

DATE: 29 April 2025
DESIGNER: DKPI
PROJECT No: O90
PROJECT NAME: Aghada, Co Cork

**LIGHTING
REALITY**

To maintain similar make fittings used in this area we have used DW Winsor fittings for these calculations.
Lighting units identified as 1B, 2B and 6A are existing but have been included for calculations purposes.
The proposed fittings will bring lux levels to comply with cat. P3 for the areas shown inside masked zone.

Aghada - housing

**Public Lighting design for the above mentioned project:
Public lighting for estate roads and pedestrian 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 -2.6m x -3.0m
Area 55.2m x 85.9m
Sample Spacing 0.99m x 1.00m

Luminaires

Luminaire A Data

Supplier	
Type	KIRIUM PRO 1 24LED 3k C2 450mA UMS UG 42 0028 0000 100
Lamp(s)	24 x 3k LED
Lamp Flux (klm)	4.45
File Name	KIRIUM PRO 1 24LED 3k C2 450mA UMS UG 42 0028 0000 100.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	794.0, 43.8, 0.0
No. in Project	4

Luminaire B Data

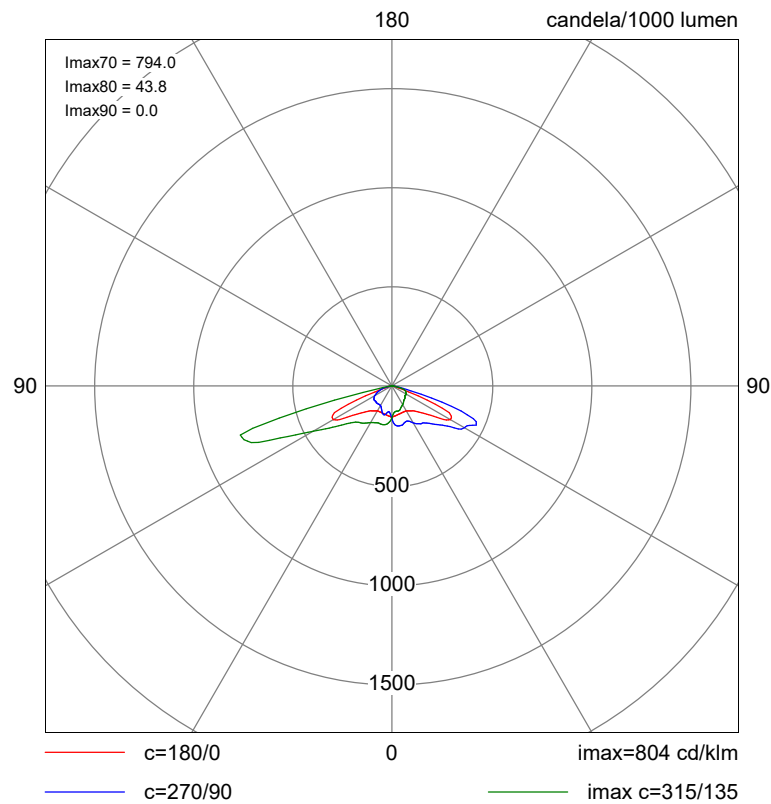
Supplier	
Type	KIRIUM PRO 1 24LED 3k C2 300mA UMS UG 42 0019 0000 100
Lamp(s)	24 x 3k LED
Lamp Flux (klm)	2.92
File Name	KIRIUM PRO 1 24LED 3k C2 300mA UMS UG 42 0019 0000 100.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	794.0, 43.8, 0.0
No. in Project	2

Layout

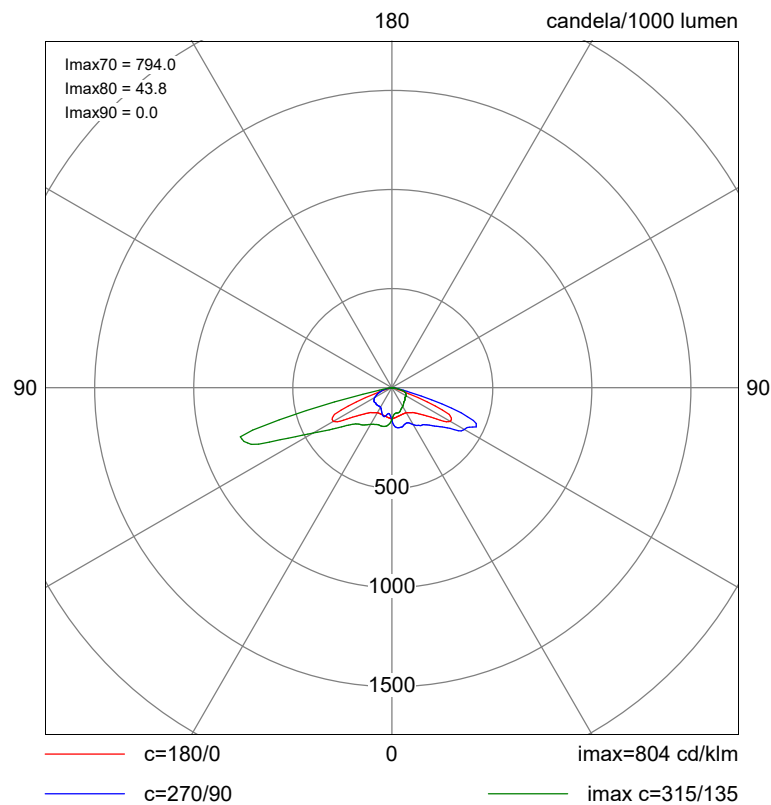
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	B	50.91	15.02	6.00	193.00	0.00	0.00	0.50			
2	B	-1.31	5.42	6.00	284.00	0.00	0.00	0.50			
3	A	28.64	15.13	6.00	280.00	0.00	0.00	0.50			
4	A	34.76	31.13	6.00	14.00	0.00	0.00	0.50			
5	A	32.22	47.41	6.00	14.00	0.00	0.00	0.50			
6	A	30.57	78.72	6.00	279.00	0.00	0.00	0.50			

Polar Diagrams

Luminaire A KIRIUM PRO 1 24LED 3k C2 450mA UMSUG 42 0028 0000 100

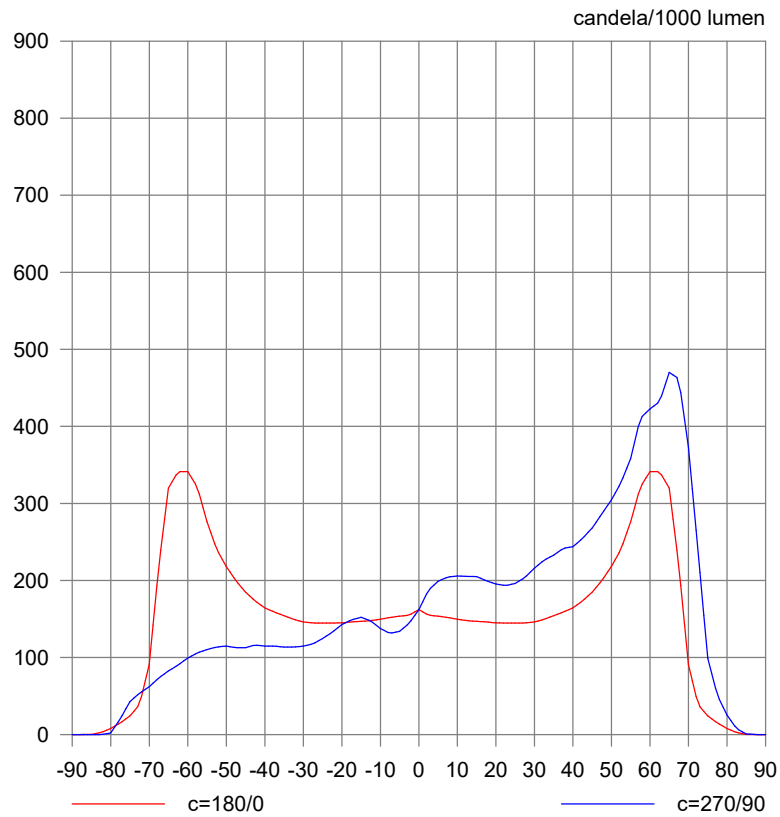


Luminaire B KIRIUM PRO 1 24LED 3k C2 300mA UMSUG 42 0019 0000 100

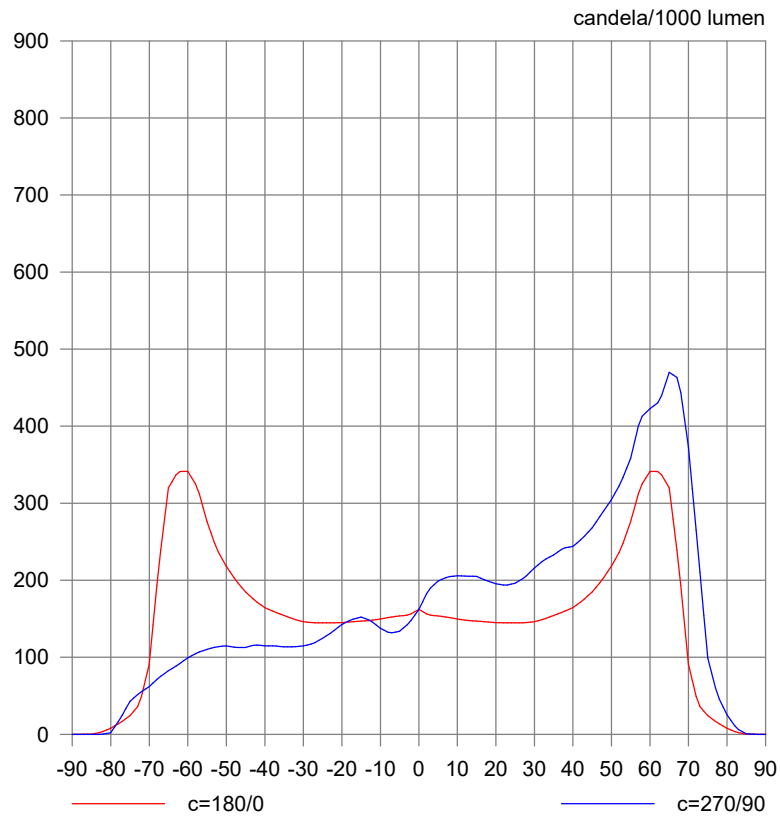


Cartesian Diagrams

Luminaire A KIRIUM PRO 1 24LED 3k C2 450mA UMSUG 42 0028 0000 100

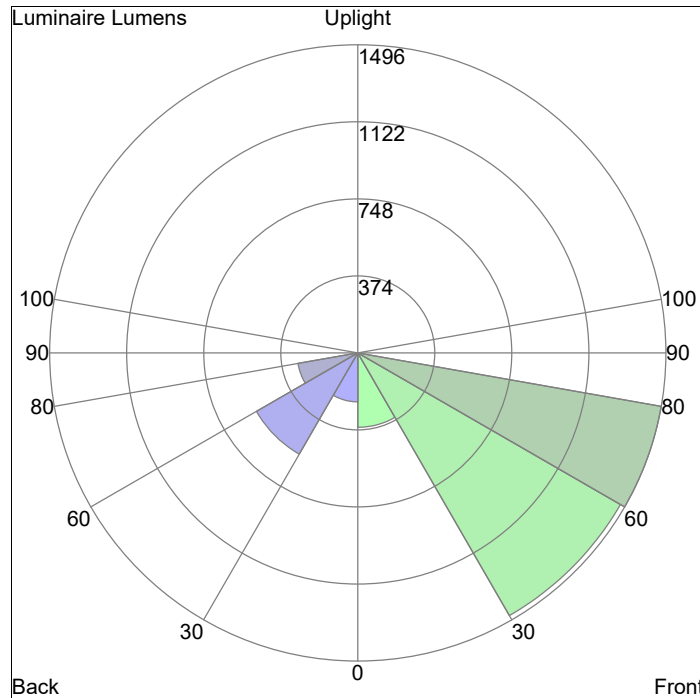


Luminaire B KIRIUM PRO 1 24LED 3k C2 300mA UMSUG 42 0019 0000 100



Luminaire Classification System (LCS) Graphs

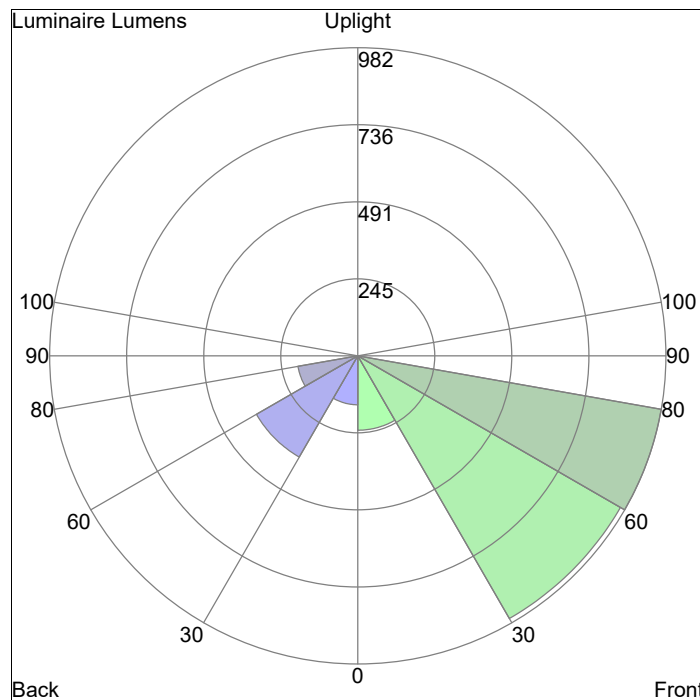
Luminaire A KIRIUM PRO 1 24LED 3k C2 450mA UMSUG 42 0028 0000 100



LCS	Lumens	%Lamp	%Lum
FL	361.5	8.1	8.1
FM	1472.5	33.1	33.1
FH	1495.9	33.6	33.6
FVH	12.0	0.3	0.3
BL	237.9	5.4	5.4
BM	567.9	12.8	12.8
BH	294.6	6.6	6.6
BVH	5.0	0.1	0.1
UL	0.0	0.0	0.0
UH	0.0	0.0	0.0
Total	4447.3	100.0	100.0

BUG rating=B2-U0-G1

Luminaire B KIRIUM PRO 1 24LED 3k C2 300mA UMSUG 42 0019 0000 100

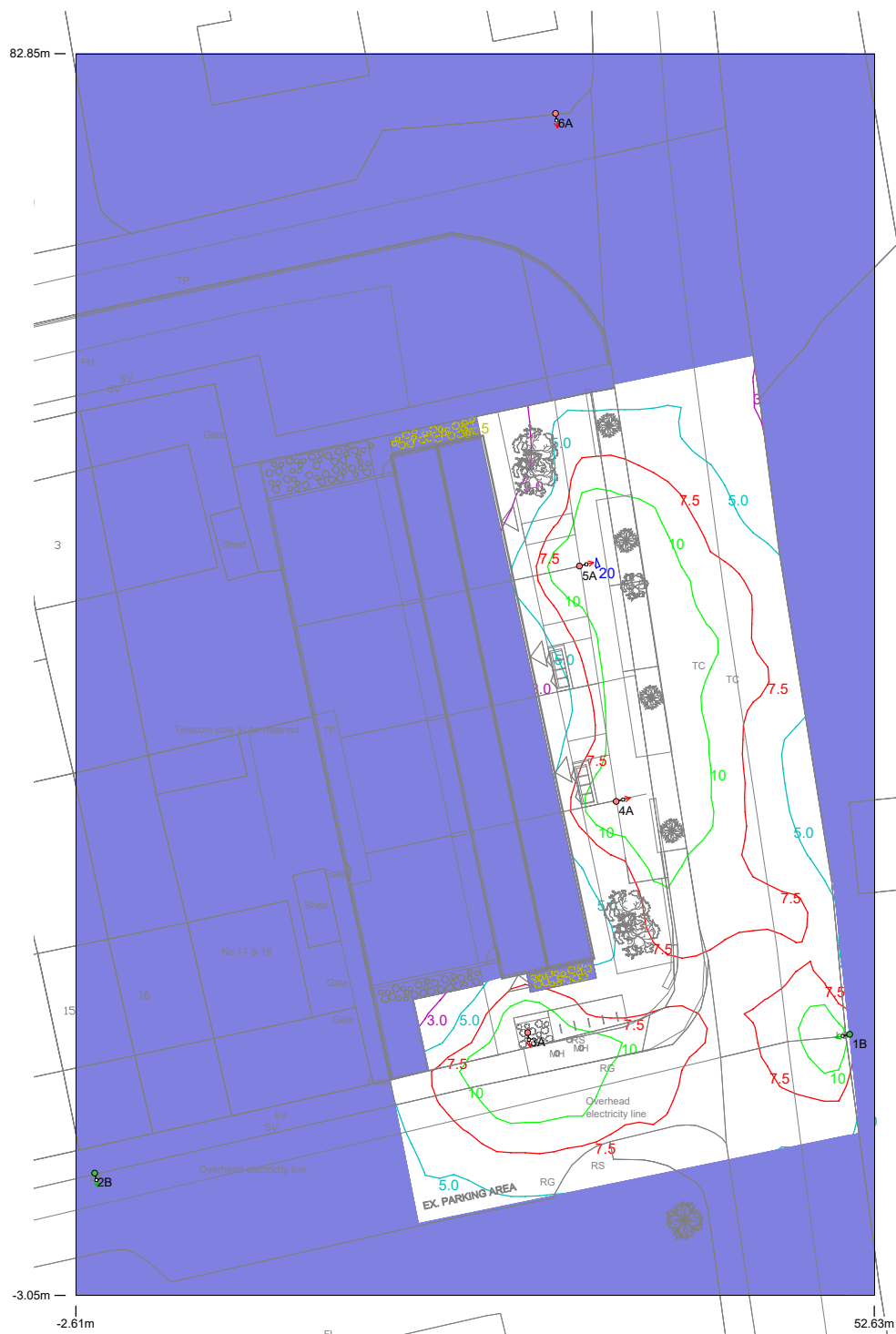


LCS	Lumens	%Lamp	%Lum
FL	237.3	8.1	8.1
FM	966.5	33.1	33.1
FH	981.9	33.6	33.6
FVH	7.9	0.3	0.3
BL	156.2	5.4	5.4
BM	372.7	12.8	12.8
BH	193.4	6.6	6.6
BVH	3.3	0.1	0.1
UL	0.0	0.0	0.0
UH	0.0	0.0	0.0
Total	2919.1	100.0	100.0

BUG rating=B1-U0-G1

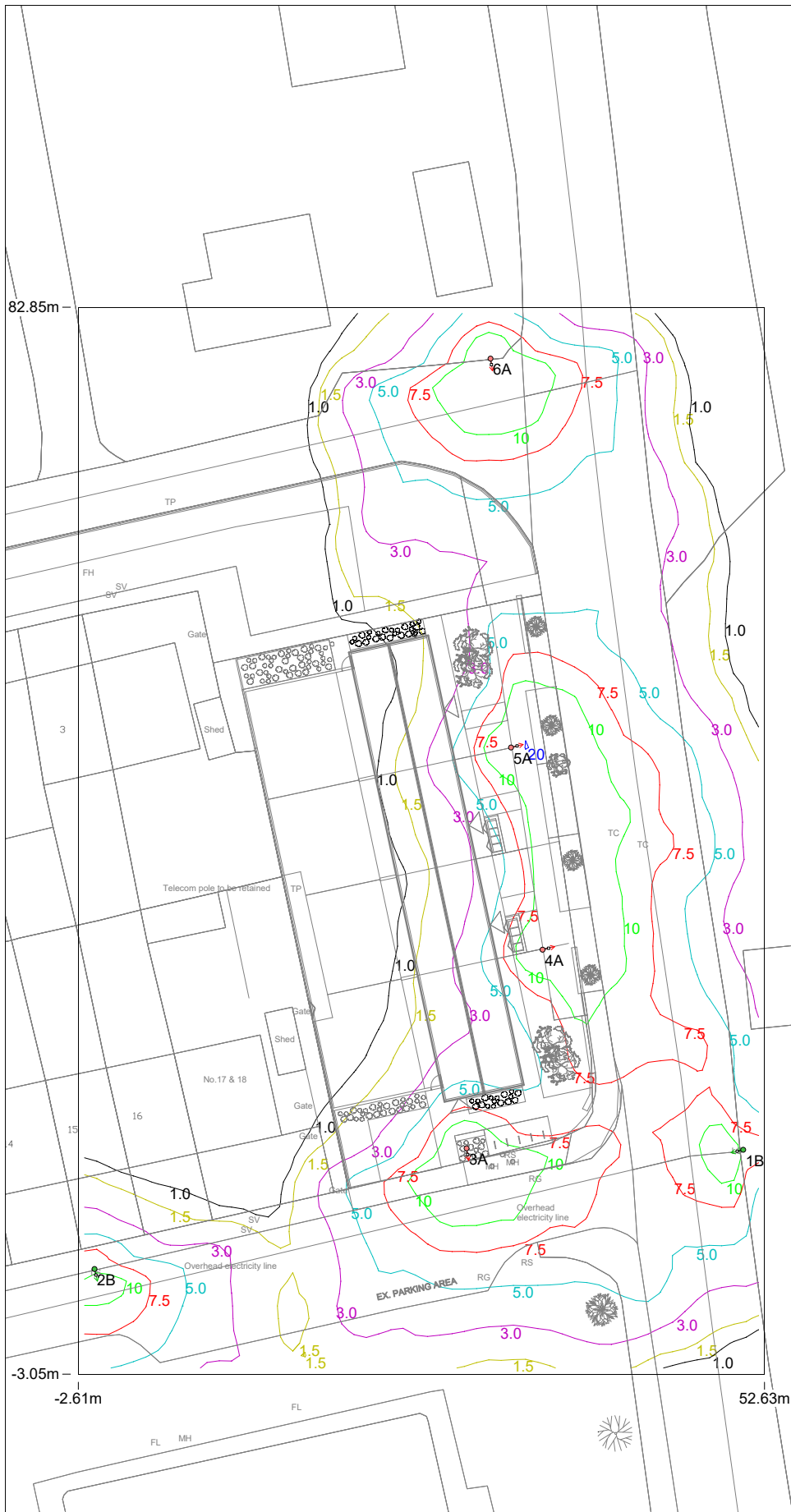
Horizontal Illuminance (lux)

Grid 1



Results

Eav	7.97
Emin	1.57
Emax	20.35
Emin/Emax	0.08
Emin/Eav	0.20



PROJECT NAME:
Aghada, Co Cork

PROJECT No:
O90

SCALE: **1:500** DATE: **29 April 2025**

CALCULATION:
Horizontal Illuminance (lux)

DESIGNER:
DKPI

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PRINT SIZE ;
A4

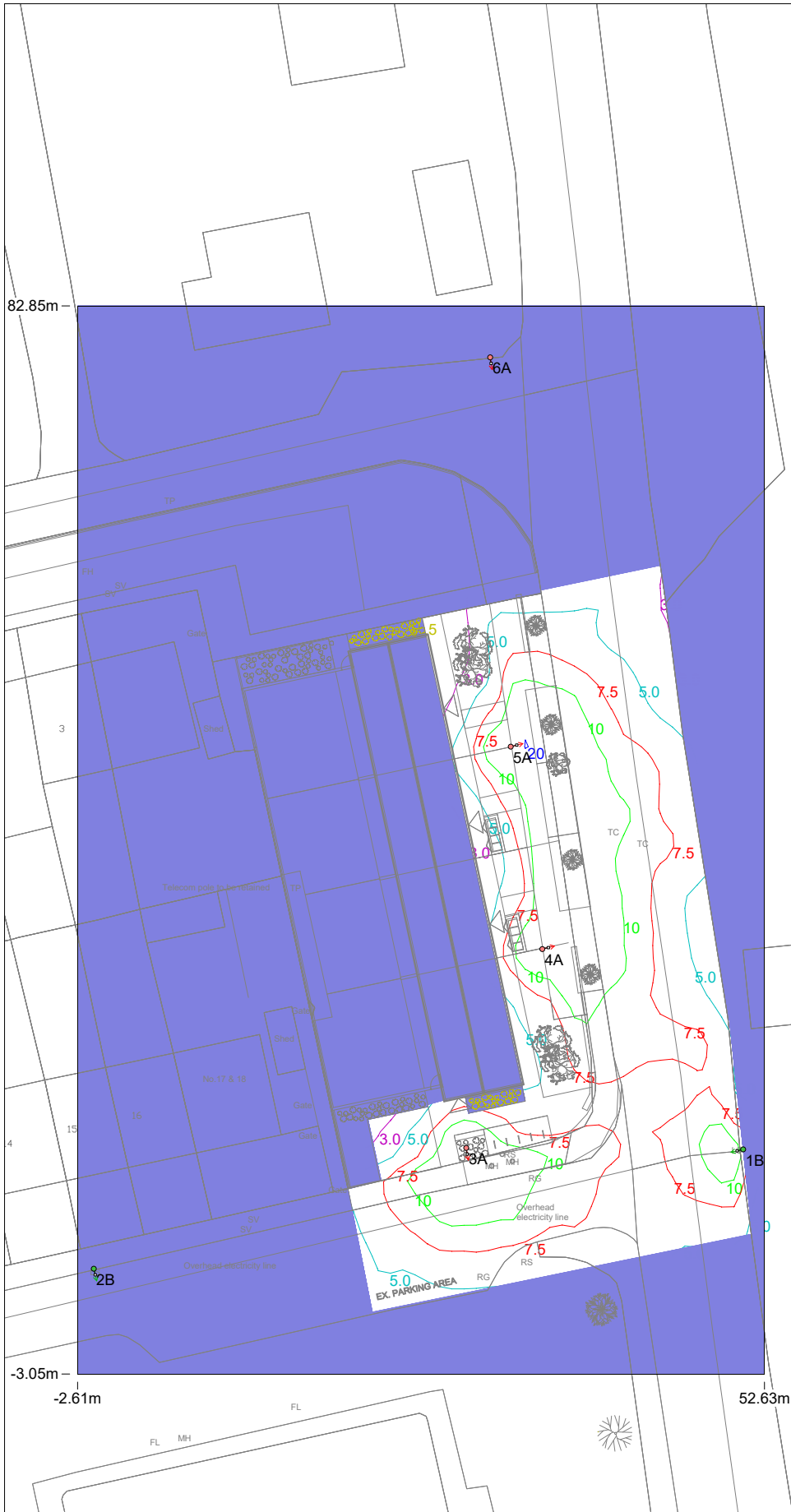
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Type	24 x 3k LED	24 x 3k LED
Lamp(s)	24 x 3k LED	24 x 3k LED
Lamp Flux (klm)	4.45	2.92
Maintenance Factor	0.80	0.80
No. in Project	4	2

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