

**DATE:** 8 February 2024  
**DESIGNER:** Declan Doyle  
**PROJECT No:** KE/RE/HSM/01 rev 2  
**PROJECT NAME:** Hegarty street Millstreet Cork



Lighting to IS EN 13201-2: 2020  
Residential Lighting To Class P3  
Dimming To U14 Regime, colour temp. 3000k  
A) Philips Lumistreet eco LED40 L95 DW, 4.00klm, 26w CLO  
B) Philips Lumistreet BGP291 DW50 BL2, 4.60klm, 27w CLO  
C/W Nema 7 Pin Socket & photocell  
6m Columns - Estate

## Outdoor Lighting Report

**NOTE: ALL TYPE B FITTINGS TO HAVE REAR SCREENS/BAFFLES FITTED TO REDUCE LIGHT SPILL TO FRONT OF DWELLINGS**

**PREPARED BY:** Declan Doyle  
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[www.astrotek.ie](http://www.astrotek.ie) | [www.kellihers.com](http://www.kellihers.com) | [www.rexel.ie](http://www.rexel.ie)



## Layout Report

### General Data

Dimensions in Metres Angles in Degrees  
 Grid Origin 9.1m x 18.3m  
 Area 109.7m x 223.4m  
 Sample Spacing 1.48m x 1.50m

### 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	9

#### Luminaire B Data

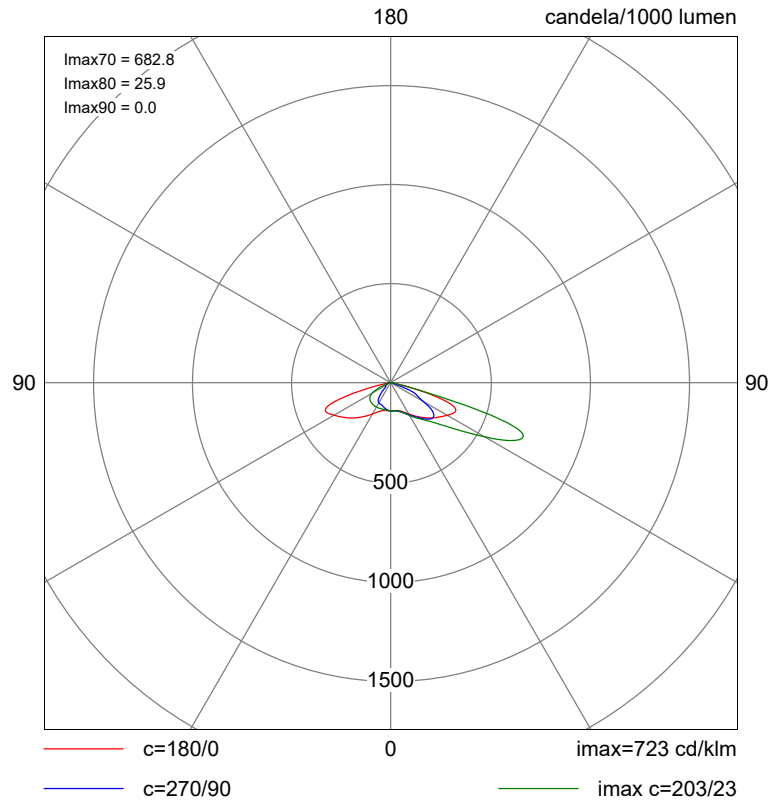
Supplier	
Type	BGP291 DW50 BL2
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	4.60
File Name	LumiStreet Gen2 Micro_BGP291_DW50 B L2_4600_20LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	589.6, 31.5, 0.0
No. in Project	7

### Layout

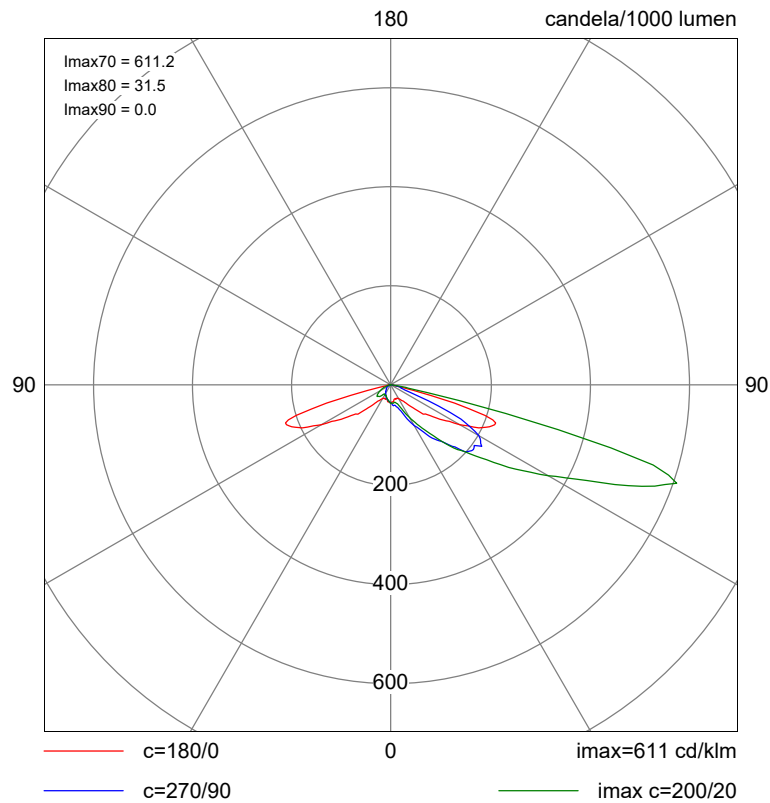
ID /Mast	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	B	67.06	212.45	6.00	88.00	0.00	0.00	0.00			
2	B	66.64	199.70	6.00	178.00	0.00	0.00	0.00			
3	A	52.84	184.18	6.00	359.00	0.00	0.00	0.00			
4	B	65.81	167.23	6.00	178.00	0.00	0.00	0.00			
5/1	A	50.00	140.04	10.00	0.00	0.00	0.00	1.00			
6/1	A	50.00	140.04	10.00	180.00	0.00	0.00	1.00			
7	B	70.99	137.38	6.00	180.00	0.00	0.00	0.00			
8	A	54.03	112.20	6.00	12.00	0.00	0.00	0.00			
9	A	43.94	105.32	6.00	130.00	0.00	0.00	0.00			
10	A	50.06	97.16	6.00	77.00	0.00	0.00	0.00			
11	B	73.32	111.89	6.00	188.00	0.00	0.00	0.00			
12	A	61.92	78.78	6.00	19.00	0.00	0.00	0.00			
13	B	86.65	67.36	6.00	277.00	0.00	0.00	0.00			
14	A	39.82	124.29	6.00	357.00	0.00	0.00	0.00			
15	A	54.21	218.31	6.00	0.00	0.00	0.00	0.00			
16	B	65.61	56.12	6.00	98.00	0.00	0.00	0.00			

# Polar Diagrams

## Luminaire A LumiStreet gen2 Eco

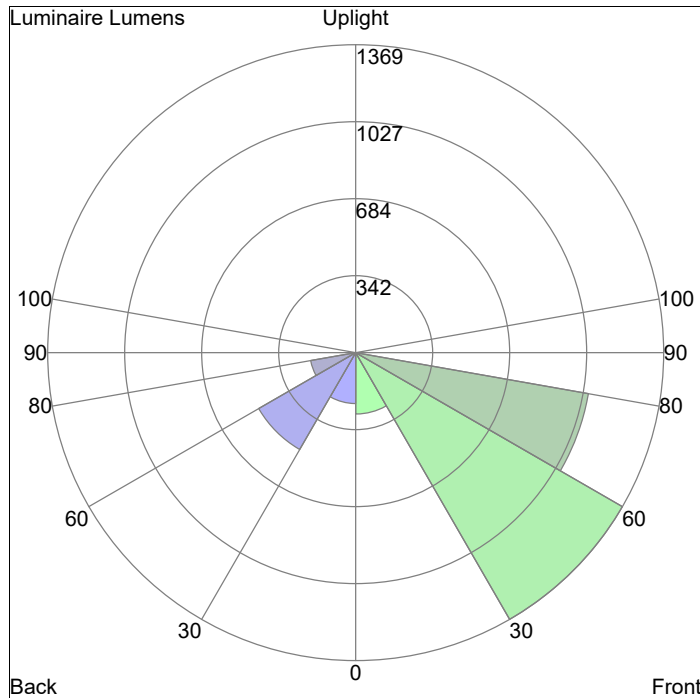


## Luminaire B BGP291 DW50 BL2



## Luminaire Classification System (LCS) Graphs

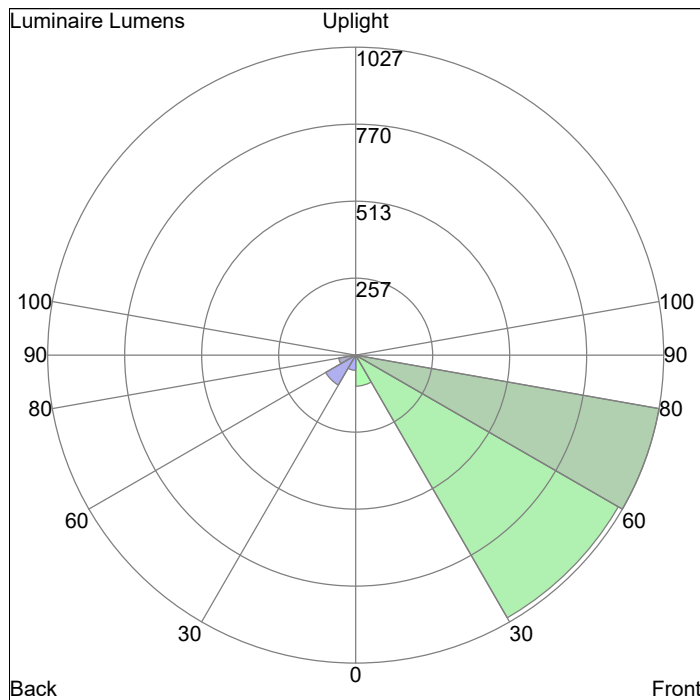
### Luminaire A LumiStreet gen2 Eco



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
<b>Total</b>	<b>3640.1</b>	<b>91.0</b>	<b>100.0</b>

BUG rating=B1-U0-G1

### Luminaire B BGP291 DW50 BL2

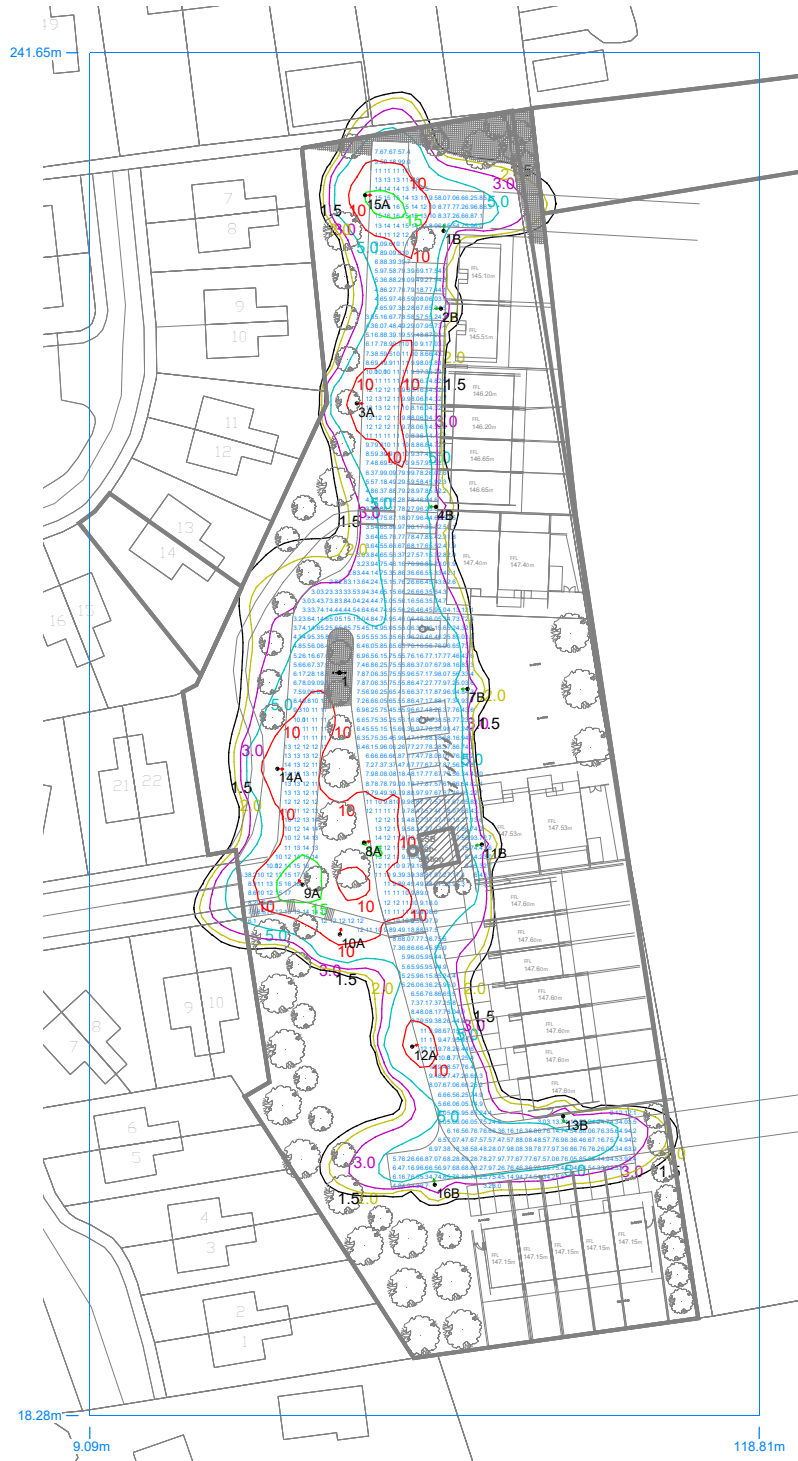


LCS	Lumens	%Lamp	%Lum
FL	103.7	2.3	4.4
FM	1010.9	22.0	42.6
FH	1026.6	22.3	43.3
FVH	5.6	0.1	0.2
BL	50.7	1.1	2.1
BM	115.3	2.5	4.9
BH	57.0	1.2	2.4
BVH	1.8	0.0	0.1
UL	0.0	0.0	0.0
UH	0.0	0.0	0.0
<b>Total</b>	<b>2371.9</b>	<b>51.6</b>	<b>100.0</b>

BUG rating=B1-U0-G1

# Horizontal Illuminance (lux)

Site



## Results

Eav	7.53
Emin	1.79
Emax	17.73
Emin/Emax	0.10
Emin/Eav	0.24
Emax/Eav	2.36