

DATE: 19 November 2024
DESIGNER: DKPI
PROJECT No: O64
PROJECT NAME: Social Housing at St Gonaits Estate Ballyvourney

**LIGHTING
REALITY**

Inner parking area and pedestrian routes are designed to comply with P4, Existing areas are masked off to highlight new area lux levels.
Columns identified with 1A,2A,4A and 10A are existing NEWLY REPLACED LED units and are shown and used for calculation purposes only.
Columns mrked 7B,8C and 9C shall be hinging columns for maintainance purposes.
U15 dimming shall be applied.

Outdoor Lighting Report

Public Lighting design for the above mentioned project: Public lighting for estateroads and pedestian pathways for this development has been designed to comply with EN13201-2015 and also according to the Public Lighting standards and current Local Authority Guidelines. A MF of 0.8 is used for all calculations. Photocells shall be of 7 pin and have a 35/18 lux switching ratio.

PREPARED BY: Ben van Deventer
DKP International
CBG House
Kenmare
Co Kerry

Layout Report

General Data

Dimensions in Metres Angles in Degrees
Grid Origin -225.2m x -96.8m
Area 91.4m x 66.3m
Sample Spacing 0.99m x 0.99m

Luminaires



Luminaire A Data

Supplier	Philips
Type	BGP702 DX51
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	4.60
File Name	Luma Gen2 Micro_BGP702_DX51_4600_20LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	467.9, 27.1, 0.0
No. in Project	5



Luminaire B Data

Supplier	Philips
Type	BGP702 DX70
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	3.20
File Name	Luma Gen2 Micro_BGP702_DX70_3200_20LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	313.4, 303.5, 0.0
No. in Project	3



Luminaire C Data

Supplier	Philips
Type	BGP702 DRM2
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	0.80
File Name	Luma Gen2 Micro_BGP702_DRM2_800_6LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	200.6, 9.5, 0.0
No. in Project	3

Layout

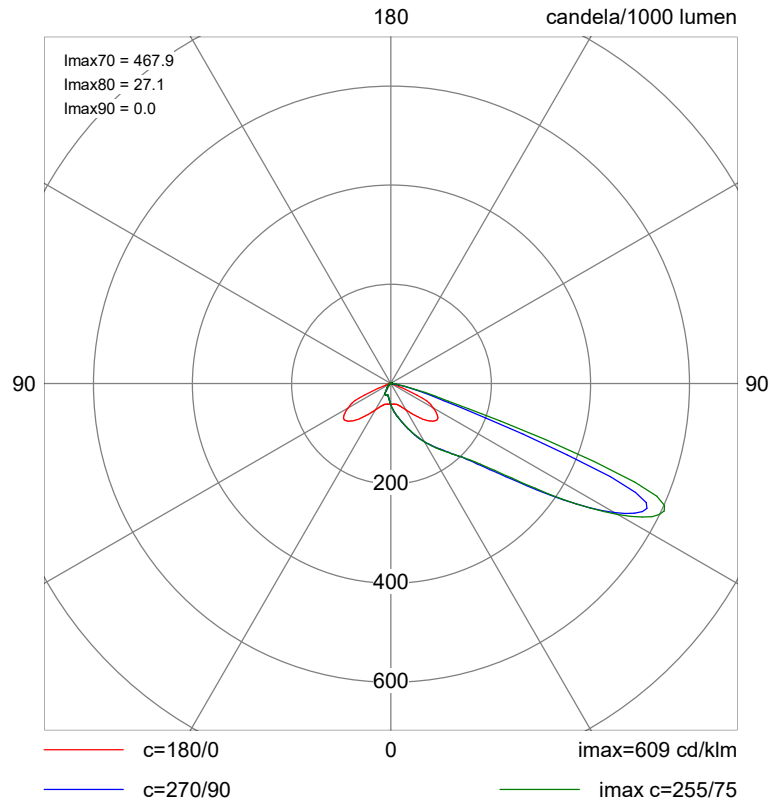
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	-156.35	-50.26	6.00	270.00	0.00	0.00	0.40			
2	A	-136.11	-62.18	6.00	180.00	0.00	0.00	0.40			
3	A	-152.00	-77.29	6.00	1.00	0.00	0.00	0.40			
4	A	-150.52	-95.09	6.00	359.00	0.00	0.00	0.40			
5	B	-170.03	-56.21	6.00	256.00	0.00	0.00	0.40			
6	B	-169.71	-76.55	6.00	90.00	0.00	0.00	0.40			
7	B	-189.67	-76.32	6.00	93.00	0.00	0.00	0.40			
8	C	-214.52	-85.96	6.00	72.00	0.00	0.00	0.40			
9	C	-189.06	-43.93	6.00	182.00	0.00	0.00	0.40			
10	A	-213.92	-90.56	6.00	203.00	0.00	0.00	0.40			

Layout Continued

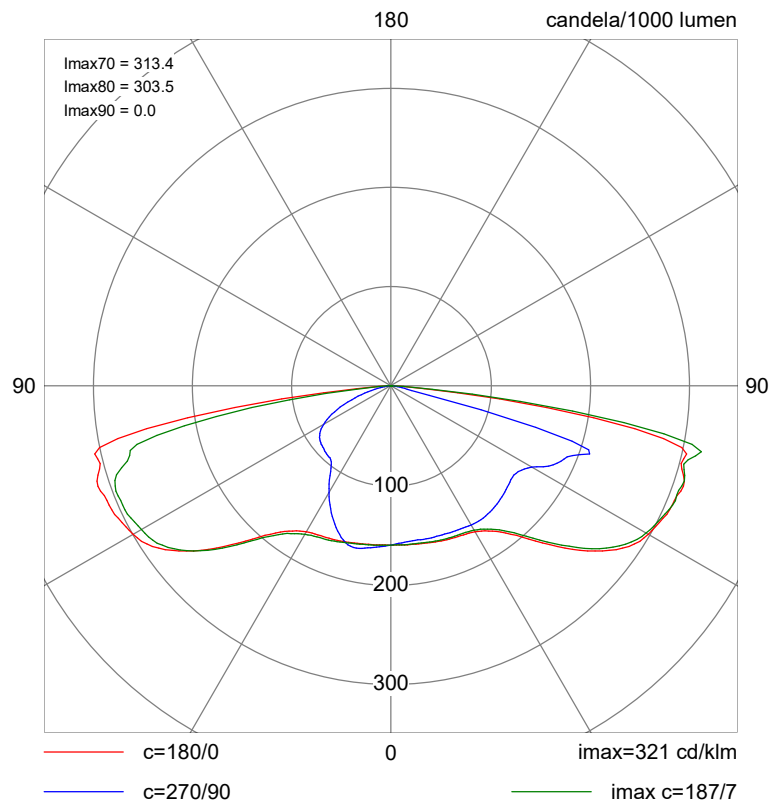
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
11	C	-188.79	-60.14	6.00	182.00	0.00	0.00	0.40			

Polar Diagrams

Luminaire A BGP702 DX51

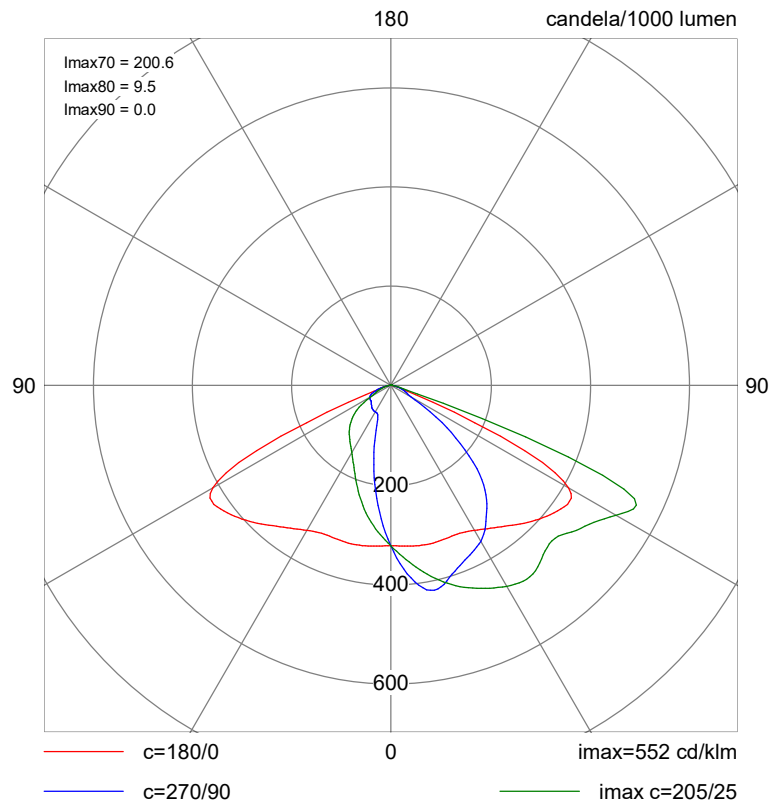


Luminaire B BGP702 DX70



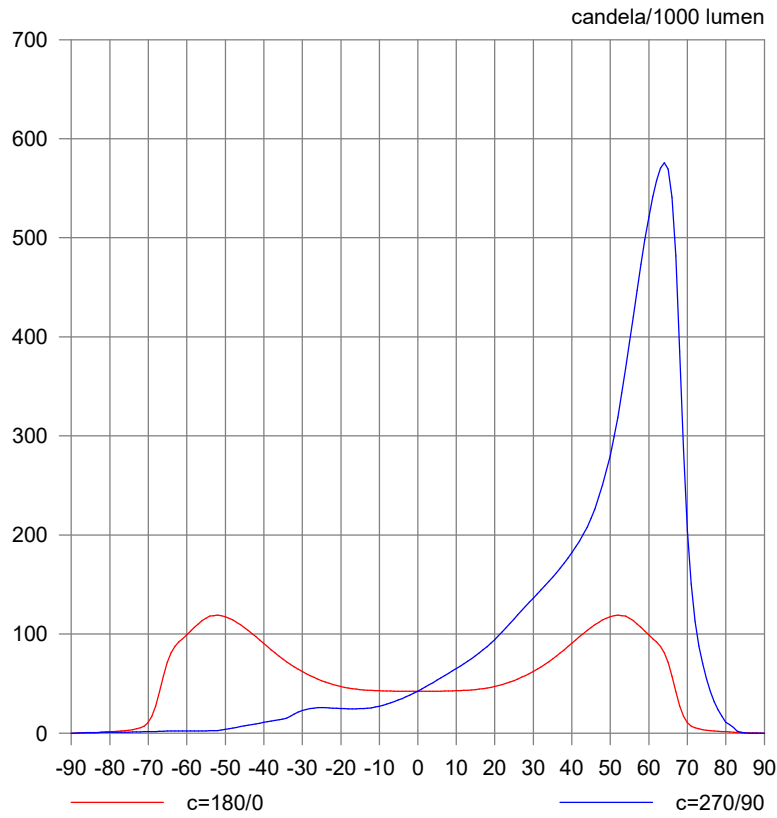
Polar Diagrams Continued

Luminaire C BGP702 DRM2

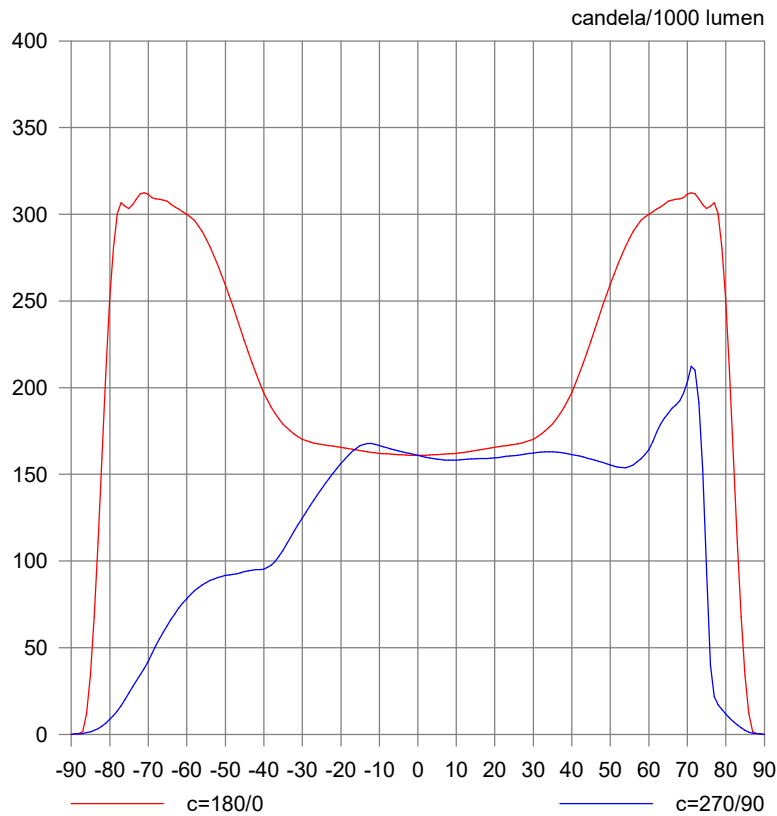


Cartesian Diagrams

Luminaire A BGP702 DX51

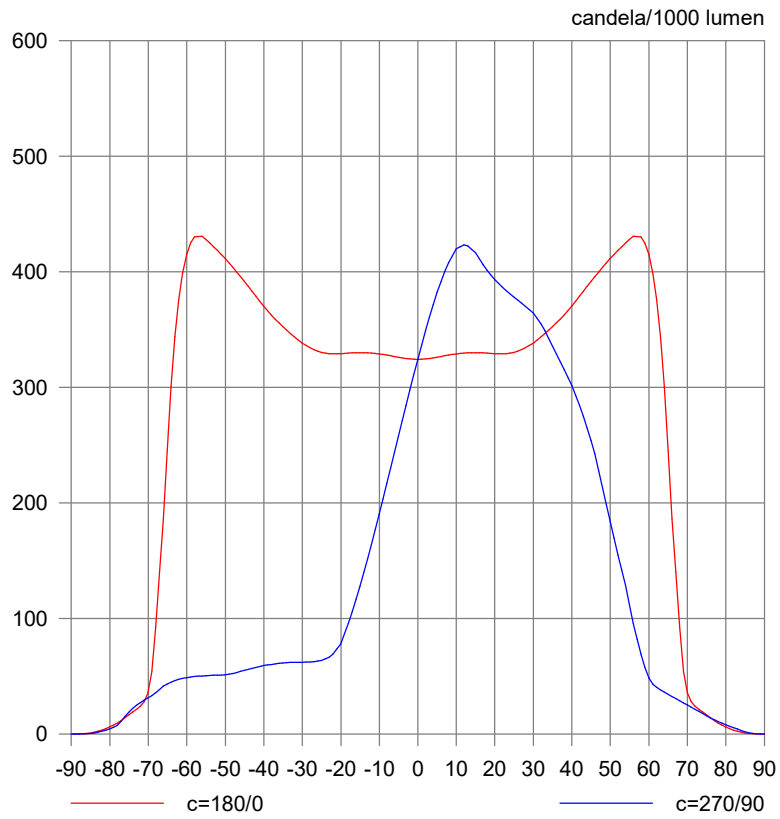


Luminaire B BGP702 DX70



Cartesian Diagrams Continued

Luminaire C BGP702 DRM2



Horizontal Illuminance (lux)

Grid 1



Results

Eav	5.03
Emin	1.04
Emax	12.64
Emin/Emax	0.08
Emin/Eav	0.21