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.

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

BL1

Luma Gen2 Mini BGP703 40 LED DM10 BL1 7.5KLM NW 4000K
lamp(s): LED-HB 5.2S 740
candela file 'Luma Gen2 Mini_BGP703_DM10 BL1_7500_40LED_5.2S_CLO_L90_740.ies'
1 lamp(s) per luminaire, 7500 initial lumens per lamp
Maintenance Factor = 0.760, watts per luminaire = 41
Outreach (from mounting axis to photometric center)= 400 mm
mounting height= 6 m
number locations= 3, number luminaires= 3

Luma Gen2 Mini BGP703 40 LED DM10 BL1 7.5KLM NW 4000K
lamp(s): LED-HB 5.2S 740
candela file 'Luma Gen2 Mini_BGP703_DM10_7500_40LED_5.2S_CLO_L90_740.ies'
1 lamp(s) per luminaire, 7500 initial lumens per lamp
Maintenance Factor = 0.760, watts per luminaire = 41
Outreach (from mounting axis to photometric center)= 400 mm
mounting height= 6 m
number locations= 1, number luminaires= 1

BL1

Luma Gen2 Medium BGP704 80 LED DW50 BL1 15KLM NW 4000K
lamp(s): LED-HB 5.2S 740
candela file 'Luma Gen2 Medium_BGP704_DW50 BL1_15000_80LED_5.2S_CLO_L90_740.ies'
1 lamp(s) per luminaire, 15000 initial lumens per lamp
Maintenance Factor = 0.760, watts per luminaire = 82
Outreach (from mounting axis to photometric center)= 400 mm
mounting height= 6 m
number locations= 2, number luminaires= 2

Luma Gen2 Medium BGP704 80 LED DW50 BL1 15KLM NW 4000K
lamp(s): LED-HB 5.2S 740
candela file 'Luma Gen2 Medium_BGP704_DW50_15000_80LED_5.2S_CLO_L90_740.ies'
1 lamp(s) per luminaire, 15000 initial lumens per lamp
Maintenance Factor = 0.760, watts per luminaire = 82
Outreach (from mounting axis to photometric center)= 400 mm
mounting height= 6 m
number locations= 3, number luminaires= 3

Car Park
411 points at z=0, sp 1.5m by 1.5m
HORIZONTAL LUX

Average	25.48
Maximum	43.70
Minimum	10.08
Min/Avg(Uo)	0.396
Min/Max	0.231
Coef Var	0.285
UnifGrad	1.46

Drive Thru
193 points at z=0, sp 1.5m by 1.5m
HORIZONTAL LUX

Average	25.3
Maximum	41.3
Minimum	11.3
Min/Avg(Uo)	0.447
Min/Max	0.274
Coef Var	0.286
UnifGrad	1.49

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
0	D-430714	INITIAL PROPOSAL	01.11.21	CP	EH
1	6079510	NEW LAYOUT	26.02.25	CP	LC

Project Number: 501734912
Scale & Sheet Size: NTS @ A3
Sheet No: DWG 00

Project Name: MCONALDS WREXHAM PLAS COCH
Drawing Name: LiAS DESIGN NOTES & LUMINAIRE SCHEDULE

LAS COCH RETAIL PARK

29no. Car Parking Spaces
Inc. 2no. Proposed Accessible Bays
Inc. 3no. Proposed Grill Bays

McDonald's
Restaurant
DO100S

Bespoke Corral

Deliveries

Cycles

3 no. Grill Bays

Proposed Sub St.

PLAS COCH ROAD

El Sub Sta

12.5
25
6.25

N

Key:

BL1 — Luma Gen2 Mini BGP703 40 LED DM10 BL1 7.5KLM NW 4000K
lamp(s): LED-HB 5.2S 740
candela file 'Luma Gen2 Mini_BGP703_DM10 BL1_7500_40LED_5.2S_CLO_L90_740.ies'
1 lamp(s) per luminaire, 7500 initial lumens per lamp
Maintenance Factor = 0.760, watts per luminaire = 41
Outreach (from mounting axis to photometric center)= 400 mm
mounting height= 6 m
number locations= 3, number luminaires= 3

BL1 — Luma Gen2 Mini BGP703 40 LED DM10 BL1 7.5KLM NW 4000K
lamp(s): LED-HB 5.2S 740
candela file 'Luma Gen2 Mini_BGP703_DM10_7500_40LED_5.2S_CLO_L90_740.ies'
1 lamp(s) per luminaire, 7500 initial lumens per lamp
Maintenance Factor = 0.760, watts per luminaire = 41
Outreach (from mounting axis to photometric center)= 400 mm
mounting height= 6 m
number locations= 1, number luminaires= 1

BL1 — Luma Gen2 Medium BGP704 80 LED DW50 BL1 15KLM NW 4000K
lamp(s): LED-HB 5.2S 740
candela file 'Luma Gen2 Medium_BGP704_DW50 BL1_15000_80LED_5.2S_CLO_L90_740.ies'
1 lamp(s) per luminaire, 15000 initial lumens per lamp
Maintenance Factor = 0.760, watts per luminaire = 82
Outreach (from mounting axis to photometric center)= 400 mm
mounting height= 6 m
number locations= 2, number luminaires= 2

BL1 — Luma Gen2 Medium BGP704 80 LED DW50 BL1 15KLM NW 4000K
lamp(s): LED-HB 5.2S 740
candela file 'Luma Gen2 Medium_BGP704_DW50_15000_80LED_5.2S_CLO_L90_740.ies'
1 lamp(s) per luminaire, 15000 initial lumens per lamp
Maintenance Factor = 0.760, watts per luminaire = 82
Outreach (from mounting axis to photometric center)= 400 mm
mounting height= 6 m
number locations= 3, number luminaires= 3

Car Park
411 points at z=0, sp 1.5m by 1.5m
HORIZONTAL LUX

Average	25.48
Maximum	43.70
Minimum	10.08
Min/Avg(Uo)	0.396
Min/Max	0.231
Coef Var	0.285
UnifGrad	1.46

Drive Thru
193 points at z=0, sp 1.5m by 1.5m
HORIZONTAL LUX

Average	25.3
Maximum	41.3
Minimum	11.3
Min/Avg(Uo)	0.447
Min/Max	0.274
Coef Var	0.286
UnifGrad	1.49

Notes:

1) 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**

2) Do not scale for this drawing

PROPOSAL
(NOT FOR CONSTRUCTION)

Rev	DSR no.	Comment	Date	LiAS	KAM
0	D-430714	INITIAL PROPOSAL	01.11.21	CP	EH
1	6079510	NEW LAYOUT	26.02.25	CP	LC

Project Number: 501734912
Scale & Sheet Size: 1:200 @ A1
Sheet No: DWG 01

Project Name: MCONALDS WREXHAM PLAS COCH
Drawing Name: PROPOSED LIGHTING LAYOUT