

Technical Submittal - UCLH P5 33695



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Package Number:	6000
Package Name:	Mechanical & Electrical
Company Name:	Dornan Engineering
Sub Contractor manager:	James Ryan
File Name:	P5-DES-001-ZZ-TS-E-0002
Document Title:	Type A1, A1C, A2, A2C, A3, A6, A8, A8E & A9 Luminaires
Purpose of Issue:	See Conject for current purpose of issue.

Status by Lead Reviewer:	<i>See Conject for current status</i>
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Version History			
Revision No.	Date Issued	Prepared By	Status
P01	06/07/17	Tony McMeiken	For Approval
C01	05/12/17	Tony McMeiken	For Construction
C02	17/08/18	Peter Hefta	For Construction

Design Information and Technical Data used to prepare submittal			
Equipment Data Sheets / Schedules :	<ul style="list-style-type: none"> P5-ARP-Z0-SP-Z-0011 (Appendix 2 Luminaire Schedule) 		
Particular Specification:	<ul style="list-style-type: none"> P5-ARP-Z0-SP-Z-0004_iss2_revT02 		
Materials & Workmanship:	<ul style="list-style-type: none"> 		
Drawings:	P5-DES-001-00-DR-E-1003 P5-DES-001-00-DR-E-1004 P5-DES-001-01-DR-E-1003 P5-DES-001-01-DR-E-1004 P5-DES-001-02-DR-E-1003 P5-DES-001-02-DR-E-1004 P5-DES-001-03-DR-E-1003	P5-DES-001-03-DR-E-1004 P5-DES-001-04-DR-E-1003 P5-DES-001-04-DR-E-1004 P5-DES-001-05-DR-E-1003 P5-DES-001-05-DR-E-1004 P5-DES-001-R6-DR-E-1003 P5-DES-001-R6-DR-E-1004	P5-DES-001-B1-DR-E-1003 P5-DES-001-B1-DR-E-1004 P5-DES-001-B2-DR-E-1003 P5-DES-001-B2-DR-E-1004 P5-DES-001-B3-DR-E-1003 P5-DES-001-B3-DR-E-1004
Schematics/Diagrammatic:	<ul style="list-style-type: none"> 		
Supplementary Specs:	<ul style="list-style-type: none"> 		

Attachments *(Tick as appropriate)*

- ☒ Catalogue Details
- ☐ Design Check Calculations
- ☐ Manufacturing Drawings
- ☐ Wiring/Control Diagrams
- ☐ Sample List
- ☐ BWIC requirements
- ☐ Assembly / installation details
- ☐ O&M instructions
- ☐ List of recommended spares
- ☐ Interface and coordination with other packages
- ☐ FAT / SAT Test Requirements
- ☐ Description of Operation



Specification Compliance Statement	
<div>Technical Submission fully compliant</div> <div>If no then proposed deviations are:</div> <div><div>Y</div><div></div></div>	
Specification Requirement	Proposed Deviation

'A' series luminaires modified in dimension to suit latest BMJ requirements dated 16/08/2018

1) ARUP Data Sheets

Please refer to next page

Job Title: UCLH Phase 5

Date: 22/01/2015

Job Number: 232426-00


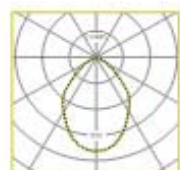
Purpose of Issue: Tender

Revision: T01

Luminaire Reference: TYPE A1

General Description

IP44 recessed linear 1200x300mm LED luminaire with full Hexaprim for optimum uniformity

General Appearance



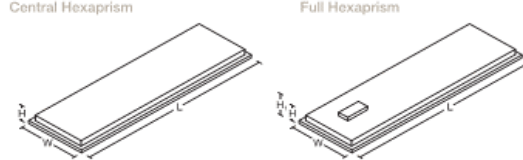
Full Hexaprim
38W LED
4000 lumens
• LOR = 100%
• SHR MAX = 1.36

Utilisation Factors UF(F)

Room Reflectance			Room Index		
C	W	F	1.00	3.00	5.00
0.70	0.50	0.20	0.79	1.00	1.06

Dimensions

Central Hexaprim Full Hexaprim



Version	L	W	H	H ₁ *	KG	KG/m ²
Central Hexaprim	1194	297	60	-	5.0	5.5
Full Hexaprim	1194	297	60	88	5.1	6.0

* Height with remote driver

Luminaire

Manufacturer	Whitecroft
Manufacturing standard	BS EN 60598
Catalogue number	Cityline - CLFY1/SRF1
Finish	White
EMC	BS EN 55015

Light Source

Type	LED
Wattage	18W
Designation	1900lm
Colour / Beam	4000K - Ra min 80

Control Gear / Transformer

Type	DALI 220-240 Vac
Dimmable	Yes
Location (Remote/Integral)	Remote

Accessories

Lens	Full Hexaprim
Baffle	-
Other	IP 44

Location

Circulation, C/E Room, waiting area

Equipment supplied to be as specified or equal approved

Additional Information

1. IP44 LED Panel
2. Recessed mounted and rapid spring assembly installation
3. All products to have a wipeable smooth clean surface. No screw heads or slots will be allowed.
- 4.

Job Title: UCLH Phase 5

Date: 22/01/2015

Job Number: 232426-00

Purpose of Issue: Tender


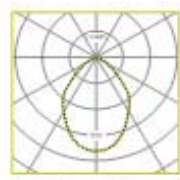
Revision: T01

Luminaire Reference: TYPE A1C

General Description

IP44 recessed linear 1200x300mm LED luminaire with full Hexaprim for optimum uniformity

Support human centric lighting control to vary the lighting colour temperature from 3000K to 6500K.

General Appearance



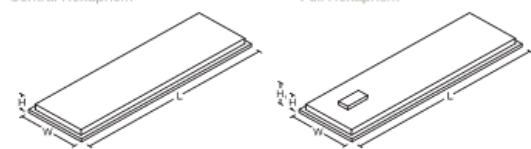
Full Hexaprim
38W LED
4000 lumens
• LOR = 100%
• SHR MAX = 1.36

Utilisation Factors UF(F)

Room Reflectance			Room Index		
C	W	F	1.00	3.00	5.00
0.70	0.50	0.20	0.79	1.00	1.06

Dimensions

Central Hexaprim Full Hexaprim



Version	L	W	H	H ₁ *	KG	KG/m ²
Central Hexaprim	1194	297	60	-	5.0	5.5
Full Hexaprim	1194	297	60	88	5.1	6.0

* Height with remote driver

Luminaire

Manufacturer	Whitecroft
Manufacturing standard	BS EN 60598
Catalogue number	Cityline - CLFY1/SRF1
Finish	White
EMC	BS EN 55015

Light Source

Type	LED
Wattage	18W
Designation	1900lm
Colour / Beam	3000K ~ 6500K - Ra min 80

Control Gear / Transformer

Type	DALI 220-240 Vac
Dimmable	Yes
Location (Remote/Integral)	Remote

Accessories

Lens	Full Hexaprim
Baffle	-
Other	IP 44

Location

Circulation, C/E Room, waiting area

Equipment supplied to be as specified or equal approved

Additional Information

1. IP44 LED Panel
2. Recessed mounted and rapid spring assembly installation
3. All products to have a wipeable smooth clean surface. No screw heads or slots will be allowed.
4. The light fitting shall equip with localised human centric lighting control system.

Job Title: UCLH Phase 5

Date: 22/01/2015

Job Number: 232426-00

Purpose of Issue: Tender

Revision: T01

Luminaire Reference: TYPE A2

General Description

IP44 recessed linear 900x300mm LED luminaire with full Hexaprim for optimum uniformity

General Appearance**Luminaire**

Manufacturer	Whitecroft
Manufacturing standard	BS EN 60598
Catalogue number	Cityline
Finish	White
EMC	BS EN 55015

Light Source

Type	LED
Wattage	13.5W
Designation	1425lm
Colour / Beam	4000K - Ra min 80

Control Gear / Transformer

Type	DALI 220-240 Vac
Dimmable	Yes
Location (Remote/Integral)	Remote

Accessories

Lens	Full Hexaprim
Baffle	-
Other	IP 44

Location

Circulation, C/E Room, waiting area

Equipment supplied to be as specified or equal approved

Additional Information

1. IP44 LED Panel
2. Recessed mounted and rapid spring assembly installation
3. All products to have a wipeable smooth clean surface. No screw heads or slots will be allowed.
- 4.

Job Title: UCLH Phase 5

Date: 22/01/2015

Job Number: 232426-00

Purpose of Issue: Tender

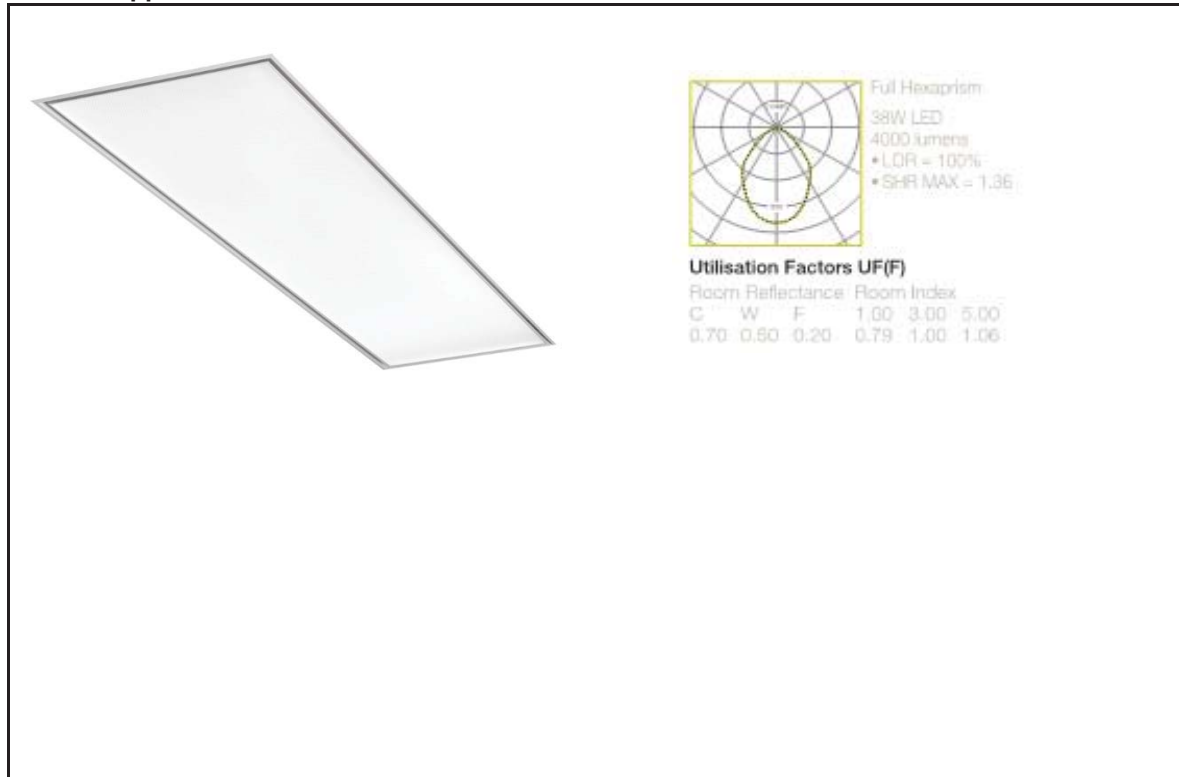
Revision: T01

Luminaire Reference: TYPE A2C

General Description

IP44 recessed linear 900x300mm LED luminaire with full Hexaprism for optimum uniformity

Support human centric lighting control to vary the lighting colour temperature from 3000K to 6500K.

General Appearance**Luminaire**

Manufacturer	Whitecroft
Manufacturing standard	BS EN 60598
Catalogue number	Cityline
Finish	White
EMC	BS EN 55015

Light Source

Type	LED
Wattage	13.5W
Designation	1425lm
Colour / Beam	3000K ~ 6500K - Ra min 80

Control Gear / Transformer

Type	DALI 220-240 Vac
Dimmable	Yes
Location (Remote/Integral)	Remote

Accessories

Lens	Full Hexaprism
Baffle	-
Other	IP 44

Location

Circulation, C/E Room, waiting area

Equipment supplied to be as specified or equal approved

Additional Information

1. IP44 LED Panel
2. Recessed mounted and rapid spring assembly installation
3. All products to have a wipeable smooth clean surface. No screw heads or slots will be allowed.
4. The light fitting shall equip with localised human centric lighting control system.

Job Title: UCLH Phase 5

Date: 22/01/2015

Job Number: 232426-00



Purpose of Issue: Tender

Revision: T01

Luminaire Reference: TYPE A3

General Description

IP44 recessed linear 1200x300mm LED luminaire with full Hexaprim for optimum uniformity

General Appearance



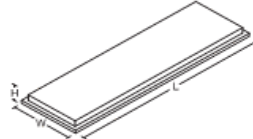
Full Hexaprim
38W LED
4000 lumens
• LOR = 100%
• SHR MAX = 1.36

Utilisation Factors UF(F)

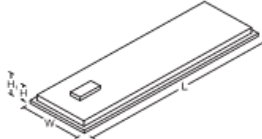
Room Reflectance			Room Index		
C	W	F	1.00	3.00	5.00
0.70	0.50	0.20	0.79	1.00	1.06

Dimensions

Central Hexaprim



Full Hexaprim



Version	L	W	H	H ₁ *	KG	KG ₂
Central Hexaprim	1194	297	60	-	5.0	5.5
Full Hexaprim	1194	297	60	88	5.1	6.0

* Height with remote driver

Luminaire

Manufacturer	Whitecroft
Manufacturing standard	BS EN 60598
Catalogue number	Cityline - CLFY2/SRF1
Finish	White
EMC	BS EN 55015

Light Source

Type	LED
Wattage	23W
Designation	2500lm
Colour / Beam	4000K - Ra min 80

Control Gear / Transformer

Type	DALI 220-240 Vac
Dimmable	Yes
Location (Remote/Integral)	Remote

Accessories

Lens	Full Hexaprim
Baffle	-
Other	IP 44

Location

Circulation, C/E Room, waiting area

Equipment supplied to be as specified or equal approved

Additional Information

1. IP44 LED Panel
2. Recessed mounted and rapid spring assembly installation
3. All products to have a wipeable smooth clean surface. No screw heads or slots will be allowed.
- 4.

2) Catalogue Details

Please refer to next page

Cityline Full Micro Prism for SAS 330 type D1 ceiling



Project reference:

A1 and A3

Part number:

CLFY#/1194/SRF###

Product description:

IP44 Recessed linear tile / plank replacement 1194mm x 297mm LED luminaire for SAS 330 ceiling type D1. Full micro prism diffuser for optimum uniformity and glare control. Additional wipeable smooth clean surface with no screw heads or slots. Integral DLO functionality to allow for specified light outputs – as Whitecroft Lighting CITYLINE.



** IP44 with wipeable clear diffuser **

*** Be aware that BS EN 12464 table 5.40 health care premises – examination rooms (general) requires Ra90, Table 5.41 eye examination rooms Ra90 and Table 5.42 ear examination rooms Ra90. However Client specified luminaires require Ra80 ***

Light source

Light source:

LED, 2500 lumen

Colour temperature:

4000K

Colour render index:

>80 (**see note above)

Colour consistency:

MacAdam 3 SDCM

Control gear:

Remote DALI dimmable driver

Integral control:

N/A

Luminaire performance

LL/CW:

125

Circuit watts:

20W

Light output ratio:

100%

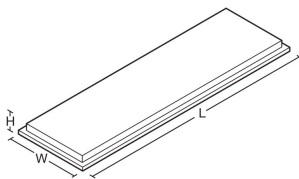
Emergency

N/A

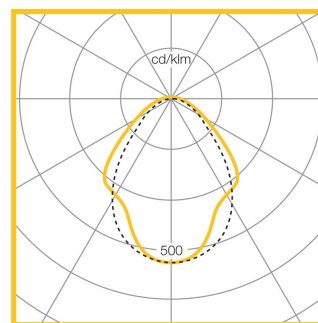
Finish

White RAL 9003

Dimensions & Weight



Polar Curve (Indicative Only)



VERSION	L	W	H	H1	KG	KG(EM)
1200mm x 300mm NOMINAL for SAS 330 type D1 ceiling	1194mm ACTUAL	297mm ACTUAL	60	88	5.1	6

Cityline Full Micro Prism Tunable for SAS 330 type D1 ceiling



Project reference:

A1C

Part number:

CLFTE#/1194/SRF###

Product description:

IP44 Recessed linear tile replacement 1194mm x 297mm LED luminaire for SAS 330 ceiling type D1. Full micro prism diffuser for optimum uniformity and glare control. Additional wipeable smooth clean surface with no screw heads or slots. This luminaire is tuneable white 2700K - 6500K and contains DALI type 8 control gear – as Whitecroft Lighting CITYLINE TUNABLE WHITE.



** IP44 with wipeable clear diffuser **

*** Be aware that BS EN 12464 table 5.40 health care premises – examination rooms (general) requires Ra90, Table 5.41 eye examination rooms Ra90 and Table 5.42 ear examination rooms Ra90. However Client specified luminaires require Ra80 ***

Light source

Light source:

LED 1900 lumen

Colour temperature:

2700K - 6500K

Colour render index:

>80 (**see note above)

Colour consistency:

MacAdam 3 SDCM

Control gear:

Remote DALI 8 for Tunable White and Dimming

Integral control:

N/A

Luminaire performance

LL/CW:

126

Circuit watts:

15W

Light output ratio:

100.00%

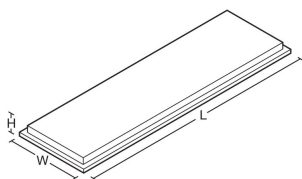
Emergency

N/A

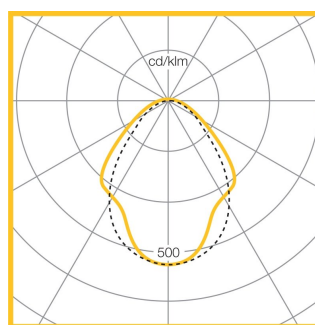
Finish

White RAL 9003

Dimensions & Weight



Polar Curve (Indicative Only)



VERSION	L	W	H	H1	KG	KG(EM)
1200mm x 300mm NOMINAL for SAS 330 type D1 ceiling	1194mm ACTUAL	297mm ACTUAL	60	88	5.1	6

Cityline Full Micro Prism for SAS 330 type D2 ceiling



Project reference:

A2

Part number:

CLFY#/894/SRF###

Product description:

IP44 Recessed linear tile replacement 894mm x 297mm LED luminaire for SAS 330 ceiling type D2. Full micro prism diffuser for optimum uniformity and glare control. Additional wipeable smooth clean surface with no screw heads or slots. Integral DLO functionality for specified light outputs – as Whitecroft Lighting CITYLINE.



** IP44 with wipeable clear diffuser **

*** Be aware that BS EN 12464 table 5.40 health care premises – examination rooms (general) requires Ra90, Table 5.41 eye examination rooms Ra90 and Table 5.42 ear examination rooms Ra90. However Client specified luminaires require Ra80 ***

Light source

Light source:

LED 2000 lumen

Colour temperature:

4000K

Colour render index:

>80 (** see note above)

Colour consistency:

MacAdam 3 SDCM

Control gear:

Remote DALI dimmable driver

Integral control:

N/A

Luminaire performance

LL/CW:

106.83

Circuit watts:

13.5W

Light output ratio:

100.00%

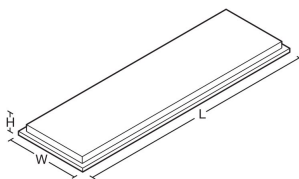
Emergency

N/A

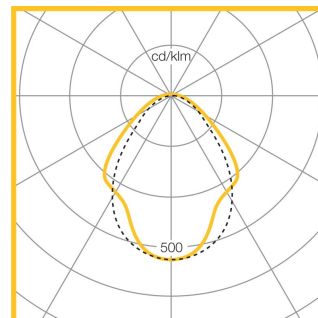
Finish

White RAL 9003

Dimensions & Weight



Polar Curve (Indicative Only)



VERSION	L	W	H	H1	KG	KG(EM)
900mm x 300mm NOMINAL for SAS 330 type D2 ceiling	894mm ACTUAL	297mm ACTUAL	60	88	5.1	6

Cityline Full Micro Prism Tunable for SAS 330 type D2 ceiling



Project reference:

A2C

Part number:

CLFTE#/894/SRF###

Product description:

IP44 Recessed linear tile replacement 894mm x 297mm LED luminaire for SAS 330 ceiling type D2. Full micro prism diffuser for optimum uniformity and glare control. Additional wipeable smooth clean surface and no screw heads or slots. This luminaire is tuneable white 2700K - 6500K and contains DALI type 8 control gear – as Whitecroft Lighting CITYLINE TUNABLE WHITE.



** IP44 with wipeable clear diffuser **

*** Be aware that BS EN 12464 table 5.40 health care premises – examination rooms (general) requires Ra90, Table 5.41 eye examination rooms Ra90 and Table 5.42 ear examination rooms Ra90. However Client specified luminaires require Ra80 ***

Light source

Light source:

LED 2000 lumen

Colour temperature:

2700K - 6500K

Colour render index:

>80 (***) see note above)

Colour consistency:

MacAdam 3 SDCM

Control gear:

Remote DALI 8 for Tunable
White and dimming

Integral control:

N/A

Luminaire performance

LL/CW:

106.83

Circuit watts:

13.5W

Light output ratio:

100.00%

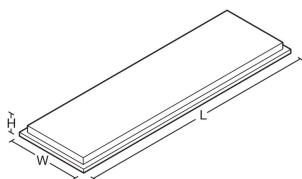
Emergency

N/A

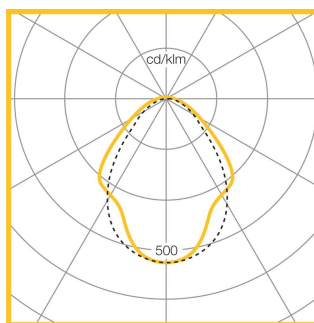
Finish

White RAL 9003

Dimensions & Weight



Polar Curve (Indicative Only)



VERSION	L	W	H	H1	KG	KG(EM)
900mm x 300mm NOMINAL for SAS 330 type D2 ceiling	894mm ACTUAL	297mm ACTUAL	60	88	5.1	6

Cityline Full Micro Prism for SAS 320 type D4 ceiling



Project reference:

A6

Part number:

CLFY#/1460/SRF###

Product description:

IP44 Recessed linear tile replacement 1460mm x 297mm LED luminaire for a lay in SAS 320 ceiling type D4. Full micro prism diffuser for optimum uniformity and glare control. Additional wipeable smooth clean surface and no screw heads or slots. Integral DLO functionality for specified light outputs – as Whitecroft Lighting CITYLINE.



** IP44 with wipeable clear diffuser **

*** Be aware that BS EN 12464 table 5.40 health care premises – examination rooms (general) requires Ra90, Table 5.41 eye examination rooms Ra90 and Table 5.42 ear examination rooms Ra90. However Client specified luminaires require Ra80 ***

Light source

Light source:

LED 4000 lumen

Colour temperature:

4000K

Colour render index:

>80 (** see note above)

Colour consistency:

MacAdam 3 SDCM

Control gear:

Remote DALI dimmable driver

Integral control:

N/A

Luminaire performance

LL/CW:

105

Circuit watts:

38W

Light output ratio:

100.00%

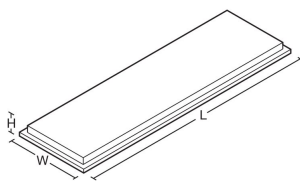
Emergency

N/A

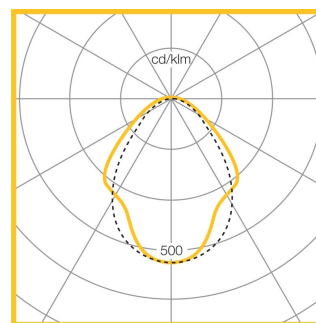
Finish

White RAL 9003

Dimensions & Weight



Polar Curve (Indicative Only)



VERSION	L	W	H	H1	KG	KG(EM)
1460mm x 300mm NOMINAL for SAS 320 type D4 ceiling	1460mm ACTUAL	297mm ACTUAL	60	88	5.1	6

Project reference:

A8 and A8E - Acoustic Rooms

Part number:

TEPDY24K
TEPDY24K/EP
CSDPBF

Product description:

Recessed LED 600 x 600mm luminaire with slim line steel body and smooth opal prismatic diffuser for general, non VDT areas. Suitable for lay in exposed T ceilings or plasterboard installation when plasterboard frame is used – as Whitecroft Lighting TEGAN AREA.



*** Be aware that BS EN 12464 table 5.40 health care premises – examination rooms (general) requires Ra90, Table 5.41 eye examination rooms Ra90 and Table 5.42 ear examination rooms Ra90. However Client specified luminaires require Ra80 ***

Light source

Light source:

LED, 4100 lumen

Colour render index:

>80 (***) see note above)

Control gear:

DALI LED Driver

Colour temperature:

4000K

Colour consistency:

MacAdam 3 SDCM

Integral control:

N/A

Luminaire performance

LL/CW:

117

Light output ratio:

100.00%

Emergency

Integral 3 hour emergency
batteries c/w EMPRO
Inverter

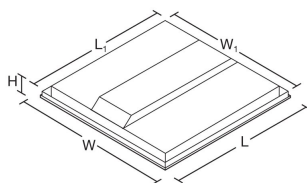
Circuit watts:

35W

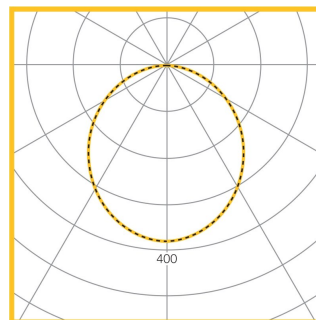
Finish

White RAL 9003

Dimensions & Weight



Polar Curve (Indicative Only)



Version	L	L1	W	W1	H	KG	KG(EM)	Cut Aperture
Tegan	595	545	595	545	103	4.5	6	
Plasterboard Frame	660		660		95	6.5	7.5	625 x 625 -3 +3

Cityline Full Micro Prism for SAS 330 type D3 ceiling



Project reference:

A9

Part number:

CLFY#/1494/SRF###

Product description:

IP44 Recessed linear tile replacement 1494mm x 297mm LED luminaire for SAS 330 ceiling type D3. Full micro prism diffuser for optimum uniformity and glare control. Additional wipeable smooth clean surface with no screw heads or slots. Integral DLO functionality for specified light outputs – as Whitecroft Lighting CITYLINE.



** IP44 with wipeable clear diffuser **

*** Be aware that BS EN 12464 table 5.40 health care premises – examination rooms (general) requires Ra90, Table 5.41 eye examination rooms Ra90 and Table 5.42 ear examination rooms Ra90. However Client specified luminaires require Ra80 ***

Light source

Light source:

LED, 4000 lumen

Colour temperature:

4000K

Colour render index:

>80 (** see note above)

Colour consistency:

MacAdam 3 SDCM

Control gear:

DALI LED Driver

Integral control:

N/A

Luminaire performance

LL/CW:

104.55

Circuit watts:

38W

Light output ratio:

100.00%

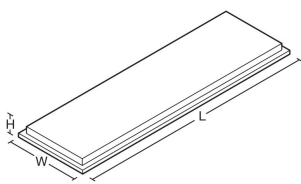
Emergency

N/A

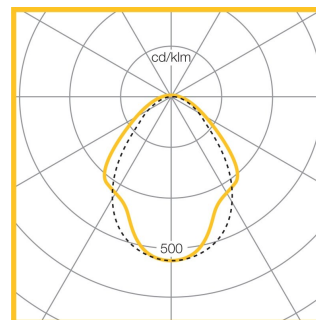
Finish

White RAL 9003

Dimensions & Weight



Polar Curve (Indicative Only)



VERSION	L	W	H	H1	KG	KG(EM)
1500mm x 300mm NOMINAL for SAS 330 type D3 ceiling	1494mm ACTUAL	297mm ACTUAL	60	88	5.1	6