

22.09.2025

## 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 Principle Designer (which is not Signify UK) during the detailed design phase.

### Project Specific Assumptions

- Where 'Lighting Classes' have not been provided/specified, the calculations have been produced using the Lidl specification .
- Where column heights have not been provided/specified, these have been assumed at 6m and 3.25m.
- It has been assumed that luminaires will be mounted post-top, twin mounted on a 0.5m outreach and wall bracket.

### Generic Assumptions (unless specifically informed differently)

- Preliminary Design proposals produced by the Signify LiAS Team are not to be used for installation purposes. It is the responsibility of the Principle Designer and/or Principle 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 Principle 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 Principle 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 Principle 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 Principle 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

**LL-E**  
  
 LL-E  
 lamp(s): LL-E  
 candela file 'LL-E.Idt'  
 1 lamp(s) per luminaire, 2300 initial lumens per lamp  
 Maintenance Factor = 0.810, watts per luminaire = 17  
 Outreach (from mounting axis to photometric center)= 0 mm  
 tilt angle= 10 deg  
 mounting height= 3.25 m  
 number locations= 15, number luminaires= 15  
 kw all locations= 0.3

**LL-E EM**  
  
 LL-E EM  
 lamp(s): LL-E EM  
 candela file 'LL-E EM.Idt'  
 1 lamp(s) per luminaire, 2300 initial lumens per lamp  
 Maintenance Factor = 0.810, watts per luminaire = 17  
 Outreach (from mounting axis to photometric center)= 0 mm  
 tilt angle= 10 deg  
 mounting height= 3.25 m  
 number locations= 5, number luminaires= 5  
 kw all locations= 0.1

**LL-C(Twin)**  
  
 LL-C(Twin)  
 LL-C 7.5klm  
 lamp(s): LL-C  
 2 luminaires per location, candela file 'LL-C 1xLL-C.ies'  
 1 lamp(s) per luminaire, 7500 initial lumens per lamp  
 Maintenance Factor = 0.760, watts per luminaire = 0  
 Outreach (from mounting axis to photometric center)= 900 mm  
 tilt angle= 5 deg  
 mounting height= 6 m  
 number locations= 6, number luminaires= 12  
 kw all locations= 0.0

**LL-C**  
  
 LL-C  
 LL-C 7.5KLM  
 lamp(s): LL-C  
 candela file 'LL-C 1xLL-C.ies'  
 1 lamp(s) per luminaire, 7500 initial lumens per lamp  
 Maintenance Factor = 0.760, watts per luminaire = 0  
 Outreach (from mounting axis to photometric center)= 400 mm  
 tilt angle= 5 deg  
 mounting height= 6 m  
 number locations= 7, number luminaires= 7  
 kw all locations= 0.0

**LL-Canopy**  
  
 LL-Canopy  
 lamp(s): LL-Canopy  
 candela file 'LL-CANOPY.Idt'  
 1 lamp(s) per luminaire, 2100 initial lumens per lamp  
 Maintenance Factor = 0.810, watts per luminaire = 18  
 Outreach (from mounting axis to photometric center)= 0 mm  
 mounting height= 3 m  
 number locations= 14, number luminaires= 14  
 kw all locations= 0.2

**LL EM Canopy**  
  
 LL EM Canopy  
 LL-Canopy  
 lamp(s): LL-Canopy  
 candela file 'LL-CANOPY.Idt'  
 1 lamp(s) per luminaire, 2100 initial lumens per lamp  
 Maintenance Factor = 0.810, watts per luminaire = 18  
 Outreach (from mounting axis to photometric center)= 0 mm  
 mounting height= 3 m  
 number locations= 1, number luminaires= 1  
 kw all locations= 0.0



**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.

**PROPOSAL**  
 (NOT FOR CONSTRUCTION)

Rev	DSR no.	Comment	Date	LIAS	KAM	Project Number	Project Name
0	D-351481	INITIAL PROPOSAL	14.04.20	CBJ	RF	0400452491	Lidl Hucknall
1	D-481889	NEW LAYOUT	31.10.22	CBJ	RF	501686643	
2	D-596262	NEW LAYOUT	07.11.24	CBJ	RF		
3	6424963	NEW LAYOUT	27.08.25	CBJ	RF		
						Scale & Sheet Size	Drawing Name
						NTS @ A3	LiAS DESIGN NOTES & LUMINAIRE SCHEDULE
						Sheet No	
						DWG 00	



- Key:**
- LL-E  
 lamp(s) LL-E  
 canfile file 'LL-E.lid'
    - 1 lamp(s) per luminaire, 2300 initial lumens per lamp
    - Maintenance Factor = 0.810, watts per luminaire = 17
    - Outreach (from mounting axis to photometric center) = 0 mm
    - tilt angle = 10 deg
    - mounting height = 3.25 m
    - number locations = 15, number luminaires = 15
    - kw all locations = 0.3
  - LL-E EM  
 lamp(s) LL-E EM  
 canfile file 'LL-E EM.lid'
    - 1 lamp(s) per luminaire, 2300 initial lumens per lamp
    - Maintenance Factor = 0.810, watts per luminaire = 17
    - Outreach (from mounting axis to photometric center) = 0 mm
    - tilt angle = 10 deg
    - mounting height = 3.25 m
    - number locations = 5, number luminaires = 5
    - kw all locations = 0.1
  - LL-C (Twin)  
 lamp(s) LL-C  
 canfile file 'LL-C'
    - 2 luminaires per location, canfile file 'LL-C' 1xLL-C ies'
    - 1 lamp(s) per luminaire, 7500 initial lumens per lamp
    - Maintenance Factor = 0.760, watts per luminaire = 0
    - Outreach (from mounting axis to photometric center) = 900 mm
    - tilt angle = 5 deg
    - mounting height = 6 m
    - number locations = 6, number luminaires = 12
    - kw all locations = 0.0
  - LL-C  
 lamp(s) LL-C  
 canfile file 'LL-C'
    - 1 lamp(s) per luminaire, 7500 initial lumens per lamp
    - Maintenance Factor = 0.760, watts per luminaire = 0
    - Outreach (from mounting axis to photometric center) = 400 mm
    - tilt angle = 5 deg
    - mounting height = 6 m
    - number locations = 7, number luminaires = 7
    - kw all locations = 0.0
  - LL-Canopy  
 lamp(s) LL-Canopy  
 canfile file 'LL-CANOPY.lid'
    - 1 lamp(s) per luminaire, 2100 initial lumens per lamp
    - Maintenance Factor = 0.810, watts per luminaire = 18
    - Outreach (from mounting axis to photometric center) = 0 mm
    - mounting height = 3 m
    - number locations = 14, number luminaires = 14
    - kw all locations = 0.2
  - LL EM Canopy  
 lamp(s) LL-Canopy  
 canfile file 'LL-CANOPY.lid'
    - 1 lamp(s) per luminaire, 2100 initial lumens per lamp
    - Maintenance Factor = 0.810, watts per luminaire = 18
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**Access Road**  
 240 points at z=0, sp 1.5m by 1.5m  
 HORIZONTAL LUX  
 Average 18.6  
 Maximum 26.6  
 Minimum 7.0  
 Min/Avg(Uo) 0.421  
 Min/Max 0.273  
 Coef Var 0.218  
 Uni/Grad 1.51

**Car Park Small**  
 607 points at z=0, sp 1.5m by 1.5m  
 HORIZONTAL LUX  
 Average 15.8  
 Maximum 67.0  
 Minimum 5.6  
 Min/Avg(Uo) 0.355  
 Min/Max 0.084  
 Coef Var 0.567  
 Uni/Grad 4.47

**Car Park Large**  
 1304 points at z=0, sp 1.5m by 1.5m  
 HORIZONTAL LUX  
 Average 15.3  
 Maximum 57.5  
 Minimum 4.2  
 Min/Avg(Uo) 0.274  
 Min/Max 0.073  
 Coef Var 0.516  
 Uni/Grad 5.87

**Canopy**  
 76 points at z=0, sp 1.5m by 1.5m  
 HORIZONTAL LUX  
 Average 100.4  
 Maximum 142.1  
 Minimum 33.9  
 Min/Avg(Uo) 0.338  
 Min/Max 0.239  
 Coef Var 0.296  
 Uni/Grad 2.67

**Building Rear**  
 44 points at z=0, sp 1.5m by 1.5m  
 HORIZONTAL LUX  
 Average 44.6  
 Maximum 112.5  
 Minimum 13.4  
 Min/Avg(Uo) 0.300  
 Min/Max 0.119  
 Coef Var 0.455  
 Uni/Grad 2.78

**Notes:**

- Unless agreed otherwise, the lighting proposal produced by the Lighting Application Specialist (LIAS) team of Signify 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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0	D-351481	INITIAL PROPOSAL	14.04.20	CBJ	RF
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Project Number	0400452491 501686643	Project Name	Lidl Hucknall
Scale & Sheet Size	1:500 @ A2	Drawing Name	PROPOSED LIGHTING LAYOUT
Sheet No	DWG 01		

