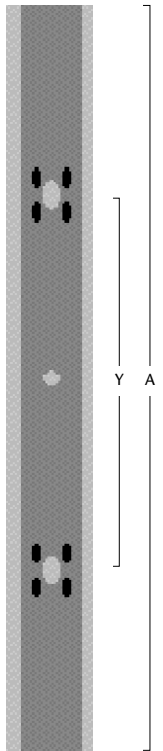


RBC/S/1436/AR

- Switchstart control gear as standard, Microloss and other gear types available upon request.
- Not suitable for chain suspension.
- Optional electronic canister starter if required.
- Designed in accordance with BS4533, IEC 598 and IP40. Mark compliance can be provided.
- Emergency lighting options.

SPECIFICATION

- Acrylic diffuser with refractor lens extruded into side wall achieves luminance limitations for the recumbent patient as specified in the CIBSE LG2.



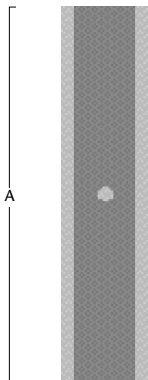
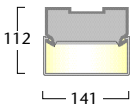
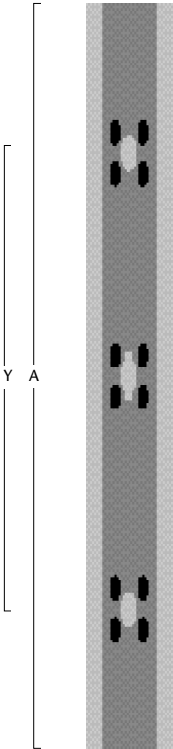
FEATURES AND DIMENSIONS MM						
ORDER CODES	DHSS reference	Lamp ways	Length	Fixing centres	Fixing detail	Wt Kg
			A	Y	No x Ø	
RAC/S/1218/AR	18/20W Single	1 x 18W	621	610	2 x BESA	1.7
RAC/S/2218/AR	18/20W Twin	2 x 18W	621	610	2 x BESA	2.2
RAC/S/1436/AR	A1P 36/40W Single	1 x 36W	1231	610	2 x BESA	3.7
RAC/S/2436/AR	A2P 36/40W Twin	2 x 36W	1231	610	2 x BESA	5.2
RAC/S/1558/AR	A3P 58/65w Single	1 x 58W	1531	610	2 x BESA	4.6
RAC/S/2558/AR	A4P 58/65W Twin	2 x 58W	1531	610	2 x BESA	6.4
RAC/S/1670/AR	A5P 70/75W Single	1 x 70W	1796	610	2 x BESA	5.4
RAC/S/2670/AR	A6P 70/75W Twin	2 x 70W	1796	610	2 x BESA	7.4

FEATURES AND DIMENSIONS MM						
ORDER CODES	Luminance at 60° to downward vertical	Lamp ways	Length	Fixing centres	Fixing detail	Wt Kg
			A	Y	No x Ø	
RBC/S/1436/AR	1295 cd/m ²	1 x 36W	1231	610	2 x BESA	3.9
RBC/S/1558/AR	1656 cd/m ²	1 x 58W	1531	610	2 x BESA	4.8
RBC/S/1670/AR	1762 cd/m ²	1 x 70W	1796	610	2 x BESA	5.6

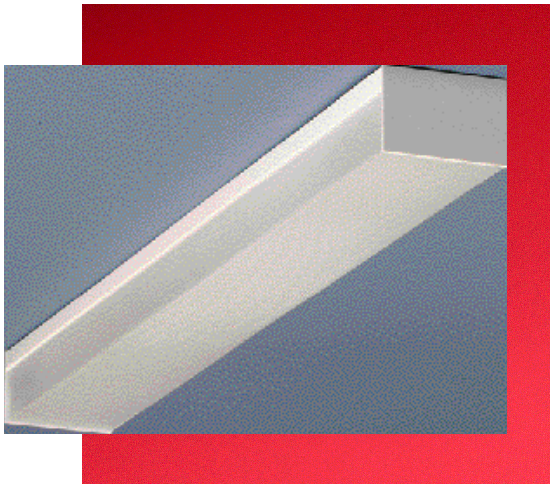


Stiletto

ACRYLIC LENS PREVIOUSLY DHSS TYPE A



SAC/S/1218
SAC/S/2218



SAC/S/1218/AR

SPECIFICATION

- White stove enamelled body with unique profile retains the diffuser along its entire length for excellent dust exclusion.
- Acrylic lens with reeded sides and prismatic base in one width for both single and twin lamp fixtures.
- Optional styrene lens with opal sides and prismatic base.
- Switchstart control gear as standard, other gear types available upon request.
- Not suitable for chain suspension.
- Optional electronic canister starter if required.
- Designed in accordance with BS4533, IEC 598 and IP40. Mark compliance can be provided.

EMERGENCY CODE

EM2BR	All 18/20W lamp luminaires
EM45IN	All 36/58W lamp luminaires
EM6IN	All 65W and 70/75W lamp luminaires

ORDER CODES	FEATURES AND DIMENSIONS MM					
	DHSS reference	Lamp ways	Length	Fixing centres	Fixing detail	Wt Kg
SAC/S/1218	18/20w Single	1 x 18W	621	610	1 x BESA	1.7
SAC/S/2218	18/20w Twin	2 x 18W	621	610	1 x BESA	2.2
SAC/S/1436	A1P 36/40w Single	1 x 36W	1231	610	2 x BESA	3.7
SAC/S/2436	A2P 36/40w Twin	2 x 36W	1231	610	2 x BESA	5.2
SAC/S/1558	A3P 58/65w Single	1 x 58W	1531	610	2 x BESA	4.6
SAC/S/2558	A4P 58/65w Twin	2 x 58W	1531	610	2 x BESA	6.4
SAC/S/1670	A5P 70/75w Single	1 x 70W	1796	610	2 x BESA	5.4
SAC/S/2670	A6P 70/75w Twin	2 x 70W	1796	610	2 x BESA	7.4

SINGLE BED AND SIX BED WARD LIGHTING EXAMPLES

T8 Triphosphor Solution

Luminaire	Rapier refractor
Order Code	RBC/M/1558
Mounting Height	2.7m
Lamp	1 x 1500mm 58W Triphosphor

Bedhead Illuminance

Illuminance at bed head based on pillow at 1m above the floor level and 0.45m away from the wall

Ceiling Reflectance	70%
Wall Reflectance	50%
Floor Reflectance	20%

Circulation Area Illuminance

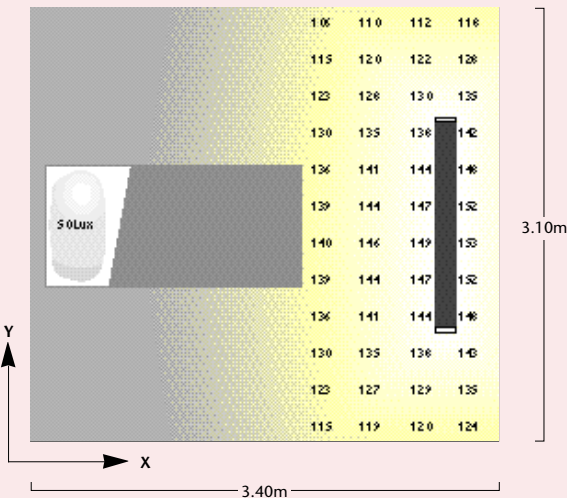
Illuminance array at floor level including the inter-reflected components based on ~

Ceiling Reflectance	70%
Wall Reflectance	50%
Floor Reflectance	20%

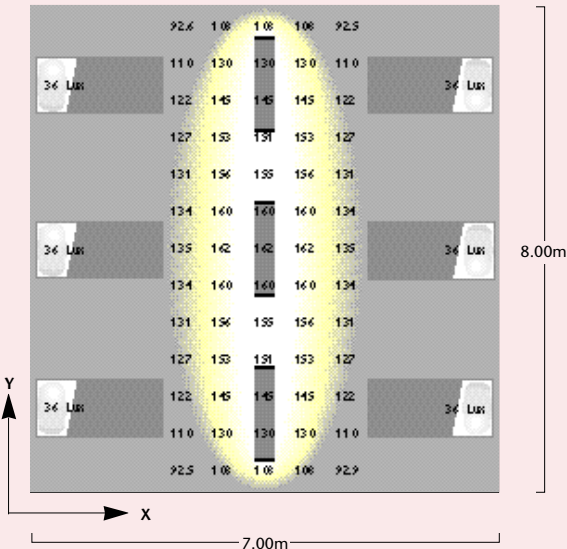
Bedhead Luminance

Calculated luminance to recumbent patient is 1656 cd/m².

SINGLE BED WARD

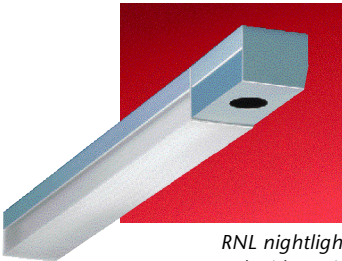


SIX BED WARD

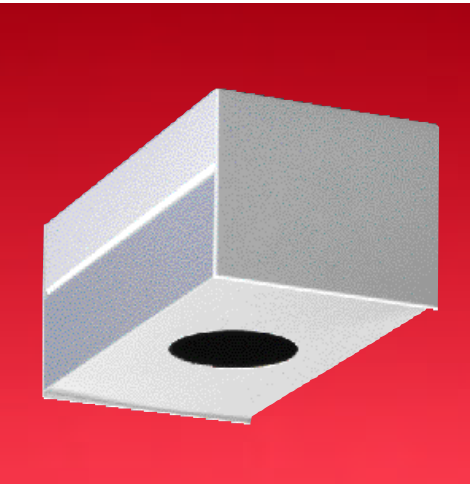


Rapier Nightlight

RAPIER NIGHTLIGHT
PREVIOUSLY DHSS TYPE BX



RNL nightlight mounted with Rapier refractor luminaire.



RNL/TC-L7

NIGHTLIGHTING OPTIONS

There are many options for the best method for achieving ward nightlighting; each option has particular benefits.

PREFERRED OPTIONS

The DHSS preferred option is a separate unit. Whitecroft has developed a separate unit which is based upon Rapier components and is therefore referred to as a 'Rapier Lookalike'. These luminaires may be used as stand-alone units or be bolted to the end of a Rapier luminaire to present the effect of a composite luminaire.

SPECIFICATION

- The performance criteria for Nightlights is laid down in BS 4533 Section 103.2 1986 and the CIBSE Code for Hospital Lighting.
- The criteria for compliance are twofold, covering luminance and illuminance limits, as follows:-
 - The luminance of Nightlight Luminaires at 55° to the downward vertical should not exceed 30 cd/m².
 - The illuminance in the circulation space should be between 3 lux and 5 lux but the illuminance at the bedhead should not exceed 0.1 lux for adult patients.

COMPLIANCE WITH SPECIFICATION

Where strict compliance with the specification is desirable, Whitecroft satisfies requirements with the preferred option of the Rapier Lookalike by attaching an aluminium cover to the standard Rapier spine, into which a formed baffle is fixed. A TC-L 5W or TC-L 7W compact fluorescent lamp is used as the light source.

Whilst more expensive, the TC-L lamps must increasingly be considered because of their extended lives. See diagram opposite.

ORDER CODES

RNL/1TCL5	SW/TC-L version
RNL/1TCL7	SW TC-L version

NON-COMPLIANCE WITH SPECIFICATION

Alternative stand alone Rapier Lookalike configurations can be supplied where compliance with the specification is relaxed.

There are two options:-

- Using the PL7 compact fluorescent lamp mounted within a standard Rapier acrylic diffuser.
- Using a 15 watt Pigmy lamp mounted within an aluminium cover attached to the standard Rapier spine to replace the diffuser.

ORDER CODES

RNL/D/1TCL7	Option 1	RNL/SBC	Option 2
-------------	----------	---------	----------

HOSPITAL NIGHTLIGHT EXAMPLE

Hospital Nightlight

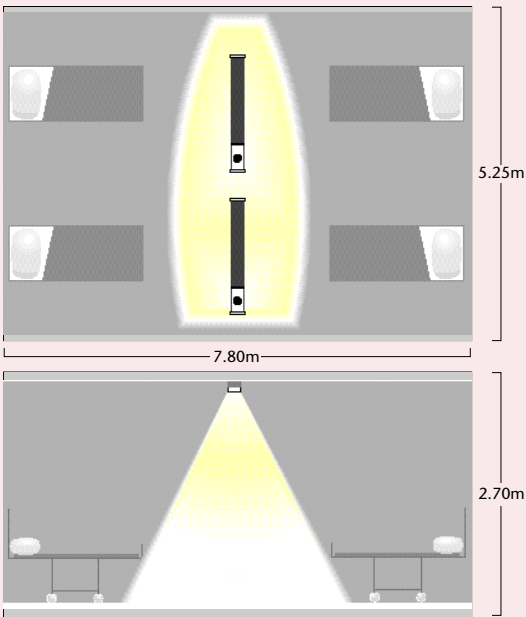
Luminaire	Rapier nightlight
Order Code	RNL/1TCL7 or RNL/1TCL5
Mounting Height	2.7m
Lamp	Compact fluorescent 7W TC-L or 5W TC-L

These are Rapier 'Lookalike' luminaires (two shown) which comply with the requirements laid down in BS 4533 Section 103.2 1986 and CIBSE Code for Hospital Lighting ~ previously DHSS type L photometric requirements.

They may be used alongside the RBC 1558 luminaires as shown.

The light area on the plan shows the illuminance of the circulation area. The illuminance is between 3 and 5 lux at floor level.

The shaded area of the elevation diagram shows the region, above 45° to the downward vertical, where the luminance to the recumbent patient is less than 30 cd m⁻².



ALTERNATIVES

Fully integral nightlights may be accommodated within the main Rapier (reference. RBC) spine but there is no pretence that these comply with the luminance limitations of the specification. In addition it is preferable that the sub-circuit wiring to Nightlights is kept separate from the normal lighting. This favours the preferred option of the stand alone unit.

Suffixing the main luminaire catalogue references as follows will specify the particular alternative requirements for integral Nightlights.

ORDER CODES

/SBC	SBC lampholder fitted, will accept most incandescent lamps
/2SBC	2 SBC lampholders fitted
/1TCL7	7W TCL Compact fluorescent
/1TCL5	5W TCL Compact fluorescent

Please refer to Whitecroft Technical Department to ensure specified nightlight lamp will physically fit in the required luminaire. Nightlight options are also available for the Stiletto range.

Sentry

SENTRY
WATCH/READING LIGHT

WATCHLIGHTING

Watchlighting has previously been used exclusively on intensive therapy units. Increasingly, however, the ceiling mounted watchlight technique is being used for the patients' reading light in a general ward.

Derivatives of surface Broadspread and Rapier are available for this application, both utilising compact fluorescent bi-axial lamps. The preferred solution however, is the recently developed Sentry Watchlight.



240/SEN/SBC

SPECIFICATION

- Circular recessed downlighter with specular aluminium reflector.
- Incorporates two alternative series connected capacitors to allow manual switching between either watchlighting or reading light illumination levels.
- Utilises a low cost incandescent lamp. Constant undervolting results in dramatically extended lamp life and low maintenance.
- Luminance of less than 700 cd/m² when viewed from an adjacent bed as required by the CIBSE Hospital Lighting Code.
- Designed in accordance with BS4533, IEC 598 and IP20.

SENTRY WATCH/READING LIGHT

This luminaire utilises a 'Softone'* Globe GLS lamp with two alternative series connected capacitors to provide two levels of illumination, reduced running costs and dramatically extended lamp life.

ORDER CODE	
240/SEN/SBC	1 x 100W G95 Softone Globe

* 'Softone' is a Philips registered trade mark

RAPIER LOOKALIKE

This continues the common theme of using the Rapier body but with a transverse blade louvre modelled on Whitecroft's PSL/TAL louvre.

ORDER CODES	
RAL/2TCL11	2 x 11W TC-L
RAL/1TCL18	1 x 18W TC-L
RAL/1218	1 x 18W T8

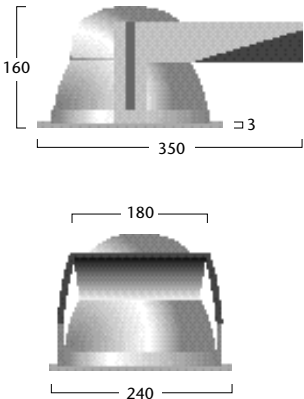
BROADSPREAD

This option is a derivative of Whitecroft's Surface Broadspread 130 using Wedge Louvre for minimum luminance to other patients.

ORDER CODES	
B13S/W3/2TCL11	2 x 11W TC-L
B13S/W3/1TCL18	1 x 18W TC-L
B13S/W3/1218	1 x 18W T8

The louvres used in these luminaires closely match those used for the ITU lighting solution and provide an extremely low brightness appearance minimising disturbance to other patients. Where a degree of brightness is desirable a crossblade louvre can be specified.

OPTIONS	
Louvre replace W3 in order code with suffix:~	
/X	Crossblade louvre



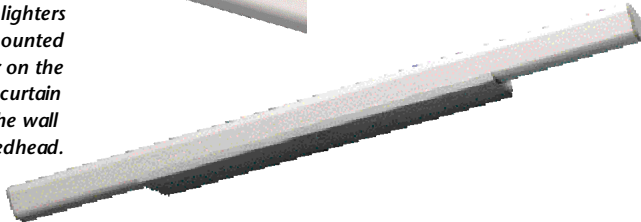
Wardlight

WALL MOUNTED UPLIGHTER

CURTAIN RAIL MOUNTED UPLIGHTER

WARDLIGHT

A new uplighting concept for bedded wards. This utilises purpose designed uplighters which are mounted either on the aluminium curtain rails or on the wall above the bedhead.



WAR/WM/HFG/2TCL55

SPECIFICATION

- Aluminium extruded body with steel mounting bracket and gear housing.
- One piece removable cover in plate glass.
- Ceiling luminance below 650 cd/m² at normal ceiling heights is well within acceptable limits.
- High Frequency control gear as standard.
- Utilises two TC-L 55W compact bi-axial lamps.

ORDER CODE

WAR/WM/HFG/2TCL55 2 × 55W

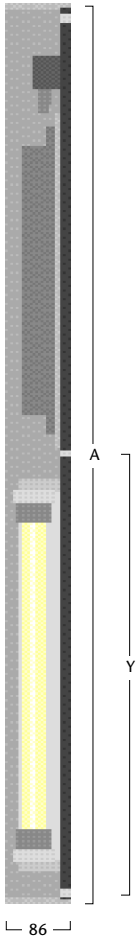
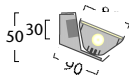
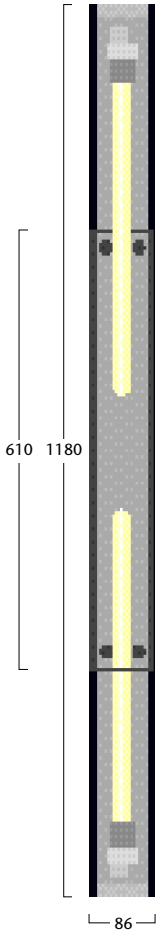
WAR/RM/HFG/1218

SPECIFICATION

- Aluminium extruded body with profile designed to locate positively on to most proprietary curtain rails.
- Optional polished reflector for increased light output.
- Two piece removable cover in plate glass.
- Ceiling luminance below 650 cd/m² at normal ceiling heights is well within acceptable limits.
- High Frequency control gear as standard.

ORDER CODES

WAR/RM/HFG/1218	1 × 18W
WAR/RM/HFG/1436	1 × 36W
WAR/RM/HFG/1558	1 × 58W
WAR/RM/HFG/1670	1 × 70W



MEASUREMENTS MM AND WEIGHTS

	Length	Fixing centre	Fixing detail	Weight Kg
	A	Y	No × Ø	
WAR/RM/HFG/1218	1190	649	2 × Ø7	2.5
WAR/RM/HFG/1436	1800	1259	2 × Ø7	3.4
WAR/RM/HFG/1558	2100	1559	2 × Ø7	3.8
WAR/RM/HFG/1670	2364	1823	2 × Ø7	4.2

ILLUMINANCE DISTRIBUTION SIX BED WARD EXAMPLE

Curtain rail mounted uplighter
for bedded wards 1 × 58W

Ceiling Height	2.7m
Utilisation Plane	1m
Mounting Height of Luminaires	2.2m
Lamp type	1 × 1500mm 58W T8 Triphosphor

Average Reflectances

Ceiling Reflectance	70%
Wall Reflectance	50%
Floor Reflectance	20%

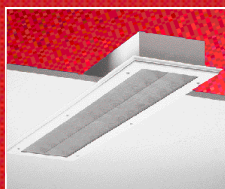
374	479	291	108	51	35.1	29.4	26.6	24
315	381	255	115	55	34.4	27	23.5	21.1
328	398	263	116	54.8	33.5	25.9	22.2	20
389	492	304	115	52.4	32.9	25.3	21.6	19.6
280	329	231	113	54.9	33.5	25.3	21.5	19.5
390	494	305	115	52.4	32.9	25.3	21.6	19.6
326	396	262	115	54.7	33.5	25.8	22.1	20
316	383	256	115	55	34.3	27	23.5	21.1
373	477	291	108	50.9	35	29.3	26.5	23.9



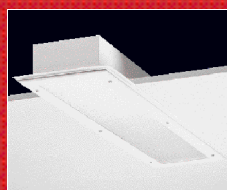
Clean area



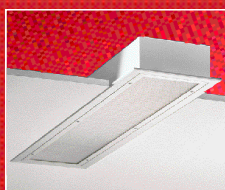
**PASTEUR II 65/65
& FLEMING 65
PAGE 225**



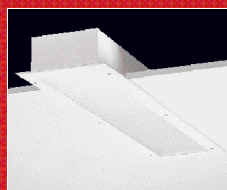
**CURIE II 65/65
PAGE 229**



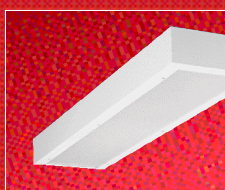
**JENNER II 65/54
PAGE 226**



**DTFA II 65/54
PAGE 230**



**LISTER II 65/20
& CORDON BLEU
PAGE 227**



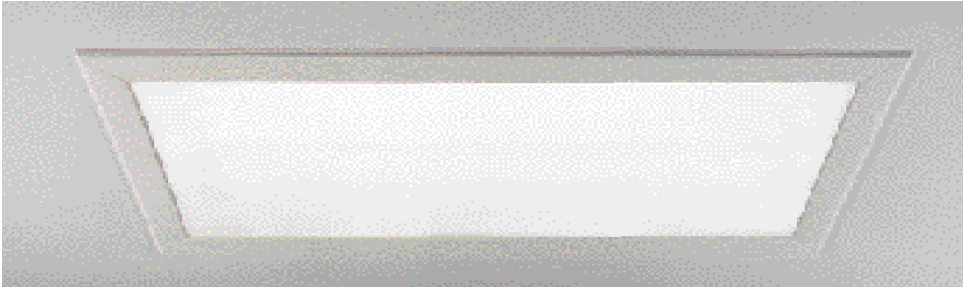
**DTBY 54
PAGE 231**



**LAMINA &
LAMINA 54
PAGE 228**



Pasteur II 65/65



Pasteur II maintains room integrity to IP65 with frame on or off and also provides the ultimate in ease of cleaning to minimise bacterial traps. This best satisfies exacting new clean room standards, such as the ISBE Guide which requires control of viable micro-organisms.

SPECIFICATION

- Frame and sides of body in UPVC, rear of canopy and attached gear tray in zinc plated steel painted white to a depth of 120mm.
- A nearly jointless front face is achieved by co-extrusion of the frame and gaskets and the use of a clipping mechanism which eliminates the need for fixing screws on front access versions.
- A universal fixing method from below employs a jacking bracket with a solid aluminium block providing a contact area with the ceiling of 3-4cm² at each fixing point.
- Ceilings up to 100mm deep can be accommodated.
- Rapidly detachable gear and lamp tray to allow quick replacement and more detailed maintenance, external to the sterile area.
- Patented Design.
- Class ITP (a) diffuser options in prismatic polycarbonate or K12 PVC, clear polycarbonate options with x blade or category 2 louvres. Prismatic options are supplied smooth face down, prisms up (PRU), unless otherwise requested.
- Similar class 3 options (TP(b)).
- Front and rear access versions are identical when viewed from below. Rear access versions are supplied with handles on the zinc steel rear canopy.
- Body frame and seal corners are continuously welded, the zinc plated rear canopy is fully gasketed to the body and the jacking bracket is isolated from the room via a nylon seal and a separate plug in the frame of the body.

OPTIONS

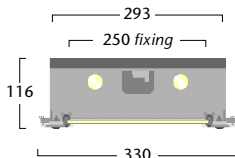
Louvre/diffuser	replace /X within order code:-
/W2	65° Cat. 2 louvre
/K12FG/PRU	K12 Fireguard Tp(a) prisms uppermost
/PPC/PRU	Prismatic Polycarbonate Tp(a) prisms uppermost
/P12A/PRU	P12 Acrylic prisms uppermost

Clear panel	replace /CPC within order code:-
/CFA	Clear flat acrylic

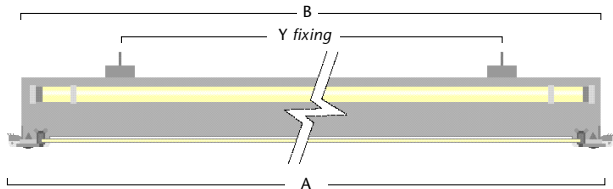
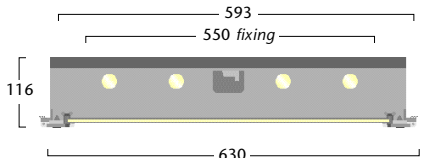
EMERGENCY CODES

EM2BR	All 18W lamp luminaires
EM4BR	All 36W and 58W lamp luminaires

Cross section: Twin lamp



Cross section: Triple & Quadruple lamp



ORDER CODES	FEATURES AND DIMENSIONS MM					
	Lamp ways	Longitudinal dimensions		Fixing Centre	Fixing detail	Wt Kg
		A	B	Y	No x Ø	Suggested cut aperture*
330/PAS2/X/HFG/2436/CPC	2 x 36W	1270	1234	910	4 x Ø10	14.0
330/PAS2/X/HFG/2558/CPC	2 x 58W	1570	1534	1200	6 x Ø10	16.9
630/PAS2/X/HFG/3218/CPC	3 x 18W	670	634	550	4 x Ø10	13.0
630/PAS2/X/HFG/3436/CPC	3 x 36W	1270	1234	910	4 x Ø10	22.9
630/PAS2/X/HFG/3558/CPC	3 x 58W	1570	1534	1200	6 x Ø10	26.3
630/PAS2/X/HFG/4218/CPC	4 x 18W	670	634	550	4 x Ø10	13.0
630/PAS2/X/HFG/4436/CPC	4 x 36W	1270	1234	910	4 x Ø10	22.9
630/PAS2/X/HFG/4558/CPC	4 x 58W	1570	1534	1200	6 x Ø10	26.3

* Cut apertures shown are for front access luminaires only. Please contact the Technical Department for back access dimensions.

FLEMING 65

NON MODULAR RECESSED BACK ACCESS LUMINAIRE

Fleming 65 is available in back access mode only. When installation costs are considered it provides both a technically superior and cost effective alternative to diffuser panels bonded into the ceiling structure. When mastic is applied correctly between frame and ceiling a seal equivalent to IP65 is obtained.

- 2, 3 and 4 lamp options available in 18, 36 and 58W versions. Please contact the Whitecroft Sales Department.

NOTES

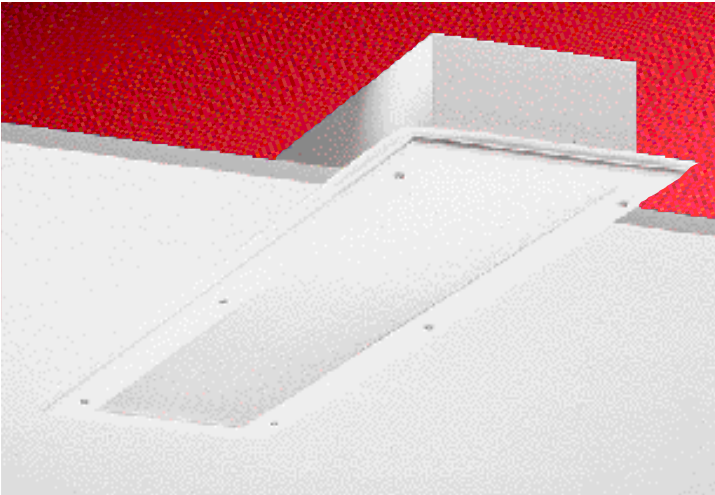
Non modular options available



Jenner II 65/54

(FRAME ON/FRAME OFF)
MODULAR RECESSED SEALED LUMINAIRE

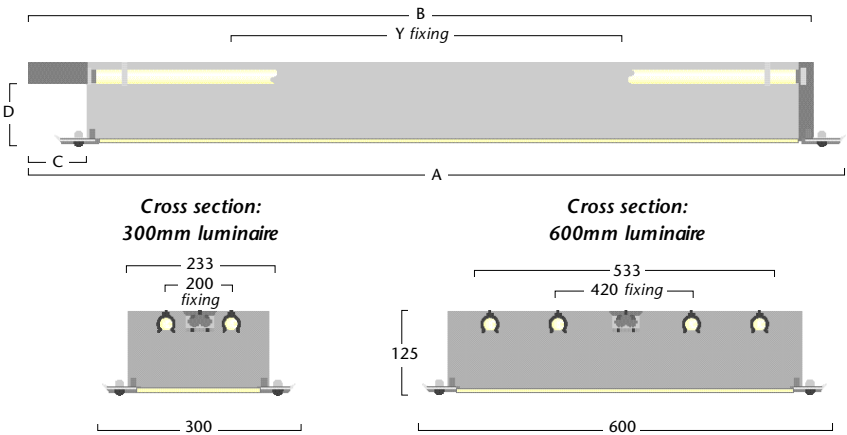
Jenner 65/54 is available in front or back access as standard. Designed to satisfy the requirements of FS209D Class 10000 and 1000000 Clean Rooms. The back access version has a single extruded aluminium frame with a vertical leg rivetted to the body. Access to lamps is gained via a fully gasketed lid with handle attachments. The front access version has two frames, access to lamps being gained via removal of fixing screws.



NOTE
Non modular options available
TC-L versions suit modular and non modular ceilings

EMERGENCY CODES	
EM2BR	All 18W lamp luminaires
EM4BR	All 36W and 58W lamp luminaires
EG6BR	All 70W lamp luminaires

300/ and 600/ luminaire range
except TC-L 36 and F34 lamp luminaires



FEATURES AND DIMENSIONS MM									Suggested cut aperture* (+5/-0mm)
ORDER CODES	Lamp ways	Longitudinal dimensions				Fixing centre	Fixing detail	Wt Kg	
		A	B	C	D	Y	No x Ø		
300/JEN2/P12A/PRU/HFG/2F34	2 x F34	1200	1132	-	-	1000	4 x Ø8	8.6	1179 x 279
300/JEN2/P12A/PRU/HFG/2436	2 x 36W	1200	1256	125	50	1000	4 x Ø8	8.6	1179 x 279
300/JEN2/P12A/PRU/HFG/2558	2 x 58W	1500	1556	125	50	1000	4 x Ø8	10.6	1479 x 279
300/JEN2/P12A/PRU/HFG/2670	2 x 70W	1800	1816	85	50	1000	4 x Ø8	11.6	1779 x 279
600/JEN2/P12A/PRU/HFG/2TCL36	2 x 36W TCL	600	532	-	-	420	4 x Ø8	9.5	579 x 579
600/JEN2/P12A/PRU/HFG/3TCL36	3 x 36W TCL	600	532	-	-	420	4 x Ø8	9.7	579 x 579
600/JEN2/P12A/PRU/HFG/3218	3 x 18W	600	646	115	50	420	4 x Ø8	9.7	579 x 579
600/JEN2/P12A/PRU/HFG/3436	3 x 36W	1200	1256	125	50	1000	4 x Ø8	14.5	1179 x 579
600/JEN2/P12A/PRU/HFG/3558	3 x 58W	1500	1556	125	50	1000	4 x Ø8	16.2	1479 x 579
600/JEN2/P12A/PRU/HFG/3670	3 x 70W	1800	1816	85	50	1000	4 x Ø8	18.0	1779 x 579
600/JEN2/P12A/PRU/HFG/4F34	4 x F34	1200	1132	-	-	1000	4 x Ø8	14.5	1179 x 579
600/JEN2/P12A/PRU/HFG/6F34	6 x F34	1200	1132	-	-	1000	4 x Ø8	14.7	1179 x 579
600/JEN2/P12A/PRU/HFG/4218	4 x 18W	600	646	115	50	420	4 x Ø8	9.5	579 x 579
600/JEN2/P12A/PRU/HFG/4436	4 x 36W	1200	1256	125	50	1000	4 x Ø8	14.5	1179 x 579
600/JEN2/P12A/PRU/HFG/4558	4 x 58W	1500	1556	125	50	1000	4 x Ø8	16.2	1479 x 579
600/JEN2/P12A/PRU/HFG/4670	2 x 70W	1800	1816	85	50	1000	4 x Ø8	18.0	1779 x 579

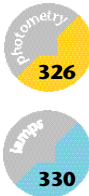
* Cut apertures shown are front access luminaires only. Please contact Technical Department for back access dimensions.

SPECIFICATION

- Unique flipper seal gasket caters for ceiling irregularities and provides IP65 protection. On front access versions, the mitred vulcanised thermoplastic rubber gasket seals both body to ceiling and flange to body.
- Extruded aluminium diffuser frame with mitred corners (fully welded on back access versions).
- Separate sealed body and diffuser frames ensure that the integrity of the room is retained with the frame in position (IP65) or removed (IP54). The design eliminates the need for mastic type sealants to be applied by the installer.
- Steel body finished in epoxy polyester powder paint finish to an average coverage of 120µm.
- On front access versions, the body is supplied for drop rod fixing as standard, optional side arm suspension brackets can be supplied. Drop rod fixing holes in the body should be properly sealed by the installer. Side arm brackets are adjusted from outside the sealed body. Side arm brackets, adjustable from within the luminaire body, are standard on the back access version with drop rod fixing being possible into the stepped body as an alternative.
- Frame fixing by means of screw fasteners to allow for ceiling irregularities. ¼ turn fasteners available as an option.
- Independently tested IP65 (frame on), IP54 (frame off) rating.
- Rapidly detachable gear and lamp tray to allow exchange with a replacement and simple maintenance outside the clean area.
- Class 3 (TP(b)) rated acrylic diffuser panel with internal prisms for easy wipeability. Class 1 (TP(a)) and louvred options are available.
- High frequency electronic control gear as standard.
- Alternative control gear versions available on request.
- Emergency options available.
- ∇ Mark available.

OPTIONS

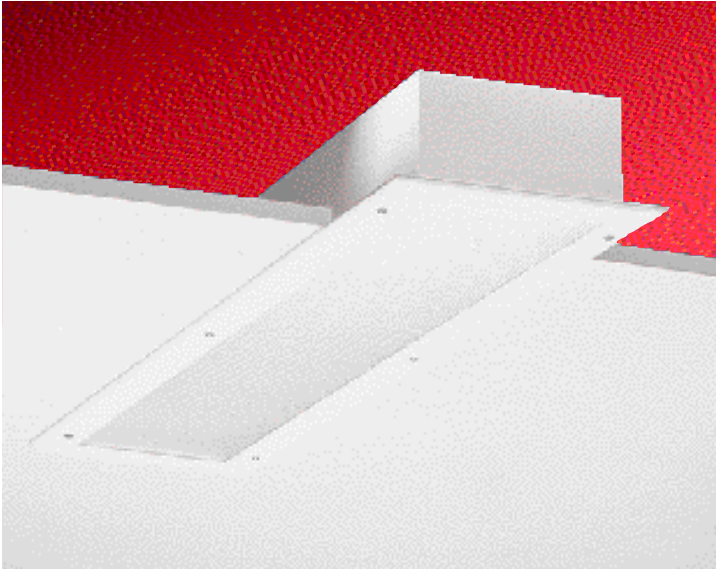
Side support brackets add suffix to order code:~	
/SB	Side support brackets
Louvres/diffusers replace /P12A/PRU within order code:~	
/X	Crossblade louvre
/W2	Category 2 louvre
/K12FG/PRU	K12 Fireguard Tp(a) prisms uppermost
/PRU//PRU	Prismatic Polycarbonate Tp(a) prisms uppermost
Clear panels for louvred options add suffix to end of order code:~	
/CFA	Clear Flat Acrylic
/CPC	Clear Polycarbonate Tp(a)
/LAMG	6.4mm laminated glass



Lister II 65/20

(FRAME ON/FRAME OFF)
MODULAR RECESSED SEALED LUMINAIRE

Lister 65/20 is available with front access. The flange design provides a seal equivalent to IP65 with the ceiling when installed. With the flange removed the ingress protection of the luminaire is IP20.



SPECIFICATION

- Closed cell extruded EPDM flange gasket provides IP65 seal against ceiling, Tee bar or auxiliary spring Tee insert.
- Extruded aluminium diffuser frame.
- Steel body finished in epoxy polyester powder paint finish to an average coverage of 120µm.
- The body is supplied for drop rod fixing is standard, optional side arm suspension brackets can be supplied. Side arm brackets are adjusted from inside the luminaire canopy.
- Frame fixing by means of screw fasteners to allow for ceiling irregularities. 1/4 turn fasteners available as an option.
- Class 3 (Tp(b)) rated acrylic diffuser panel with internal prisms for easy wipeability. Class 1 (Tp(a)) and louvred options.
- Switch start control gear as standard.
- Alternative control gear versions available on request.
- Emergency options available.
- Steel frame version available, Cordon Bleu.

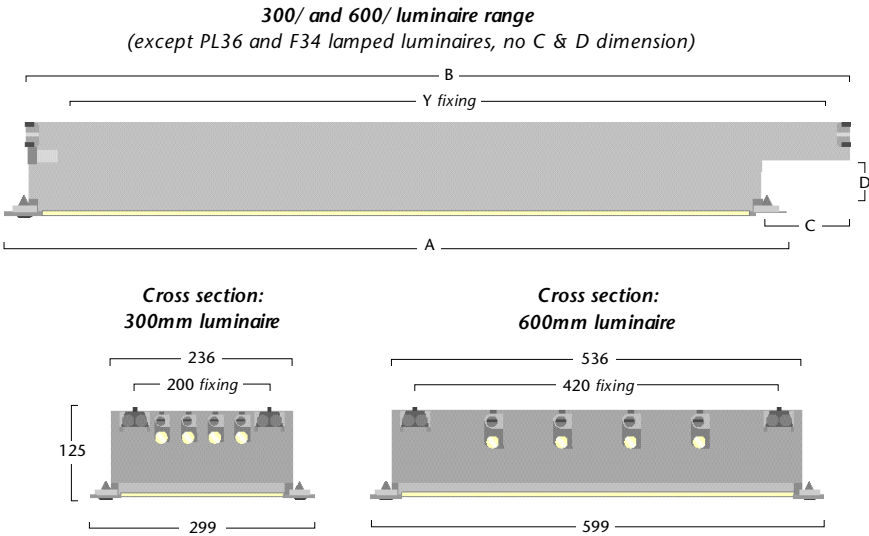
OPTIONS

Side support brackets add suffix to order code:-
/SB Side support brackets

Louvres/diffusers replace /P12A/PRU within order code:-
/X Crossblade louver
/W2 Category 2 louver
/K12FG/PRU K12 Fireguard Tp(a) prisms uppermost
/PRU//PRU Prismatic Polycarbonate Tp(a) prisms uppermost

Clear panels for louvred options
add suffix to end of order code:-

/CFA Clear Flat Acrylic
/CPC Clear Polycarbonate Tp(a)
/LAMG 6.4mm laminated glass



FEATURES AND DIMENSIONS MM									
ORDER CODES	Lamp ways	Longitudinal dimensions				Fixing centre	Fixing detail	Wt Kg	Suggested cut aperture*
		A	B	C	D	Y	No x Ø		(+5/-0mm)
300/LIS2/P12A/PRU/S/2F34	2 x F34	1199	1136	-	-	1000	4 x Ø8	8.3	1175 x 275
300/LIS2/P12A/PRU/S/2436	2 x 36W	1199	1227	90	69	1000	4 x Ø8	8.0	1175 x 275
300/LIS2/P12A/PRU/S/2558	2 x 58W	1499	1527	90	69	1000	4 x Ø8	9.8	1475 x 275
300/LIS2/P12A/PRU/S/2670	2 x 70W	1799	1791	54	69	1000	4 x Ø8	10.6	1775 x 275
600/LIS2/P12A/PRU/S/2TCL36	2 x 36W TCL	599	536	-	-	420	4 x Ø8	8.3	575 x 575
600/LIS2/P12A/PRU/S/3TCL36	3 x 36W TCL	599	536	-	-	420	4 x Ø8	8.5	575 x 575
600/LIS2/P12A/PRU/S/3218	3 x 18W	599	617	80	69	420	4 x Ø8	8.5	575 x 575
600/LIS2/P12A/PRU/S/3436	3 x 36W	1199	1227	90	69	1000	4 x Ø8	14.0	1175 x 575
600/LIS2/P12A/PRU/S/3558	3 x 58W	1499	1527	90	69	1000	4 x Ø8	16.3	1475 x 575
600/LIS2/P12A/PRU/S/3670	3 x 70W	1799	1791	54	69	1000	4 x Ø8	17.5	1775 x 575
600/LIS2/P12A/PRU/S/4F34	4 x F34	1199	1136	-	-	1000	4 x Ø8	14.5	1175 x 575
600/LIS2/P12A/PRU/S/6F34	6 x F34	1199	1136	-	-	1000	4 x Ø8	14.7	1175 x 575
600/LIS2/P12A/PRU/S/4218	4 x 18W	599	617	80	69	420	4 x Ø8	8.5	575 x 575
600/LIS2/P12A/PRU/S/4436	4 x 36W	1199	1227	90	69	1000	4 x Ø8	14.0	1175 x 575
600/LIS2/P12A/PRU/S/4558	4 x 58W	1499	1527	90	69	1000	4 x Ø8	16.3	1475 x 575
600/LIS2/P12A/PRU/S/4670	4 x 70W	1799	1791	54	69	1000	4 x Ø8	17.5	1775 x 575

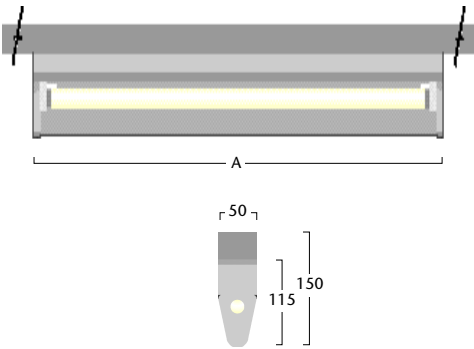
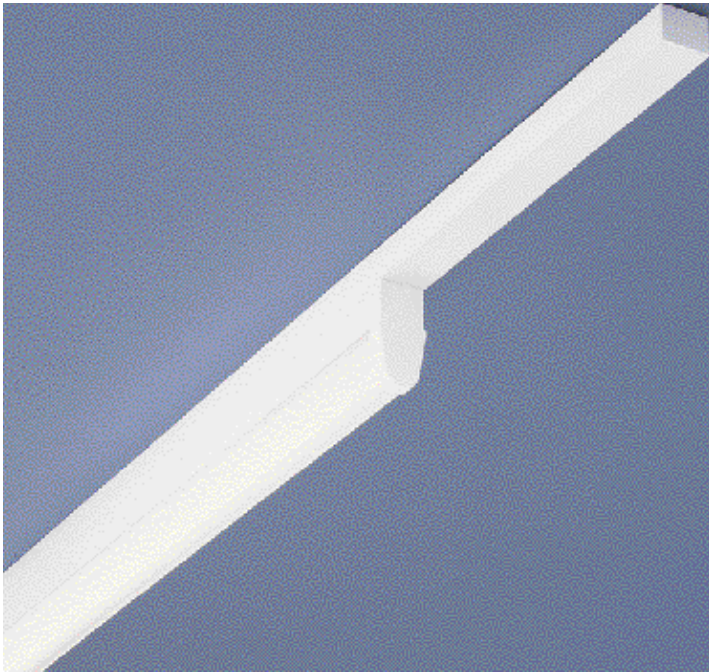
* Cut apertures shown are front access luminaires only. Please contact Technical Department for back access dimensions.

NOTE

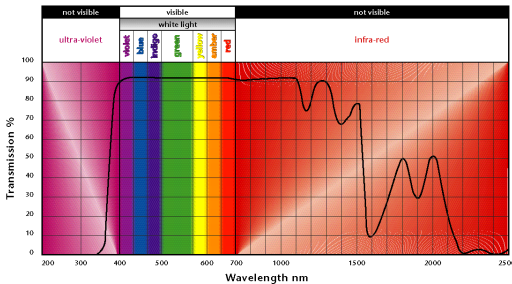
Non modular options available
TC-L versions suit modular and non modular ceilings



Lamina & Lamina 54



UV TRANSMISSION ~ STANDARD DEGALAN DIFFUSER



OPTIONS

Finishes *substitute W with suffix:~*
A Anodised finish

Base unit *consists of body, gear tray and diffuser:~*
LAMTRUNK 2.4 2.4m length (please specify quantity)

Intermediate connection kit *please specify quantity:~*
LEI/0.5 Double end cap and connecting cable, terminated in moulded Wieland connectors at each end

End connection kit *please specify quantity:~*
LES/1.0 2 x single endcaps and 1m supply cable, one end terminated in a moulded Wieland connector, other end crimped wires

Mounting options *add suffix to order code:~*
/IND Individual mounting
/CONT Continuous mounting

Body colour *please specify:~*
White **Silver**

Diffuser *please specify:~*
UV Degalan Clear or opal
Polycarbonate Clear or opal

SPECIFICATION

- Designed to cause the minimum possible disturbance to laminar air flow, to meet the exacting requirements of the micro electronic clean room industry. Independently tested by Diamond Scientific Ltd., contamination control consultants to the clean room user.
- Individual or continuous mounting options.
- Available in any length required up to a maximum lamp length of 1800mm.
- The luminaires can be mounted direct to the ceiling Tee, or a continuous trunking system is available for easy installation, which has provision for extra low voltage wiring separation. Trunking is supplied in 2.4 m lengths.
- Both trunking and luminaire mounting surface have a central groove for accurate drilling and alignment beneath the Tee Bar.
- High Frequency ballast as standard.
- A particularly shallow depth allowing maximum ceiling clearance: 150mm with trunking, 115mm without trunking.
- Diffusers either in special UV absorbent DEGALAN (absorption properties shown below) or in polycarbonate, each available in clear or opal.
- Luminaire dimensions allow incorporation of a gold sleeve for Photosensitive applications.
- Both Luminaire body and trunking are designed to fit flush with a standard 50mm ceiling grid.
- Body in extruded aluminium, with either white painted finish (closest RAL equivalent RAL9016) or satin silver AA5 anodised finish.
- Rapidly detachable gear tray with push fit Wieland connectors to minimise disruption in the room and allow maintenance to be performed outside.
- Single or double ABS endcaps for end or middle of a row. Double end caps have 24mm diameter hole, single end caps have 24mm knock out.
- Up to 30 luminaires can be supplied on 1 feed.
- Fully integral emergency versions can be supplied using an extended body.

LAMINA 54

- Main details as Lamina above.
- Endcap design and body profile modified to achieve IP54 to satisfy the requirements of the Pharmaceutical Industry.

EMERGENCY CODES

EM2IN	All 18W lamp luminaires
EM45IN	All 36W and 58W lamp luminaires
EM6IN	All 70W lamp luminaires

FEATURES AND DIMENSIONS MM

ORDER CODES	Lamp ways	Longitudinal dimension	Wt Kg	
Lamina surface teardrop		A		
LAMW/HFG/1218	1 x 18W	627	1.5	
LAMW/HFG/1436	1 x 36W	1237	2.7	
LAMW/HFG/1558	1 x 58W	1537	3.4	
LAMW/HFG/1670	1 x 70W	1801	4.0	
Lamina 54 surface teardrop				
LAM54/HFG/1218	1 x 18W	627	2.0	
LAM54/HFG/1436	1 x 36W	1237	3.2	
LAM54/HFG/1558	1 x 58W	1537	3.9	
LAM54/HFG/1670	1 x 70W	1801	4.5	
Base unit				
LAMTRUNK 2.4	-	2400	1.9	

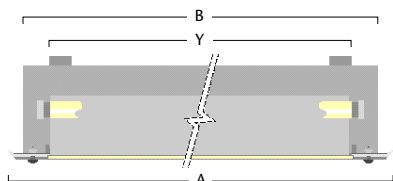
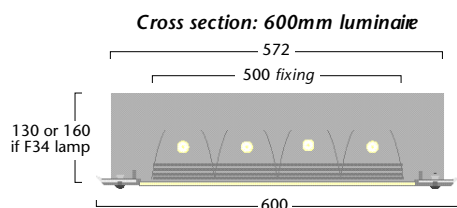
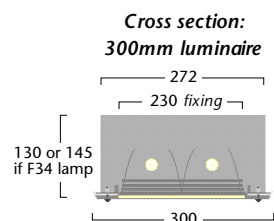
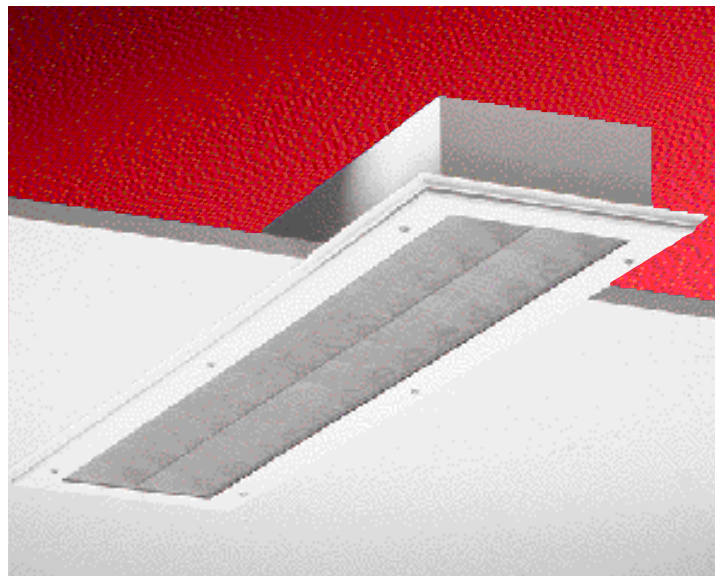
When ordering, specify number of base units, intermediate connections and end connection kits, detailed above and opposite, together with length of trunking if required. If one single end cap is employed, such as at the end of row, add 1mm to base unit.



Curie II 65

(FRAME ON/FRAME OFF)

Curie 65/65 is available in front or back access as standard. Designed to satisfy the most exacting clean room requirements. The back access version has a single extruded aluminium frame with a vertical leg rivetted to the body. Access to lamps is gained via a fully gasketed lid with handle attachments. The front access version has two frames, access to lamps being gained via removal of fixing screws.



OPTIONS

Side support brackets add suffix to order code:~

/SB Side support brackets

Louvres/diffusers replace X within order code:~

/W2 65° Cat.2 louvres

/K12FG/PRU K12 Fireguard Tp(a) prisms uppermost

/PPC/PRU Prismatic Polycarbonate Tp(a) prisms uppermost

/P12A/PRU P12 Acrylic prisms uppermost

Clear panel replace /CPC within order code:~

/CFA Clear Flat Acrylic

/LAMG 6.4mm laminated glass

EMERGENCY CODES

EM2BR All 18W lamp luminaires

EM45BR All 34, 36 and 58W lamp luminaires

EG6BR All 70W lamp luminaires

FEATURES AND DIMENSIONS MM

ORDER CODES	Lamp ways	Longitudinal dimensions		Fixing centre	Fixing detail	Wt Kg	Suggested cut aperture*
		A	B				
300/CUR2/X/HFG/2F34/CPC	2 x F34	1200	1170	1000	4 x Ø8	12.5	1179 x 279
300/CUR2/X/HFG/2436/CPC	2 x 36W	1286	1256	1000	4 x Ø8	12.5	1269 x 279
300/CUR2/X/HFG/2558/CPC	2 x 58W	1586	1556	1000	4 x Ø8	16.3	1569 x 279
300/CUR2/X/HFG/2670/CPC	2 x 70W	1846	1816	1000	4 x Ø8	20.1	1829 x 279
600/CUR2/X/HFG/2F34/CPC	2 x F34	600	570	400	4 x Ø8	13.0	579 x 579
600/CUR2/X/HFG/3F34/CPC	3 x F34	600	570	400	4 x Ø8	13.2	579 x 579
600/CUR2/X/HFG/3218/CPC	3 x 18W	676	645	500	4 x Ø8	13.2	659 x 579
600/CUR2/X/HFG/3436/CPC	3 x 36W	1286	1256	1100	4 x Ø8	20.5	1269 x 579
600/CUR2/X/HFG/3558/CPC	3 x 58W	1586	1556	2@700	4 x Ø8	24.2	1569 x 579
600/CUR2/X/HFG/3670/CPC	3 x 70W	1846	1816	2@825	4 x Ø8	27.9	1829 x 579
600/CUR2/X/HFG/4F34/CPC	4 x F34	1200	1170	1000	4 x Ø8	20.5	1179 x 579
600/CUR2/X/HFG/6F34/CPC	6 x F34	1200	1170	1000	4 x Ø8	20.7	1179 x 579
600/CUR2/X/HFG/4218/CPC	4 x 18W	676	646	500	4 x Ø8	13.0	659 x 579
600/CUR2/X/HFG/4436/CPC	4 x 36W	1286	1256	1100	4 x Ø8	20.5	1269 x 579
600/CUR2/X/HFG/4558/CPC	4 x 58W	1586	1556	2@700	4 x Ø8	24.2	1569 x 579
600/CUR2/X/HFG/4670/CPC	4 x 70W	1846	1816	2@825	4 x Ø8	27.9	1829 x 579

* Cut apertures shown are front access luminaires only. Please contact Technical Department for back access dimensions.

SPECIFICATION

- Unique flipper seal gasket caters for ceiling irregularities and provides IP65 protection. On front access versions, the mitred vulcanised thermoplastic rubber (TPR) gasket seals both body to ceiling and flange to body.
- Extruded aluminium diffuser and inner frames with welded and finished corners.
- Separate sealed body and fully welded and finished diffuser frame ensures that the integrity of the room is retained to IP65 after gas sterilisation, whether carried out with the frame in position or removed (front access version). This unique design eliminates the need for mastic type sealants to be applied by the installer.
- Fully welded and finished zinc coated steel body finished in epoxy polyester powder paint finish to an average coverage of 120µm.
- Stainless steel body attachments including front frame security chains and airtight rivets fastening front frame to body.
- Standard side arm suspension brackets can be clamped from within the sealed body on front and back access versions, allowing easy installation when access to the ceiling void is not available, without compromising the IP65 rating.
- Front access drop rod fixing option via fixing holes and IP65 drop rod fixing kit from within the sealed body or alternatively by means of perforated channels welded to rear of body (requires access to ceiling void for fixing). Back access drop rod fixing possible into stepped body.
- Frame fixing on front access versions by means of screw fasteners to allow for ceiling irregularities. 1/4 turn fasteners available as an option.
- Independently tested IP65 rating on frame and body.
- Rapidly detachable gear and lamp tray to allow exchange with a replacement and simple maintenance outside the clean area.
- Class 1 (TP(a)) rated clear polycarbonate panel for easy wipeability with internal high efficiency cross blade louvre. Laminated glass, prismatic diffuser and Class 3 (TP(b)) options are available. Prismatic options are supplied smooth face down, prisms up (PRU), unless otherwise requested.
- High frequency electronic control gear as standard.
- Alternative control gear versions available on request.
- Emergency options available.
- Optional hazardous area Zone 2 (ExN II T4) BASEEFA approved versions.

NOTE

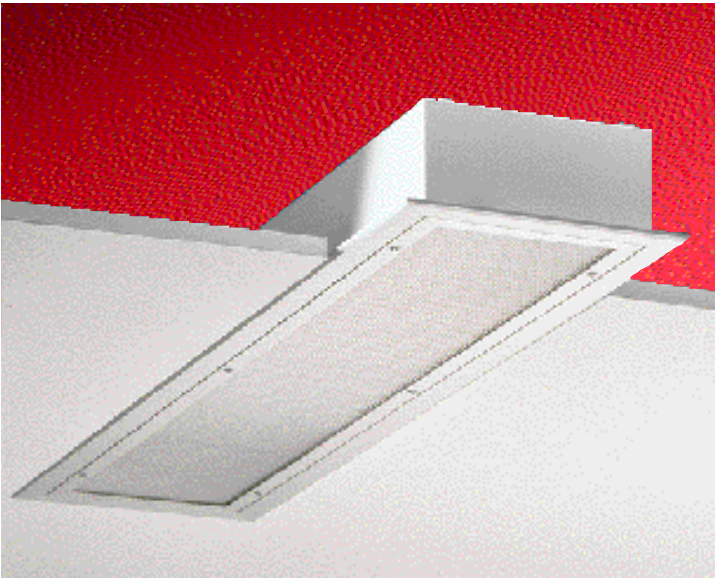
Non modular options available

TC-L versions suit modular and non modular ceilings

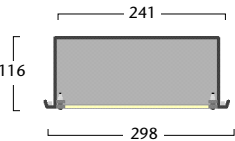


DTFA II 65/54

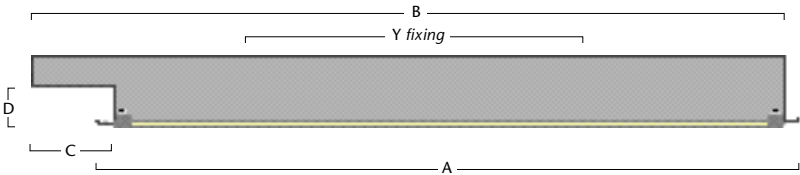
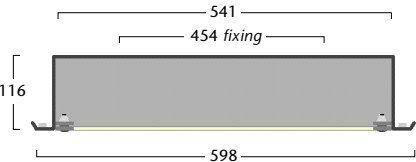
(FRAME ON/FRAME OFF)



Cross section: 300mm luminaire



Cross section: 600mm luminaire



SPECIFICATION

- Designed to satisfy the requirement of FS209D class 10,000 and 100,000 clean rooms. Available as a front across luminaire as standard, back access options available.
- The body is tested and approved to IP54 ensuring room integrity is maintained with the flange on (IP65) or off (IP54). Any holes in the body required for drop rod fixing should be adequately sealed by the installer. Please contact Whitecroft if technical advice is required.
- Back access version available as an option.
- The standard luminaire body is prepared for drop rod fixing from the ceiling soffit, see dimensions for fixing detail. Other means of fixing can be provided.
- The outer frame is gasketed direct to the ceiling and gaskets are also incorporated between inner and outer frames. This maintains room integrity to IP65 with the frame in place. Mastix is not necessary but can be applied if preferred.
- Inner and outer frames are in satin silver AA5 anodised aluminium. The inner frame and diffuser are positively retained. When installed, the gap between inner and outer frame totally closes removing a potential bacterial trap.
- M6 fasteners pass inside the steel body.
- High frequency ballast as standard, other options available on request.
- The IP54 Body is Phosphate treated steel to give added corrosion protection and white epoxy polyester powder coated (closest RAL equivalent RAL9016) finish to an average depth of 120µm.
- Prismatic acrylic diffuser retained in inner frame. Diffusers are normally supplied with smooth face facing downwards. Refer to options for Diffuser materials that qualify as Class 1 (TP (a)) when tested in accordance with BS 476 part 7 1987.

OPTIONS

Side brackets	add suffix to order code:-
/SB	Side support brackets
Diffusers	replace P12A/PRU:-
/K12FG/PRU	K12 Fireguard Tp(a) prisms uppermost
/PPC/PRU	Prismatic Polycarbonate Tp(a) prisms uppermost
/CFA	Clear Flat Acrylic
/CPC	Clear Polycarbonate Tp(a)

EMERGENCY CODES

EM2BR	All 18W lamp luminaires
EM45BR	All 36W and 58W lamp luminaires
EM6BR	All 70W lamp luminaires

FEATURES AND DIMENSIONS MM

ORDER CODES	Lamp ways	Longitudinal dimensions				Fixing centre	Fixing detail	Wt Kg	Suggested cut aperture*
		A	B	C	D				
300/DTFA2/P12A/PRU/HFG/2436	2 x 36W	1198	1245	103	49	914	2 x Ø8	9.5	1165 x 257
300/DTFA2/P12A/PRU/HFG/2558	2 x 58W	1498	1545	103	49	1372	2 x Ø8	11.5	1465 x 257
300/DTFA2/P12A/PRU/HFG/2670	2 x 70W	1798	1816	75	49	1372	2 x Ø8	12.5	1765 x 257
600/DTFA2/P12A/PRU/HFG/3218	3 x 18W	598	635	93	49	454	4 x Ø8	8.6	565 x 557
600/DTFA2/P12A/PRU/HFG/3436	3 x 36W	1198	1245	103	49	914	4 x Ø8	15.4	1165 x 557
600/DTFA2/P12A/PRU/HFG/3558	3 x 58W	1498	1545	103	49	1372	4 x Ø8	17.7	1465 x 557
600/DTFA2/P12A/PRU/HFG/3670	3 x 70W	1798	1816	75	49	1372	4 x Ø8	20.0	1765 x 557
600/DTFA2/P12A/PRU/HFG/4218	4 x 18W	598	635	93	49	454	4 x Ø8	8.6	565 x 557
600/DTFA2/P12A/PRU/HFG/2TCL36	2 x 36W TCL	598	541	-	-	454	4 x Ø8	8.4	565 x 557
600/DTFA2/P12A/PRU/HFG/4436	4 x 36W	1198	1245	103	49	914	4 x Ø8	15.4	1165 x 557
600/DTFA2/P12A/PRU/HFG/4558	4 x 58W	1498	1545	103	49	1372	4 x Ø8	17.7	1465 x 557
600/DTFA2/P12A/PRU/HFG/4670	4 x 70W	1798	1816	75	49	1372	4 x Ø8	20.0	1765 x 557

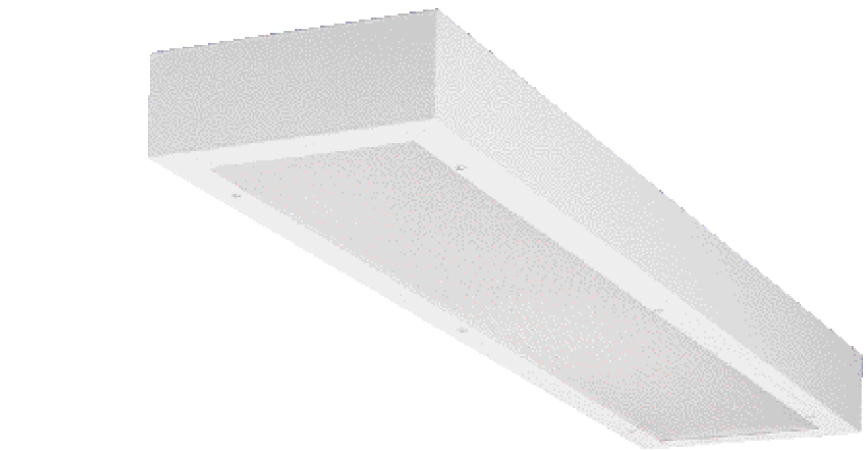
* Cut apertures shown are front access luminaires only. Please contact Technical Department back access dimensions.

NOTES

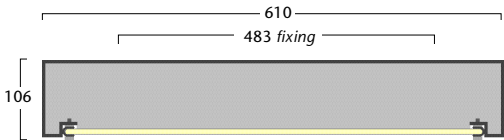
Non modular options available



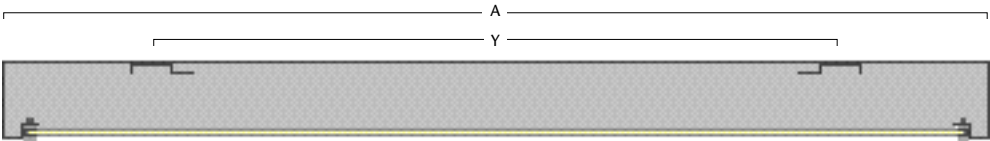
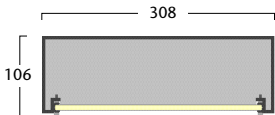
DTBY 54



Cross section:
610mm luminaire



Cross section:
308mm luminaire



SPECIFICATION

- The flange is designed in accordance with IP54 to seal to the luminaire body. Smooth exterior surfaces minimise collection of dust or moisture.
- The luminaire body is mounted direct to the ceiling soffit.
- Inner frame in aluminium with epoxy polyester powder coated (closest RAL equivalent RAL9016) finish to an average depth of 120µm. The inner frame and diffuser are positively retained.
- Fasteners pass inside the steel body.
- High frequency ballast as standard, other options available on request.
- Phosphate treated steel body to give added corrosion protection and white epoxy polyester powder coated (closest RAL equivalent RAL9016) finish to an average depth of 120µm.
- Prismatic diffuser retained in gasketed inner frame. Diffusers are normally supplied with prisms facing downwards but if hygiene is a critical consideration, request prisms up by adding /PRU to the end of the product code.

OPTIONS

Diffusers add suffix after /P12S within order code:~

/PRU Diffuser mounted prisms uppermost (where hygiene is a critical consideration)

EMERGENCY CODES

EM2BR	All 18W lamp luminaires
EM45BR	All 36W and 58W lamp luminaires
EM6BR	All 70W lamp luminaires

ORDER CODES	FEATURES AND DIMENSIONS MM				
	Lamp ways	Longitudinal dimensions	Fixing centre	Fixing detail	Wt Kg
		A	Y	No x Ø	
308/DTBY/P12S/HFG/1436	1 x 36W	1303	914	2 x Ø20	10.4
308/DTBY/P12S/HFG/1558	1 x 58W	1603	914	2 x Ø20	13.0
308/DTBY/P12S/HFG/1670	1 x 70W	1862	914	2 x Ø20	14.8
308/DTBY/P12S/HFG/2436	2 x 36W	1303	914	2 x Ø20	10.4
308/DTBY/P12S/HFG/2558	2 x 58W	1603	914	2 x Ø20	13.0
308/DTBY/P12S/HFG/2670	2 x 70W	1862	914	2 x Ø20	14.8
610/DTBY/P12S/HFG/3218	3 x 18W	694	457	4 x Ø20	8.0
610/DTBY/P12S/HFG/3436	3 x 36W	1303	914	4 x Ø20	17.7
610/DTBY/P12S/HFG/3558	3 x 58W	1603	914	4 x Ø20	22.0
610/DTBY/P12S/HFG/3670	3 x 70W	1862	914	4 x Ø20	25.7
610/DTBY/P12S/HFG/4218	4 x 18W	694	457	4 x Ø20	8.0
610/DTBY/P12S/HFG/4436	4 x 36W	1303	914	4 x Ø20	17.7
610/DTBY/P12S/HFG/4558	4 x 58W	1603	914	4 x Ø20	22.0
610/DTBY/P12S/HFG/4670	4 x 70W	1862	914	4 x Ø20	25.7

