

- FUTURE EV CHARGER ON PRIVATE PARKING SPACE TO BE WIRED BACK TO DISTRIBUTION BOARD WITHIN DWELLING
- 100mmØ UPSTAND FOR FUTURE EV CHARGING POINT
- 100mmØ UPSTAND TO FUTURE ESB MINI PILLAR LOCATION (MAXIMUM 8 SPACES)
- 100mmØ RED UNDERGROUND DUCT FOR FUTURE EV CHARGER CABLING

*All of the above in accordance with TGD part L Section 1.4.6
 **All of the external upstands to be capped and suitably labelled

B	ISSUED FOR COUNCIL APPROVAL	16.07.2024
A	ISSUED FOR COUNCIL APPROVAL	13.05.2024
Issue	Revision	Date
Client CORK COUNTY COUNCIL		
Project HOUSING DEVELOPMENT ST. JOSEPHS ROAD, MALLOW, CO. CORK		
Title EV CHARGING SERVICES		
Scale	1:500@A1	Dwg. No. E1
Date	JUNE 2023	Our Ref. E23.1678
Drawn	TJ	Checked JK

JKA John Kelleher & Associates
 Building Services Engineers
 MECHANICAL • ELECTRICAL • SUSTAINABLE • RENEWABLE
 Cuiil Greine House, Ballincollig Commercial Park, Link Road, Ballincollig, Co. Cork
 Tel: (021) 4850838 Mob: (083) 1988557 E Mail: jkassocs@eircom.net

DATE: 17 July 2024
DESIGNER: Karol Drapala
PROJECT No: KE/RE/SJM/01
PROJECT NAME: St. Josephs road Mallow Cork



Lighting to IS EN 13201:2 - 2015

Estate lighting to Class P3
Walkway lighting to Class P4

3000k colour temp. Dimming to U14 regime

A) Phillips Lumistreet gen 2 ECO 730 DW 4.00klm
B) Phillips Lumistreet BGP291 730 DRXN1 1.00klm

c/w nema 7 pin socket & photocell

6m columns

Outdoor Lighting Report

PREPARED BY: Karol Drapala
Lighting Designer

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Layout Report

General Data

Dimensions in Metres Angles in Degrees

Calculation Grids

ID	Grid Name	X	Y	X' Length	Y' Length	X' Spacing	Y' Spacing
1	Estate	556532.57	599045.05	211.27	327.49	1.50	1.52
2	Walkway 1	556618.08	599232.72	67.85	20.02	1.48	1.43
3	Walkway 2	556640.55	599122.10	38.95	11.92	0.85	0.85

Luminaires

Luminaire A Data

Supplier	
Type	LumiStreet gen2 Eco
Lamp(s)	LED40 L95@100kh /730 T25
Lamp Flux (klm)	4.00
File Name	BGS010 T25 FP LED40 L95@100kh-730 D W.ies
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	682.8, 25.9, 0.0
No. in Project	40

Luminaire B Data

Supplier	Philips
Type	BGP291 DRXN1
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	1.00
File Name	LumiStreet Gen2 Micro_BGP291_DRXN1_1000_6LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	1155.3, 26.3, 0.0
No. in Project	4



Layout

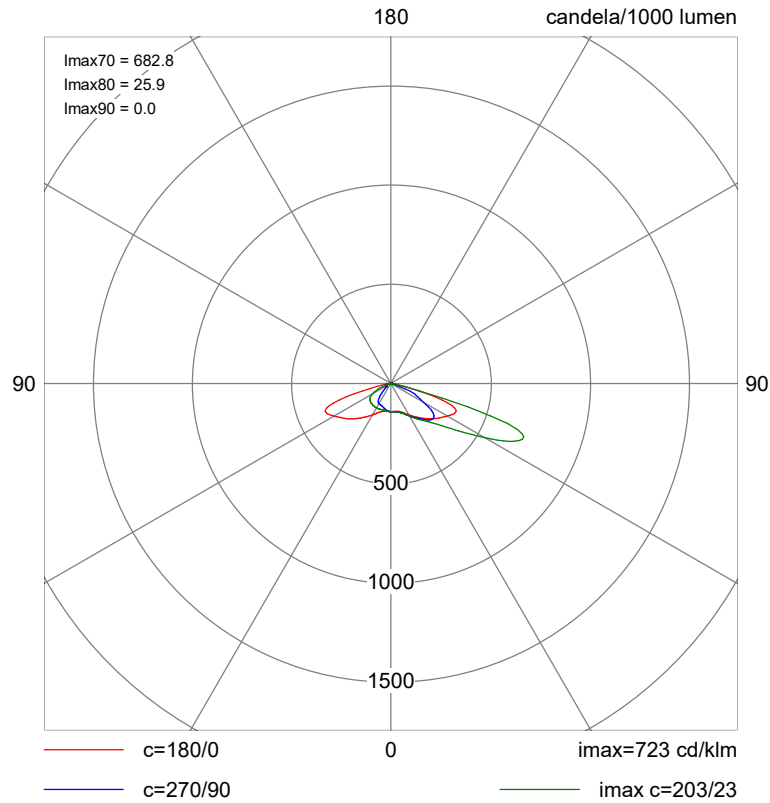
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	556730.40	599055.30	6.00	124.00	0.00	0.00	1.00			
2	A	556711.65	599048.15	6.00	84.00	0.00	0.00	0.00			
3	A	556739.29	599067.81	6.00	209.00	0.00	0.00	1.00			
4	A	556729.64	599091.28	6.00	209.00	0.00	0.00	1.00			
5	A	556713.67	599095.79	6.00	36.00	0.00	0.00	1.00			
6	A	556715.60	599119.90	6.00	209.00	0.00	0.00	1.00			
7	A	556697.65	599134.05	6.00	257.00	0.00	0.00	1.00			
8	A	556698.10	599118.73	6.00	38.00	0.00	0.00	1.00			
9	A	556666.85	599107.81	6.00	117.00	0.00	0.00	1.00			
10	A	556644.39	599106.76	6.00	52.00	0.00	0.00	1.00			
11	A	556621.00	599123.24	6.00	52.00	0.00	0.00	1.00			
12	A	556623.71	599148.31	6.00	183.00	2.00	0.00	1.00			
13	A	556621.00	599176.72	6.00	183.00	3.00	0.00	1.00			
14	A	556618.77	599205.83	6.00	183.00	2.00	0.00	1.00			
15	A	556615.44	599250.43	6.00	183.00	0.00	0.00	1.00			
16	A	556611.28	599268.67	6.00	5.00	0.00	0.00	1.00			
17	A	556620.30	599284.81	6.00	183.00	2.00	0.00	1.00			
18	A	556624.16	599327.17	6.00	180.00	0.00	0.00	1.00			

Layout Continued

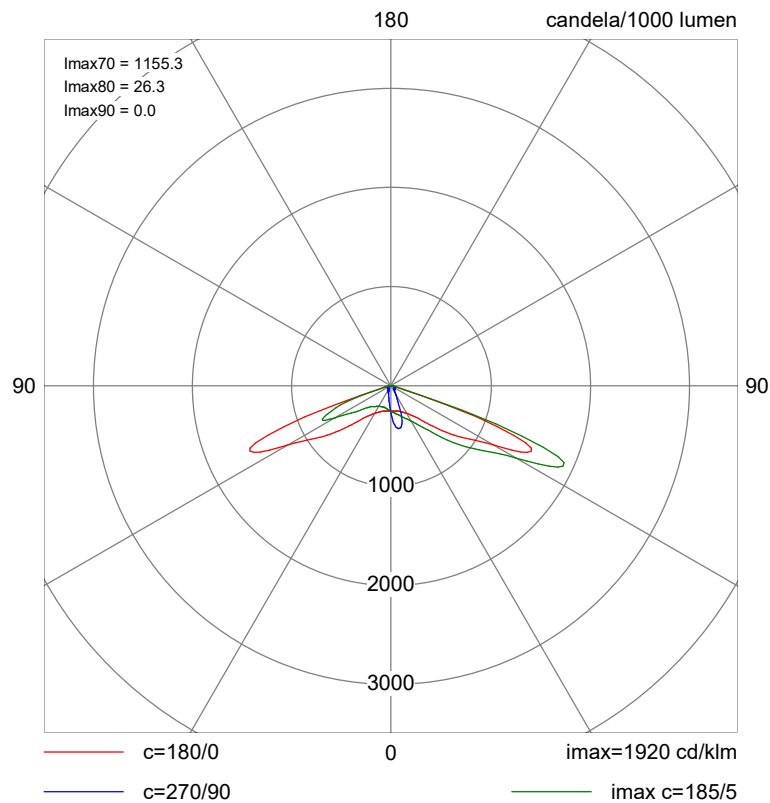
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
19	A	556693.16	599152.25	6.00	183.00	0.00	0.00	1.00			
20	A	556691.29	599175.21	6.00	183.00	0.00	0.00	1.00			
21	A	556694.29	599200.52	6.00	183.00	0.00	0.00	1.00			
22	A	556679.67	599205.64	6.00	1.00	0.00	0.00	1.00			
23	A	556687.34	599231.97	6.00	183.00	0.00	0.00	1.00			
24	A	556692.22	599252.49	6.00	183.00	0.00	0.00	1.00			
25	A	556680.96	599280.34	6.00	6.00	0.00	0.00	1.00			
26	A	556677.89	599320.68	6.00	2.00	1.00	0.00	1.00			
27	A	556679.31	599300.57	6.00	6.00	0.00	0.00	1.00			
28	A	556688.40	599341.80	6.00	183.00	0.00	0.00	1.00			
29	A	556693.65	599356.70	6.00	283.00	0.00	0.00	1.00			
30	A	556667.85	599351.68	6.00	285.00	0.00	0.00	1.00			
31	A	556632.13	599332.46	6.00	97.00	0.00	0.00	1.00			
32	A	556608.49	599308.10	6.00	0.00	0.00	0.00	1.00			
33	A	556608.05	599227.08	6.00	0.00	0.00	0.00	1.00			
34	A	556612.44	599160.56	6.00	0.00	0.00	0.00	1.00			
35	A	556618.76	599357.72	6.00	188.00	0.00	0.00	1.00			
36	A	556642.77	599123.68	6.00	232.00	0.00	0.00	1.00			
37	A	556675.28	599128.52	6.00	297.00	0.00	0.00	1.00			
38	A	556648.37	599348.13	6.00	279.00	1.00	0.00	1.00			
39	A	556704.61	599349.03	6.00	162.00	0.00	0.00	1.00			
40	B	556646.71	599242.88	6.00	66.00	0.00	0.00	0.00			
41	B	556627.31	599249.11	6.00	90.00	0.00	0.00	0.00			
42	B	556666.72	599240.45	6.00	93.00	0.00	0.00	0.00			
43	B	556657.73	599131.92	6.00	279.00	0.00	0.00	0.00			
44	A	556601.51	599352.92	6.00	12.00	0.00	0.00	1.00			

Polar Diagrams

Luminaire A LumiStreet gen2 Eco

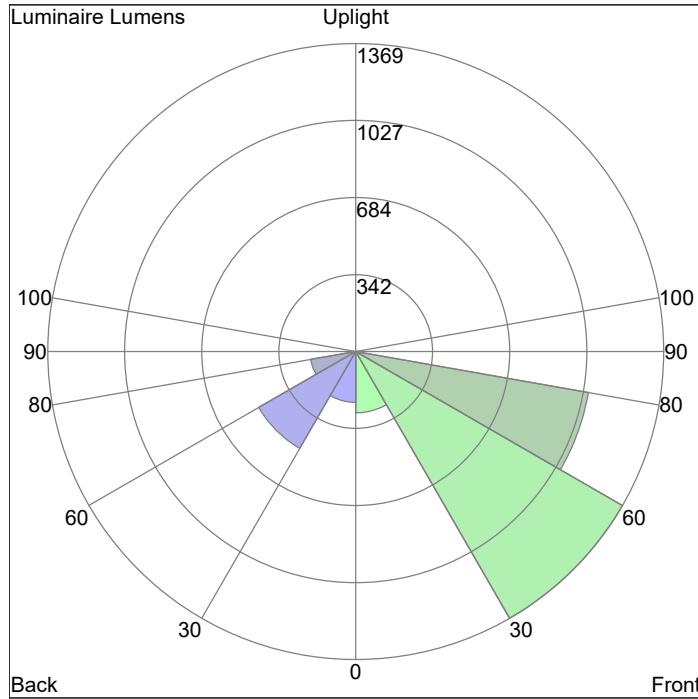


Luminaire B BGP291 DRXN1



Luminaire Classification System (LCS) Graphs

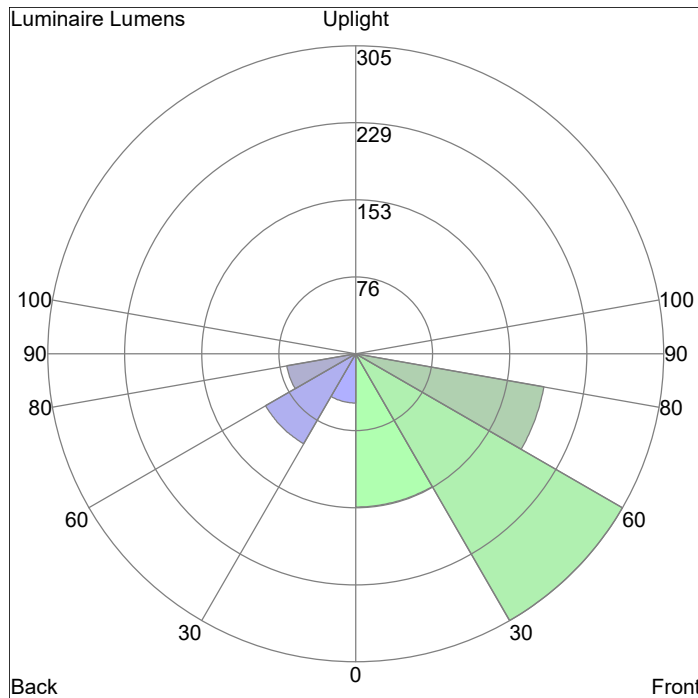
Luminaire A LumiStreet gen2 Eco



LCS	Lumens	%Lamp	%Lum
FL	273.2	6.8	7.5
FM	1368.8	34.2	37.6
FH	1050.6	26.3	28.9
FVH	12.6	0.3	0.3
BL	226.5	5.7	6.2
BM	497.1	12.4	13.7
BH	202.6	5.1	5.6
BVH	8.5	0.2	0.2
UL	0.0	0.0	0.0
UH	0.0	0.0	0.0
Total	3640.1	91.0	100.0

BUG rating=B1-U0-G1

Luminaire B BGP291 DRXN1



LCS	Lumens	%Lamp	%Lum
FL	151.9	15.2	17.4
FM	305.0	30.5	35.0
FH	189.2	18.9	21.7
FVH	2.3	0.2	0.3
BL	48.9	4.9	5.6
BM	102.9	10.3	11.8
BH	69.1	6.9	7.9
BVH	1.4	0.1	0.2
UL	0.0	0.0	0.0
UH	0.0	0.0	0.0
Total	870.8	87.1	100.0

BUG rating=B0-U0-G0

Horizontal Illuminance (lux)

Estate

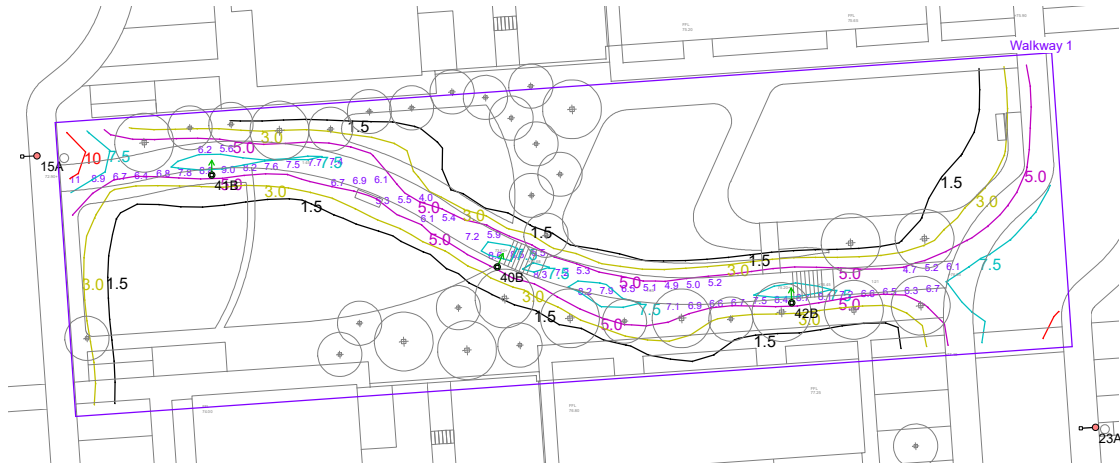


Results

Eav	8.91
Emin	1.74
Emax	17.99
Emin/Emax	0.10
Emin/Eav	0.20

Horizontal Illuminance (lux)

Walkway 1

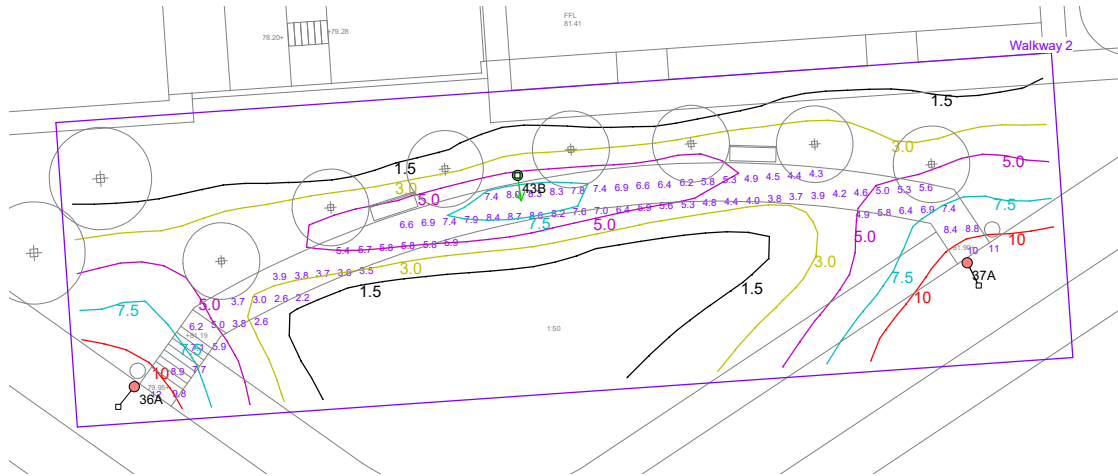


Results

Eav	6.85
Emin	4.01
Emax	10.75
Emin/Emax	0.37
Emin/Eav	0.59

Horizontal Illuminance (lux)

Walkway 2



Results

Eav	6.07
Emin	2.20
Emax	11.63
Emin/Emax	0.19
Emin/Eav	0.36



GENERAL NOTES

1. ALL DIMENSIONS ARE GIVEN IN MILLIMETERS UNLESS OTHERWISE INDICATED.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SCOPE OF WORKS. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF KELLIHERS FOR CLARIFICATION PRIOR TO ANY WORK COMMENCING.
3. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS, DISCREPANCIES ARE TO BE NOTIFIED TO THE CONTRACTOR AND DESIGN FOR RESOLUTION.
4. ALL WORKS TO COMPLY WITH PREVIOUSLY AGREED AND ISSUED SPECIFICATIONS
5. ALL EXTERNAL LIGHTING LAYOUTS ARE DESIGNED IN ACCORDANCE WITH BS5489:1-2020.

LEGEND

Estate
 Results - Horizontal Illuminance (lux)
 Eav= 8.91
 Emin= 1.74
 Emax= 17.99
 Emin/Emax= 0.10
 Emin/Eav= 0.20
 Emax/Eav= 2.02

Walkway 1
 Results - Horizontal Illuminance (lux)
 Eav= 6.85
 Emin= 4.01
 Emax= 10.75
 Emin/Emax= 0.37
 Emin/Eav= 0.59
 Emax/Eav= 1.57

Walkway 2
 Results - Horizontal Illuminance (lux)
 Eav= 6.07
 Emin= 2.20
 Emax= 11.63
 Emin/Emax= 0.19
 Emin/Eav= 0.36
 Emax/Eav= 1.92

Luminaire Data
 Luminaire A LumiStreet gen2 Eco
 Lamp LED40 L95@100kh/730 T25 MF 0.76
 Luminaire B BCP291 DRXN1
 Lamp LED-HB 5.2S 730 MF 0.76

- Key
- Luminaire A Column
 - Luminaire B Column
 - Beam Aiming Target
 - Photometric Centre

ISSUED FOR COUNCIL APPROVAL	KD	PS	PS	17JUL24
ISSUED FOR COUNCIL APPROVAL	KD	PS	PS	30MAY24
ISSUED FOR COUNCIL APPROVAL	KD	PS	PS	30MAY24
ISSUED FOR COUNCIL APPROVAL	KD	PS	PS	14MAY24
ISSUED FOR COUNCIL APPROVAL	KD	PS	PS	08MAY24
ISSUED FOR COUNCIL APPROVAL	KD	PS	PS	23JUN23

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PROJECT: ST JOSEPHS ROAD MALLOW

KELLIHERS ELECTRICAL LTD.
 MOD BUSINESS PARK,
 BALLYMOUNT,
 DUBLIN 12.

APPROVALS	DATE
DESIGN	KD 23JUN23
REVISION	KD 23JUN23
CHECKED	PS 23JUN23
ISSUED	PS 23JUN23
APPROVED	PS 23JUN23

ST JOSEPHS ROAD RESIDENTIAL MALLOW COUNTY CORK LIGHTING LAYOUT PHILIPS LED

PROJECT NO.	KE/SJR/01	DATE	0
ISSUE NO.	1/500@A0	SCALE	1 - 1