04/0339/DD05

Lighting Design Proposal

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DW Windsor
LIGHTING

style with performance

conclusion

We trust that this design is acceptable and that we have satisfied all of your requirements. Should you require any additional information or clarification please do not hesitate to contact us.

If your design plan or criteria change in any way, please contact us in order that the alterations may be implemented, and their effect on the illumination levels calculated.

We have amended the scheme based on the latest layout plan using customer specified locations.

results

The full illuminance results can be found printed on the layout plot(s).

To aid identification of the luminaires, the plots have been marked with X-Y co-ordinates, and individual references have been given to each luminaire, so relative locations can be derived.

The results are obtained using standard fixed parameters with regard to the equipment used, the electrical supply and the installation. Any variations in these parameters may affect the results.

Area	Eav (lux)	Emin (lux)	Uniformity (%)
Requirement	-	-	-
Design Area	7.67	0.3	4

conclusion

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We have amended the scheme based on the latest layout plan using customer specified locations.

project team

The following members of our team have been assigned to handle your project. Please call us at anytime for further help.

Design

Barry Earl
Applications Engineer

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Project Management

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Project Engineer

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design brief

No requirements have been specified for this design.

This design has been performed in conjunction with the parameters and information provided to us. If any aspect of the design does not meet your expectations, please do not hesitate to contact us in order for alterations to be performed.

Unless already specified, it has been assumed that there are no special factors to be considered for this design. However, if there are any issues* you feel may need addressing, please contact us to allow amendments to be made as required.

* Potential issues could include proximity to railway lines, conservation areas, overhead power cables, listed buildings, and aircraft flightpaths. Incorporation of CCTV into the scheme is also a factor, as certain additional criteria may apply.

design factors

A horizontal burning Philips 42 watt PLT lamp with a lumen output of 3200 lumens has been utilised.

A vertical burning Philips 42 watt PLT lamp with a lumen output of 3200 lumens has been utilised.

Cleaning cycle: 24 months
Pollution area category: medium
Ingress Protection Rating: IP65
⇒ Luminaire dirt depreciation factor: 0.89

Lamp change cycle: 24 months
⇒ Lamp depreciation factor: 0.82

Combined maintenance factor: 0.73

(This factor ensures that the required illumination levels are still achieved prior to the scheduled maintenance visit in accordance with BS5489 guidelines.)

Columns must generally be located within 2 metres of their marked positions in order to maintain the results achieved within this design. If there are any potential restrictions on the positioning of the columns, brackets or fittings (due to underground services, access ways or any other obstructions), please ensure that we are aware of these in order for suitable alternatives to be arranged.

All luminaires must be orientated in the directions specified on the design plot / plots and not obstructed in any way, or the results obtained within the design may be impaired.

Landscaping or planting around the installation point should be kept at a reasonably low level to avoid obstructing the luminaires, and should be suitably maintained to avoid future obstruction of the fittings. Access to the column doors must be maintained at all times where applicable.

Light input from other sources, such as highway lighting, adjacent buildings or signage has not been included in our calculations.

Unless otherwise specified, all luminaires used in this design are rated as IP65. Any luminaire with this classification is protected against the ingress of both dust and water, thus requires no internal cleaning.

The minimum number of luminaires has been used to achieve the design target levels, where applicable.

equipment quantities

10 Qty Akord Bullet luminaire, 42w PLT integral control gear, Diamond Optic 5-35, flat toughened glass glazing.

10 Qty Single arm bracket to suit above.

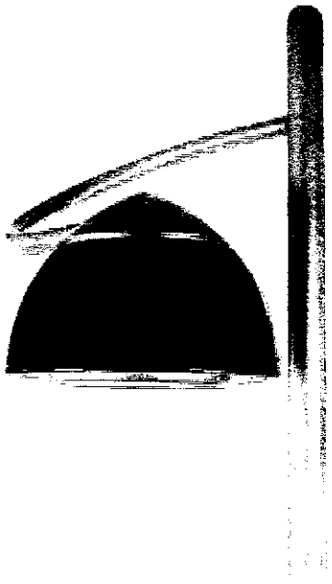
10 Qty 4m column to suit above.

24 Qty Nexus illuminated bollard, 42w PLT integral control gear, 360° Cone Optic, polycarbonate clear glazing.

Detailed general product specifications can be found in the next section of the report.

product specification

akord bullet



key features

Diamond Optic® reflector system reduces light pollution and allows increased column spacings

For ease of installation and accurate luminaire alignment, Easy-fit™ entry connector fitted as standard

Flat glass glazing for zero light pollution.

Ingress Protection – whole luminaire sealed to IP65

Choice of entries including unique 45° angled entry for more innovative mounting options

Restrained gear tray and glazing for ease of maintenance

options

Sizes	Akord Bullet Suitable for mounting heights from 4 to 6 metres Maximum lamp wattage: 70w
Glazing	Flat toughened glass
Optical control	Diamond Optic® (standard)
Lamp	50, 70w SON 50, 70w HQI 35, 70w CDM 42w PL-T
Mounting	Easy-fit™ side entry, top entry & angled entry (45°) [42.4 mm Ø]
Finish	PAN 7621 Metallic Silver Grey
Top Casting	RAL 9017 Black
Canopy	RAL 7016 Anthracite Grey RAL 5002 Ultramarine Blue RAL 5015 Sky Blue RAL 6005 Moss Green RAL 6018 Yellow Green RAL 3020 Traffic Red RAL 2004 Pure Orange K26/G34 Metallic Copper PAN 7621 Metallic Silver Grey
Other	A range of dedicated columns and brackets is available for Akord Bullet

product specification

nexus illuminated bollard

key features

High Ingress Protection - IP65

Cone Optic. for enhanced spacing performance

Tough polycarbonate glazing tube for enhanced vandal resistance

Optional specular back shield enhances single direction performance

Spot lighting optic for accurate lighting of architectural features

Large base compartment able to house a wide range of electrical cut outs and components

Styling sympathetic to Optima range of luminaires, lighting columns and street furniture

options

Sizes	Nexus Maximum lamp wattage: 70w
Glazing	Clear polycarbonate Cone Optic™ reflector (standard)
Optical Control	Anodised aluminium louvre White aluminium louver Spot Lighting Optic
Lamp	50, 70w SON 50, 70w HQI 35, 70w CDM-T 42w PL-T 70w CDM-R*
Mounting	Integral root (standard) Flange plate mounted Internal flange plate mounted
Finish	RAL 9017 Black RAL 7016 Anthracite Grey RAL 7037 Dusty Grey RAL 5003 Sapphire Blue RAL 6005 Moss Green RAL 3005 Wine Red PAN 7621 Metallic Silver Grey
Other	Specular back shield (180° cut off)

* Spot Lighting Optic only

results

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