

LiAS Design Notes

This preliminary design is produced by the Lighting Application Specialist (LiAS) team of Signify UK based on information supplied by the Customer for the purpose of identifying suitable products and costing the proposal. This design cannot be used for Construction, as this design does not purport to eliminate health and safety risks as a CDM Regulation risk assessment has not been undertaken.

Depending on the level of information received, a number of assumptions may have been applied in order to create an indicative lighting proposal and costing model, according to lighting industry guidelines and incorporating industry best practice methods. These assumptions are documented below and will require confirmation by the Principal Designer (which is not Signify UK) during the detailed design phase.

Project Specific Design Comments:

- Where 'Lighting Classes' have not been provided/specified, the calculations have been provided to achieve:

Calculation Area 1 (Market to Main road walkway) - P1 lighting classification

Calculation Area 2 (Urban area) - P2 lighting classification

Calculation Area 3 (Urban seating area) - C2 lighting classification

- Where column heights have not been provided/specified, these have been assumed to be 4m (note Metronomis design height is 5m due to the luminaire light source placement). The Catenary lighting is proposed at 6m height.
- Please note that no cable calculations have been completed for the Catenary system, this proposal shows the luminaire only calculated results. Full cable calculations/testing will be required before installation.
- Preliminary Design proposals produced by the Signify LiAS Team are not to be used for installation purposes. It is the responsibility of the Principal Designer and/or Principal Contractor to ensure all Installation and Maintenance can be done in a safe manner, carried out by competent persons, based on their agreed Risk Assessments and Method Statements.
- The Luminaire Maintenance Factors have been based on 6-year cleaning intervals within an E3/E4 Environmental Zone and it is assumed that lamp/luminaire failures will be replaced on a 'spot replacement'.
- Energy consumptions have been based on the luminaire/s having Constant Light Output (CLO) enabled and the quoted wattage/s are the average over 100,000 hours (without dimming).
- The design calculations produced by Signify do not account for the effect obstructions, such as trees, will cause.
- Signify has not been provided with utility plans showing Buried, Above Ground or Overhead utilities. Therefore, all column/luminaire locations are indicative and are subject to review/verification by the Principal Designer.
- Unless stated otherwise, Signify has not visited site. Therefore, all column/luminaire locations are indicative and are subject to an onsite verification arranged/performed by the Principal Designer.
- Signify has not produced any Private Cable Network electrical calculations or reviewed the DNO network to confirm power supplies to the proposed lighting.
- Signify has not performed any asset condition testing and therefore assumes that any existing lighting columns/wall mounted brackets are structurally capable of supporting the weight & windage of the proposed luminaire/s. This must be verified by the Principal Designer before installation works commence.
- Unless stated otherwise, Signify is not supplying the new lighting columns (including brackets etc) and therefore it is the responsibility of the Principal Designers to confirm that all proposed equipment is suitable for the intended locations (e.g. raise & lower, ground condition, foundation type, saline environment, etc).
- Unless stated otherwise, luminaires will be supplied in their standard colour.

Luminaire Schedule

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DigiStreet BGP761 T25 1 xLED59-4S/740 DW50
lamp(s): LED59-4S/740
candela file 'BGP761 T25 1 xLED59-4S740 DW50.lgt'
1 lamp(s) per luminaire, 6000 initial lumens per lamp
Maintenance Factor = 0.760, watts per luminaire = 36
Outreach (from mounting axis to photometric center)= 400 mm
tilt angle= 5 deg
mounting height= 4 m
number locations= 3, number luminaires= 3
- 

City Soul BSP530 T25 1 xLED75-4S/740 DS50
lamp(s): LED75-4S/740
candela file 'BSP530 T25 1 xLED75-4S740 DS50.lgt'
1 lamp(s) per luminaire, 7600 initial lumens per lamp
Maintenance Factor = 0.760, watts per luminaire = 46
Outreach (from mounting axis to photometric center)= 0 mm
mounting height= 6 m
number locations= 6, number luminaires= 6
- 

Metronomis Fluid BDS670 T25 1 xLED120-4S/740 MDV
lamp(s): LED120-4S/740
candela file 'BDS670 T25 1 xLED120-4S740 MDV.lgt'
1 lamp(s) per luminaire, 12000 initial lumens per lamp
Maintenance Factor = 0.760, watts per luminaire = 69
Outreach (from mounting axis to photometric center)= 0 mm
mounting height= 5 m
number locations= 2, number luminaires= 2

Calculation Area 1	
123 points at z=0, sp 1.5m by 1.5m	
HORIZONTAL LUX	
Average	19.02
Maximum	36.87
Minimum	3.06
Min/Avg(Uo)	0.161
Min/Max	0.083
Coef Var	0.433
UnifGrad	1.44

Calculation Area 2	
303 points at z=0, sp 1.5m by 1.5m	
HORIZONTAL LUX	
Average	13.61
Maximum	43.48
Minimum	2.54
Min/Avg(Uo)	0.187
Min/Max	0.058
Coef Var	0.669
UnifGrad	1.98

Calculation Area 3	
209 points at z=0, sp 1.5m by 1.5m	
HORIZONTAL LUX	
Average	21.29
Maximum	28.72
Minimum	10.16
Min/Avg(Uo)	0.477
Min/Max	0.354
Coef Var	0.169
UnifGrad	1.29

Signify Contacts:

Key Account Manager, Logan Colbeck +44 (7407) 200754 - logan.colbeck@signify.com







Rev	DSR no.	Comment	Date	LiAS	KAM	Project Number	Project Name
0	D-510157	INITIAL PROPOSAL	11.05.23	CP	LC	0400866999 Scale & Sheet Size NTS @ A3 Sheet No DWG 00	RADCLIFFE CIVIC HUB
							Drawing Name
							LiAS DESIGN NOTES & LUMINAIRE SCHEDULE

PROPOSAL
(NOT FOR CONSTRUCTION)

Lighting Proposal Terms and Conditions of Use
These terms apply to the use of this preliminary proposal produced by Signify UK. This “**Proposal**” is understood to mean this document, a CAD drawing, lighting calculations, written documents, verbal conversations or any medium used to demonstrate or communicate the proposed lighting scheme using products from Signify's brands. A “**Customer**” is the person or organisation for whom the Proposal is intended. The “**CDM Regulations**” means The Construction, Design and Management Regulations 2015, the Safety, Health & Welfare at Work Act 2005, The Construction (Design & Management) Regulations (Northern Ireland) 2015.
This Proposal is for guidance only and cannot be relied upon for purposes of installation or Health and Safety.
The supply and installation of this lighting scheme are subject to a contract being agreed between Customer and Signify.



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Min/Avg(Uo) 0.161
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Coef Var 0.433
UnifGrad 1.44

Calculation Area 2
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HORIZONTAL LUX
Average 13.61
Maximum 43.48
Minimum 2.54
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Min/Max 0.058
Coef Var 0.669
UnifGrad 1.98

Calculation Area 3
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HORIZONTAL LUX
Average 21.29
Maximum 28.72
Minimum 10.16
Min/Avg(Uo) 0.477
Min/Max 0.354
Coef Var 0.169
UnifGrad 1.29



Project Name
RADCLIFFE CIVIC HUB

Drawing Name
PROPOSED LIGHTING LAYOUT

- Notes:
- Unless agreed otherwise, the lighting proposal produced by the Lighting Application Specialist (LIAS) team of Philips Lighting UK&I is not intended for construction purposes, as it does not take into account the elimination of health and safety risks at this stage. For further details please refer to sheet number **DWG 00**
 - Do not scale for this drawing

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Rev	DSR no.	Comment	Date	LIAS	KAM
0	D-510157	INITIAL PROPOSAL	11.05.23	CP	LC

Project Number
0400866999
Scale & Sheet Size
1:200 @ A0
Sheet No
DWG 01