

Lighting Equipment Specification/

Project:	Coal Drops Yard, King's Cross London, UK
Project Number:	10793
Document Number:	KXC-M0-001-S+M10793-J-63-850
Revision:	04

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Rev.	Date	By	Notes
00	15/06/15	SC	Preliminary Draft- For Information only
01	03/09/15	HT	General revision
02	07/10/15	HT	Stage 3 issue
03	29/02/16	TJ	Stage 3 update
04	31/05/16	HT	Stage 3 update

1.0 General Conditions

- 1.1 A schedule of luminaires and associated equipment is enclosed, and should be read in conjunction with the Lighting Consultant's relevant drawings.
- 1.2 This specification supersedes all previous issues.

2.0 Samples, Mock-ups & Prototypes

- 2.1 Should a sample of a standard, or prototype of a special luminaire or variant of a standard luminaire be ordered, its cost shall either be incorporated into a tender price, or shall be invoiced to the Client or his nominated representative separately, as agreed.
- 2.2 Any such sample prototype or variant shall be a sample of the luminaire type specified, and shall be submitted to the Lighting Consultant, together with full photometric and dimensional data if specifically requested, to enable both its accurate assessment and the detailing of any adjustments deemed necessary prior to the commencement of full production.
- 2.3 Prototypes are required of a series of luminaires where noted in the Luminaire Equipment Specification.
- 2.4 Where situational mock-ups are required to demonstrate the desired lit effect, this will be noted Lighting Equipment Specification and in line with the Architectural Specification

3.0 Standards Of Compliance

- 3.1 For projects in the United Kingdom, all equipment supplied shall comply with the relevant BS and IEC requirements, and be capable of installation in accordance with the manufacturers' instructions, the current edition of the IEE Wiring Regulations and all relevant statutory and local authority requirements.
- 3.2 Notwithstanding the above, the following British Standards (and any which supersede them) in particular should be checked for compliance:
- BS 5266 Part 7/EN 1838: Emergency Lighting (where relevant – check Engineers information).
 - BS EN 60598: Luminaires
- 3.3 For projects outwith the United Kingdom, all equipment supplied shall comply with the relevant standards in force in the project's country of origin.
- 3.4 The cost of obtaining any necessary approvals and testing shall be included in any tender price, detailed as a separate item.

4.0 Protection

- 4.1 All equipment shall be supplied with adequate means of protection to ensure its preservation during transport to site and any subsequent storage prior to installation.
- 4.2 All vulnerable finished parts liable to scratching or other abrasion during handling and installation shall be further protected by a removable film applied prior to dispatch.

5.0 Guarantees

- 5.1 All equipment and components supplied shall be guaranteed against failure due to poor workmanship, materials, or luminaire design, for a period of not less than 18 months from the date of delivery to site or 12 months from the date of practical completion, whichever is the sooner, with the exception of lamps which shall be covered only by their manufacturer's normal assurances as to life expectancy and performance.

6.0 Technical Requirements

6.1 Luminaires

- 6.1.1 Equipment selected as a standard item from a particular manufacturer's range has been specified with a view to performance, optics, maintenance, quality, aesthetics, etc.
- 6.1.2 Should alternative equipment be offered, full technical and photometric data shall be supplied to Speirs + Major in time to enable its accurate assessment. No substitutions or alterations to the specifications will be allowed without the written approval of the lighting consultant.
- 6.1.3 If any variants of standard luminaires are required, these shall be developed by the manufacturer of the standard luminaire, unless otherwise specifically stated, and shall be manufactured to the same quality as the equivalent standard luminaire.
- 6.1.4 Two copies of all working drawings of proposed variants, dimensioned in mm, shall be supplied to Speirs + Major for approval prior to fabrication.
- 6.1.5 Notwithstanding the above, the manufacturers shall remain responsible for ensuring compliance with relevant standards, the accuracy of the information shown on his drawings at all times and for ensuring that the equipment shown fulfils the requirements of this specification.
- 6.1.6 If any special luminaires and associated equipment are required, these will be the subject of a separate specification, a copy of which will be enclosed with this document.
- 6.1.7 Speirs + Major cannot accept responsibility for installation of non-approved luminaires.
- 6.1.8 The final location of each luminaire and where relevant its integration with the architecture shall be as detailed on the construction issue drawings. Speirs + Major cannot accept responsibility for luminaires installed in a manner other than intimated in the relevant drawings or as otherwise agreed and minuted.

6.2 Control Gear/ LED Drivers

- 6.2.1 All necessary control gear and transformers shall be mounted within the luminaire unless shown as being located remotely. All such gear shall be of good quality construction, shall comply with all relevant statutory regulations, shall be compatible with the lamps specified and the control method stated, and shall be mounted and wired in accordance with the manufacturers' instructions.
- 6.2.2 Where appropriate, the Electrical Engineer shall also liaise with the selected lighting control system manufacturer to ensure compatibility between control gear and the control system. He shall also check and confirm all necessary data regarding circuit load of luminaires, to enable dimmers/contactors be sized correctly.
- 6.2.3 Transformers shall have a stable output voltage of 11.5V/23V, under varying loads, where the output voltage is nominally quoted at 12V/24V.
- 6.2.4 Unless otherwise stated, all transformers shall be suitable for leading-edge dimming on their primary side via a thyristor controlled remote lighting control system.
- 6.2.5 Where gear or transformers are installed remotely, care should be taken to ensure that any audible sounds generated by control gear, or by lamp filaments via control gear are kept to a minimum. Where this is particularly crucial, detailed acoustic requirements are included in the Specific Conditions.
- 6.2.6 All equipment shall be protected from unexpected mains failure, and mains borne interference.
- 6.2.7 Electrical supply connections shall be designed to facilitate the easy installation of the luminaires. The supplier shall liaise with the Electrical Engineer to ensure any specific requirements of his in this respect are met.

- 6.2.8 All remote LED drivers are to be installed in accessible, clean, dry, ventilated/conditioned environment within manufacturers specified maximum distances. Multiple drivers may be required, exact qrys and specification to be confirmed by electrical contractor/consultant.
- 6.3 Lamps
- 6.3.1 Incandescent and tungsten halogen lamps shall not be operated, other than for initial testing, prior to final inspection.
- 6.3.2 Lamps are generally specified by manufacturers name by example.
- 6.3.3 Should alternative lamps be offered, particular attention is paid to colour rendering, colour temperature, light distribution, life expectancy and general performances when selecting such alternatives. Alternative lamps may only be substituted if full technical data is first supplied to Speirs + Major to enable their accurate assessment and approval.
- 6.4 Cold Cathode
- 6.4.1 All cold cathode installation shall be carried out by specialist subcontractors who shall provide comprehensive specifications and drawings of the proposed installation, outlining lengths of tubes, transformer sizes and electrical feeds, switches etc. The specialist subcontractor shall liaise with the Electrical Contractor and Electrical Engineer for determination of transformer locations.
- 6.5 LED and LED Drivers
- 6.5.1 The importance of colour consistency within ranges and across the full specification is paramount. The light produced by fittings of, say, the same rated correlated colour temperature should produce light that is indiscernible in appearance from other fittings of the same rating. It is the responsibility of the Party producing the final specification to compare samples of the specified luminaires to ensure this consistency across the project.
- 6.5.2 The benchmark for acceptable colour consistency within a manufacturer's range shall be 4 MacAdam ellipses for road lighting and 2 MacAdam ellipses for all other lighting including, but not limited to, downlights, wall washers, spotlights, linear luminaires and decorative fittings. Should a manufacturer have a different method for ensuring colour consistency, this shall be assessed by the lighting designer on a case by case basis.
- 6.5.3 All manufacturers shall be required to record the spectral distribution and output of all luminaires supplied to the project, such that any replacements provided shall have the same light appearance and output as the luminaires previously supplied. Manufacturers shall guarantee being able to supply replacements on this basis for a period of at least 5 years from the original date of supply.
- 6.5.4 All luminaires shall have depreciation of not more than 30% of initial lumen output at 50,000 hours of operation (i.e. L70 \geq 50,000 hours).
- 6.5.5 All luminaires shall be designed to operate the LEDs within the LED manufacturers stated conditions to achieve the above performance.
- 6.5.6 All LED drivers shall be supplied by the manufacturer of the LED luminaire and shall be fully compatible with the luminaire and the LEDs used.
- 6.5.7 All LED systems (luminaires combined with their drivers) shall be fully dimmable between 1% and 100% of light output. Dimming shall be achieved either through the use of a standard analogue or digital lighting protocol as stated in the specification (0-10V, 1-10V, DMX or DALI) or through the use of trailing edge dimming as appropriate.
- 6.5.8 All specified LED systems shall be tested with the specified control system prior to the order of equipment to ensure stable dimming of all luminaires across the full dimming range sated above (also refer to the Lighting Control System Specification).
- 6.5.9 LED systems shall include thermal protection circuits wherever possible to ensure that the LEDs are operated within their stated thermal ranges; typically these should reduce the output of the LEDs to maintain appropriate internal temperature. This is particularly important for external fittings which will experience the highest ambient temperatures and accidental operation during the daytime may result in irreversible damage to the LEDs and/or electronics. The Contractor shall ensure that any circuits including fixtures that include no internal thermal protection

are identified to the Control System Engineer such that they can be protected through programming of the control system (also refer to Lighting Control System Specification).

7.0 Project Specific Requirements

7.1 Environment

7.1.1 All luminaires and associated equipment indicated for external use are to be suitable for constant exposure in an exposed exterior environment in London and are to withstand temperatures to -10°C to +80°C.

7.1.2 External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (linked to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.

General lighting to Yard + Viaduct Level

LUMINAIRE REF.

XA

LUMINAIRE

Manufacturer: iGuzzini
Product: iTeka variant
Catalogue Number: 3.TJL0.715.0
Note: Standard product to be modified specially for CDY project

Description:

Exterior quality IP66 rated wall mounted fixed focus low glare surface washer to provide general illumination. 220-240V 22W warm white LED 3000K CCT with 1910lm output and CRI 80+. Asymmetrical light distribution. Dimmable 0-100% DALI control protocol. Vertically adjustable by +45°/-60° and horizontally adjustable by 337° with a mechanical locking. Housing constructed of die-cast aluminium with silver aluminium reflectors. To be supplied with integral DALI dimmable driver.

Accessories:

- Custom anti-glare longitudinal louvre with back spill shield to be developed via testing/mock-up (Catalogue Number B995.13161)
- Accessory frame

Luminaire Colour:

RAL finish TBC by Architect prior to order

Drivers:

Integral dimmable 0-100% DALI driver. All control gear/drivers to be compatible with architectural lighting control system.

Specific Project Requirements:

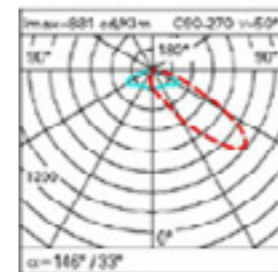
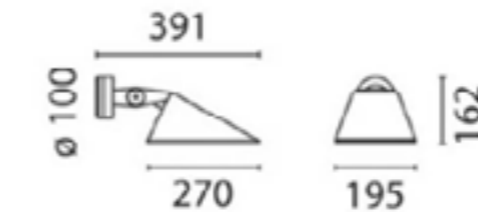
- Luminaires to be supplied with 3000K warm white LEDs and integral DALI dimmable driver.
- Mounting detail to be further developed by Contractor's design team during Stage 4.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-GF002, KXC-M0-001-S+M10793-J-63-00002
Lighting detail: KXC-M0-001-S+M10793-J-63-5002, KXC-M0-001-S+M10793-J-63-5003

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Length: 391mm
Width: 195mm
Height: 162mm
Weight: 2.2Kg

SOURCE

Manufacturer: iGuzzini
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 22W
Lumens: 1910lm
Efficacy: 86.8lm/w
Base: n/a
Rated Life: 10,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
iGuzzini
www.iguzzini.com

Local Supplier:
iGuzzini
Astolat Business Park
Astolat Way
Off Old Portsmouth Road
GU3 1NE Guildford

Project Contact:
Name: Terence Goode
Tel: 0 7710 824 429
Email: Terence.Goode@iguzzini.co.uk

General lighting to Lower Stable Street + Canal towpath entrance

LUMINAIRE REF.

XB

LUMINAIRE

Manufacturer: Davey Lighting
Product: Bulkhead fitting
Catalogue Number: 8138 variant
Note: Standard product to be modified specially for CDY project

Description:
 Exterior quality IP65 rated surface mounted bulkhead luminaire to provide general lighting and soft uplighting to facade. Luminaire to be fitted with warm white LED 3000K CCT with 3500lm initial output and CRI 80+. Nominal wattage of 50W. Frosted glass diffuser to provide homogenous glow without visible nodes of LEDs. To be supplied with integral 0-100% DALI dimmable driver. Driver to be located away from light source to avoid visible silhouetting through diffuser. Housing and cross blade guard constructed of die-cast aluminium. Finish to be confirmed by Architect prior to order.

Accessories:
 n/a

Luminaire Colour:
 TBC by Architect prior to order

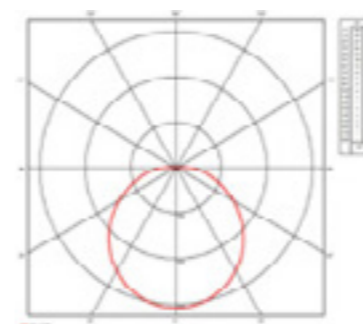
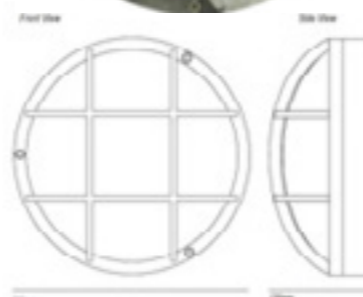
Drivers:
 Integral dimmable 0-100% DALI driver. All control gear/drivers to be compatible with architectural lighting control system.

- Specific Project Requirements:**
- This is a bespoke fitting based on the aesthetics of a standard product. Details to be further developed by Contractor's design team during Stage 4. Working prototype to be presented by Contractor to Design Team's approval prior to order.

Refer To Drawings:
 Lighting arrangement: KXC-M0-001-S+M10793-J-63-00001, KXC-M0-001-S+M10793-J-63-GF001

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:
 Diameter: \varnothing 260mm
 Height: 130mm nominal
 Weight: TBC

SOURCE

Manufacturer: TBC by manufacturer
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 50W nominal
Lumens: 3500lm
Efficacy: 70lm/w
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
 Davey Lighting
www.davey-lighting.co.uk

Local Supplier:
 Davey Lighting
 UNIT 21 / 22
 AVENUE ONE STATION LANE
 WITNEY
 OX28 4XZ

Project Contact:
 Name: Charlie Bowles
 Tel: 020 73512130
 Email: charlie@originalbtc.com

General Lighting to Lower Stable Street WIP

LUMINAIRE REF. XC

LUMINAIRE

Manufacturer: TBC
Product: TBC
Catalogue Number: TBC
Note: Prototype

Description:
 Exterior quality IP65 rated surface mounted diffused LED luminaire to provide general lighting to floor and uplighting to facade. 230v 50W warm white LED 3000K CCT with 3500lm initial output and CRI 80+. Diffused lighting distribution. Dimmable 0-100% DALI Control Protocol Housing constructed of aluminium and stainless steel. Requires remote accessible IP rated DALI LED driver. LED driver - luminaire distance, cable diameter and housing locations to be confirmed by electrical consultant/contractor prior to order.

Accessories:
 n/a

Luminaire Colour: TBC by architect prior to order

Drivers:
 Remote dimmable 0-100% DALI Control Protocol. All control gear/drivers to be compatible with architectural lighting control system. LED drivers-luminaire distance, cable diameter and housing locations to be confirmed by Architect prior to order.

Drivers to be mounted in accessible, clean, dry, well ventilated/conditioned environment within manufacturers specified maximum distances. Exact qtys, specifications and schematics to be confirmed by electrical contractor/consultant. Contact mechanical and fire rating of cable between luminaire and driver to be confirmed by electrical consultant/contractor. For locations and schematics to be coordinated by architect in conjunction with specialist consultants. All details to be confirmed with manufacturers by Electrical Consultant/Contractor prior to equipment order.

Specific Project Requirements:
 • n/a

Refer To Drawings:
 Lighting Arrangement: 10793-LA-001, 10793-LA-002

Manufacturers

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Length: TBC
 Width: TBC
 Height: TBC
 Weight: TBC

SOURCE

Manufacturer: TBC
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 85+
Wattage: 50W
Lumens: 3500lm
Beam Angle: 70lm/w
Base: n/a
Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

REFERENCE DELETED

General Lighting to Towpaths **WIP**

LUMINAIRE REF. **XD**

LUMINAIRE

Manufacturer: TBC
Product: TBC
Catalogue Number: TBC
Note: Prototype

Description:

Exterior quality IP65 rated surface mounted diffused LED luminaire to provide general lighting to towpath entrance vaults. 230v 50W warm white LED 3000K CCT with 3500lm initial output and CRI 80+. Diffused lighting distribution. Dimmable 0-100% DALI Control Protocol Housing constructed of aluminium and stainless steel. Requires remote accessible IP rated DALI LED driver. LED driver - luminaire distance, cable diameter and housing locations to be confirmed by electrical consultant/contractor prior to order.

Accessories:

n/a

Luminaire Colour: TBC by architect prior to order

Drivers:

Remote dimmable 0-100% DALI Control Protocol. All control gear/drivers to be compatible with architectural lighting control system. LED drivers-luminaire distance, cable diameter and housing locations to be confirmed by Architect prior to order.

Drivers to be mounted in accessible, clean, dry, well ventilated/conditioned environment within manufacturers specified maximum distances. Exact qty's, specifications and schematics to be confirmed by electrical contractor/consultant. Contact mechanical and fire rating of cable between luminaire and driver to be confirmed by electrical consultant/contractor. For locations and schematics to be coordinated by architect in conjunction with specialist consultants. For details to be confirmed with manufacturers by Electrical Consultant/Contractor prior to equipment order.

Specific Project Requirements:

- n/a

Refer To Drawings:

Lighting Arrangement: 10793-LA-001, 10793-LA-002, 10793-LA-004

Manufacturers Information:

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Length: TBC
 Width: TBC
 Height: TBC
 Weight: TBC

SOURCE

Manufacturer: TBC
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 85
Wattage: 50W
Lumens: 3500lm
Capacity: 70lm/w
Base: n/a
Mean Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

REFERENCE DELETED

Exterior lighting to Roof Ribbon

LUMINAIRE REF.

XF

LUMINAIRE

Manufacturer: Philip ColorKinetics
Product: ColorGraze MX Powercore
Catalogue Number: ColorGraze MX Powercore variant 2700K 90°x60° 305mm DMX
Note: Standard product to be modified specially for CDY project

Description:

Exterior quality IP 66 rated surface mounted, adjustable, lockable linear LED luminaire to illuminate copper finish exterior roof ribbon. 100-277VAC 15W warm white LED 2700K CCT with 694 lm output and CRI 80+. Symmetrical lighting distribution of 90°x60°. Dimmable 0-100% DMX control protocol. Housing constructed of extruded aluminium. To be supplied with adjustable hinge bracket and remote DMX Data Enabler. All details including luminaire specification, colour temperature, beam distribution and accessories to be confirmed by 1:1 scale mock-up prior to order.

Accessories:

- Adjustable hinge bracket
- DMX Data Enabler

Luminaire Colour:

Silver

Drivers/Control Gear:

Integral DMX dimmable driver. All control gear/drivers to be compatible with architectural lighting control system.

Specific Project Requirements:

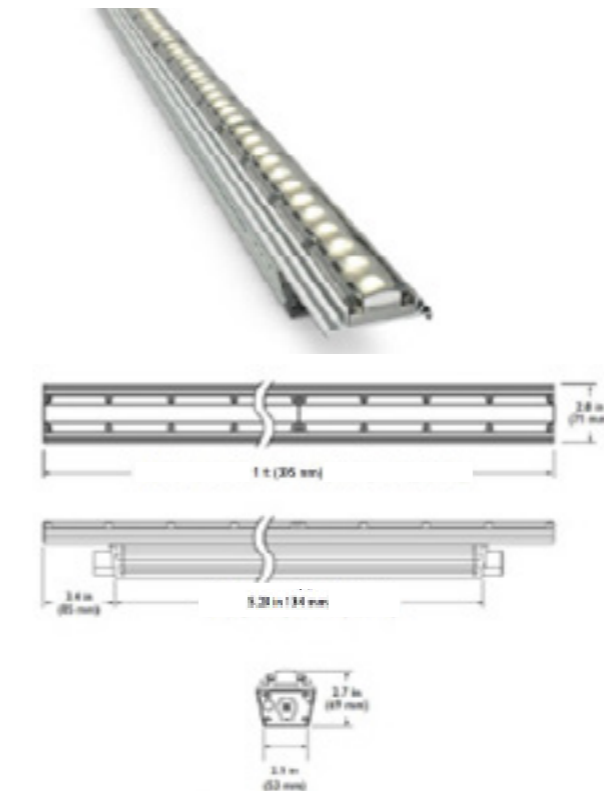
- 305mm luminaire modules to be installed continuously end-to-end with no visible shadow gaps. Each luminaire requires individual control via DMX protocol to achieve different intensities along the curved roof structure due to varying offset distances. All details including luminaire specification, colour temperature, beam distribution and accessories to be further developed by Contractor's design team during Stage 4 and confirmed by 1:1 scale mock-up to Client and Design Team approval prior to order.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-102
 Lighting detail: KXC-M0-001-S+M10793-J-63-5001

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Length: 305mm
 Width: 71mm
 Height: 69mm
 Weight: 1.0kg

SOURCE

Manufacturer: Philip ColorKinetics
Type: LED
Colour Temperature: 2700K (TBC)
Colour Rendering: Ra 80+
Watts: 49W per linear meter
Lumens: 2361lm per linear meter
Efficacy: 48.2lm/w
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
 Philips ColorKinetics
 www.colorkinetics.com

Local Supplier:
 Architainment Lighting
 Roundwood House
 134-136 Lane End Road
 High Wycombe
 Buckinghamshire HP12 4HX

Tel: +44 1494 471340

Project Contact:
 Name: Neil Gamble
 Tel: 0 7508 094131
 Email: neil.gamble@architainment.co.uk

Uplighting to South End Wall of Eastern Coal Drops

LUMINAIRE REF. **XG**

LUMINAIRE

Manufacturer: ACDC
Product: IGLU
Catalogue Number: acdc1120
Note:

Description:

Exterior quality IP67 rated floor recessed linear luminaire to uplight South End wall of Eastern Coal Drops. LED washlighting system utilising an array of high output LED 36W per linear meter and 3550lm initial output when driven at 350mA. Warm white LEDs 3000K CCT and CRI 80+. 30° beam distribution. Dimmable 0-100% DMX Control Protocol. Housing constructed of extruded aluminium with integral micro louvre, part frosted front cover, installation sleeve and flush endcap for continuous end to end installation. Supplied with integral DMX driver. Finish to be confirmed by Architect prior to order.

Accessories:

- All mechanical and electrical connections

Luminaire Colour: Anodised aluminium black finish - TBC by architect prior to order

Drivers:

Integral dimmable 0-100% DMX Protocol. All control gear/drivers to be compatible with architectural lighting control system. All details to be confirmed with manufacturers by Electrical Consultant/Contractor prior to equipment order.

Specific Project Requirements:

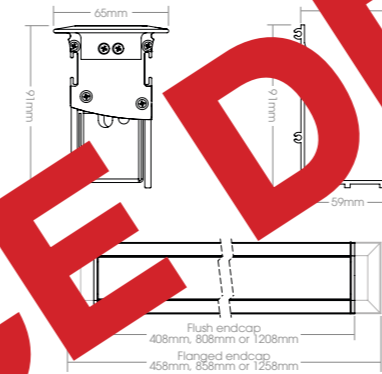
- Fittings to be ordered with flanged end cap so they can be installed end to end for a continuous wallwash effect.
- Luminaire available in different lengths (616mm, 858mm, 1258mm). Contractor to choose best suitable length and install end to end fitting with no visible gaps between.

Refer To Drawings:

Lighting Arrangement: 10793-LA-00

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Length: 458mm, 858mm, 1258mm
Width: 65mm
Height: 91mm
Weight: TBC

SOURCE

Manufacturer: ACDC
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Wattage: 36W/m
Lumens: 3550lm
Efficiency: 98lm/w
Base: n/a
Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Uplighting to core entrance reveals

LUMINAIRE REF.

XH

LUMINAIRE

Manufacturer: Simes
Product: PLANO
Catalogue Number: S.5444W
Note:

Description:

Exterior quality IP67 rated ground recessed LED luminaire to uplight core entrance reveals. 230V 9.1W warm white LED 3000K CCT 710lm initial output and CRI 90+. Medium beam 28deg light distribution. Lamp ±10° adjustable. Dimmable 0-100% DALI Control Protocol. Housing constructed of die cast aluminium with high resistance against corrosion, pre treated silicone gaskets and toughened semiacid-etched solidic calcic Weiss glass. Luminaire to be supplied with integral DALI driver and anti glare honeycomb louvre.

Accessories:

- Installation blackout
- Honeycomb louvre

Luminaire Colour:

TBC by architect prior to order

Drivers:

Integral 0 - 100% DALI dimmable driver. All control gear/drivers to be compatible with architectural lighting control system.

Specific Project Requirements:

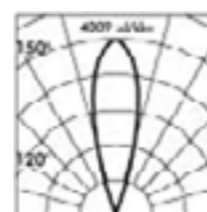
- Lighting Detail to be fully coordinated with landscape proposals.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-00001, KXC-M0-001-S+M10793-J-63-GF001

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Diameter: ø 190mm
Recessed depth: 100mm

SOURCE

Manufacturer: SIMES
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 90+
Watts: 9.1W
Lumens: 710lm
Efficacy: 78lm/w
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
Simes
www.simes.com

Local Supplier:
Havells Sylvania Fixtures UK Ltd
Incorporating Concord
Longbow House
20 Chiswell Street
London EC1Y 4TW

Tel: +44 207 011 9700
Email: info.uk@havells-sylvania.com

Project Contact:
Name: Daniel Kyle
Tel: 07976-737344
Email: daniel.kyle@havells-sylvania.com

Uplighting to trees

LUMINAIRE REF.

XH2

LUMINAIRE

Manufacturer: Simes
Product: PLANO
Catalogue Number: S.5468W
Note:

Description:

Exterior quality IP67 rated ground recessed LED luminaire to uplight trees on Stable Street. 230V 10.5W warm white LED 3000K CCT 945lm initial output and CRI 90+. Medium beam 28deg light distribution. Lamp ±10° adjustable. Dimmable 0-100% DALI Control Protocol. Housing constructed of die cast aluminium with high resistance against corrosion, pre treated silicone gaskets and toughened semiacid-etched solidic calcic Weiss glass. Luminaire to be supplied with integral DALI driver and anti glare honeycomb louvre.

Accessories:

- Installation blackout
- Honeycomb louvre

Luminaire Colour:

TBC by architect prior to order

Drivers:

Integral 0 - 100% DALI dimmable driver. All control gear/drivers to be compatible with architectural lighting control system.

Specific Project Requirements:

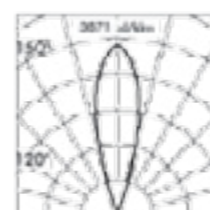
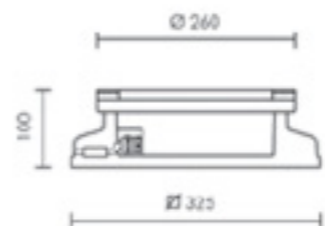
- Provisional place holder specification until height of trees are confirmed. Lighting specification and installation detail to be fully coordinated with landscape proposals.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-00001, KXC-M0-001-S+M10793-J-63-GF001

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Diameter: ø 260mm
Recessed depth: 100mm

SOURCE

Manufacturer: SIMES
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 90+
Watts: 10.5W
Lumens: 945lm
Efficacy: 90lm/w
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
Simes
www.simes.com

Local Supplier:
Havells Sylvania Fixtures UK Ltd
Incorporating Concord
Longbow House
20 Chiswell Street
London EC1Y 4TW

Tel: +44 207 011 9700
Email: info.uk@havells-sylvania.com

Project Contact:
Name: Daniel Kyle
Tel: 07976-737344
Email: daniel.kyle@havells-sylvania.com

Lighting Equipment Specification
www.speirsandmajor.com

Integrated handrail Lighting

LUMINAIRE REF.

XJ

LUMINAIRE

Manufacturer: WILA
Product: Puck
Catalogue Number: MP1201002-70-30
Note:

Description:

Exterior quality IP66 rated handrail recessed adjustable spotlight to provide general illumination. Utilising 1W warm white LED 3000K CCT with 127lm initial output and CRI 80+. One-side symmetric beam angle 80° with the handrail and 60° crosswise. Dimmable 0-100% DALI Control Protocol. Housing constructed of stainless steel, lens made of polycarbonate. Requires remote DALI dimmable driver. Remote distance between driver and luminaire, cable diameter and housing locations to be confirmed by electrical consultant/contractor prior to order.

Accessories:

- Remote DALI dimmable driver

Luminaire Colour:

TBC by architect prior to order

Drivers:

Remote 0 - 100% DALI dimmable driver. All control gear/drivers to be compatible with architectural lighting control system. Remote distance between driver and luminaire, cable diameter and housing locations to be confirmed by electrical consultant/contractor prior to order.

Drivers to be mounted in accessible, clean, dry, well ventilated/conditioned environment within manufacturers specified maximum distances. 1no.driver can typically operate up to 20 Pucks. Exact qty, specifications and schematics to be confirmed by electrical engineer/contractor. Exact mechanical and fire rating of cable between luminaire and driver to be confirmed by electrical engineer/contractor. Driver locations and schematics to be coordinated by architect in conjunction with electrical engineer/contractor.

Specific Project Requirements:

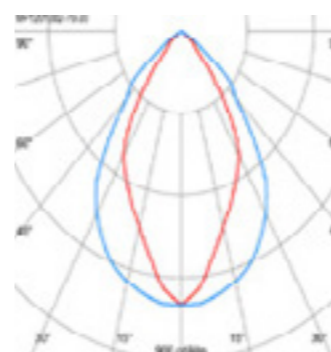
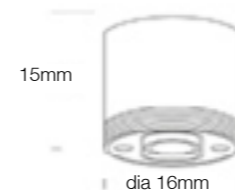
- Lighting detail to be fully coordinated with handrail design. Lighting integration detail to be further developed by Contractor's design team during Stage 4 and confirmed by 1:1 scale mock-up to Client and Design Team approval prior to order.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-GF001
Lighting detail: KXC-M0-001-S+M10793-J-63-5013

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Diameter: \varnothing 16mm
Installation Depth: 15mm
Weight: 0.2kg

SOURCE

Manufacturer: WILA
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 1W
Lumens: 127lm
Efficacy: 127lm/w
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
WILA
www.wila.com

Local Supplier:
WILA Lighting Limited
8-10 The Quadrangle
Grove Technology Park
Downsview Road
Wantage, Oxfordshire
OX12 9FA

Tel: +44 1235 773500

Project Contact:
Name: Othman Kaghat
Tel: 0 7827 938 684
Email: othman.kaghat@wila.co.uk

General Lighting

LUMINAIRE REF.

XK

LUMINAIRE

Manufacturer: SIMES
Product: Slot Pole
Catalogue Number: S.3973 variant 3000K
Note: Standard product to be modified specially for CDY project

Description:
 Exterior quality IP65 rated pole mounted luminaire to provide general lighting outside southern gable end of Eastern Coal Drops. 230V 37W warm white LED 3000K CCT with 2066lm output and CRI 80+. 60°x30° beam. Dimmable 0-100% DALI Control Protocol. Housing constructed of die cast aluminium. Luminaire to be supplied with integral DALI dimmable driver.

Accessories:

- Column to match that of public realm lighting scheme around Coal Drops and Triplets Park as designed by Hoare Lea. Column specification to be confirmed by Hoare Lea.

Luminaire Colour:

To match that of public realm lighting scheme around Coal Drops and Triplets Park as designed by Hoare Lea.

Drivers:

Integral 0-100% Dimmable DALI driver. All drivers to be compatible with architectural lighting control system.

Specific Project Requirements:

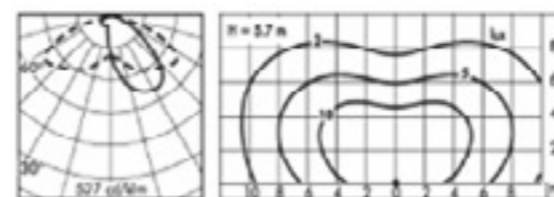
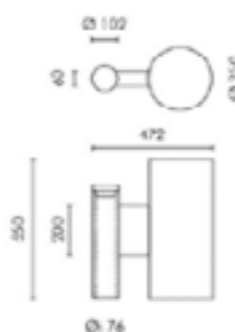
Luminaire finish and column specification to match that of public realm lighting scheme around Coal Drops and Triplets Park as designed by Hoare Lea.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-GF002

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Length: 472mm
 Width: 250mm
 Height: 550mm

SOURCE

Manufacturer: SIMES
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 37W
Lumens: 2072lm
Efficacy: 56lm/W
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
 SIMES
 www.simes.com

Local Supplier:
 Havells Sylvania UK Limited
 Avis Way
 Newhaven
 East Sussex
 BN9 0ED
 United Kingdom

Tel: +44(0)8706-062-030

Project Contact:
 Name: Danny Kyle
 Tel: 0 7976 737 344
 Email: daniel.kyle@havells-sylvania.com

Interior lighting to Roof Ribbon

LUMINAIRE REF.

XL

LUMINAIRE

Manufacturer: SIMES
Product: Movit Square 320mm
Catalogue Number: S.3070W variant DMX
Note: Standard product to be modified specially for CDY project

Description:

Exterior quality IP65 rated surface mounted LED projector to illuminate timber clad roof ribbon inside the anchor retail unit. 230V 45.5W warm white LED 3000K CCT with 2990 lm output. CRI 90+. Asymmetrical light distribution. Dimmable 0-100% DMX Control Protocol. Housing constructed of die-cast aluminium with tempered front glass cover. Requirement for removing standard edge frosting to be confirmed by mock-up. Luminaire to be supplied with remote DMX dimmable driver. Remote distance between driver and luminaire, cable diameter and housing locations to be confirmed by electrical engineer/contractor prior to order. All details including luminaire specification, colour temperature, beam distribution and accessories to be confirmed by 1:1 scale mock-up prior to order.

Accessories:

- Remote DMX dimmable drivers

Luminaire Colour:

White finish. RAL code TBC by Architect prior to order.

Drivers:

Remote 0 - 100% DMX dimmable driver. All control gear/drivers to be compatible with architectural lighting control system. Remote distance between driver and luminaire, cable diameter and housing locations to be confirmed by electrical engineer/contractor prior to order.

Drivers to be mounted in accessible, clean, dry, well ventilated/conditioned environment within manufacturers specified maximum distances. Multiple drivers may be required, exact qty, specifications and schematics to be confirmed by electrical engineer/contractor. Exact mechanical and fire rating of cable between luminaire and driver to be confirmed by electrical engineer/contractor. Driver locations and schematics to be coordinated by architect in conjunction with electrical engineer/contractor.

Specific Project Requirements:

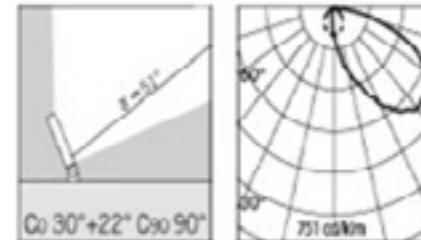
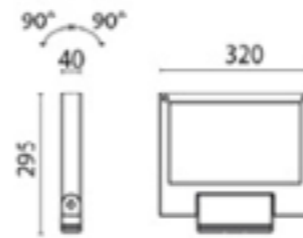
Each luminaire requires individual control via DMX protocol to achieve different intensities along the curved roof structure due to varying offset distances. All details including luminaire specification, colour temperature, beam distribution and accessories to be further developed by Contractor's design team during Stage 4 and confirmed by 1:1 scale mock-up to Client and Design Team approval prior to order.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-102
 Lighting detail: KXC-M0-001-S+M10793-J-63-5001

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Length: 320mm
 Width: 295mm
 Height: 40mm
 Weight: 4.1kg

SOURCE

Manufacturer: SIMES
Type: LED
Colour Temperature: 3000K (TBC)
Colour Rendering: Ra 90+
Watts: 45.5W
Lumens: 2990lm
Efficacy: 65.7lm/W
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
 SIMES
 www.simes.com

Local Supplier:
 Havells Sylvania UK Limited
 Avis Way
 Newhaven
 East Sussex
 BN9 0ED
 United Kingdom

Tel: +44 8706-062-030

Project Contact:
 Name: Danny Kyle
 Tel: 0 7976 737 344
 Email: daniel.kyle@havells-sylvania.com

Lighting to ramp from Pavilion H

LUMINAIRE REF.

XM

LUMINAIRE

Manufacturer: iGuzzini
Product: Led Tube
Catalogue Number: BJ52
Note:

Description:

Exterior quality IP67 rated surface mounted LED luminaire to provide general lighting to ramp and area adjacent to Pavilion H. 24V DC 12.6W warm white LEDs 3000K CCT 1640lm initial output and CRI 80+. Wide beam light distribution. Dimmable 0-100% DALI Control Protocol. Housing constructed of extruded polycarbonate cylindrical body, die cast Zamak cover plates and cable gland supports with opaque nickel galvanic treatment, complete with silicone seals. Requires IP68 rated linear connectors for pass-through wiring. Requires remote power supplies and DALI dimmable drivers. Remote distance between power supply/driver and luminaire, cable diameter and housing locations to be confirmed by electrical engineer/contractor prior to order.

Accessories:

- IP68 rated linear connectors, external power supplies, DALI dimmable drivers
- Mounting brackets
- Custom made louvres

Luminaire Colour: TBC by architect prior to order

Drivers:

Remote dimmable 0-100% DALI Control Protocol. All control gear/drivers to be compatible with architectural lighting control system. LED drivers-luminaire distance, cable diameter and housing locations to be confirmed by Architect prior to order.

Drivers to be mounted in accessible, clean, dry, well ventilated/conditioned environment within manufacturers specified maximum distances. Exact qty's, specifications and schematics to be confirmed by electrical contractor/consultant. Exact mechanical and fire rating of cable between luminaire and driver to be confirmed by electrical consultant/contractor. Driver locations and schematics to be coordinated by architect in conjunction with specialist consultants/contractors. All details to be confirmed with manufacturers by Electrical Consultant/Contractor prior to equipment order.

Specific Project Requirements:

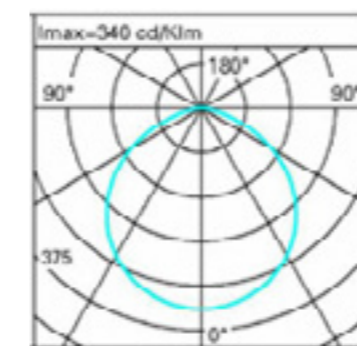
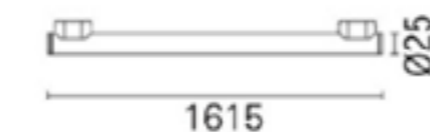
Luminaire modules to be installed continuously end-to-end with no visible shadow gaps. Contractor to work out best possible fit according to site dimensions. Luminaires are also available in 1215mm, 815mm or 415mm modules. All details including luminaire specification, colour temperature, beam distribution and accessories to be further developed by Contractor's design team during Stage 4 and confirmed by 1:1 scale mock-up to Client and Design Team approval prior to order.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-GF002
Lighting detail: KXC-M0-001-S+M10793-J-63-5005

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Length: 1615mm
Diameter: Ø25mm
Height: 72mm
Weight: 1.80Kg

SOURCE

Manufacturer: iGuzzini
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 12.6W
Lumens: 1640lm
Efficacy: 130lm/W
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
iGuzzini
www.iGuzzini.com

Local Supplier:
iGuzzini
Astolat Business Park
Astolat Way
Off Old Portsmouth Road
GU3 1NE Guildford
T: 0044 01483 468000
F: 0044 01483 468001
info@iguzzini.co.uk

Project Contact:
Name: Terence Goode
Tel: 0 7710 824 429
Email: Terence.Goode@iguzzini.co.uk

Lighting to Ramp from Granary Square Mast (Provisional specification only)

LUMINAIRE REF.

XN

LUMINAIRE

Manufacturer: SITECO
Product: Reflector system
Catalogue Number: TBC
Note: Bespoke lighting system. Specification to be coordinated with existing system on mast

Description:

Exterior quality secondary reflector system utilising 6no. 150W HIT Surface Mounted Projectors and 1no. Sistar asymmetric mirror reflector. Lighting system to be added on to the existing western Granary Square lighting mast to provide general illumination to ramp and adjacent open area between Ghat Steps and Fish&Coal building.

Projectors: Exterior quality IP 65, rationally symmetrical projectors producing parallel light distribution with plated anodised aluminium, highly specular reflectors optimised for secondary reflector technique. Matt exterior to reflectors. 6no. projectors each utilising 1no. 150W HIT Lamp. Complete with thermo control gear and ignitor. Housing made from die cast aluminium with power coated RAL finish. High temperature resistant toughened safety glass.

Mirror: Sistar reflector, 1200mmx 1200mm square asymmetric mirror reflector. Single convex facets for asymmetric light distribution. Vaporised aluminium reflector facets of rigid polymer material, highly specular. Corrosion proof lacquered coatings. Facets mounted on to aluminium supporting frame to form reflector. Rigid supporting frame to form reflector. Rigid supporting frame of alloyed aluminium. Complete with mounting/suspension accessories for column-mounting. Wide beam axial/transverse angle. Asymmetric distribution.

Accessories:

TBC

Luminaire Colour:

To match existing luminaires on site

Drivers:

Specific Project Requirements:

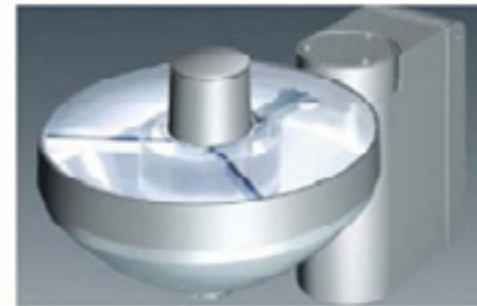
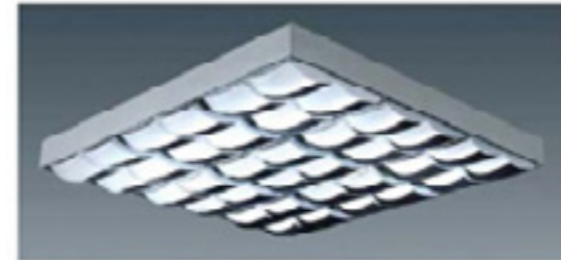
Structural feasibility study and coordination with existing lighting mast required. All details including luminaire specification, colour temperature, beam distribution and accessories to be further developed by Contractor's design team during Stage 4. System specification including lamp type, wattage, luminaire and housing finish and cantilever bracket etc. to match that of existing lighting system to ensure consistent appearance.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-GF002
 Lighting detail: KXC-M0-001-S+M10793-J-63-5004

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Length: TBC
 Width: TBC
 Height: TBC
 Weight: TBC

SOURCE

Manufacturer: TBC
Type: TBC
Colour Temperature: TBC
Colour Rendering: TBC
Watts: TBC
Lumens: TBC
Efficacy: TBC
Base: TBC
Rated Life: TBC

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
 Siteco
 www.siteco.com

Local Supplier:
 OSRAM Ltd,
 Osram House,
 Waterside Drive,
 Langley,
 Berkshire,
 SL3 6EZ

Project Contact:
 Name: Karen Cawley
 Tel: 0 7771835842
 Email: n.brassey@siteco.co.uk

Lighting to route between Triplets and Western Coal Drops (by Hoare Lea)

LUMINAIRE REF.

XP

LUMINAIRE

Manufacturer: We-ef
Product: VFL530 Street and Area Lighting
Catalogue Number: VFL530 108-1171 (TBC by Hoare Lea)
Note: Specification to be coordinated with Triplets Park lighting by Hoare Lea

Description:

Exterior IP66 rated wall-mounted street lighting lantern to illuminate routes between Triplets and Western Coal Drops. 48W warm white LED array (24no.) module 3000K CCT with a minimum initial light output of 5530lm with a side throw asymmetrical beam (S70) distribution. Housing from die cast aluminium housing with clear lens. Fitting to be supplied with custom integral DALI dimmable LED driver.

Accessories:

- Wall mounted bracket

Luminaire Colour:

TBC by architect prior to order

Drivers:

Integral 0-100% Dimmable DALI driver. All drivers to be compatible with architectural lighting control system.

Specific Project Requirements:

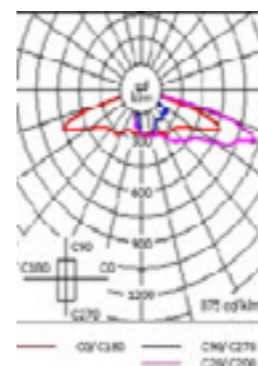
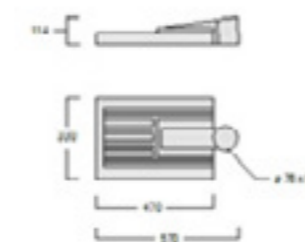
Final details of specification to be confirmed by Hoare Lea as part of Triplets Park lighting scheme.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-GF002

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Length: 570mm
 Width: 330mm
 Height: 114mm

SOURCE

Manufacturer: We-ef
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 48W
Lumens: 5530lm
Efficacy: 115lm/W
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
 We-ef
 www.we-ef.com

Local Supplier:
 WE-EF LIGHTING Ltd
 Suite 2c, East Bridgford Business Park
 Kneeton Road, East Bridgford, Nottingham NG13 8PJ
 UK
 Tel: +44 844 880 5346
 Email: info.uk@we-ef.com

Project Contact:
 Name: Charles Dunbar
 Tel: 0 7768 766 119
 Email: c.dunbar@we-ef.com

Uplighting to gable ends

LUMINAIRE REF.

XQ

LUMINAIRE

Manufacturer: We-ef
Product: ETC330-GB LED ASC
Catalogue Number: 185-2694
Note:

Description:

Exterior quality IP67 rated ground recessed LED luminaire to uplight gable ends. 230V 12W warm white LED 3000K CCT 1242lm initial output and CRI 80+. Wide beam light distribution. Luminaire rotation range +/- 360° and 30° tilt. Dimmable 0-100% DALI Control Protocol. Housing constructed of stainless steel, silicone rubber gasket and safety glass lens with Anti-Slip ceramic Coating (ASC). Requires remote DALI driver. LED driver-luminaire distance, cable diameter and housing locations to be confirmed by electrical consultant/contractor prior to order.

Accessories:

- Remote DALI dimmable driver
- Installation blackout
- Flood Lens

Luminaire Colour:

TBC by architect prior to order

Drivers:

Remote 0 - 100% DALI dimmable driver. All control gear/drivers to be compatible with architectural lighting control system. Remote distance between driver and luminaire, cable diameter and housing locations to be confirmed by electrical engineer/contractor prior to order.

Drivers to be mounted in accessible, clean, dry, well ventilated/conditioned environment within manufacturers specified maximum distances. Multiple drivers may be required, exact qtys, specifications and schematics to be confirmed by electrical engineer/contractor. Exact mechanical and fire rating of cable between luminaire and driver to be confirmed by electrical engineer/contractor. Driver locations and schematics to be coordinated by architect in conjunction with electrical engineer/contractor.

Specific Project Requirements:

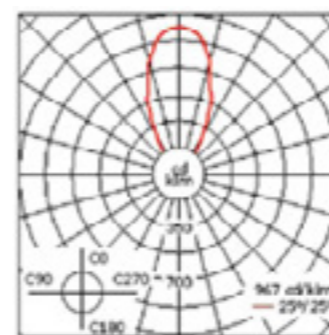
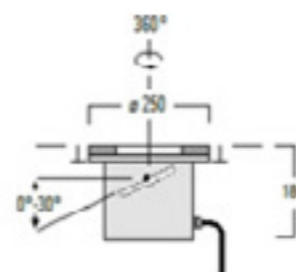
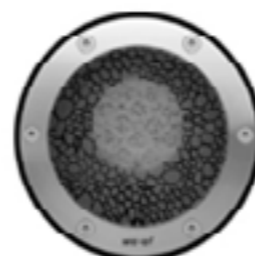
- Lighting Detail to be fully coordinated with landscape proposals.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-00001

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Diameter: ø 250mm
Height: 180 mm

SOURCE

Manufacturer: We-ef
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 12W
Lumens: 1242lm
Efficacy: 103lm/w
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- External luminaires to be installed in dry conditions only. Contractor to ensure min 300mm aggregate drainage (to land drain) to all inground luminaires. Inground luminaires must never sit in standing water at any time.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
We-ef
www.we-ef.com

Local Supplier:
WE-EF LIGHTING Ltd
Suite 2c, East Bridgford Business Park
Kneeton Road, East Bridgford, Nottingham NG13 8PJ
UK
Tel: +44 844 880 5346
Email: info.uk@we-ef.com

Project Contact:
Name: Charles Dunbar
Tel: 0 7768 766 119
Email: c.dunbar@we-ef.com

General lighting to core top stairs

LUMINAIRE REF.

XR

LUMINAIRE

Manufacturer: Hoffmeister
Product: DL150
Catalogue Number: 117 460 03 726
Note:

Description:

Exterior quality IP65 rated ceiling mounted LED luminaire to provide general lighting to core top stairs. 230V 28W warm white LED 3000K CCT 2100lm initial output and CRI 80+. 65deg wide flood beam light distribution. Housing constructed of die cast aluminium with luminaire cover made of clear safety glass. Bespoke mounting bracket to suit ceiling tilt angle. Luminaire to be supplied with integral dimmable 0-100% DALI driver.

Accessories:

- N/A

Luminaire Colour:

RAL finish TBC by architect prior to order

Drivers:

Integral 0-100% Dimmable DALI driver. All drivers to be compatible with architectural lighting control system.

Specific Project Requirements:

- Mounting detail to be fully coordinated with ceiling design by contractor's design team drawing at stage 4

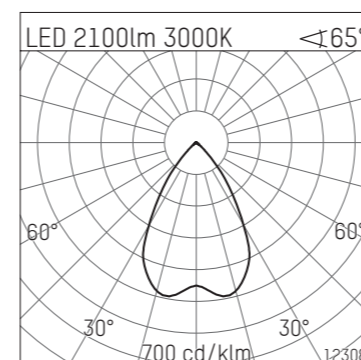
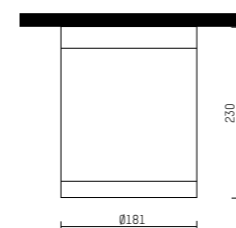
Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-01002

Lighting detail: KXC-M0-001-S+M10793-J-63-5015

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Diameter: \varnothing 181mm

Height: 230 mm

SOURCE

Manufacturer: Hoffmeister
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 28W
Lumens: 2100lm
Efficacy: 75lm/w
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
Hoffmeister
www.hoffmeister.de

Local Supplier:
LIGHTWORKS Architectural Ltd
Cannon Park
Transfesa Road
Paddock Wood
Kent. TN12 6UF
Email: sales@lightworks.co.uk

Project Contact:
Name: Colin Parsons
Tel: 0 7734 389000
Email: cparsons@lightworks.co.uk

Integrated lighting to feature stair treads

LUMINAIRE REF.

XS

LUMINAIRE

Manufacturer: LED Linear
Product: VarioLED
Catalogue Number: VarioLED HYDRA LD10
Note:

Description:

Exterior quality IP67 rated linear LED luminaire to be integrated into feature stair treads. 24V 9.6W/meter warm white LED 3000K CCT 1364lm initial output and CRI 80+. LED luminaire to be supplied in polyurethane encapsulation with aluminium profile and opal diffuse cover. Requires remote 24V DC power supply unit and dimmable 0-100% DALI driver. Driver-luminaire distance, cable diameter and housing locations to be confirmed by electrical consultant/contractor prior to order.

Accessories:

- VarioContour 005 base profile 10000038
- VarioContour 005 mounting profile 10000039
- VarioCover 005 Opal L 12000013

Luminaire Colour:

Standard aluminium profile

Drivers:

Remote 0 - 100% DALI dimmable driver. All control gear/drivers to be compatible with architectural lighting control system. Remote distance between driver and luminaire, cable diameter and housing locations to be confirmed by electrical engineer/contractor prior to order.

Drivers to be mounted in accessible, clean, dry, well ventilated/conditioned environment within manufacturers specified maximum distances. Multiple drivers may be required, exact qtys, specifications and schematics to be confirmed by electrical engineer/contractor. Exact mechanical and fire rating of cable between luminaire and driver to be confirmed by electrical engineer/contractor. Driver locations and schematics to be coordinated by architect in conjunction with electrical engineer/contractor.

Specific Project Requirements:

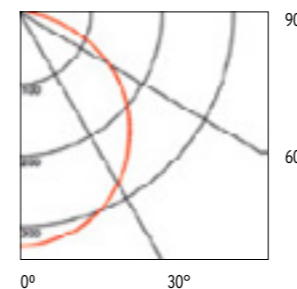
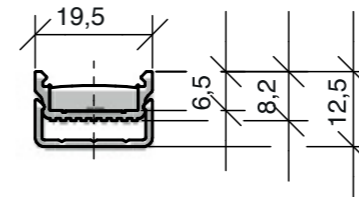
- Lighting Detail to be fully coordinated with stair design. Lighting integration detail to be further developed by Contractor's design team during Stage 4. All details to be confirmed by 1:1 scale mock-up to Client and Design Team approval.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-00001, KXC-M0-001-S+M10793-J-63-GF001
Lighting detail: KXC-M0-001-S+M10793-J-63-5009

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Width: 19.5mm
Height: 15mm
Maximum single Length: 1956mm

SOURCE

Manufacturer: LED Linear
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 9.6W/m
Lumens: 1364lm/meter
Efficacy: 142lm/w
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
LED Linear
www.led-linear.com/

Local Supplier:
Architainment
Roundwood House,
134-136 Lane End Road
High Wycombe,
Buckinghamshire, HP12 4HX
Email: sales@lightworks.co.uk

Project Contact:
Name: Neil Gamble
Tel: +44 (0) 7508 094131
Email: neil.gamble@architainment.co.uk

General lighting to stairs

LUMINAIRE REF. XT

LUMINAIRE

Manufacturer: Selux
Product: M100
Catalogue Number: SX 11P011206/1186
Note:

Description:

Interior quality IP20 surface mounted linear LED luminaire to illuminate stairs. 25W warm white LED 3000K CCT 1750lm initial output and CRI 80+. Symmetric light distribution. Luminaire body made of extruded aluminium with opal diffuse cover. Integral dimmable 0-100% DALI driver. Luminaire to be supplied with aluminium end caps.

Accessories:

- End cap SX 99-444-3 finish to match luminaire housing

Luminaire Colour:

RAL finish TBC by architect prior to order

Drivers:

Integral 0-100% Dimmable DALI driver. All drivers to be compatible with architectural lighting control system.

Specific Project Requirements:

- Mounting detail including surface mounted conduit routing to be further developed by Contractor's design team during Stage 4 to Client and Design Team approval.

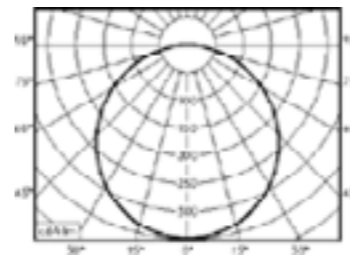
Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-100, KXC-M0-001-S+M10793-J-63-1GF
Lighting detail: KXC-M0-001-S+M10793-J-63-5000-5010

Manufacturers Information

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

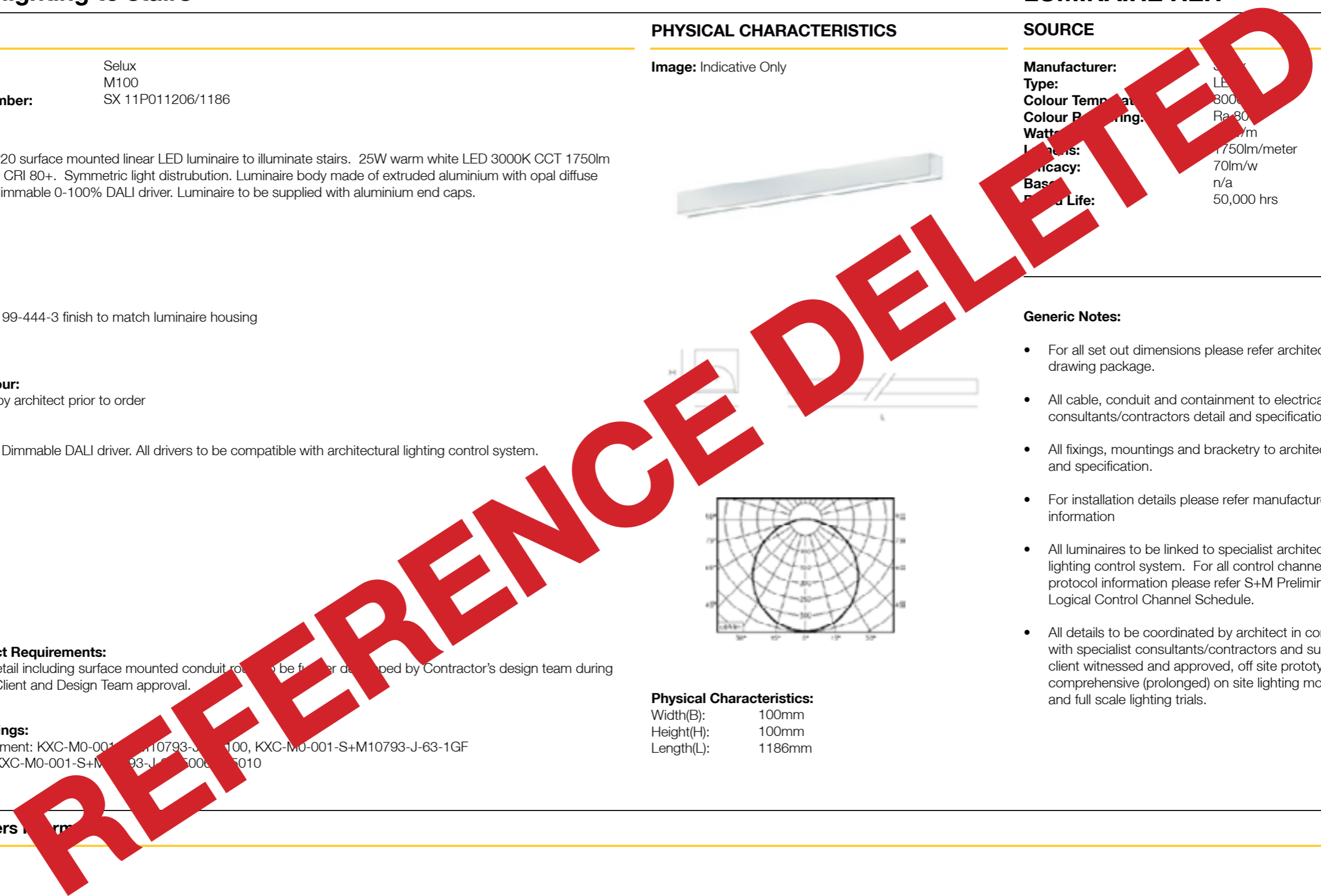
Width(B): 100mm
Height(H): 100mm
Length(L): 1186mm

SOURCE

Manufacturer: Selux
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80
Wattage: 25W/m
Lumens: 1750lm/meter
Efficiency: 70lm/w
Base: n/a
Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.



Graze lighting to lift doors

LUMINAIRE REF.

XV

LUMINAIRE

Manufacturer: Ecosense
Product: Trov
Catalogue Number: L50-E-12-10-30-90-MULT-9x17
Note:

Description:

Exterior quality IP66 rated surface mounted linear LED luminaire to provide graze light to lift doors and cladding panel above. Utilising 33W/m warm white LED 3000K CCT 3425lm initial output and CRI 80+. 9x17 light distribution. Luminaire housing made of extruded aluminium, clear polycarbonate lens, and stainless steel fasteners. Dimmable 0-100% DALI protocol utilising separate DALI to trailing edge converter. Luminaire to be supplied with anti glare asymmetric louvre and adjustment mounting bracket.

Accessories:

- Anti glare asymmetric louvre LV-L50-ASYM-12
- Fine adjustment bracket MNT-L-FAB
- External DALI to trailing-edge converter DALI PCD/S

Luminaire Colour:

Standard aluminium finish

Drivers:

External dimmable DALI converter to be connected to luminaire. All drivers to be compatible with architectural lighting control system.

Specific Project Requirements:

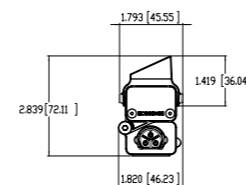
- Luminaire to be fully concealed within architectural ceiling slot around lift cores. Lighting integration detail to be further developed by Contractor's design team during Stage 4. All details to be confirmed by 1:1 scale mock-up to Client and Design Team approval.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-00002, KXC-M0-001-S+M10793-J-63-GF002
Lighting detail: KXC-M0-001-S+M10793-J-63-5013

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Width: 41.6mm
Height: 72mm (including louvre)
Length: 305mm

SOURCE

Manufacturer: Ecosense
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 33W/m
Lumens: 3425lm/meter
Efficacy: 103lm/w
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
Ecosense
www.ecosenselighting.com

Local Supplier:
Architainment
Roundwood House,
134-136 Lane End Road
High Wycombe,
Buckinghamshire, HP12 4HX
Email: sales@lightworks.co.uk

Project Contact:
Name: Neil Gamble
Tel: +44 (0) 7508 094131
Email: neil.gamble@architainment.co.uk

General lighting to cores

LUMINAIRE REF.

XW

LUMINAIRE

Manufacturer: Hoffmeister
Product: DL150
Catalogue Number: 117 440 03 726
Note:

Description:
Exterior quality IP65 rated ceiling mounted LED luminaire to light staircase landing. 230V 28W warm white LED 3000K CCT 2100lm initial output and CRI 80+. 25deg narrow beam light distribution. Housing constructed of die cast aluminium with luminaire cover made of clear safety glass. Luminaire to be supplied with integral dimmable 0-100% DALI driver.

Accessories:
N/A

Luminaire Colour:
RAL finish TBC by architect prior to order

Drivers:
Integral 0-100% Dimmable DALI driver. All drivers to be compatible with architectural lighting control system.

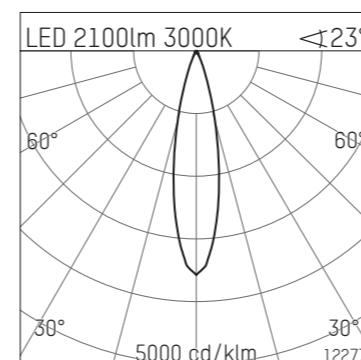
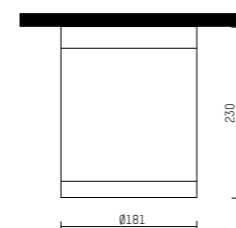
Specific Project Requirements:

- Mounting detail to be fully coordinated with ceiling design by Contractor's design team during Stage 4.

Refer To Drawings:
Lighting arrangement: KXC-M0-001-S+M10793-J-63-00002, KXC-M0-001-S+M10793-J-63-GF002
Lighting detail: KXC-M0-001-S+M10793-J-63-5015

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Diameter: ø 181mm
Height: 230 mm

SOURCE

Manufacturer: Hoffmeister
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 28W
Lumens: 2100lm
Efficacy: 75lm/w
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers own information
- All luminaires to be linked to specialist architectural lighting control system. For all control channel and protocol information please refer S+M Preliminary Logical Control Channel Schedule.
- All details to be coordinated by architect in conjunction with specialist consultants/contractors and subject to client witnessed and approved, off site prototypes and comprehensive (prolonged) on site lighting mock ups and full scale lighting trials.

Manufacturers Information

Manufacturer:
Hoffmeister
www.hoffmeister.de

Local Supplier:
LIGHTWORKS Architectural Ltd
Cannon Park
Transfesa Road
Paddock Wood
Kent. TN12 6UF
Email: sales@lightworks.co.uk

Project Contact:
Name: Colin Parsons
Tel: +44 (0)7734 389000
Email: cparsons@lightworks.co.uk