

Track mounted spotlight

LUMINAIRE REF.

XX

LUMINAIRE

Manufacturer: Hoffmeister
Product: lo.nely2
Catalogue Number: 116 523 03 721
Note:

Description:

Interior quality IP20 rated track mounted LED spotlight to provide accent lighting to display gallery area below stair landing. 14W warm white LED 3000K CCT 1060lm initial output and CRI 90+. 25deg medium beam light distribution. Housing constructed of die cast aluminium with clear safety glass. 360deg rotatable and 90deg tilttable. With 3 circuit 0.5-100% dimmable DALI adapter.

Accessories:

N/A

Luminaire Colour:

RAL finish TBC by architect prior to order

Drivers:

Integral 0.5-100% Dimmable DALI driver. All drivers to be compatible with architectural lighting control system.

Specific Project Requirements:

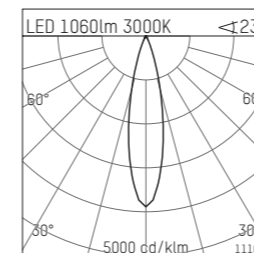
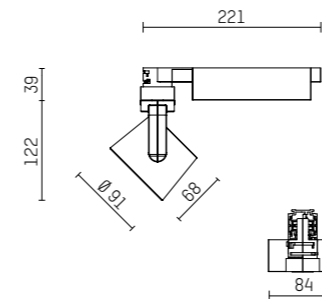
- Mounting detail to be fully coordinated with stair design by Contractor's design team during Stage 4.

Refer To Drawings:

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

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Length: 221mm
Width: 84mm
Height: 161mm

SOURCE

Manufacturer: Hoffmeister
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 14W
Lumens: 1060lm
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

General lighting to cores

LUMINAIRE REF.

XY

LUMINAIRE

Manufacturer: Hoffmeister
Product: DL150
Catalogue Number: 117 350 03 726
Note:

Description:

Exterior quality IP65 rated ceiling recessed LED luminaire to provide general lighting to cores. 230V 28W warm white LED 3000K CCT 2100lm initial output and CRI 80+. 45deg flood beam light distribution. Housing constructed of die cast aluminium with luminaire cover made of clear safety glass. Luminaire to be supplied with remote dimmable 0-100% DALI driver.

Accessories:

- Remote dimmable 0-100% DALI driver.

Luminaire Colour:

RAL finish TBC by architect prior to order

Drivers:

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

Specific Project Requirements:

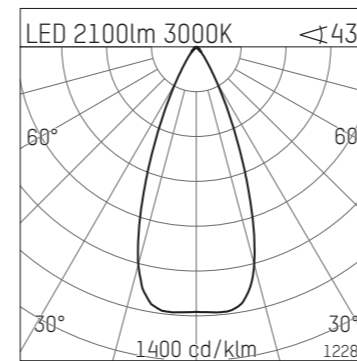
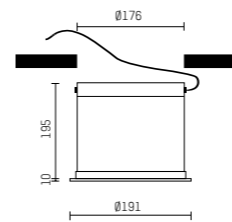
- Mounting detail to be fully coordinated with ceiling design by Contractor's design team during Stage 4.

Refer To Drawings:

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

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Diameter: \varnothing 191mm
Cutout: 176mm
Recessed depth: 195mm

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

General lighting to cores

LUMINAIRE REF.

XZ

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.

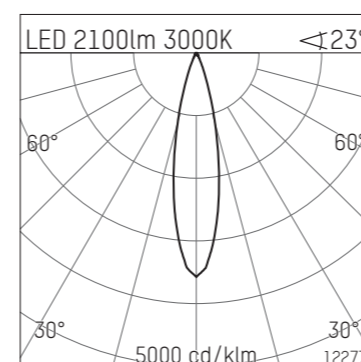
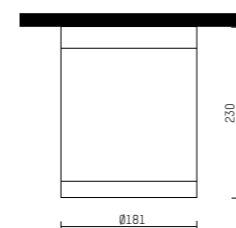
Specific Project Requirements:

- 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

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: +44 (0)7734 389000
Email: cparsons@lightworks.co.uk

Marker light to stair landing

LUMINAIRE REF.

BA

LUMINAIRE

Manufacturer: ACDC
Product: GALLI
Catalogue Number: acdc1014SSB30U0FMFDGF
Note:

Description:

Exterior quality IP68 rated floor recessed LED marker light. 2.5W warm white LED 3000K CCT 146lm initial output and CRI 80. Uncolimated light distribution with frosted glass cover and 0 deg tilt. Housing constructed of aluminium CNC machined to aerospace tolerance. Requires remote dimmable 0-100% DALI driver. Driver-luminaire distance, cable diameter and housing locations to be confirmed by electrical consultant/contractor prior to order.

Accessories:

- Remote dimmable 0-100% DALI driver
- Installation sleeve

Luminaire Colour:

Stainless steel finish 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:

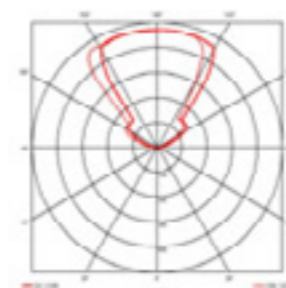
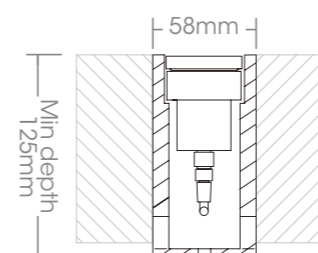
- Mounting detail to be fully coordinated with stair design by Contractor's design team during Stage 4.

Refer To Drawings:

KXC-M0-001-S+M10793-J-63-GF001

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Cutout: \varnothing 58mm

Recessed Depth: 125mm

SOURCE

Manufacturer: ACDC
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 2.5W
Lumens: 146lm
Efficacy: 58.4lm/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:
ACDC
www.acdclighting.com

Local Supplier:
ACDC
Wordsworth House
Vantage Court
Riverside Way
Barrowford
BB9 6BP
Email: sales@acdclighting.co.uk

Project Contact:
Name: Liam Deards
Tel: +44 (0)7730 522 636
Email: ldeards@acdclighting.co.uk

Downlighting to lift reveal

LUMINAIRE REF.

BB

LUMINAIRE

Manufacturer: Alto
Product: Downlight O3 Series
Catalogue Number: 11301C-830H-010-025

Description:
Interior quality IP20 ceiling recessed adjustable LED downlight. 7.5W warm white LED 3000K CCT 700lm initial output and CRI 80. 25deg beam distribution. Housing constructed die cast aluminium with aluminium vacuum coated reflector. Requires remote dimmable 0-100% DALI driver. Driver-luminaire distance, cable diameter and housing locations to be confirmed by electrical consultant/contractor prior to order.

Accessories:
• Requires remote dimmable 0-100% DALI driver

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, contractors. All details to be confirmed with manufacturers by Electrical Consultant/Contractor prior to equipment order.

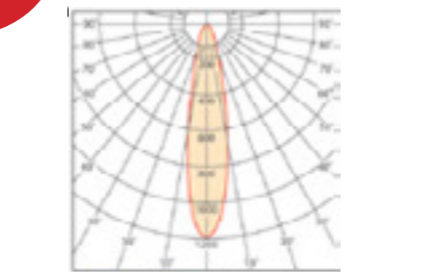
Specific Project Requirements:
• Lighting detail to be fully coordinated with lift reveal details

Refer To Drawings:
Lighting arrangement: KXC-M0-001-S+M10793-J-63-850-00, KXC-M0-001-S+M10793-J-63-1GF

Manufacturers Information

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Cutout: 96mm
Recessed Depth: 87mm

SOURCE

Manufacturer: Alto
Type: LED
Colour Temperature: 3000K
Colour Rendering Index: Ra 80
Wattage: 7.5W
Lumens: 700lm
Efficiency: 93.3lm/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.
- 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

Backlit ceiling to feature lift car (Provisional specification only)

LUMINAIRE REF. **BC**

LUMINAIRE

Manufacturer: LED Linear
Product: VarioLED
Catalogue Number: VarioLED HYDRA LD10
Note: Provisional specification only. All details TBC by specialist lift manufacturer.

Description:
 Interior quality IP20 rated linear LED luminaire to be integrated into lift car backlit ceiling to provide uniform glow without any visible nodes of LEDs. 24V 9.6W/meter warm white LED 3000K CCT 1364lm initial output and CRI 80+. LED luminaire to be supplied with aluminium profile and clear cover. Requires remote 24V DC power supply 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 clear L 12000019
- Remote 24V DC PSUs
- Remote dimmable 0-100% DALI driver

Luminaire Colour:
N/A

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 qty's, 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:

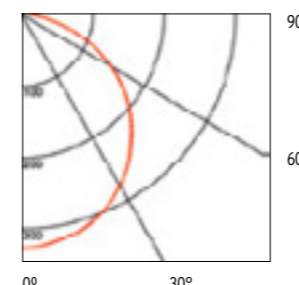
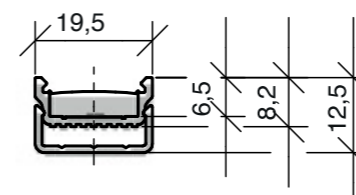
- Lighting detail to be fully coordinated with lift car design. Lighting integration detail to be further developed by Contractor's design team and specialist lift manufacturer during Stage 4. All details including ceiling diffuser specification to be confirmed by 1:1 scale mock-up to Client and Design Team approval prior to construction.

Refer To Drawings:

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

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Width: 19.5mm
 Height: 15mm
 Maximum single Length: 5000mm

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

Project Contact:
 Name: Neil Gamble
 Tel: 07508 094131
 Email: neil.gamble@architainment.co.uk

Exterior lighting to feature lift car (Provisional specification only)

LUMINAIRE REF. BD

LUMINAIRE

Manufacturer: Philip ColorKinetics
Product: ColorGraze MX Powercore
Catalogue Number: ColorGraze MX Powercore red/amber 30°x60° 305mm DMX
Note: Provisional specification only. All details TBC by specialist lift manufacturer.

Description:
 Exterior quality IP66 rated surface mounted, adjustable, lockable linear LED luminaire to illuminate metal cladding panel at top and base of feature lift car. 100-277VAC 15W red/amber LED (colour TBC). Symmetrical lighting distribution of 30°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, 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:
TBC

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

- Specific Project Requirements:**
- Lighting detail to be fully coordinated with lift car design. Lighting information to be developed by Contractor's design team and specialist lift manufacturer during Stage 3. All details to be confirmed by 1:1 scale mock-up to Client and Design Team approval prior to construction.

Refer To Drawings:
 Lighting arrangement: KXC-M0-001-S+M10793-J-63-850-00
 Lighting detail: KXC-M0-001-S+M10793-J-63-850-00

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
Colour Rendering: Ra 80
Wattage: 15W per linear meter
Inputs: n/a
Efficiency: n/a
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

Surface mounted luminaire to core stairs

LUMINAIRE REF.

BF

LUMINAIRE

Manufacturer: Spectral Lighting
Product: Stora
Catalogue Number: STORA Quadron LED 11700/840 OS-DA (800x800 mm)
Note:

Description:
 Interior quality IP20 rated surface mounted LED luminaire to illuminate core stairs. 55W 350mA 3000K LED module producing 5500lm output. Diffused light distribution using MPO diffuser. Housing constructed of extruded aluminium. Luminaire to be supplied with integral dimmable 0-100% DALI driver.

Accessories:

- N/A

Luminaire Colour:

Custom RAL colour TBC by architect.

Drivers/Control Gear:

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

Specific Project Requirements:

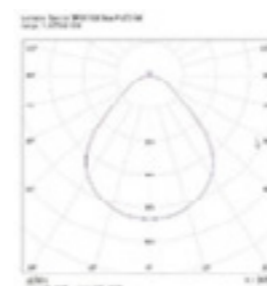
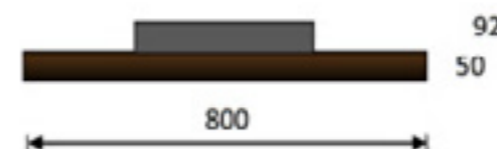
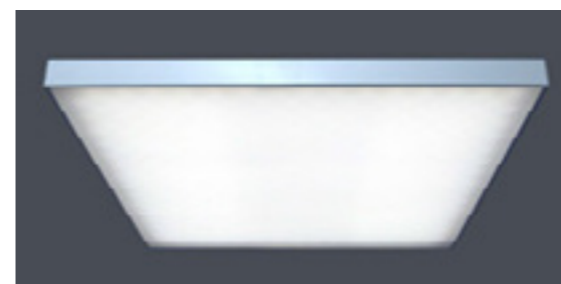
- Luminaire to be integrated within metal trim on stair landing soffit to architect's detail and specification.

Refer To Drawings:

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

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Length: 800mm
 Width: 800mm
 Height: 52mm
 Weight: NA

SOURCE

Manufacturer: Spectral
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 85+
Watts: 55W
Lumens: 3960
Efficacy: 72lm/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:
 Spectral Lighting
 www.spectral-lighting.co.uk

Local Supplier:
 Spectral Lighting
 8/9 The Marshgate Centre, Parkway,
 Harlow Business Park, Harlow,
 Essex CM 19 5QP
 Tel: +44 (0)1279 450882

Project Contact:
 Name: Jon Estell
 Tel: +44 1279 45 08 82
 Email: Jon.Estell@ridi.co.uk

Surface mounted downlight to mesh curtain

LUMINAIRE REF.

BG

LUMINAIRE

Manufacturer: Mike Stoane Lighting
Product: Custom fitting
Catalogue Number: NA
Note:

Description:

Interior quality IP20 rated surface mounted LED downlight to illuminate mesh curtain around lift core. Luminaire utilising 1No. 700mA 29.3W Xicato XTM 3000lm module with symmetrical 20.9° reflector to produce 2700lm output. Housing constructed of aluminium and clear front glass cover to protect against dust. To be supplied with remote dimmable 0-100% DMX driver. All details including luminaire specification, colour, beam distribution and accessories to be confirmed by 1:1 scale mock-up prior to order.

Accessories:

- Remote dimmable DMX driver
- Honeycomb louvre
- Linear spread lens

Luminaire Colour:

TBC by architect prior to order

Drivers/Control Gear:

Remote DMX 0-100% dimmable driver: 388x42x30mm Eldoled 100W DMX 4 channel driver to be installed in clean, dry and well ventilated location. Maximum 4 luminaires per driver. Maximum distance 36m from fittings.

All control gear/drivers to be compatible with architectural lighting control system.

Specific Project Requirements:

- Lighting integration detail to be further developed by Contractor's design team and specialist lift manufacturer during Stage 4. All details to be confirmed by 1:1 scale mock-up to Client and Design Team approval prior to construction.

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-63-5014

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Diameter: ø 84mm (luminaire housing)
ø 110mm (mounting plate)
Height: 135mm
Weight: 1.0kg

SOURCE

Manufacturer: Xicato
Type: LED
Colour Temperature: 3000K
Colour Rendering: Ra 80+
Watts: 29.3W
Lumens: 2700lm
Efficacy: 92lm/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:
Mike Stoane Lighting
www.mikestoanelighting.com/

Local Supplier:
Mike Stoane Lighting Ltd
20 Dryden Road
Bilston Glen Industrial Estate
Loanhead Midlothian EH20 9LZ
Tel: +44 131 440 1313

Project Contact:
Name: Craig Scott
Tel: +44 131 440 1313
Email: Craig@mikestoanelighting.com

Suspended pendent light in toilet

LUMINAIRE REF.

BJ

LUMINAIRE

Manufacturer: Davey Lighting
Product: Ship's Well Glass Pendant
Catalogue Number: DP7524/PE/BR/WE/CL
Note: To be fitted with LED retrofit lamp

Description:

Interior quality IP44 ceiling suspended LED luminaire to provide general lighting to toilet vanity area and cubicals. Housing constructed of weathered brass and clear glass. Luminaire to be fitted with 230V E27 dimmable LED retrofit lamp.

Accessories:

- 230V E27 dimmable LED retrofit lamp

Luminaire Colour:

TBC by architect prior to order

Drivers:

N/A

Specific Project Requirements:

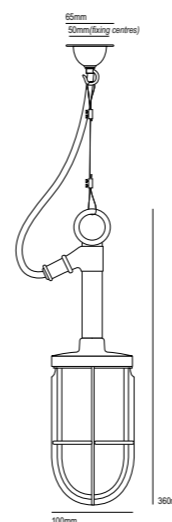
- Exact lamp specification to be confirmed at later stage. Best performance lamp will be specified by Speirs + Major at the time of procurement. Contractor to contact Speirs + Major accordingly.
- Luminaire to be supplied with 3.5m suspension wire and 4m electrical cable. Exact mounting height to be coordinated with toilet cubicle/partition height to Architect's detail. Contractor to cut suspension wire and electrical cable on site to suit. Final mounting height to be confirmed by Architect.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-00002

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Diameter: \varnothing 100mm
Height: 360mm

SOURCE

Manufacturer: TBC
Type: LED
Colour Temperature: TBC
Colour Rendering: TBC
Watts: TBC
Lumens: TBC
Efficacy: TBC
Base: E27
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.
- 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
United Kingdom

Project Contact:
Name: Charlie Bowles
Tel: 0207 3512130
Email: charlie@originalbtc.com

Surface mounted downlight in toilet

LUMINAIRE REF.

BK

LUMINAIRE

Manufacturer: Hoffmeister
Product: DL150
Catalogue Number: 117 450 03 726
Note:

Description:

Exterior quality IP65 rated ceiling mounted LED luminaire to provide general lighting to toilets. 230V 28W warm white LED 3000K CCT 2100lm initial output and CRI 80+. 43deg wide flood 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:

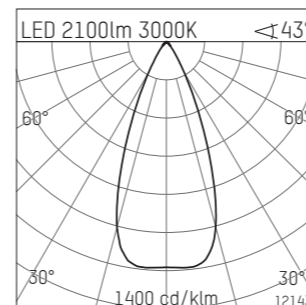
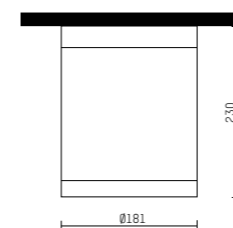
- Mounting detail to be fully coordinated with ceiling design by Contractor's design team during Stage 4.

Refer To Drawings:

Lighting arrangement: KXC-M0-001-S+M10793-J-63-00002

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

Surface mounted track

LUMINAIRE REF.

TR

LUMINAIRE

Manufacturer: Hoffmeister
Product: Control X
Catalogue Number: 110 101 00 721
Note:

Description:
Interior quality surface mounted 3- circuit track to accommodate spotlights. DALI control protocol. Profile made of extruded aluminium .

Accessories:

- Contractor to configure all necessary components including live ends, end caps, DALI adaptor etc.

Profile Colour:

TBC by architect prior to order

Drivers:

n/a

Specific Project Requirements:

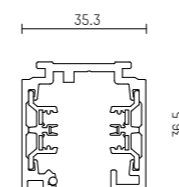
- Mounting detail to be fully coordinated with stair design by Contractor's design team during Stage 4.

Refer To Drawings:

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

PHYSICAL CHARACTERISTICS

Image: Indicative Only



Physical Characteristics:

Width: 35.3mm
Height: 36.3 mm
Length: Available in 1000/2000/3000/4000/5000mm

SOURCE

Manufacturer: Hoffmeister
Type: LED
Colour Temperature: n/a
Colour Rendering: n/a
Watts: n/a
Lumens: n/a
Efficacy: n/a
Base: n/a
Rated Life: 50,000 hrs

Generic Notes:

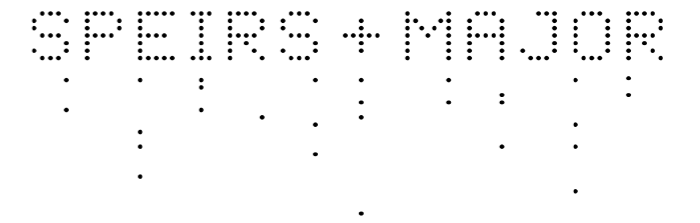
- For all set out dimensions please refer architectural drawing package.
- All cable, conduit and containment to electrical consultants/contractors detail and specification.
- All fixings, mountings and bracketry to architects detail and specification.
- For installation details please refer manufacturers 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



Preliminary Logical Control Channel Schedule

Project: Coal Drops Yard, King's Cross
London, UK
Project Number: 10793
Document Number: KXC-M0-001-S+M10793-J-63-701
Revision: 04

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

Zone	Area	Channel	Luminaire Ref.	Lighting Function	Quantity	Lamp Type	Control Gear Type	Lamp Load Per Unit	Total Lamp Load	Power Control Required	Control Data Required	Behaviour	Notes
						see note 3.0	see note 4.0	see note 2.0	see note 2.0	see note 5.0	see note 6.0	see note 7.0	
Yard Level Lighting													
	1	10	XA	General Lighting to East Coal Drops	12	LED	LED	22w	264w	SW	DALI	Dimming	
	1	11	XA	General Lighting to East Coal Drops	7	LED	LED	22w	154w	SW	DALI	Dimming	
	1	12		OMITTED									
	1	13	XA	Uplighting to Viaduct Soffit	32	LED	LED	22w	704w	SW	DALI	Dimming	
	1	14	XA	General Lighting to West Coal Drops	16	LED	LED	22w	352w	SW	DALI	Dimming	
	1	15	XA	General Lighting to Wharf Street	11	LED	LED	22w	242w	SW	DALI	Dimming	
	1	16		OMITTED									
	1	17		OMITTED									
	1	18	XB	General Lighting to Lower Stable Street	25	LED	LED	50w	1250w	SW	DALI	Dimming	
	1	19		OMITTED									
	1	20	XB	General Lighting to Gable Ends	5	LED	LED	50w	250w	SW	DMX	Dimming	
	1	21	XB	General Lighting to Gable Ends	2	LED	LED	50w	100w	SW	DALI	Dimming	
	1	22	XB	General Lighting to Gable Ends	7	LED	LED	50w	350w	SW	DALI	Dimming	
	1	23		OMITTED									
	1	24	XB	General Lighting to Towpath Entrance	4	LED	LED	50w	200w	SW	DALI	Dimming	
	1	25	XB	General Lighting to Towpath Entrance	4	LED	LED	50w	200w	SW	DALI	Dimming	
	1	26	XA	Uplighting to Viaduct Soffit	30	LED	LED	22w	660w	SW	DALI	Dimming	
	1	27	XA	General Lighting	30	LED	LED	22w	660w	SW	DALI	Dimming	
	1	28	XA	General Lighting to West Coal Drops	15	LED	LED	22w	330w	SW	DALI	Dimming	
	1	29	XA	General Lighting	5	LED	LED	22w	110w	SW	DALI	Dimming	
	1	30	XQ	Uplighting to gable end wall	7	LED	LED	12w	84w	SW	DALI	Dimming	
	1	31	XQ	Uplighting to gable end wall	7	LED	LED	12w	84w	SW	DALI	Dimming	
	1	32	XA	General Lighting to East Coal Drops	3	LED	LED	22w	66w	SW	DALI	Dimming	
	1	33	XA	General Lighting to West Coal Drops	5	LED	LED	22w	110w	SW	DALI	Dimming	
	1	34	XW	Downlight to Core 1 corridor	6	LED	LED	28w	168w	SW	DALI	Dimming	
	1	35	BF	General Lighting to stairs Core 1	4	LED	LED	55w	220w	SW	DALI	Dimming	
	1	36	BG	Downlight to Lift shaft wall Core 1	12	LED	LED	25w	300w	SW	DALI	Dimming	
	1	37	XV	Linear light to lift door & panel above door	2.2	LED	LED	10w	22w	SW	DALI	Dimming	
	1	38		OMITTED									
	1	39	XW	Downlight to Core 2 corridor	9	LED	LED	28w	252w	SW	DALI	Dimming	
	1	40	BF	General Lighting to stairs Core 2	4	LED	LED	55w	220w	SW	DALI	Dimming	
	1	41	BG	Downlight to Lift shaft wall Core 2	12	LED	LED	25w	300w	SW	DALI	Dimming	
	1	42	XV	Linear light to lift door & panel above door	2.2	LED	LED	10w	22w	SW	DALI	Dimming	
	1	43		OMITTED									
	1	44	XW	Downlight to Core 5 corridor	6	LED	LED	28w	168w	SW	DALI	Dimming	
	1	45	BF	General Lighting to stairs Core 5	4	LED	LED	55w	220w	SW	DALI	Dimming	
	1	46	BG	Downlight to Lift shaft wall Core 5	12	LED	LED	25w	300w	SW	DALI	Dimming	Quantity in Linear Meters
	1	47	XV	Linear light to lift door & panel above door	2	LED	LED	10w	20w	SW	DALI	Dimming	
	1	48	XB	General Lighting to Core 5 corridor	6	LED	LED	50w	300w	SW	DALI	Dimming	
	1	49	XY	Downlight to Core 4	9	LED	LED	28w	252w	SW	DALI	Dimming	

Zone	Area	Channel	Luminaire Ref.	Lighting Function	Quantity	Lamp Type	Control Gear Type	Lamp Load Per Unit	Total Lamp Load	Power Control Required	Control Data Required	Behaviour	Notes
						see note 3.0	see note 4.0	see note 2.0	see note 2.0	see note 5.0	see note 6.0	see note 7.0	
1	50		XZ	General Lighting to Core 4	4	LED	LED	28w	112w	SW	DALI	Dimming	
1	51		XS	Linear Lighting to Core 4 stair tread	92.5	LED	LED	10w	888w	SW	DALI	Dimming	Quantity in Linear Meters for entire staircase
1	52		BG	Downlight to Lift shaft wall Core 4	32	LED	LED	25w	800w	SW	DALI	Dimming	
1	53		XB	Surface mounted scone light to Core 4	5	LED	LED	50w	250w	SW	DALI	Dimming	
1	54		XB	Surface mounted scone light to Core 4 vault	8	LED	LED	50w	400w	SW	DALI	Dimming	
1	55		BG	Downlight to lift shaft wall Core 6	8	LED	LED	25w	200w	SW	DALI	Dimming	
1	56		XB	Surface mounted scone light to Core 3 vault	4	LED	LED	50w	200w	SW	DALI	Dimming	
1	57		BF	General Lighting to stairs Core 3	4	LED	LED		0w	SW	DALI	Dimming	
1	58		XW	Downlight to Core 3 corridor	7	LED	LED	28w	196w	SW	DALI	Dimming	
1	59			OMITTED									
1	60			OMITTED									
1	61		XB	General Lighting to Core 6	4	LED	LED	50w	200w	SW	DALI	Dimming	
1	62		XW	General Lighting to Core 6	1	LED	LED	28w	28w	SW	DALI	Dimming	
1	63		XX	Track mounted spotlights to Core 1 gallery	2	LED	LED	14w	28w	SW	DALI	Dimming	
1	64		XX	Track mounted spotlights to Core 2 gallery	2	LED	LED	14w	28w	SW	DALI	Dimming	
1	65		XX	Track mounted spotlights to Core 5 understairs	2	LED	LED	14w	28w	SW	DALI	Dimming	
1	66		XX	Track mounted spotlights to Core 3 under stairs	2	LED	LED	14w	28w	SW	DALI	Dimming	
1	67		BJ	Suspended light to cubical female toilet Core 2	7	LED	LED	6w	42w	SW	NONE	Dimming	
1	68		BK	General lighting to female toilet Core 2	6	LED	LED	28w	168w	SW	DALI	Dimming	
1	69		BJ	Suspended light to basin female toilet Core 2	4	LED	LED	6w	24w	SW	NONE	Dimming	
1	70		BK	General lighting to family room female toilet Core 2	2	LED	LED	28w	56w	SW	DALI	Dimming	
1	71		BJ	Suspended light to family room female toilet Core 2	1	LED	LED	6w	6w	SW	NONE	Dimming	
1	72		XW	General lighting to disabled toilet Core 2	1	LED	LED	28w	28w	SW	DALI	Dimming	
1	73		BJ	Suspended light to cubicals male toilet Core 2	3	LED	LED	6w	18w	SW	NONE	Dimming	
1	74		BK	General lighting to disabled toilet Core 2	4	LED	LED	28w	112w	SW	DALI	Dimming	
1	75		BJ	Suspended light to basin male toilet Core 2	3	LED	LED	6w	18w	SW	NONE	Dimming	
1	76		BJ	Suspended light to basin disabled male toilet Core 2	1	LED	LED	6w	6w	SW	NONE	Dimming	
1	80		BC	Backlit ceiling to core 1 lift car	39	LED	LED	10w	374w	SW	DALI	Dimming	Indicative wattage only. All lift car lighting to specialist lift contractor's detail and specification.
1	81		BC	Backlit ceiling to core 2 lift car	39	LED	LED	10w	374w	SW	DALI	Dimming	Indicative wattage only. All lift car lighting to specialist lift contractor's detail and specification.
1	82		BC	Backlit ceiling to core 5 lift car	39	LED	LED	10w	374w	SW	DALI	Dimming	Indicative wattage only. All lift car lighting to specialist lift contractor's detail and specification.
1	83		BC	Exterior lighting to core 4 lift car	36	LED	LED	50w	1800w	SW	DMX	Dimming	Indicative quantity in linear metres. All lift car lighting to specialist lift contractor's detail and specification
1	84		BC	Exterior lighting to core 4 lift car	36	LED	LED	50w	1800w	SW	DMX	Dimming	Indicative quantity in linear metres. All lift car lighting to specialist lift contractor's detail and specification
1	85		BC	Backlit ceiling to core 6 lift car	1	LED	LED	150w	150w	SW	DALI	Dimming	Indicative wattage only. All lift car lighting to specialist lift contractor's detail and specification.
1	86			OMITTED									
1	87			OMITTED									
1	88		XH	Uplight to entrance reveal core 1	2	LED	LED	8w	15w	SW	DALI	Dimming	
1	89		XH	Uplight to entrance reveal core 2	2	LED	LED	8w	15w	SW	DALI	Dimming	
1	90		XH	Uplight to entrance reveal core 3	2	LED	LED	8w	15w	SW	DALI	Dimming	
1	91		XH	Uplight to entrance reveal core 4	4	LED	LED	8w	30w	SW	DALI	Dimming	
1	92		XH	Uplight to entrance reveal core 5	2	LED	LED	8w	15w	SW	DALI	Dimming	

Zone	Area	Channel	Luminaire Ref.	Lighting Function	Quantity	Lamp Type	Control Gear Type	Lamp Load Per Unit	Total Lamp Load	Power Control Required	Control Data Required	Behaviour	Notes
						see note 3.0	see note 4.0	see note 2.0	see note 2.0	see note 5.0	see note 6.0	see note 7.0	
Vuaduct Level Lighting													
· 2	· 10		XA	General Lighting to West Coal Drops	6	LED	LED	25w	150w	SW	DALI	Dimming	
· 2	· 11		XJ	Handrail Lighting	14	LED	LED	1w	14w	SW	DALI	Dimming	
· 2	· 12		XJ	Handrail Lighting	36	LED	LED	1w	36w	SW	DALI	Dimming	
· 2	· 13		XJ	Handrail Lighting	36	LED	LED	1w	36w	SW	DALI	Dimming	
· 2	· 14		XJ	Handrail Lighting	36	LED	LED	1w	36w	SW	DALI	Dimming	
· 2	· 15		XK	General Lighting to pub area	2	LED	LED	74w	148w	SW	DALI	Dimming	
· 2	· 16		XJ	Handrail Lighting	51	LED	LED	1w	51w	SW	DALI	Dimming	
· 2	· 17		XJ	Handrail Lighting	46	LED	LED	1w	46w	SW	DALI	Dimming	
· 2	· 18		XJ	Handrail Lighting	39	LED	LED	1w	39w	SW	DALI	Dimming	
· 2	· 19		XJ	Handrail Lighting	30	LED	LED	1w	30w	SW	DALI	Dimming	
· 2	· 20		XA	General Lighting to East Coal Drops	11	LED	LED	25w	275w	SW	DALI	Dimming	
· 2	· 21		XJ	Handrail Lighting	33	LED	LED	1w	33w	SW	DALI	Dimming	
· 2	· 22		XB	General Lighting to South Gable Ends	5	LED	LED	50w	250w	SW	DALI	Dimming	
· 2	· 23			OMITTED									
· 2	· 24			OMITTED									
· 2	· 25			OMITTED									
· 2	· 26			OMITTED									
· 2	· 27		XJ	Handrail Lighting	32	LED	LED	1w	32w	SW	DALI	Dimming	
· 2	· 28		XJ	Handrail Lighting	20	LED	LED	1w	20w	SW	DALI	Dimming	
· 2	· 29		XJ	Handrail Lighting	20	LED	LED	1w	20w	SW	DALI	Dimming	
· 2	· 30		XJ	Handrail Lighting	20	LED	LED	1w	20w	SW	DALI	Dimming	
· 2	· 31		XJ	Handrail Lighting	20	LED	LED	1w	20w	SW	DALI	Dimming	
· 2	· 32		XJ	Handrail Lighting	22	LED	LED	1w	22w	SW	DALI	Dimming	
· 2	· 33		XJ	Handrail Lighting	40	LED	LED	1w	40w	SW	DALI	Dimming	
· 2	· 34		XJ	Handrail Lighting	22	LED	LED	1w	22w	SW	DALI	Dimming	
· 2	· 35		XM	Downlighting to Pavillion H	34	LED	LED	8w	265w	SW	DALI	Dimming	
· 2	· 36		XN	General lighting from existing Grannary Square mast	1	TBC	TBC	TBC	TBC	TBC	TBC	TBC	Quantity in Linear Meters Feasibility study and coordination with existing mast required. All details to be confirmed by Contractor to Design Team's approval.
· 2	· 37		XJ	Handrail Lighting	34	LED	LED	1w	34w	SW	DALI	Dimming	
· 2	· 38		XH-1	Tree Uplighting	12	LED	LED	8w	90w	SW	DALI	Dimming	
· 2	· 39		XP	Lighting to route towards Triplets	9	LED	LED	48w	432w	SW	DALI	Dimming	Details to be confirmed by Hoare Lea as part of Triplets Park lighting scheme

Zone	Area	Channel	Luminaire Ref.	Lighting Function	Quantity	Lamp Type	Control Gear Type	Lamp Load Per Unit	Total Lamp Load	Power Control Required	Control Data Required	Behaviour	Notes
		40	XA	General Lighting to West Coal Drops	10	LED	LED	25w	250w	SW	DALI	Dimming	
		41	XA	General Lighting to East Coal Drops	12	LED	LED	25w	300w	SW	DALI	Dimming	
		42	XW	Downlight to Core 1 corridor	6	LED	LED	28w	168w	SW	DALI	Dimming	
		43	BF	General Lighting to Core 1 stairs	6	LED	LED	55w	330w	SW	DALI	Dimming	
		44	BG	Downlight to lift shaft wall Core 1	12	LED	LED	25w	300w	SW	DMX	Dimming	
		45	XV	Linear light to lift door & panel above door	2.2	LED	LED	10w	22w	SW	DALI	Dimming	
		46		OMITTED									
		47	XW	Downlight to Core 2 corridor	9	LED	LED	28w	252w	SW	DALI	Dimming	
		48	BF	General Lighting to Core 2 stairs	6	LED	LED	55w	330w	SW	DALI	Dimming	
		49	BG	Downlight to lift shaft wall Core 1	12	LED	LED	25w	300w	SW	DMX	Dimming	
		50	XV	Linear light to lift door & panel above door	2.2	LED	LED	10w	22w	SW	DALI	Dimming	
		51		OMITTED									
		52	XW	Downlight to Core 5 corridor	10	LED	LED	28w	280w	SW	DALI	Dimming	
		53	XW	General Lighting to Core 5 stairs	4	LED	LED	28w	112w	SW	DALI	Dimming	
		54	BG	Downlight to lift shaft wall Core 5	12	LED	LED	25w	300w	SW	DMX	Dimming	
		55	XV	Linear light to lift door & panel above door	2	LED	LED	10w	20w	SW	DALI	Dimming	
		56	XB	General Lighting to Core 3 corridor	5	LED	LED	50w	250w	SW	DALI	Dimming	
		57	XZ	Downlight to Core 4	4	LED	LED	28w	112w	SW	DALI	Dimming	
		58	XZ	General Lighting to Core 4 stairs	3	LED	LED	28w	84w	SW	DALI	Dimming	
		59	XZ	General Lighting to Core 4 stairs	2	LED	LED	28w	56w	SW	DALI	Dimming	
		60	BG	Downlight to lift shaft wall Core 4	32	LED	LED	25w	800w	SW	DMX	Dimming	
		61	XV	Linear light to heritage wall	8.9	LED	LED	33w	294w	SW	DALI	Dimming	
		62	BG	Downlight to lift shaft wall lift Core 6	16	LED	LED	25w	400w	SW	DMX	Dimming	
		63	XW	Downlight to Core 3 corridor	9	LED	LED	28w	252w	SW	DALI	Dimming	
		64	BF	General Lighting to Core 3 stairs	6	LED	LED	55w	330w	SW	DALI	Dimming	
		65		OMITTED									
		66		OMITTED									
		67		OMITTED									
		68	XW	General Lighting to Core 6	1	LED	LED	28w	28w	SW	DALI	Dimming	
		69	BA	Inground marker lights to Core 4 stair landing	7	LED	LED	3w	18w	SW	DALI	Dimming	
		70	BB	Downlight to Core 4 lift reveal (mezzanine level)	4	LED	LED	8w	30w	SW	DALI	Dimming	
		71	BB	Downlight to Core 4 lift reveal (viaduct level)	4	LED	LED	8w	30w	SW	DALI	Dimming	
		72	XH	Uplight to entrance reveal core 1	2	LED	LED	8w	15w	SW	DALI	Dimming	
		73	XH	Uplight to entrance reveal core 2	2	LED	LED	8w	15w	SW	DALI	Dimming	
		74	XH	Uplight to entrance reveal core 3	4	LED	LED	8w	30w	SW	DALI	Dimming	
		75	XH	Uplight to entrance reveal core 3	2	LED	LED	8w	15w	SW	DALI	Dimming	
		76	XH	Uplight to entrance reveal core 4	8	LED	LED	8w	60w	SW	DALI	Dimming	
		77	XH	Uplight to entrance reveal core 4	4	LED	LED	8w	30w	SW	DALI	Dimming	
		78	XH	Uplight to entrance reveal core 5	4	LED	LED	8w	30w	SW	DALI	Dimming	
		79	XH	Uplight to entrance reveal core 5	2	LED	LED	8w	15w	SW	DALI	Dimming	
		80	XH	Uplight to entrance reveal core 6	2	LED	LED	8w	15w	SW	DALI	Dimming	

Zone	Area	Channel	Luminaire Ref.	Lighting Function	Quantity	Lamp Type	Control Gear Type	Lamp Load Per Unit	Total Lamp Load	Power Control Required	Control Data Required	Behaviour	Notes
						see note 3.0	see note 4.0	see note 2.0	see note 2.0	see note 5.0	see note 6.0	see note 7.0	
Upper Level + Roof Level Lighting													
· 3	· 1		XR	Suspended lights to top stairs Core 1	2	LED	LED	28w	56w	SW	DALI	Dimming	
· 3	· 2		XR	Suspended lights to top stairs Core 2	2	LED	LED	28w	56w	SW	DALI	Dimming	
· 3	· 3		XR	Suspended lights to top stairs Core 3	2	LED	LED	28w	56w	SW	DALI	Dimming	
· 3	· 4		XR	Suspended lights to top stairs Core 4	2	LED	LED	28w	56w	SW	DALI	Dimming	
· 3	· 10		XF	Exterior lighting to roof robbon	80	LED	LED	50w	4000w	SW	DMX	Dimming	Quantity in Linear Meters
· 3	· 11		XF	Exterior lighting to roof robbon	80	LED	LED	50w	4000w	SW	DMX	Dimming	Quantity in Linear Meters
· 3	· 12		XL	Interior lighting to roof robbon	78	LED	LED	46w	3588w	SW	DMX	Dimming	
· 3	· 13		XL	Interior lighting to roof robbon	78	LED	LED	46w	3588w	SW	DMX	Dimming	

- 1.0 The attached are preliminary estimated quantities, types and lamp loads only.
- 2.0 Electrical loads are nominal lamp loads only and do not include ballast and transformer losses, motors, fans or any other loads which may exist within a luminaire. Detailed information on these loads cannot be provided until detailed specification is undertaken.
- 3.0 Lamp Types
- | | |
|------|-------------------------------------------------|
| T | Tungsten (Mains Voltage) |
| LV | Low-Voltage $\leq 24V$ (Tungsten Halogen/Xenon) |
| TH | Tungsten Halogen (Mains Voltage) |
| FLU | Linear Fluorescent |
| CFLU | Compact Fluorescent |
| HID | High Intensity Discharge |
| LED | Light Emitting Diode |
| C/C | Cold Cathode |
| NONE | None |
- 4.0 Gear Types
- | | |
|------|------------------------|
| MTX | Magnetic transformer |
| MB | Magnetic ballast |
| ETX | Electronic transformer |
| EB | Electronic ballast |
| LED | Electronic LED driver |
| NONE | None |
- 5.0 Power Control
- | | |
|------|--------------------------------------------------|
| CON | Constant (Unswitched by lighting control system) |
| LDIM | Leading Edge Dim |
| TDIM | Trailing Edge Dim |
| SDIM | Sine Wave Dim |
| SW | Switched (by lighting control system) |
- 6.0 Control Data
- | | |
|-------|----------------|
| 0-10V | 0-10V Analogue |
| 1-10V | 1-10V Analogue |
| DALI | DALI |
| DMX | DMX512 |
| DSI | Tridonic DSI |
| NONE | None |
| OTHER | Other |
| PROP | Proprietary |
- 7.0 Behaviour This is a general description only of the intended behaviour of the lights indicated.
- 8.0 Quantities are estimated against current drawing information and should be checked by others. Speirs + Major are not responsible for final take-offs of quantities from drawings.
- 9.0 All quantities should be checked by Quantity Surveyor.
- 10.0 All electrical loads should be checked by Electrical Engineer.
- 11.0 Speirs + Major will not be held responsible for the content of electronic versions of this document if they are in any way changed by any other party.

10.4 Tenant and Retail Lighting Guidelines

Coal Drops Yard
King's Cross Central, London, UK
10793

KXC-M0-001-S+M10793-J-63-900-00
Revision 00
07/10/15



1.0 Introduction

The following lighting guidelines have been produced by Speirs + Major to provide background information to support the creative and technical design of the lighting to the various retail units of Coal Drops Yard. Whilst the retail lighting will be designed by the tenants, its appearance will be key to the overall image and character of Coal Drops Yard, particularly after dark. It should be noted that these guidelines are not intended as a set of restrictive rules, rather they aim to provide non-prescriptive, flexible guidance and best practice to ensure that the private and public spaces are illuminated in a coherent manner such that the development provides a positive and memorable experience for the people using it after dark.

The following section describes the lighting design intent for Coal Drop Yard, in order that the tenants may understand the wider context, vision and composition of the lighting scheme, of which their unit forms an integral part.

2.0 Lighting Design Concept Summary

The lighting has been designed in collaboration with the lead architects Heatherwick Studio, to create a visually appealing space and to support the retail offer. The lighting of Coal Drops Yard requires the careful balancing of two aims:

On one hand, the development of the area as a retail destination requires the use of lighting to contribute to the creation of a safe environment, to improve people's sense of security and to help make the site legible and accessible after dark.

On the other hand, there is a strong desire to retain the atmospheric, historic and industrial character of Coal Drops Yard. This approach will help to maintain the integrity of the area and in doing so will help to create a unique and exciting retail experience.

In response to these two aims, lighting will be used judiciously and sensitively, applying light where it is needed and preserving comparative darkness where it is not. Light levels will be carefully set and controlled to support the safe use of the site and to contribute to people's enjoyment of the buildings.

An understated approach will be used to the architectural application of light: it will be used to describe the massing of the buildings and to influence the character and ambience of the area in preference to highlighting the architectural detailing. The quality and colour temperature of light will be chosen to compliment the historic materials and the brick in particular.

3.0 Retail Lighting Guidelines: Type 'A'

The following guidelines are applicable to all of the regular tenants and the end anchor unit tenants.

Retailers are encouraged to employ the highest standards of creative lighting design within their units that meet their requirements for trading, but the overall appearance of Coal Drop Yard should also be taken into consideration. Whilst diversity is encouraged amongst the shop front designs, several technical parameters are set out below to help ensure that no one shopfront dominates or compromises the overall lit character of the development:

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- 3.1 Lighting within in the shop windows has a hugely important role to play in Coal Drops Yard even after the retail units have closed. Keeping the shop windows illuminated will be particularly important to the F&B tenants to ensure that Coal Drops Yard does not feel as though it has shut down until they themselves have closed. To this end, a 'Keep Lit' clause will be developed by the Landlord and Estate Management Teams, though the exact timing of the 'curfew hour' is under discussion at the time of writing this document and will be confirmed by the Landlord at a later stage. Keeping the shop windows illuminated throughout the night is likely to make Coal Drops Yard feel safer to pedestrians and may reduce the likelihood of troublemakers gathering. Ultimately this will be a decision for the Landlord and Estate Management Teams.
- 3.2 In order to fulfil the requirement of the 'Keep Lit' clause as described above, all lighting within the shop front should be on its own independent lighting circuit controlled by a programmable timer. The aim of such system is to ensure the shop window lighting operates until a time advised by the landlord without the need to leave the entire store lighting on to reduce energy consumption and associated running costs.
- 3.3 In order for each retail unit to make positive contributions towards the overall character of Coal Drops Yard, there is a need to balance the visual brightness of individual retail displays along the retail frontage. In order to achieve this, retailers may be requested to either dim their lights, replace fittings with lower output lamps, or to switch off some of the luminaires within their window display.
- 3.4 Retailers are encouraged to utilise warm white (3000K) light sources for the interior lighting of their individual retail units. Where the use of other light colour temperature or coloured light is fundamental to the brand's identity and/or specific trading requirements, the Landlord shall be consulted in advance for review and approval on a case-by-case basis.
- 3.5 Retailers are asked to carefully consider the use of media screens and other kinetic lighting techniques. Where such lighting devices/techniques are fundamental to the brand's identity and/or specific trading requirements, the Landlord shall be consulted in advance for review and approval on a case-by-case basis. In all instances, these lighting elements shall be made dimmable.
- 3.6 The retailer should ensure that all luminaires within their store are properly directed such that there is no glare for members of the public outside the store demise. Luminaires positioned close to the shop windows should employ suitable glare control devices, such as louvres, snoots, cowls and barn-doors shutters etc.
- 3.7 Retailers are asked to ensure that their lighting is maintained to the highest standards and that blown lamps and/or malfunctioning luminaires, particularly those lighting the shop windows, are replaced at the earliest opportunity.
- 3.8 Those retail units that may empty their window displays upon closing (e.g. jewellery shops etc.) are encouraged to keep something in their window display area (e.g. a store name sign), which can still be lit until the curfew hour as determined by the Landlord. This prevents dark windows from breaking the visual continuity along the retail frontage.
- 3.9 Compliance with all relevant statutory and mandatory lighting standards shall be to the responsibility of the tenant.

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4.0 Retail Lighting Guideline: Type 'B'

The following section describes the retail lighting guidelines that are applicable only to the central anchor unit occupying the upper level of Coal Drops Yard.

The roof peel which forms a significant part of the interior soffit of the central anchor unit is the major architectural statement of the development. It is anticipated to become the image of Coal Drops Yard both by day and night. In order to celebrate and reinforce this architectural expression, feature architectural lighting will be applied to the roof peel both from inside the store and externally above the skylight. Whilst the retailer is encouraged to employ the highest standards of creative lighting design within their unit that meet their requirements for trading, given the highly glazed nature of the central and elevated position of the main anchor unit, the fit-out interior lighting will have a huge impact on the way the whole development will be perceived particularly during the hours of darkness. To this end, the central anchor tenant is encouraged to make positive contributions to the creation of unique identity and character for Coal Drops Yard taking the following into consideration.

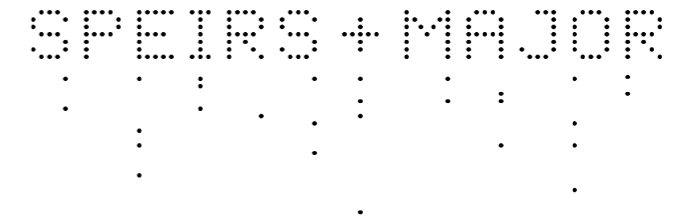
- 4.1 No architectural lighting shall be applied to the soffit and walls within the central anchor unit in order to ensure that the roof peel is the only architectural element that is positively expressed through feature architectural lighting.
- 4.2 The retailer shall provide the necessary and appropriate level of general lighting and display lighting through methods other than the use of ceiling recessed lighting equipment to ensure that the soffit is kept free of sparkling 'points of light' when seen from below at yard and viaduct levels. Other lighting techniques with graphic characteristics which may interrupt the clean and monolithic nature of the roof design (e.g. graphic 'lines of light', field of expressed pendant lights etc.) should also be avoided. Where such techniques are fundamental to the brand's identity and/or specific trading requirements, the Landlord shall be consulted in advance for review and approval on a case-by-case basis. In all instances, these lighting elements shall be made dimmable.
- 4.3 In order for the central anchor unit to make positive contributions towards the overall character of Coal Drops Yard, there is a need to balance the visual brightness of retail displays with the unlit soffit below, other retail units and the surrounding context. In order to achieve this, retailers may be requested to either dim their lights, replace fittings with lower output lamps, or to switch off some of the luminaires within their window display.
- 4.4 Retailers are encouraged to utilise warm white (3000K) light sources for the interior lighting of their retail unit. Where the use of other light colour temperature or coloured light is fundamental to the brand's identity and/or specific trading requirements, the Landlord shall be consulted in advance for review and approval on a case-by-case basis.
- 4.5 Retailers are asked to carefully consider the use of media screens and other kinetic lighting techniques. Where such lighting devices/techniques are fundamental to the brand's identity and/or specific trading requirements, the Landlord shall be consulted in advance for review and approval on a case-by-case basis. In all instances, these lighting elements shall be made dimmable.
- 4.6 The retailer should ensure that all luminaires within their store are properly directed such that there is no glare for members of the public outside the store demise. Luminaires positioned close to the shop windows should employ suitable glare control devices, such as louvres, snoots, cowls and barn-doors shutters etc.

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- 4.7 Retailers are asked to ensure that their lighting is maintained to the highest standards and that blown lamps and/or malfunctioning luminaires, particularly those lighting the shop windows, are replaced at the earliest opportunity.
- 4.8 Compliance with all relevant statutory and mandatory lighting standards shall be to the responsibility of the tenant.



**Lighting Designer's Residual Risk Register For
Lighting Installation and Maintenance**

Project: Coal Drops Yard, King's Cross
London, UK
Project Number: 10793
Document Number: KXC-M0-001-S+M10793-J-63-702
Revision: 00

Rev.	Date	By	Notes
00	16/09/15	HT	Preliminary issue

Ref.	Control Channel	Area / Activity / Element	Hazard / Risk Identification	Design Control Measures Taken	Residual Hazard / Risk Mitigation
XN	2.36	Granary Square mast mounted lighting (*Provisional specification only. Structural feasibility study and coordination with existing mast required prior to construction).	The luminaires are mounted at up to 10m and within an area with relatively high footfall. There is a risk of falling persons/and or falling objects.	High quality lamps which have a longer rated life than standard lamps shall be specified by the Design&Build contractor's design team, thereby reducing the need for maintenance.	Appropriate access equipment will be required by Contractors during installation and Client during maintenance. Contractor and Client to ensure warning notifications at ground level and all precautions as per associated regulations. Cordon area below to avoid injury from falling objects. No work to be undertaken without prior written permissions and work permits. Full and comprehensive method statements to be submitted by relevant Contractor before any planned installation or periodic maintenance.
XF	3.1	Exterior lighting to roof ribbon	The luminaires are externally mounted on the roof structure adjacent to a glazed rooflight approximately 20m above the ground level. There is a risk of falling persons/and or falling objects.	Luminaires with long life light sources shall be specified by the Design&Build contractor's design team, thereby reducing the need for maintenance.	Appropriate access equipment will be required by Contractors during installation and Client during maintenance. Contractor and Client to ensure warning notifications at ground level and all precautions as per associated regulations. Cordon area below to avoid injury from falling objects. Mansafe system to be employed at all times when working on roof. No work to be undertaken without prior written permissions and work permits. Full and comprehensive method statements to be submitted by relevant Contractor before any planned installation or periodic maintenance.
XL	3.13	Interior lighting to roof ribbon	The luminaires are mounted at up to 8m within anchor retail unit with high footfall. There is a risk of falling persons/and or falling objects.	Luminaires with long life light sources shall be specified by the Design&Build contractor's design team, thereby reducing the need for maintenance. Opportunity to locate drivers remotely away from the luminaires in an easily accessible location to be fully explored by the Design&Build contractor's design team, thereby reducing the need for maintenance at high level.	Appropriate access equipment will be required by Contractors during installation and Client during maintenance. Contractor and Client to ensure warning notifications at ground level and all precautions as per associated regulations. Cordon area below to avoid injury from falling objects. No work to be undertaken without prior written permissions and work permits. Full and comprehensive method statements to be submitted by relevant Contractor before any planned installation or periodic maintenance.

1.0 General Conditions

In preparing the above assessment, it has been assumed that a competent contractor will execute the works and as such general hazards/risks common to all sites and building operations have not been identified. General considerations relating to lighting installation and maintenance are outlined in Sections 3 through 8 of this document. This section assesses site/project specific hazards/risks which are considered exceptions to the general guidance given.

This document provides a basic Risk Assessment for the project within the limits of the scope which is defined by Speirs + Major's appointment. This information is provided in compliance with the Construction (Design and Management) Regulations 2007 ("CDM 2007") to assist the planning and management of health and safety considerations throughout the life of the project. For further information, refer to the Health and Safety Plan.

This document is to be read in conjunction with all Speirs + Major's project documentation including but not limited to the Luminaire Performance Specification Preamble, Schedule of Luminaires, drawings and details.

2.0 General Statement

The lighting installation employs a wide variety of luminaire and lamp types in order to achieve the desired lighting effects. The following information is intended as a general guideline only and is an outline of good practice. For more specific recommendations refer to manufacturers details for application, operation, handling, cleaning and disposal.

This document identifies generally applicable risks associated with the installation and maintenance of lighting equipment, and assesses specific risks associated with specific elements of the design for this project.

This document covers only items within Speirs + Major's design scope. For risk assessment of other lighting, refer to documentation by others.

3.0 Generally Applicable Risks Relating to Lighting Equipment

In the spirit of CDM 2007, it is assumed that personnel involved in the installation and maintenance of lighting equipment are competent and aware of the general risks associated with lighting and general construction.

Where a hazard or risk cannot be eliminated under Regulation 11(3) and (6) and Regulation 18(2) of CDM 2007, it is recorded in this document. It may also be identified on other documentation, such as drawings.

The following risks are likely to apply to the vast majority of lighting installations:

3.1 Electric Shock

All fittings shall be electrically isolated prior to work commencing on them. Fittings must be focused while powered but are all specified to be either fully enclosed and earthed or to be operating at extra low voltage. See Electrical Engineer's risk assessments for further information on electrical work.

3.2 Burns

Most light fittings operate at high temperatures. Fittings should be disconnected and allowed to cool prior to being worked upon. Where it is necessary to touch fittings for focusing when lit, suitable gloves must be worn and fittings moved by means of any operating handles provided.

3.3 Ultra Violet Radiation

Certain lamp types including tungsten halogen and most high-intensity discharge can emit potentially hazardous levels of U.V radiation. The luminaires or lamps specified have an integral UV filter by way of a glass cover or secondary envelope. The lamp or luminaire must not be operated if this protection is damaged or not correctly installed.

4.0 Risks Relating to Lamp Types

Certain lamp types pose particular risks:

4.1 Tungsten halogen lamps

Tungsten halogen lamps emit some ultra violet radiation. All tungsten halogen lamps should be operated in accordance with the manufacturer's operating instructions. All luminaires which utilise high wattage tungsten halogen lamps are supplied with a front cover glass and/or broken lamp shield. These should only be operated when cover glass/shield is in position. Luminaires must only be operated under the conditions specified by the manufacturers (e.g. for specific mounting positions and applications).

Low wattage TH lamps without integral outer glass envelopes are normally used in shielded luminaires. Such luminaires should not be operated without the front glass in place.

Where mains voltage lamps with bayonet or Edison Screw caps are used in unshielded luminaires, replacement lamps must:

- have an integral lamp fuse, to reduce the chance of non-passive failure to the lamp.
- have an outer envelope (bulb) or some other means of protection which reduces ultra violet transmission levels to a safe level.

4.2 H.I.D lamps

4.2.1 Mercury and metal halide lamps

Some mercury and metal halide lamps emit significant ultra violet radiation. They should always be operated in a luminaire specially designed for their operation with a safety shield unless otherwise stated by the lamp or luminaire manufacturer.

4.2.2 Double ended high pressure sodium

These lamps may emit a significant amount of ultra violet radiation and should always be operated in a specially designed luminaire fitted with a safety shield in accordance with manufacturers operating instructions.

4.2.3 Single ended high pressure sodium

These lamps do not emit significant amounts of ultra violet radiation and may be used in open faced fittings designed specifically for their use in accordance with manufacturers operating instructions.

4.2.4 Fluorescent and compact fluorescent lamps

Fluorescent lamps emit some UVA radiation and a very small amount of UVB, but not at levels posing any risk to humans.

5.0 Risk of Lamp Explosion

5.1 High Pressure Lamps

In accordance with IEC 598 Luminaire Standard all luminaires which utilise high pressure lamps must only be operated with a protective screen in place.

5.2 Low pressure lamps

Where a lamp is specified as low pressure, care must be taken to ensure that upon replacement only a low pressure lamp is used.

6.0 General Guidelines for the Safe Handling of Lamps

6.1 Lamps are generally made of glass, which is inherently fragile. The majority of lamps are sufficiently robust to resist breakage in normal handling except for linear fluorescent tubes and cold cathode lamps, which should be handled with protective gloves and while wearing eye protection. The use of gloves and eye protection is good practice when handling any lamp.

6.2 When replacing the lamp, ensure that the lamp wattage and voltage conform to the specification and are within the rating of the luminaire and control gear. Ensure that the lamp has the correct base for the luminaire.

- 6.3 Lamps should be protected from high humidity or direct contact with water.
- 6.4 Avoid bending the contact pins as this can damage the lamp and result in premature failure of lamp, lamp base or control gear.
- 6.5 Special care should be exercised when handling quartz envelope lamps (i.e. metal halide, ceramic metal halide, low voltage tungsten halogen and mains voltage tungsten halogen). Handle in accordance with lamp manufacturers recommendations. Do not touch the quartz envelope with bare fingers. If touched accidentally, wipe clean with a soft cloth moistened with methylated spirits. Use lamp wrapping or gloves to handle lamps.

7.0 General Guidelines for the Handling of Broken lamps

Hazardous substances can be released when some lamp types are broken and the following general recommendations are made for dealing with broken lamp:

- 7.1 In the event of an accidental breakage of a lamp, care is necessary in order to prevent injury from broken glass. Suitable protective gloves should be worn when cleaning up and other personnel kept clear of the immediate area until debris is cleared safely.
- 7.2 The generation and inhalation of airborne dust should be avoided when cleaning up, especially where fluorescent or high-intensity discharge lamps are involved.

8.0 Disposal of Lamps at End-of-Life

Risks relating to handling as noted above are relevant to disposal.

- 8.1 Disposal through controlled breakage must be carried out by trained personnel using appropriate machinery.
- 8.2 Lamps for disposal/recycling should be stored in appropriate containers prior to disposal, preferably supplied for the purpose by a reputable lamp disposal contractor. If lamps are stored in the packaging from the replacement lamps, they should be clearly labelled.
- 8.3 It is recommended that use be made of specialist companies who will remove intact lamps from premises for recovery or disposal to landfill, in compliance with the European Waste Electrical and Electronic Equipment Directive and other legislation.