

DATE: 4 July 2023
DESIGNER: DKPI - Ben van Deventer
PROJECT No: N66
PROJECT NAME: Mill Road, Kanturk

**LIGHTING
REALITY**

Junction to this housing development has been designed to C4 where existing lighting on the adjacent feeder road is replaced with LED to comply with P3 standard using existing columns / locations with an additional new column (3A & 4A)
The parking and circulation area within the housing estate is designed to comply with P4
5B & 9B ARE HINGING COLUMNS

P4 PARK & CIRC, C4 JUNCTION (P3 road)

**Public Lighting design for above mentioned project :
Public lighting for estate roads and pedestrian pathways
for this development has been designed to comply with
EN13201-2015 and according to the Public Lighting standards
and Local Authorities guidelines.
All fitting to have CLO function enabled. MF of 0.8 is used.
Photocell shall be mounted using 7 pin NEMA socket and
have 35/18 lux switching ratio.**

PREPARED BY: Ben van Deventer
DKP International
CBG House
Kenmare
Co Kerry
Design Software from:
Lighting Reality Ltd

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	PARKING & CIRC (P4)	-13.57	42.60	76.97	47.50	1.13	1.03
2	JUNCTION (C4)	72.47	21.05	16.91	11.78	0.89	0.98
3	EXT MAIN RD - PART A (P3)	89.99	56.63	52.44	17.75	0.65	0.71
4	EXT MAIN RD - PART B (P3)	62.77	-11.75	76.17	16.51	0.94	0.66

Luminaires



Luminaire A Data

Supplier	Philips
Type	BGP292 DX70
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	9.00
File Name	LumiStreet Gen2 Mini_BGP292_DX70_900_0_40LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	325.1, 353.8, 0.0
No. in Project	4



Luminaire B Data

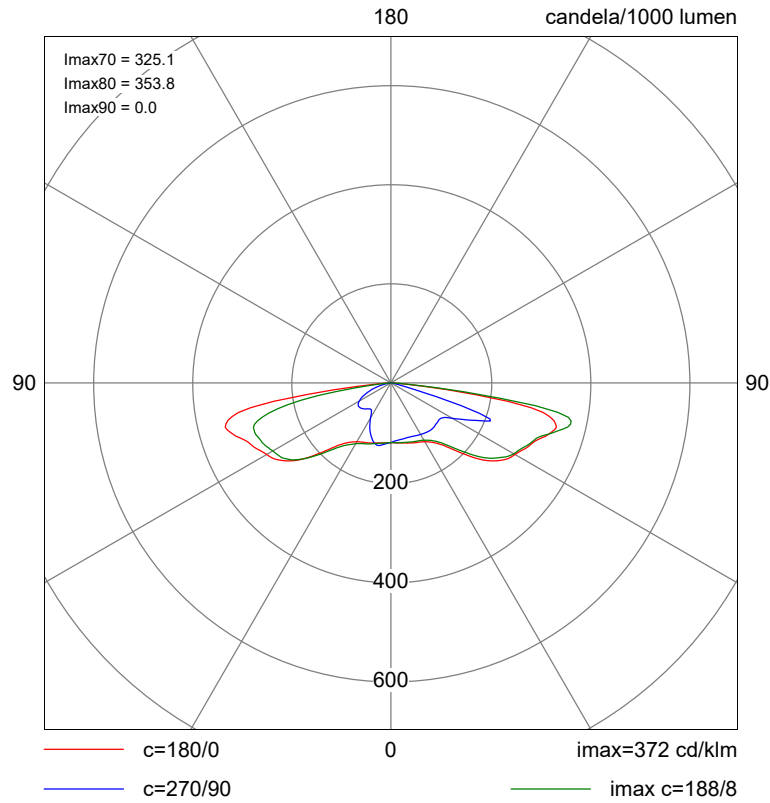
Supplier	Philips
Type	BGP291 DX70
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	3.60
File Name	LumiStreet Gen2 Micro_BGP291_DX70_3600_20LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	325.1, 353.8, 0.0
No. in Project	5

Layout

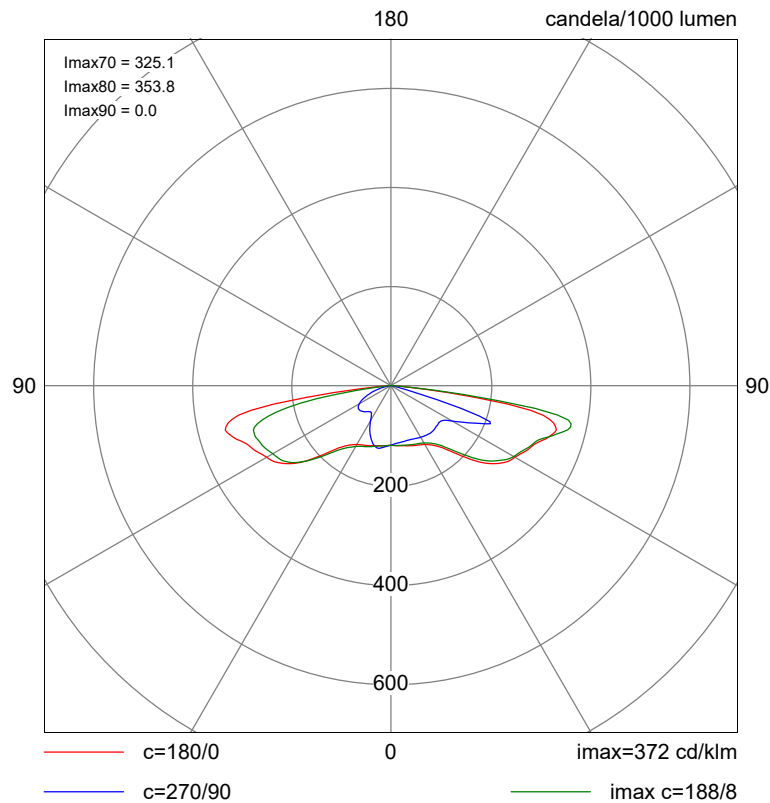
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	74.59	99.87	8.00	198.00	0.00	0.00	0.50			
2	A	80.76	72.34	8.00	178.00	0.00	0.00	0.50			
3	A	75.39	35.17	8.00	162.00	0.00	0.00	0.50			
4	A	56.76	11.73	8.00	339.00	0.00	0.00	0.50			
5	B	15.03	62.58	6.00	115.00	0.00	0.00	0.50			
6	B	37.01	48.87	6.00	47.00	5.00	0.00	0.50			
7	B	36.39	67.68	6.00	243.00	5.00	0.00	0.50			
8	B	56.06	35.09	6.00	48.00	0.00	0.00	0.50			
9	B	59.53	59.63	6.00	229.00	0.00	0.00	0.50			

Polar Diagrams

Luminaire A BGP292 DX70

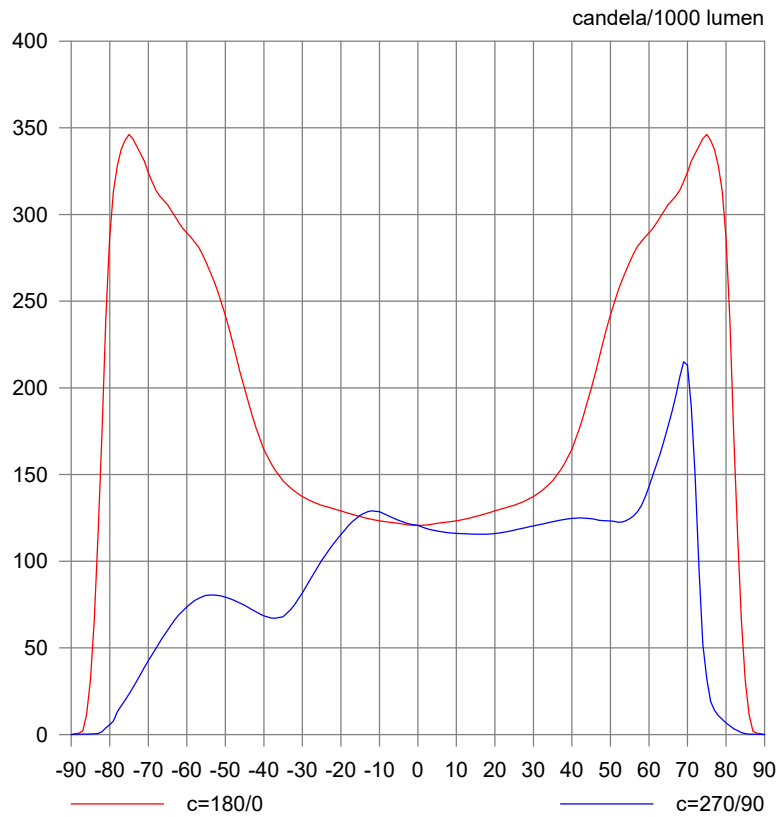


Luminaire B BGP291 DX70

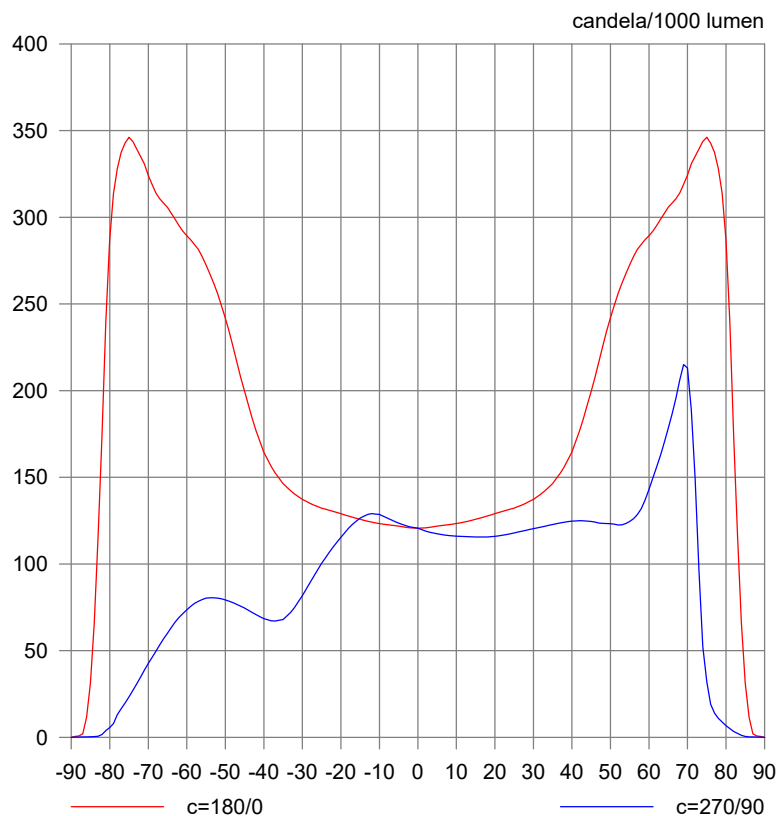


Cartesian Diagrams

Luminaire A BGP292 DX70

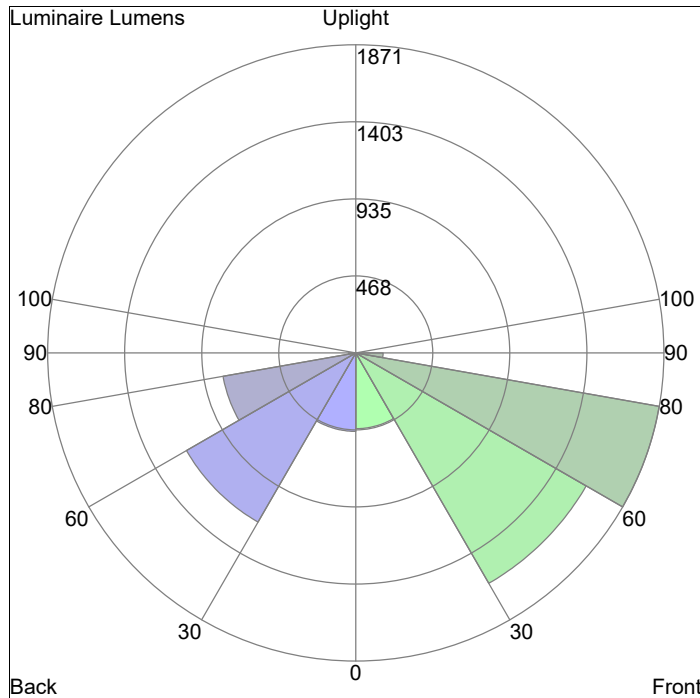


Luminaire B BGP291 DX70



Luminaire Classification System (LCS) Graphs

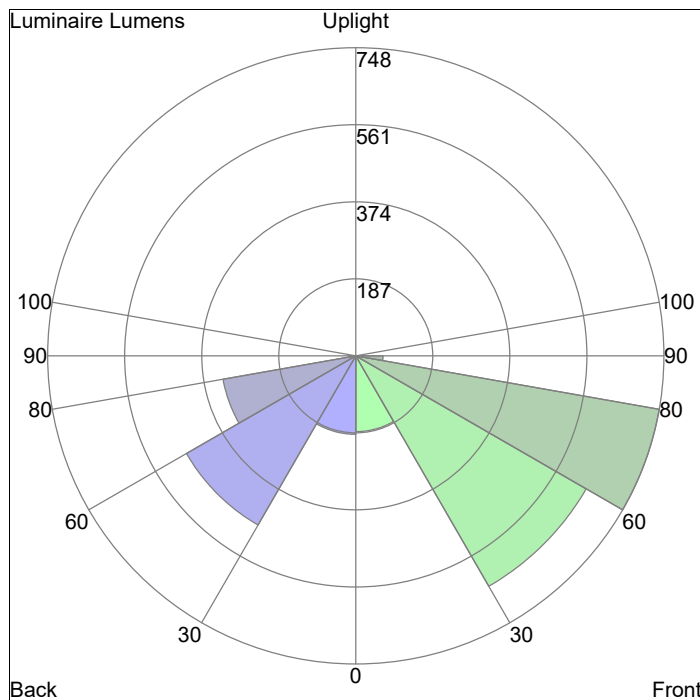
Luminaire A BGP292 DX70



LCS	Lumens	%Lamp	%Lum
FL	460.6	5.1	6.9
FM	1615.7	18.0	24.3
FH	1871.0	20.8	28.2
FVH	166.4	1.8	2.5
BL	476.9	5.3	7.2
BM	1186.4	13.2	17.9
BH	817.8	9.1	12.3
BVH	43.2	0.5	0.7
UL	0.0	0.0	0.0
UH	0.0	0.0	0.0
Total	6638.0	73.8	100.0

BUG rating=B3-U0-G2

Luminaire B BGP291 DX70



LCS	Lumens	%Lamp	%Lum
FL	184.2	5.1	6.9
FM	646.3	18.0	24.3
FH	748.4	20.8	28.2
FVH	66.6	1.8	2.5
BL	190.7	5.3	7.2
BM	474.6	13.2	17.9
BH	327.1	9.1	12.3
BVH	17.3	0.5	0.7
UL	0.0	0.0	0.0
UH	0.0	0.0	0.0
Total	2655.2	73.8	100.0

BUG rating=B1-U0-G1

Horizontal Illuminance (lux)

PARKING & CIRC (P4)

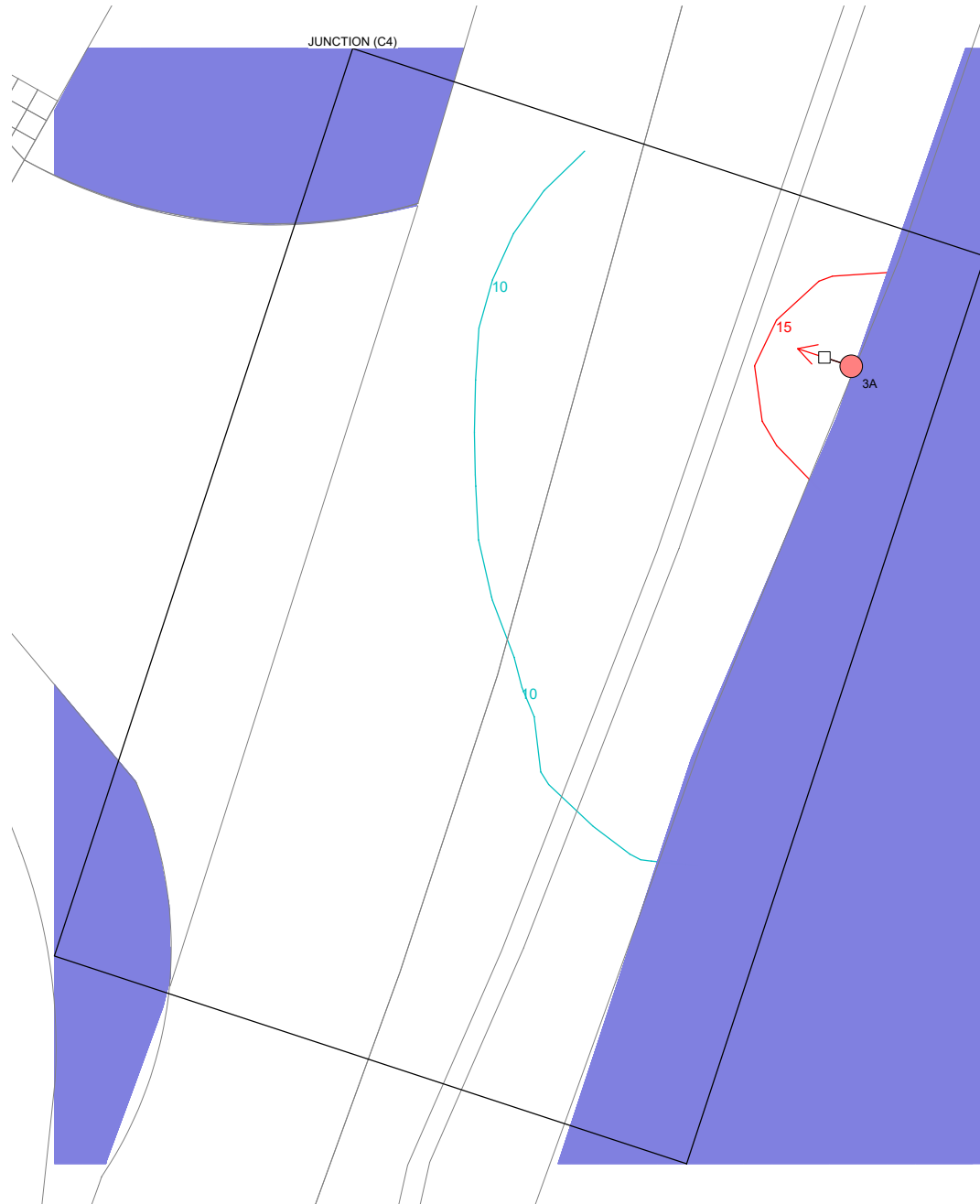


Results

Eav	5.49
Emin	1.17
Emax	12.11
Emin/Emax	0.10
Emin/Eav	0.21

Horizontal Illuminance (lux)

JUNCTION (C4)

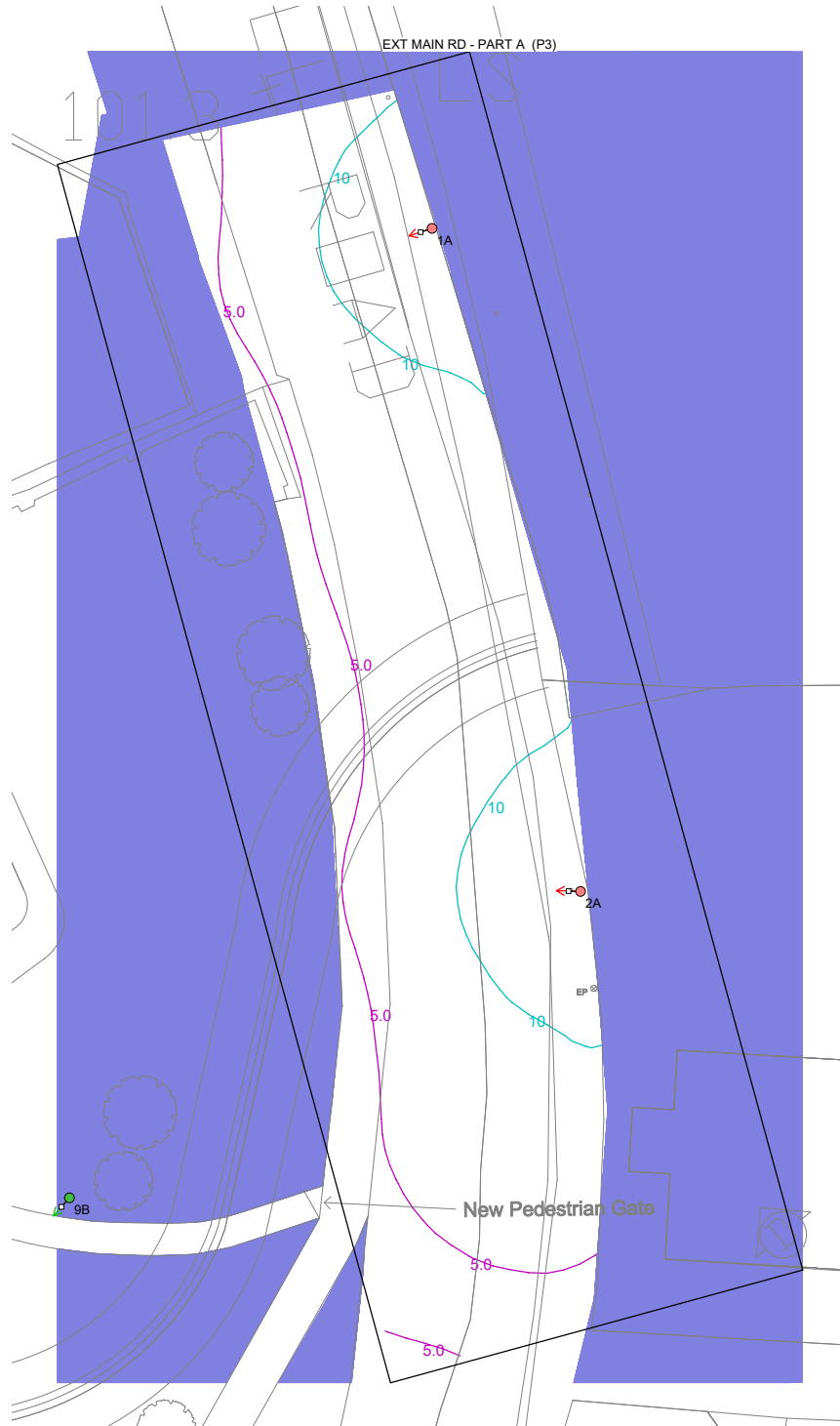


Results

Eav	10.07
Emin	7.34
Emax	15.49
Emin/Emax	0.47
Emin/Eav	0.73

Horizontal Illuminance (lux)

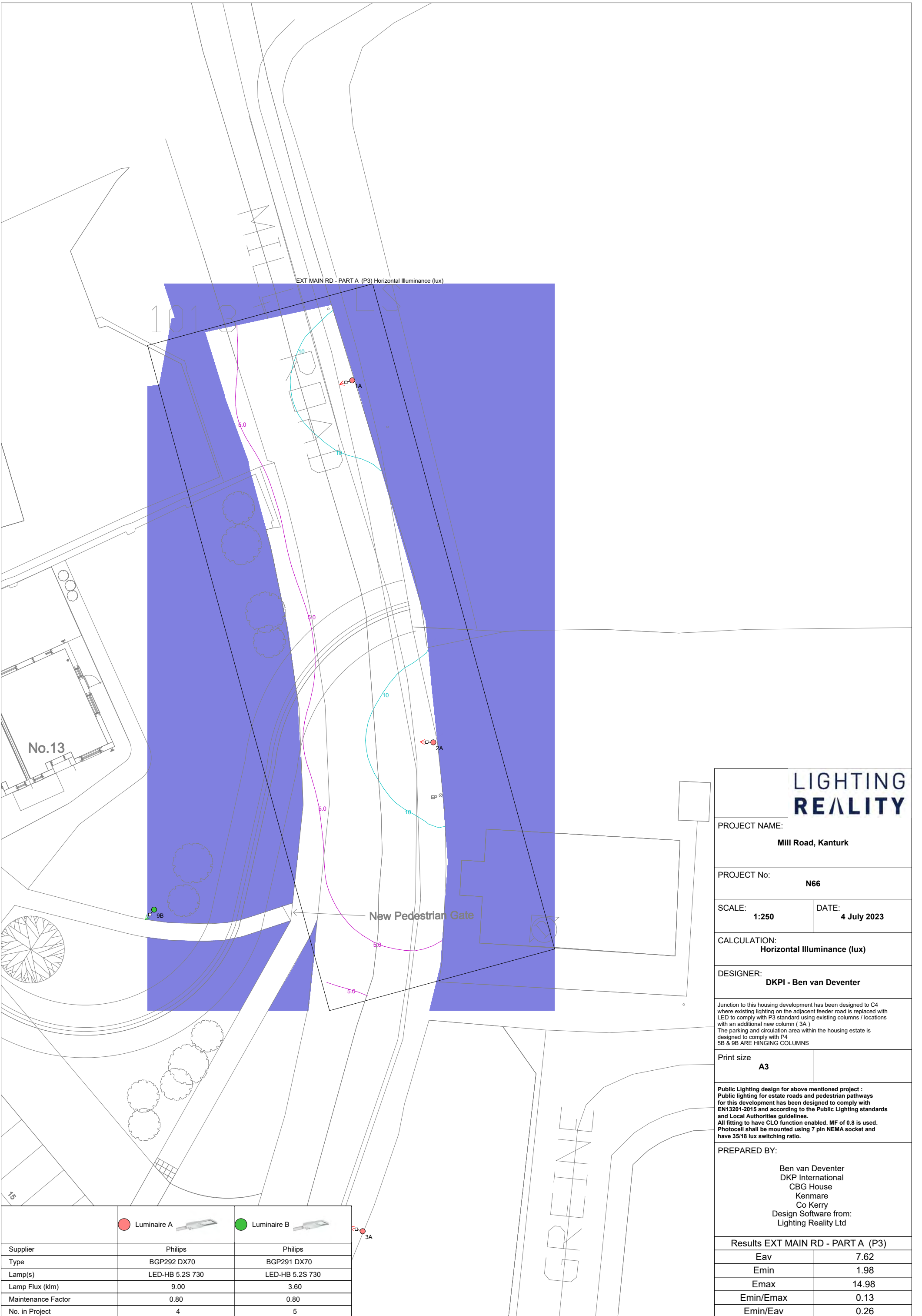
EXT MAIN RD - PART A (P3)



Results





Eav	7.62
Emin	1.98
Emax	14.98
Emin/Emax	0.13
Emin/Eav	0.26

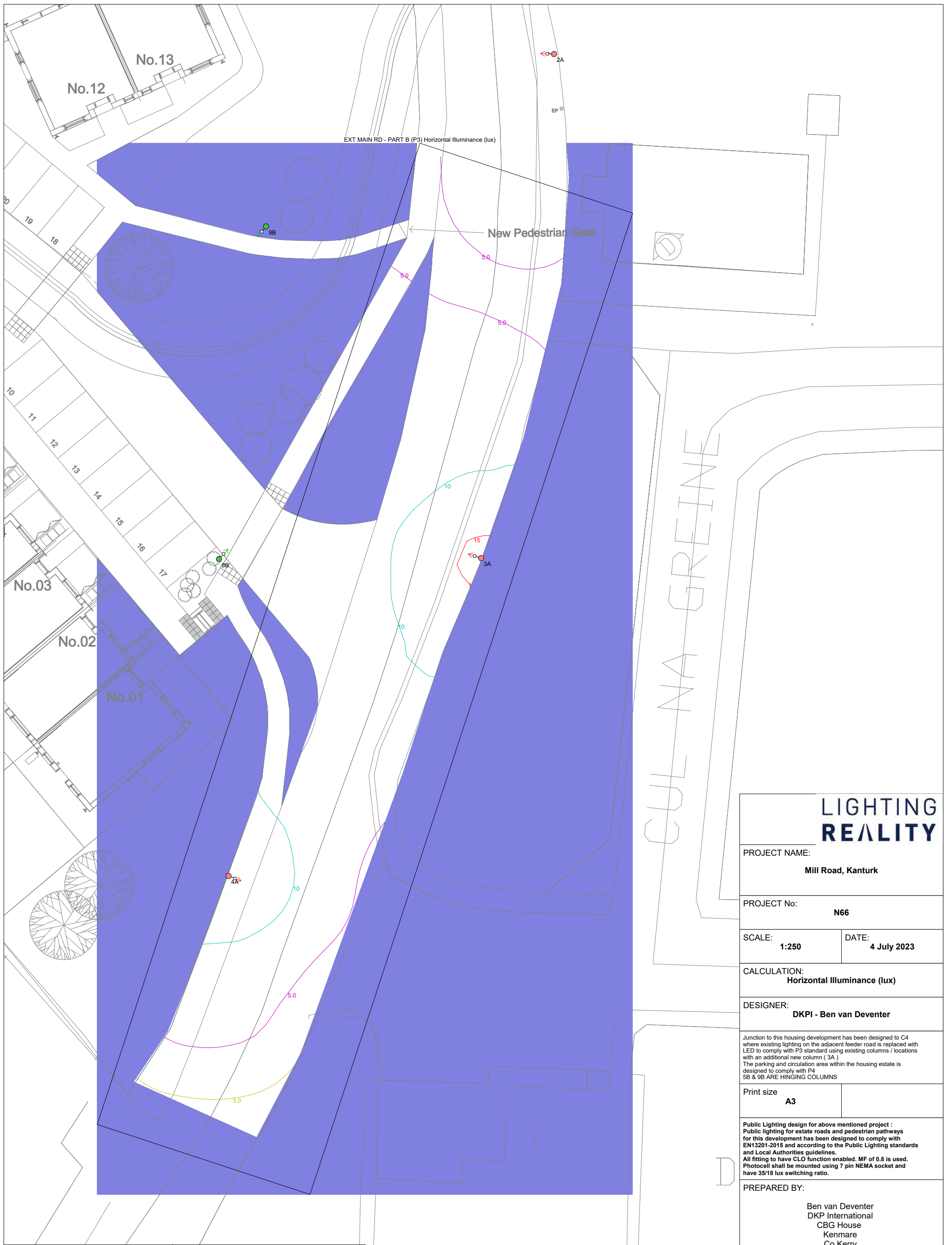
8514950256



LIGHTING REALITY

PROJECT NAME: Mill Road, Kanturk	
PROJECT No: N66	
SCALE: 1:250	DATE: 4 July 2023
CALCULATION: Horizontal Illuminance (lux)	
DESIGNER: DKPI - Ben van Deventer	
<p>Junction to this housing development has been designed to C4 where existing lighting on the adjacent feeder road is replaced with LED to comply with P3 standard using existing columns / locations with an additional new column (3A) The parking and circulation area within the housing estate is designed to comply with P4 5B & 9B ARE HINGING COLUMNS</p>	
Print size A3	
<p>Public Lighting design for above mentioned project : Public lighting for estate roads and pedestrian pathways for this development has been designed to comply with EN13201-2015 and according to the Public Lighting standards and Local Authorities guidelines. All fitting to have CLO function enabled. MF of 0.8 is used. Photocell shall be mounted using 7 pin NEMA socket and have 35/18 lux switching ratio.</p>	
PREPARED BY: Ben van Deventer DKP International CBG House Kenmare Co Kerry Design Software from: Lighting Reality Ltd	
Results EXT MAIN RD - PART A (P3)	
Eav	7.62
Emin	1.98
Emax	14.98
Emin/Emax	0.13
Emin/Eav	0.26

	 Luminaire A 	 Luminaire B 
Supplier	Philips	Philips
Type	BGP292 DX70	BGP291 DX70
Lamp(s)	LED-HB 5.2S 730	LED-HB 5.2S 730
Lamp Flux (klm)	9.00	3.60
Maintenance Factor	0.80	0.80
No. in Project	4	5



LIGHTING REALITY

PROJECT NAME:
Mill Road, Kanturk

PROJECT No:
N66

SCALE: **1:250** DATE: **4 July 2023**

CALCULATION:
Horizontal Illuminance (lux)

DESIGNER:
DKPI - Ben van Deventer

Junction to this housing development has been designed to C4 where existing lighting on the adjacent feeder road is replaced with LED to comply with P3 standard using existing columns / locations with an additional new column (3A)
The parking and circulation area within the housing estate is designed to comply with P4
5B & 9B ARE HINGING COLUMNS

Print size
A3

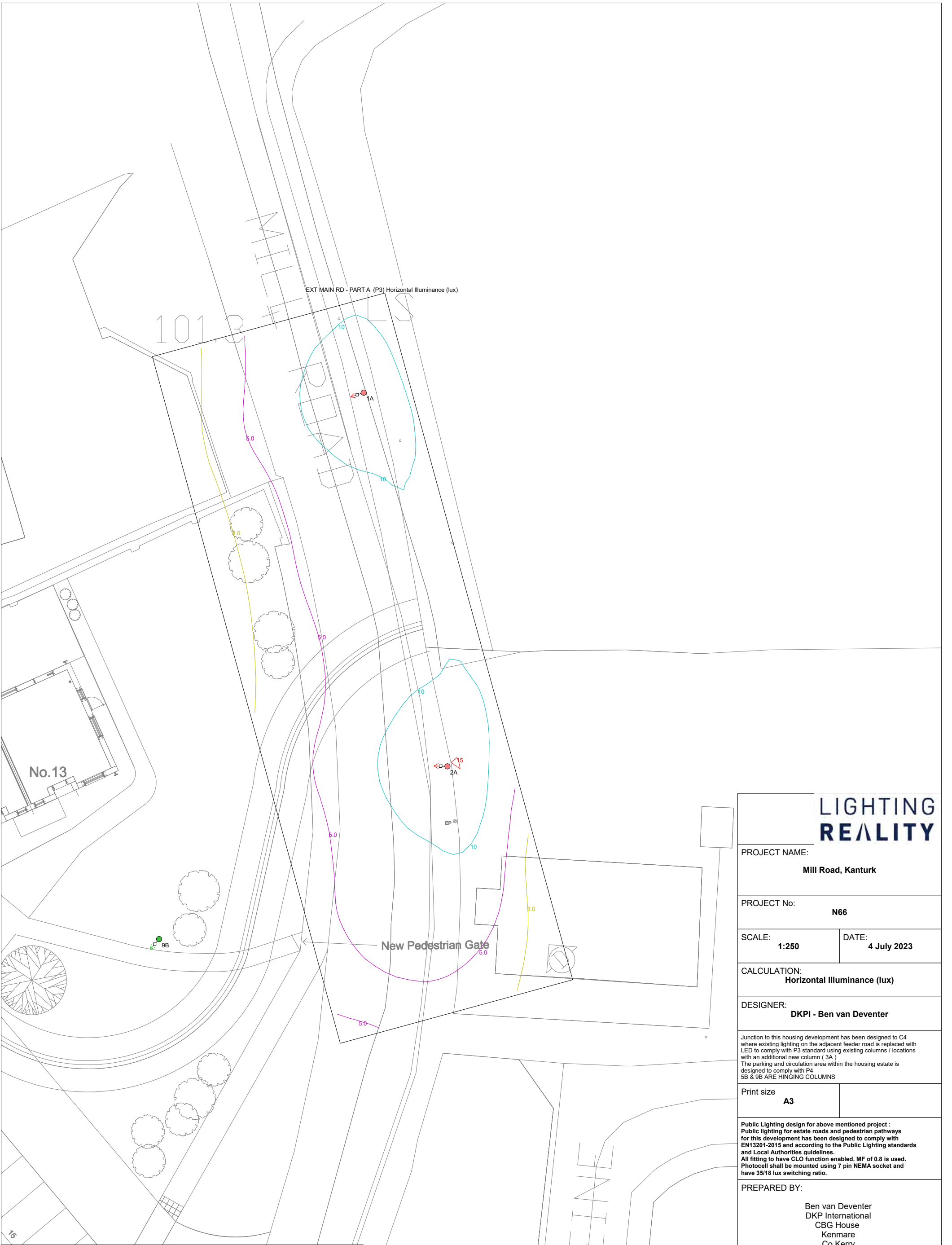
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PREPARED BY:

Ben van Deventer
DKP International
CBG House
Kenmare
Co Kerry
Design Software from:
Lighting Reality Ltd

Results EXT MAIN RD - PART B (P3)	
Eav	7.54
Emin	2.22
Emax	15.61
Emin/Emax	0.14
Emin/Eav	0.29

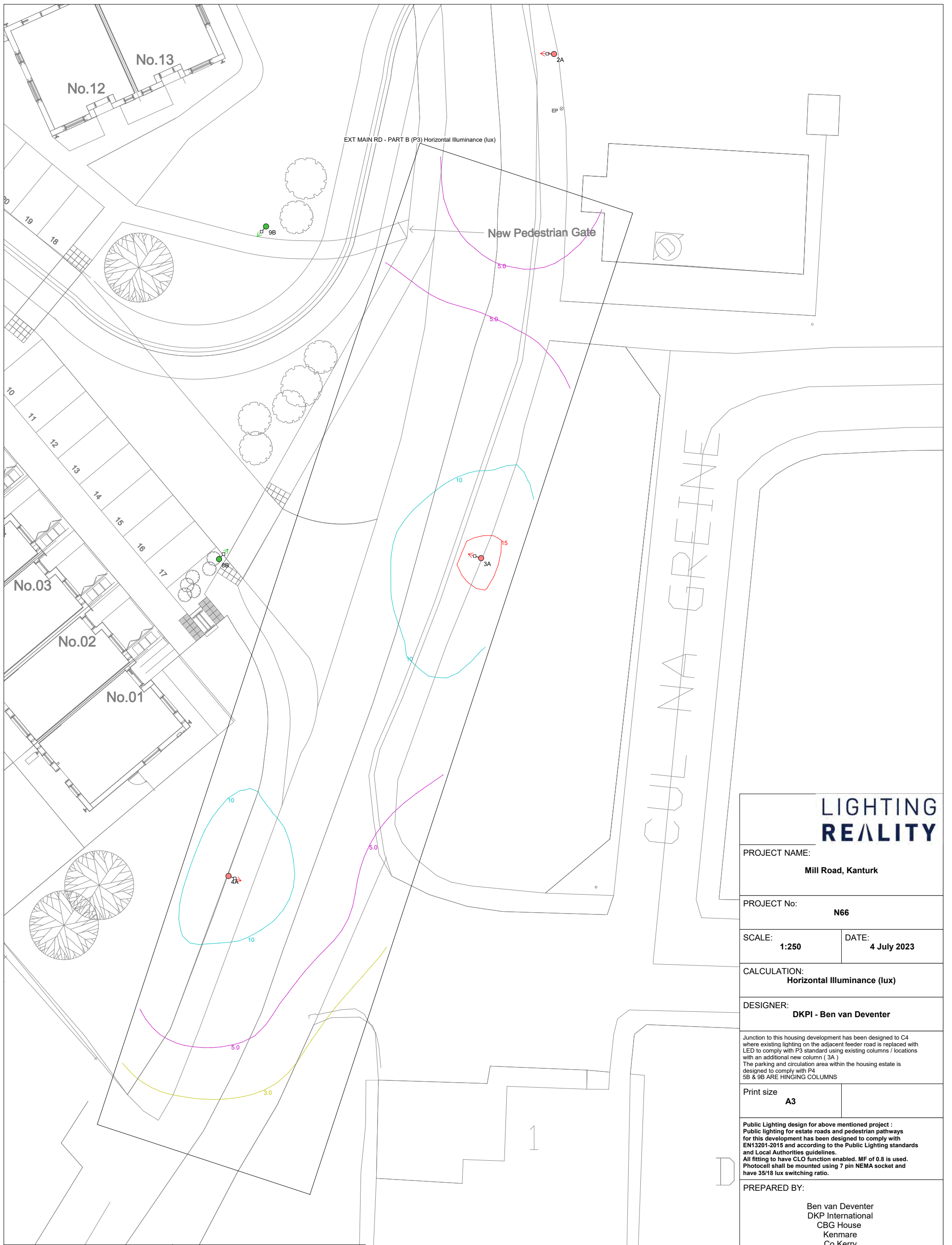
	Luminaire A	Luminaire B
Supplier	Philips	Philips
Type	BGP292 DX70	BGP291 DX70
Lamp(s)	LED-HB 5.2S 730	LED-HB 5.2S 730
Lamp Flux (klm)	9.00	3.60
Maintenance Factor	0.80	0.80
No. in Project	4	5



LIGHTING REALITY

PROJECT NAME: Mill Road, Kanturk	
PROJECT No: N66	
SCALE: 1:250	DATE: 4 July 2023
CALCULATION: Horizontal Illuminance (lux)	
DESIGNER: DKPI - Ben van Deventer	
<p>Junction to this housing development has been designed to C4 where existing lighting on the adjacent feeder road is replaced with LED to comply with P3 standard using existing columns / locations with an additional new column (3A)</p> <p>The parking and circulation area within the housing estate is designed to comply with P4</p> <p>5B & 9B ARE HINGING COLUMNS</p>	
Print size A3	
<p>Public Lighting design for above mentioned project : Public lighting for estate roads and pedestrian pathways for this development has been designed to comply with EN13201-2015 and according to the Public Lighting standards and Local Authorities guidelines.</p> <p>All fitting to have CLO function enabled. MF of 0.8 is used. Photocell shall be mounted using 7 pin NEMA socket and have 35/18 lux switching ratio.</p>	
PREPARED BY: Ben van Deventer DKP International CBG House Kenmare Co Kerry Design Software from: Lighting Reality Ltd	
Results EXT MAIN RD - PART A (P3)	
Eav	7.62
Emin	1.98
Emax	14.98
Emin/Emax	0.13
Emin/Eav	0.26

	Luminaire A	Luminaire B
Supplier	Philips	Philips
Type	BGP292 DX70	BGP291 DX70
Lamp(s)	LED-HB 5.2S 730	LED-HB 5.2S 730
Lamp Flux (klm)	9.00	3.60
Maintenance Factor	0.80	0.80
No. in Project	4	5



LIGHTING REALITY

PROJECT NAME:
Mill Road, Kanturk

PROJECT No:
N66

SCALE: **1:250** DATE: **4 July 2023**

CALCULATION:
Horizontal Illuminance (lux)

DESIGNER:
DKPI - Ben van Deventer

Junction to this housing development has been designed to C4 where existing lighting on the adjacent feeder road is replaced with LED to comply with P3 standard using existing columns / locations with an additional new column (3A)
The parking and circulation area within the housing estate is designed to comply with P4
5B & 9B ARE HINGING COLUMNS

Print size
A3

Public Lighting design for above mentioned project :
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CBG House
Kenmare
Co Kerry
Design Software from:
Lighting Reality Ltd

Results EXT MAIN RD - PART B (P3)	
Eav	7.54
Emin	2.22
Emax	15.61
Emin/Emax	0.14
Emin/Eav	0.29

	Luminaire A	Luminaire B
Supplier	Philips	Philips
Type	BGP292 DX70	BGP291 DX70
Lamp(s)	LED-HB 5.2S 730	LED-HB 5.2S 730
Lamp Flux (klm)	9.00	3.60
Maintenance Factor	0.80	0.80
No. in Project	4	5



LIGHTING REALITY

PROJECT NAME:
Mill Road, Kanturk

PROJECT No:
N66

SCALE: **1:125** DATE: **4 July 2023**

CALCULATION:
Horizontal Illuminance (lux)

DESIGNER:
DKPI - Ben van Deventer

Junction to this housing development has been designed to C4 where existing lighting on the adjacent feeder road is replaced with LED to comply with P3 standard using existing columns / locations with an additional new column (3A)
The parking and circulation area within the housing estate is designed to comply with P4
5B & 9B ARE HINGING COLUMNS

Print size
A3

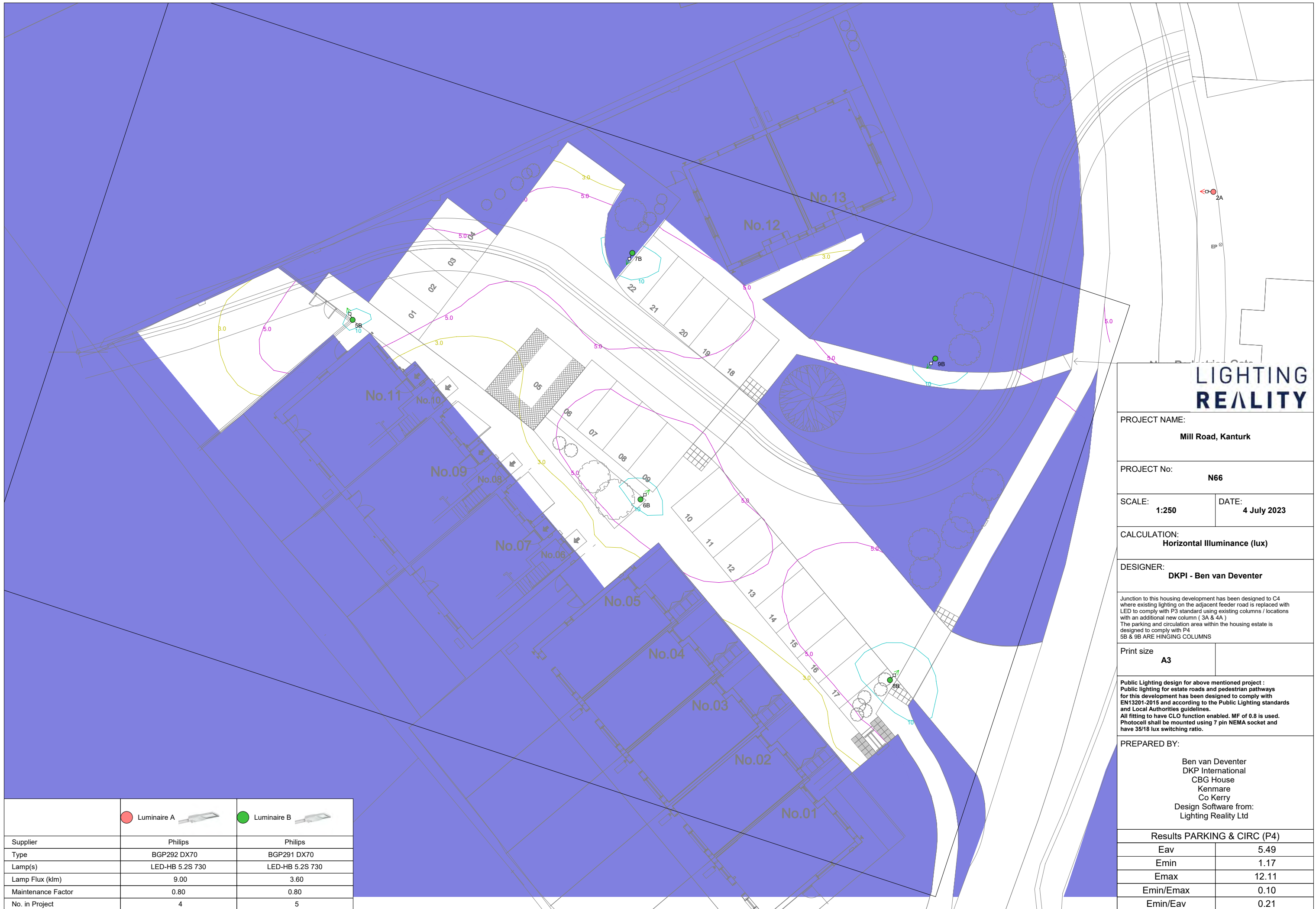
Public Lighting design for above mentioned project :
Public lighting for estate roads and pedestrian pathways for this development has been designed to comply with EN13201-2015 and according to the Public Lighting standards and Local Authorities guidelines.
All fitting to have CLO function enabled. MF of 0.8 is used.
Photozell shall be mounted using 7 pin NEMA socket and have 35/16 lux switching ratio.

PREPARED BY:

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DKP International
CBG House
Kenmare
Co Kerry
Design Software from:
Lighting Reality Ltd

Results JUNCTION (C4)	
Eav	10.07
Emin	7.34
Emax	15.49
Emin/Emax	0.47
Emin/Eav	0.73

	Luminaire A	Luminaire B
Supplier	Philips	Philips
Type	BGP292 DX70	BGP291 DX70
Lamp(s)	LED-HB 5.2S 730	LED-HB 5.2S 730
Lamp Flux (klm)	9.00	3.60
Maintenance Factor	0.80	0.80
No. in Project	4	5



LIGHTING REALITY

PROJECT NAME: Mill Road, Kanturk	
PROJECT No: N66	
SCALE: 1:250	DATE: 4 July 2023
CALCULATION: Horizontal Illuminance (lux)	
DESIGNER: DKPI - Ben van Deventer	
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PREPARED BY:	
<p>Ben van Deventer DKP International CBG House Kenmare Co Kerry Design Software from: Lighting Reality Ltd</p>	
Results PARKING & CIRC (P4)	
Eav	5.49
Emin	1.17
Emax	12.11
Emin/Emax	0.10
Emin/Eav	0.21

	Luminaire A	Luminaire B
Supplier	Philips	Philips
Type	BGP292 DX70	BGP291 DX70
Lamp(s)	LED-HB 5.2S 730	LED-HB 5.2S 730
Lamp Flux (klm)	9.00	3.60
Maintenance Factor	0.80	0.80
No. in Project	4	5



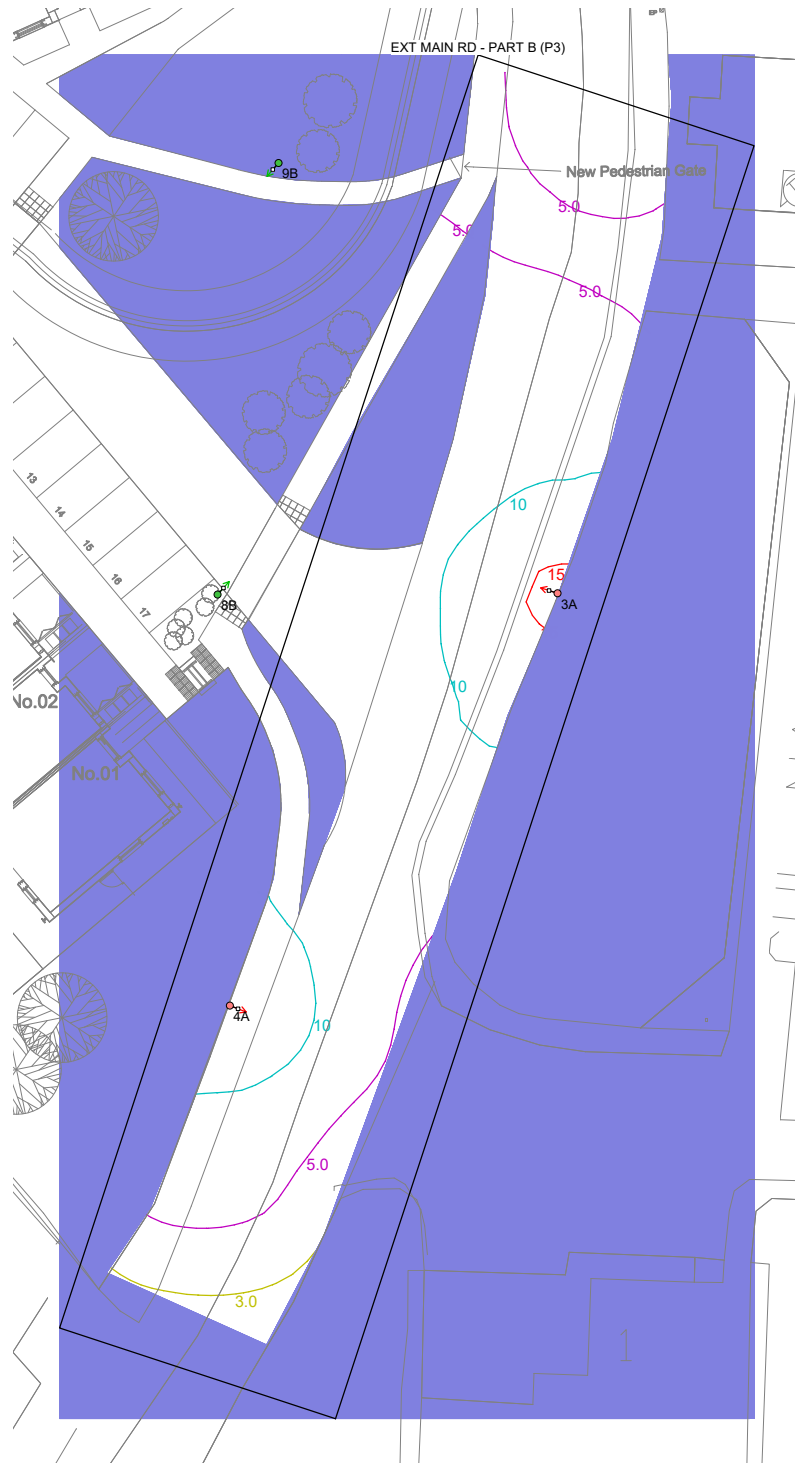
LIGHTING REALITY

PROJECT NAME: Mill Road, Kanturk	
PROJECT No: N66	
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CALCULATION: Horizontal Illuminance (lux)	
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PREPARED BY: Ben van Deventer DKP International CBG House Kenmare Co Kerry Design Software from: Lighting Reality Ltd	
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Eav	5.49
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	Luminaire A	Luminaire B
Supplier	Philips	Philips
Type	BGP292 DX70	BGP291 DX70
Lamp(s)	LED-HB 5.2S 730	LED-HB 5.2S 730
Lamp Flux (klm)	9.00	3.60
Maintenance Factor	0.80	0.80
No. in Project	4	5

Horizontal Illuminance (lux)

EXT MAIN RD - PART B (P3)



Results

Eav	7.54
Emin	2.22
Emax	15.61
Emin/Emax	0.14
Emin/Eav	0.29