

DATE: 19 February 2024
DESIGNER: Declan Doyle
PROJECT No: KE/RE/SGS/01
PROJECT NAME: SGS apts. Mardyke st. Skibereen



Lighting to IS EN 13201:2-2015

apartment lighting to class P4, Mardyke st. to class P3

apartment lighting - 3000k, Mardyke st. lighting - 3000k
Dimming to U14 protocol

- A) Philips Lumistreet micro BGP291 DM50 BL1 5.40klm, 32w CLO
- B) Philips Lumistreet micro BGP291 DN10 BL2 2.80klm, 19w CLO
c/w nema socket & photocell

6m column estate (existing columns on Mardyke st.)

Outdoor Lighting Report

PREPARED BY: Declan Doyle
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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	Site	51.04	14.56	78.36	58.73	1.48	1.47
2	Mardyke street	48.62	33.48	55.44	11.92	1.50	1.49

Luminaires

Luminaire A Data

Supplier	
Type	BGP291 DM50 BL1
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	5.40
File Name	LumiStreet Gen2 Micro_BGP291_DM50 BL 1_5400_20LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	914.2, 33.8, 0.0
No. in Project	2

Luminaire B Data

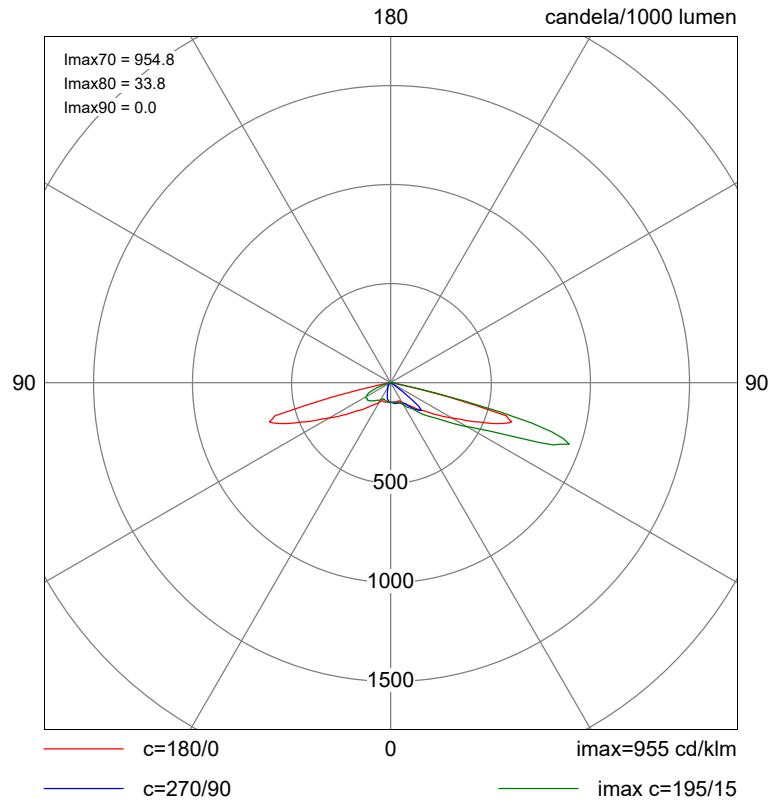
Supplier	
Type	BGP291 DN10 BL2
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	2.80
File Name	LumiStreet Gen2 Micro_BGP291_DN10 BL 2_2800_20LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	520.1, 74.2, 0.0
No. in Project	2

Layout

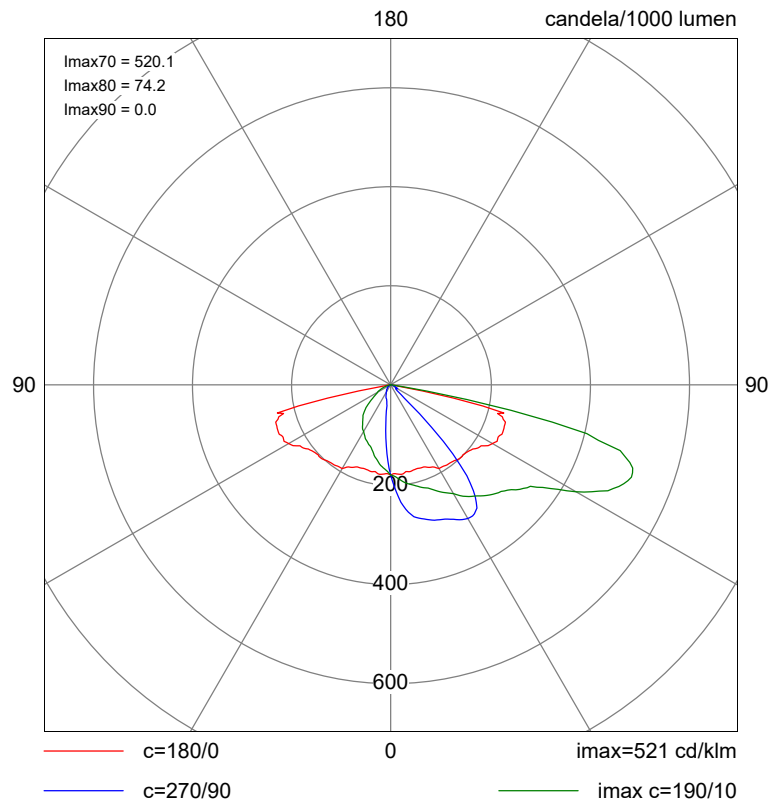
ID /Mast	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	56.79	45.79	6.00	136.00	0.00	0.00	1.00			
2	A	86.82	73.15	6.00	136.00	0.00	0.00	1.00			
3/1	B	63.67	67.64	6.00	311.00	0.00	0.00	1.00			
4/1	B	63.67	67.64	6.00	131.00	0.00	0.00	1.00			

Polar Diagrams

Luminaire A BGP291 DM50 BL1

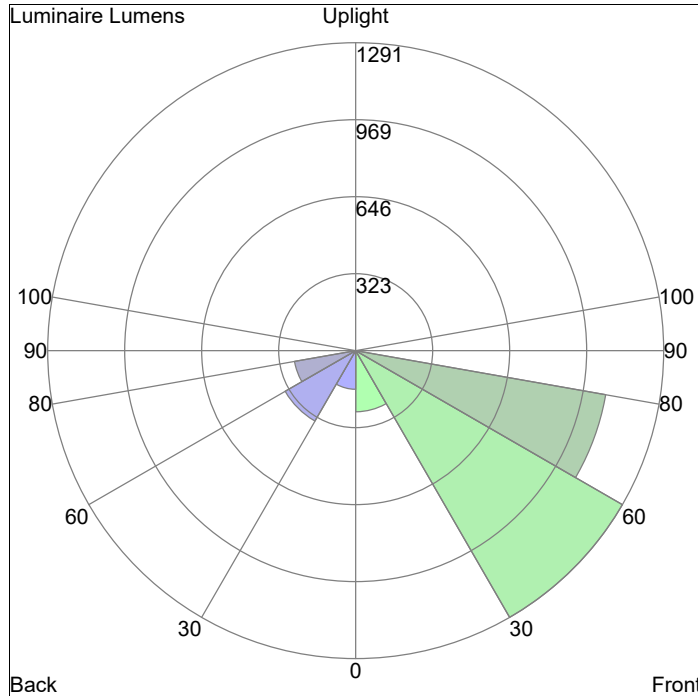


Luminaire B BGP291 DN10 BL2



Luminaire Classification System (LCS) Graphs

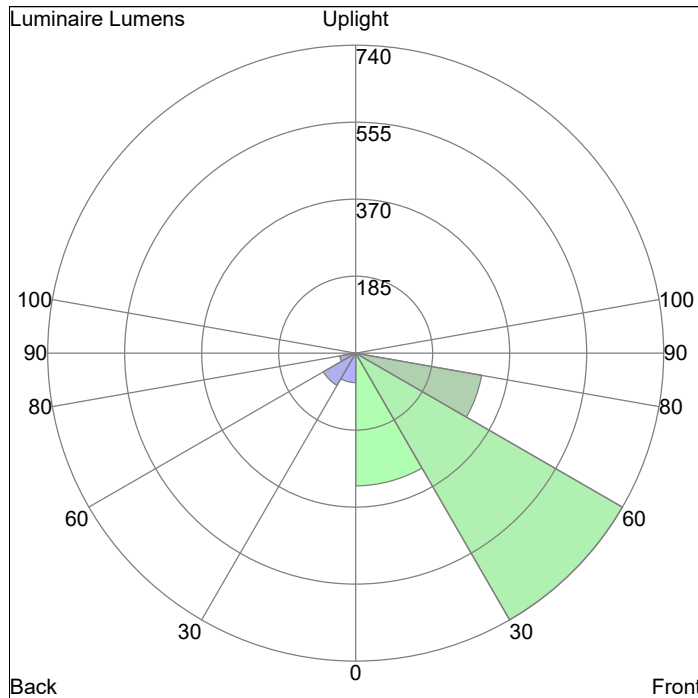
Luminaire A BGP291 DM50 BL1



LCS	Lumens	%Lamp	%Lum
FL	256.6	4.8	7.6
FM	1291.4	23.9	38.1
FH	1064.9	19.7	31.4
FVH	8.1	0.1	0.2
BL	162.4	3.0	4.8
BM	341.2	6.3	10.1
BH	260.1	4.8	7.7
BVH	2.4	0.0	0.1
UL	0.0	0.0	0.0
UH	0.0	0.0	0.0
Total	3387.5	62.7	100.0

BUG rating=B1-U0-G1

Luminaire B BGP291 DN10 BL2



LCS	Lumens	%Lamp	%Lum
FL	318.9	11.4	20.3
FM	740.1	26.4	47.1
FH	307.4	11.0	19.6
FVH	3.5	0.1	0.2
BL	71.0	2.5	4.5
BM	89.6	3.2	5.7
BH	39.0	1.4	2.5
BVH	0.9	0.0	0.1
UL	0.0	0.0	0.0
UH	0.0	0.0	0.0
Total	1570.3	56.1	100.0

BUG rating=B0-U0-G0

Horizontal Illuminance (lux)

Site



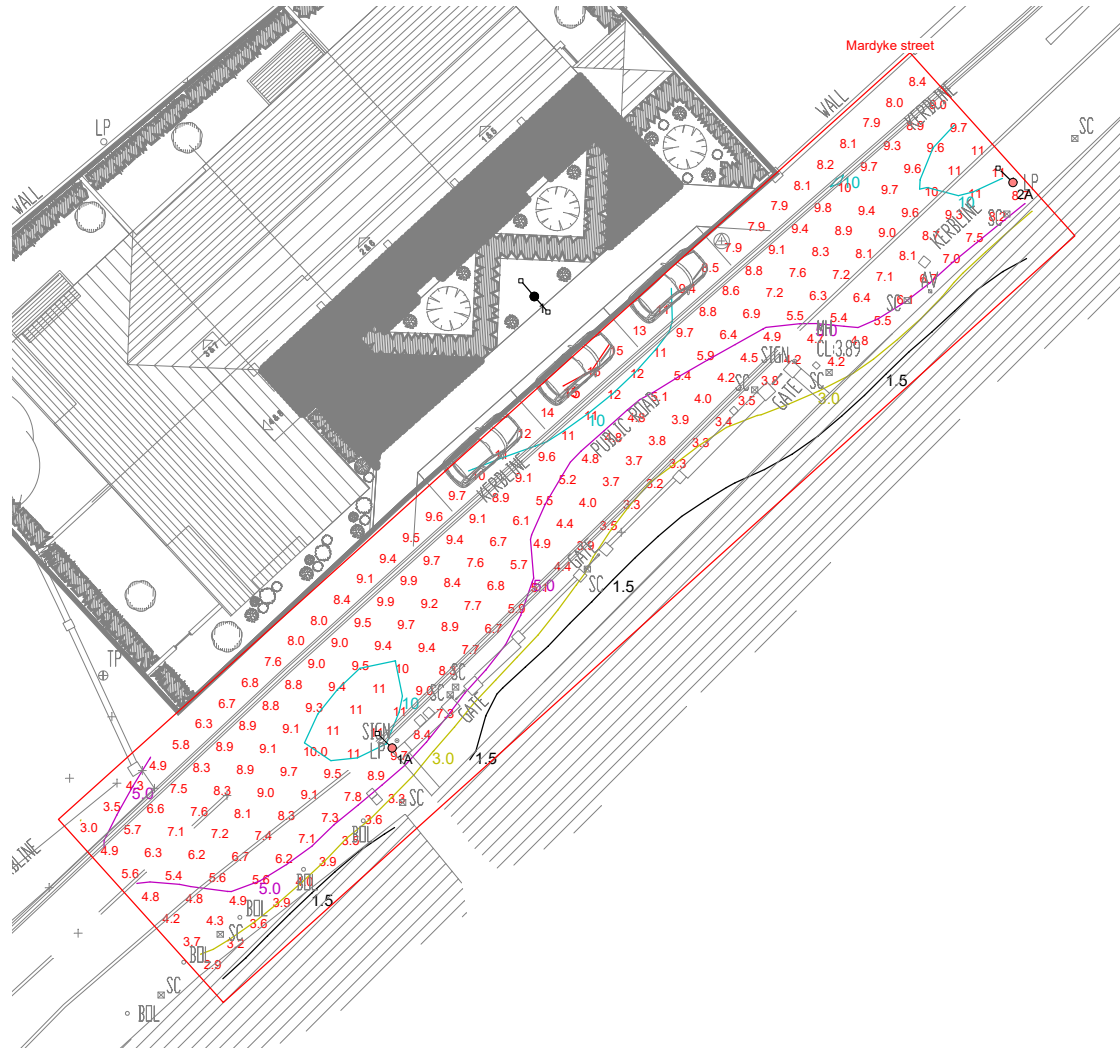
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Results

Eav	6.83
Emin	1.93
E _{max}	17.52
E _{min} /E _{max}	0.11
E _{min} /E _{av}	0.28
E _{max} /E _{av}	2.57

Horizontal Illuminance (lux)

Mardyke street



Results

Eav	7.57
Emin	2.86
E _{max}	16.06
E _{min} /E _{max}	0.18
E _{min} /E _{av}	0.38
E _{max} /E _{av}	2.12