

DATE: 11 February 2026
DESIGNER: Karol Drapala
PROJECT No: KE/RE/WCB/01
PROJECT NAME: West City Ballincollig Cork



Lighting to IS EN 13201:2 - 2015

Residential Lighting To Class P4
Road Lighting To Class M4
Conflict Zone Lighting To Class C3
Colour temp. 3000k

- A) Philips Lumistreet Eco Gen2 BGS010 DW 2.70klm
- B) Philips Lumistreet BGP291 DRXN1 1.80klm
- C) Philips Lumistreet Eco Gen2 BGS010 DW 9.40klm
- D) Philips Lumistreet BGP292 DW50 10.00klm

C/W Nema 7 Pin Socket & photocell
6m Columns - Estate
8m Columns - Roads

Outdoor Lighting Report

PREPARED BY: Karol Drapala
Lighting Designer

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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	Estate	97.15	56.85	141.43	101.76	1.41	1.50
2	Mechterstadt Road	101.48	38.87	142.18	18.44	1.50	1.42
3	Inishmore Lawn Road	239.13	72.70	18.95	123.90	1.46	1.49
4	Car Park Entrance / Confl...	100.90	46.45	12.52	10.87	1.39	1.55
5	Estate Entrance / Conflict...	223.86	144.43	8.59	10.36	1.43	1.48

Luminaires

Luminaire A Data

Supplier	
Type	LumiStreet gen2 Eco
Lamp(s)	LED27 L96@100kh /730 T25
Lamp Flux (klm)	2.70
File Name	BGS010 T25 FP LED27 L96@100kh-730 D W.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	689.8, 26.2, 0.0
No. in Project	11

Luminaire B Data

Supplier	Philips
Type	BGP291 DRXN1
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	1.80
File Name	LumiStreet Gen2 Micro_BGP291_DRXN1_1800_10LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	1155.3, 26.3, 0.0
No. in Project	8



Luminaire C Data

Supplier	
Type	LumiStreet gen2 Eco
Lamp(s)	LED94 L92@100kh /730 T25
Lamp Flux (klm)	9.40
File Name	BGS010 T25 FP LED94 L92@100kh-730 D W.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	661.9, 25.1, 0.0
No. in Project	6

Luminaire D Data

Supplier	Philips
Type	BGP292 DW50
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	10.00
File Name	LumiStreet Gen2 Mini_BGP292_DW50_1000_40LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	609.4, 39.0, 0.0
No. in Project	3



Layout

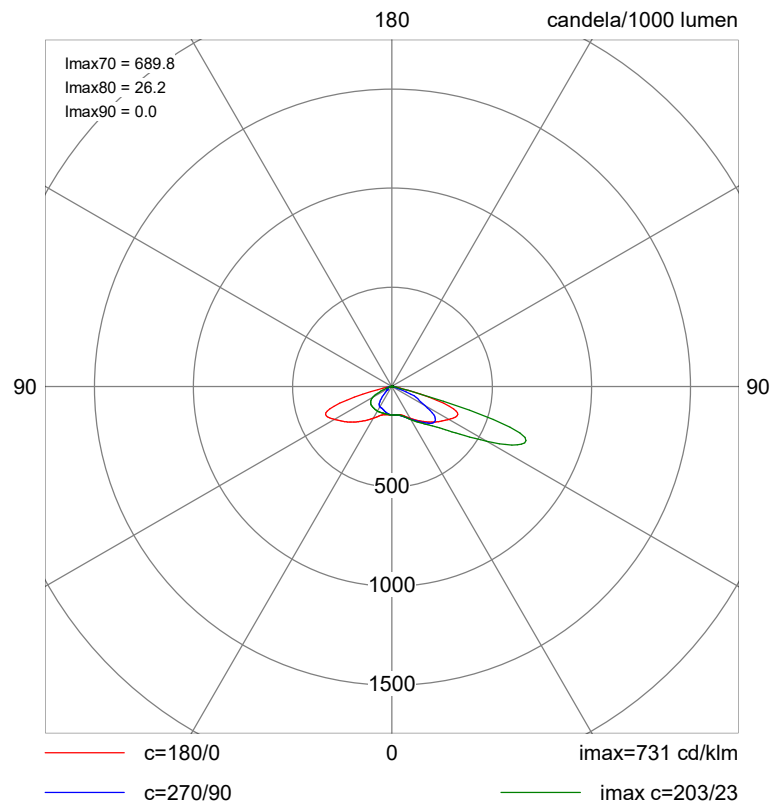
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
2	B	210.17	152.87	6.00	200.00	0.00	0.00	0.40			
3	B	211.14	131.90	6.00	12.00	0.00	0.00	0.40			
4	B	216.47	111.72	6.00	6.00	0.00	0.00	0.40			
5	A	196.55	136.16	6.00	105.00	0.00	0.00	0.40			
6	A	177.33	145.29	6.00	284.00	0.00	0.00	0.40			
7	A	172.61	125.32	6.00	105.00	0.00	0.00	0.40			

Layout Continued

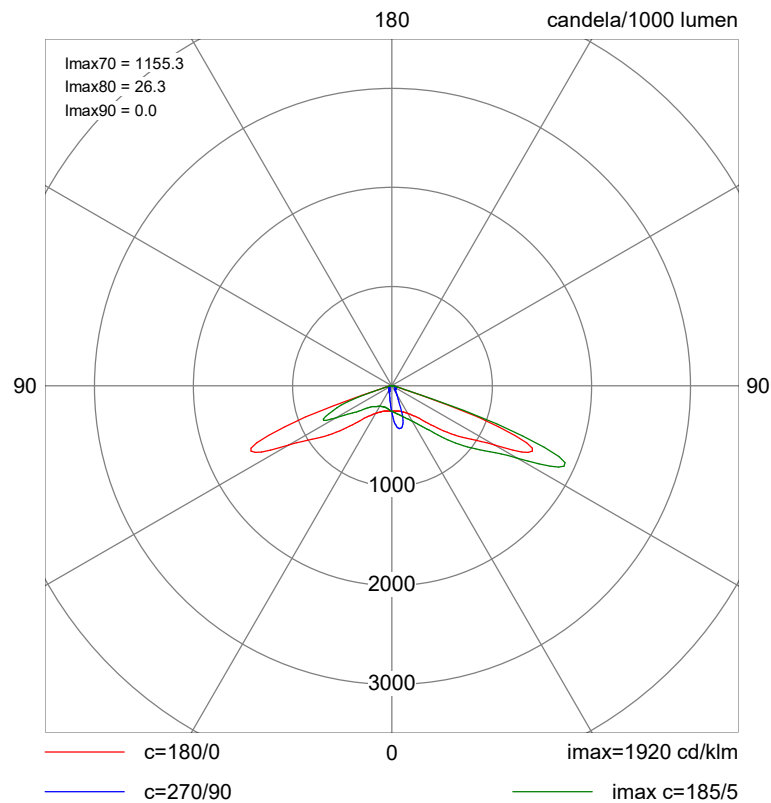
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
8	A	150.17	138.26	6.00	285.00	0.00	0.00	0.40			
9	A	131.22	123.55	6.00	15.00	0.00	0.00	0.40			
10	B	116.68	140.30	6.00	197.00	0.00	0.00	0.40			
11	B	129.72	152.96	6.00	105.00	0.00	0.00	0.40			
12	B	154.09	159.40	6.00	105.00	0.00	0.00	0.40			
13	B	181.14	166.38	6.00	105.00	0.00	0.00	0.40			
14	A	147.32	111.23	6.00	50.00	0.00	0.00	0.40			
15	A	160.69	98.41	6.00	55.00	0.00	0.00	0.40			
16	A	181.39	105.92	6.00	105.00	0.00	0.00	0.40			
17	A	187.73	123.21	6.00	192.00	0.00	0.00	0.40			
18	A	117.94	79.63	6.00	283.00	0.00	0.00	0.40			
19	A	102.86	65.17	6.00	350.00	0.00	0.00	0.40			
20	C	124.17	60.40	8.00	275.00	0.00	0.00	0.40			
21	C	152.48	58.24	8.00	105.00	0.00	0.00	0.40			
22	C	186.30	67.71	8.00	105.00	0.00	0.00	0.40			
23	C	218.95	76.61	8.00	94.00	0.00	0.00	0.40			
EXISTING-24	D	246.10	88.17	8.00	193.00	0.00	0.00	2.00			
EXISTING-25	D	235.81	134.88	8.00	192.00	0.00	0.00	2.00			
EXISTING-26	D	228.79	185.67	8.00	191.00	0.00	0.00	2.00			
27	C	105.44	46.00	8.00	92.00	0.00	0.00	0.40			
28	B	128.98	132.79	8.00	282.00	0.00	0.00	0.40			
30	C	232.60	151.73	8.00	192.00	0.00	0.00	0.40			

Polar Diagrams

Luminaire A LumiStreet gen2 Eco

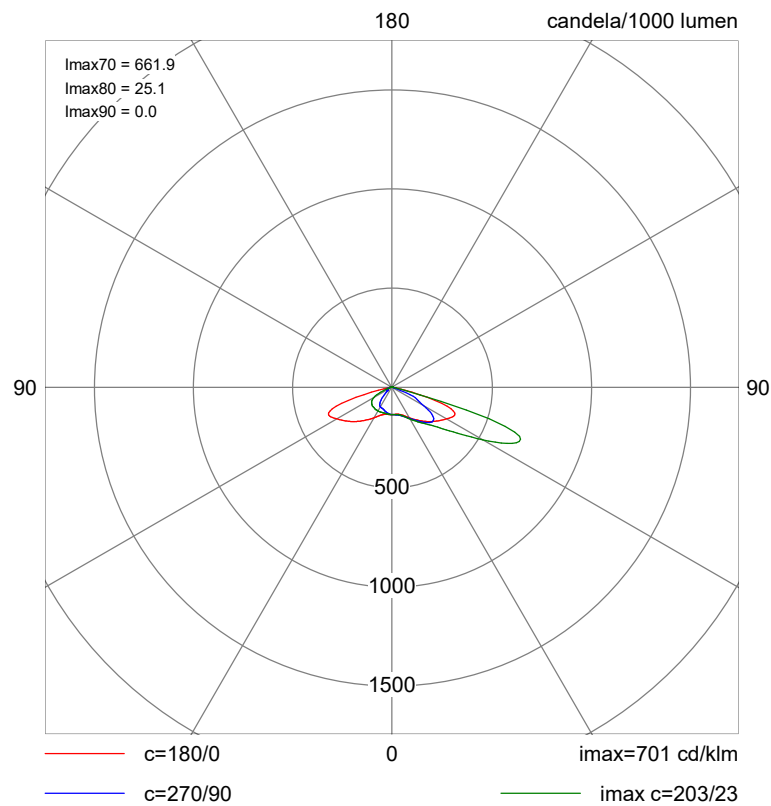


Luminaire B BGP291 DRXN1

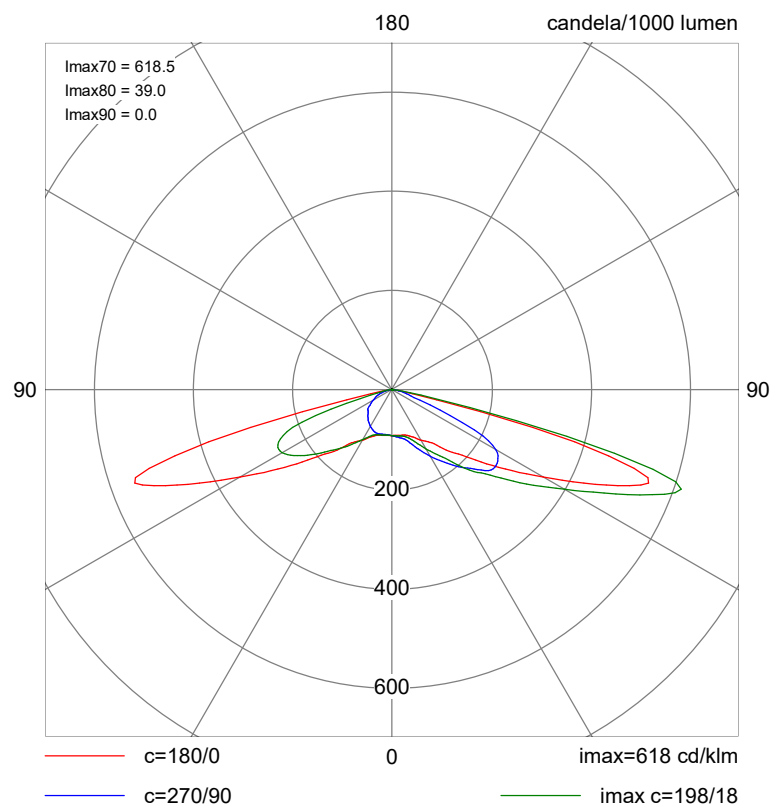


Polar Diagrams Continued

Luminaire C LumiStreet gen2 Eco

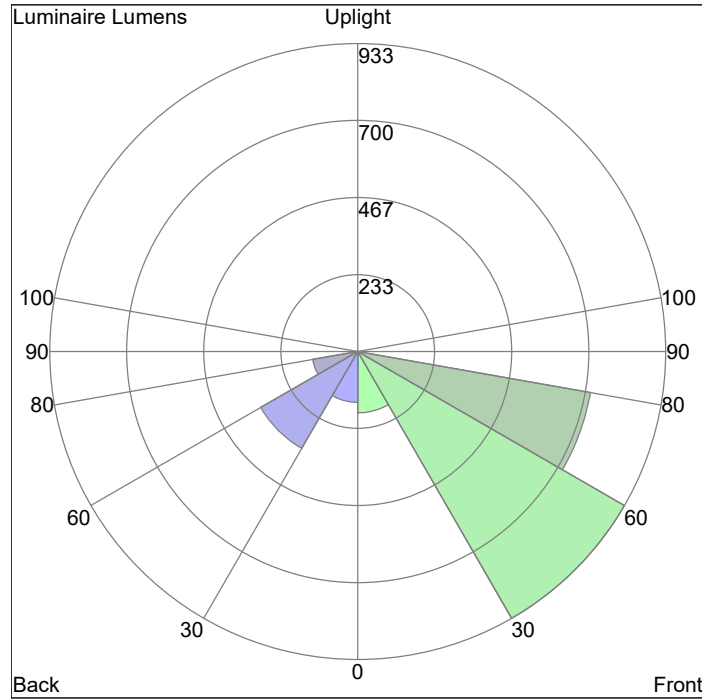


Luminaire D BGP292 DW50



Luminaire Classification System (LCS) Graphs

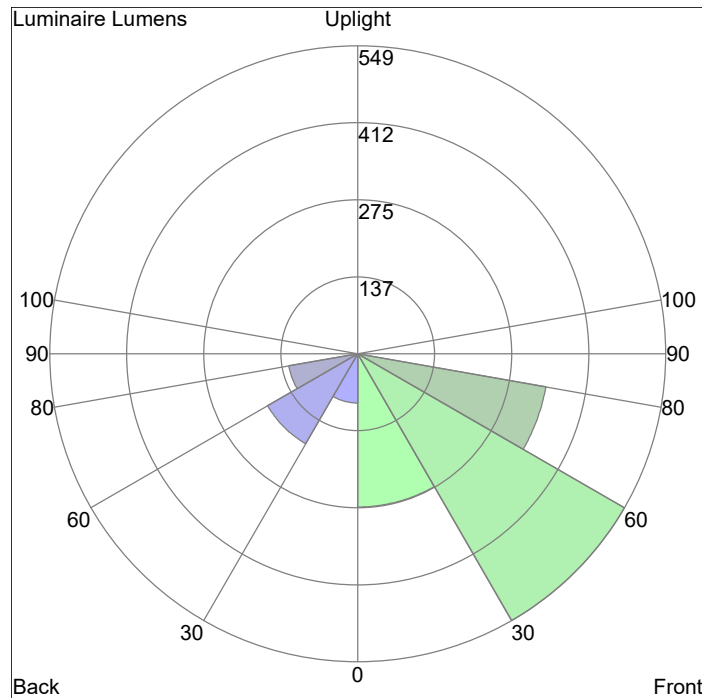
Luminaire A LumiStreet gen2 Eco



LCS	Lumens	%Lamp	%Lum
FL	186.3	6.9	7.5
FM	933.4	34.6	37.6
FH	716.4	26.5	28.9
FVH	8.6	0.3	0.3
BL	154.5	5.7	6.2
BM	339.0	12.6	13.7
BH	138.2	5.1	5.6
BVH	5.8	0.2	0.2
UL	0.0	0.0	0.0
UH	0.0	0.0	0.0
Total	2482.1	91.9	100.0

BUG rating=B1-U0-G1

Luminaire B BGP291 DRXN1

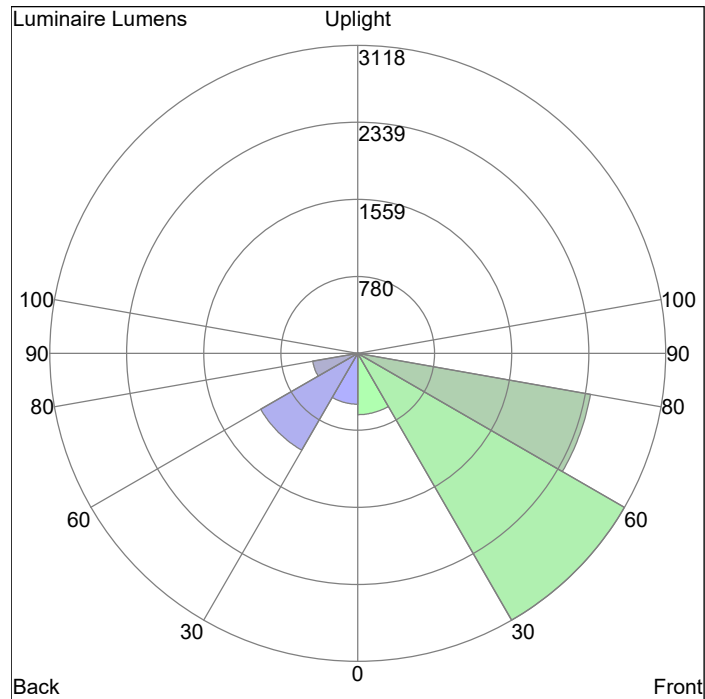


LCS	Lumens	%Lamp	%Lum
FL	273.4	15.2	17.4
FM	549.1	30.5	35.0
FH	340.6	18.9	21.7
FVH	4.1	0.2	0.3
BL	88.0	4.9	5.6
BM	185.2	10.3	11.8
BH	124.5	6.9	7.9
BVH	2.6	0.1	0.2
UL	0.0	0.0	0.0
UH	0.0	0.0	0.0
Total	1567.4	87.1	100.0

BUG rating=B1-U0-G1

Luminaire Classification System (LCS) Graphs Continued

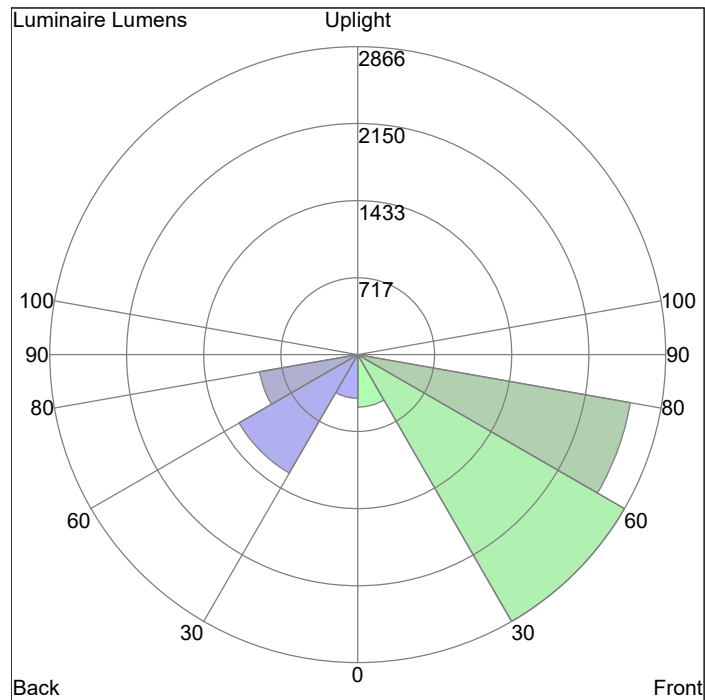
Luminaire C LumiStreet gen2 Eco



LCS	Lumens	%Lamp	%Lum
FL	622.3	6.6	7.5
FM	3118.2	33.2	37.6
FH	2393.4	25.5	28.9
FVH	28.7	0.3	0.3
BL	516.0	5.5	6.2
BM	1132.5	12.0	13.7
BH	461.6	4.9	5.6
BVH	19.5	0.2	0.2
UL	0.0	0.0	0.0
UH	0.0	0.0	0.0
Total	8292.3	88.2	100.0

BUG rating=B3-U0-G2

Luminaire D BGP292 DW50

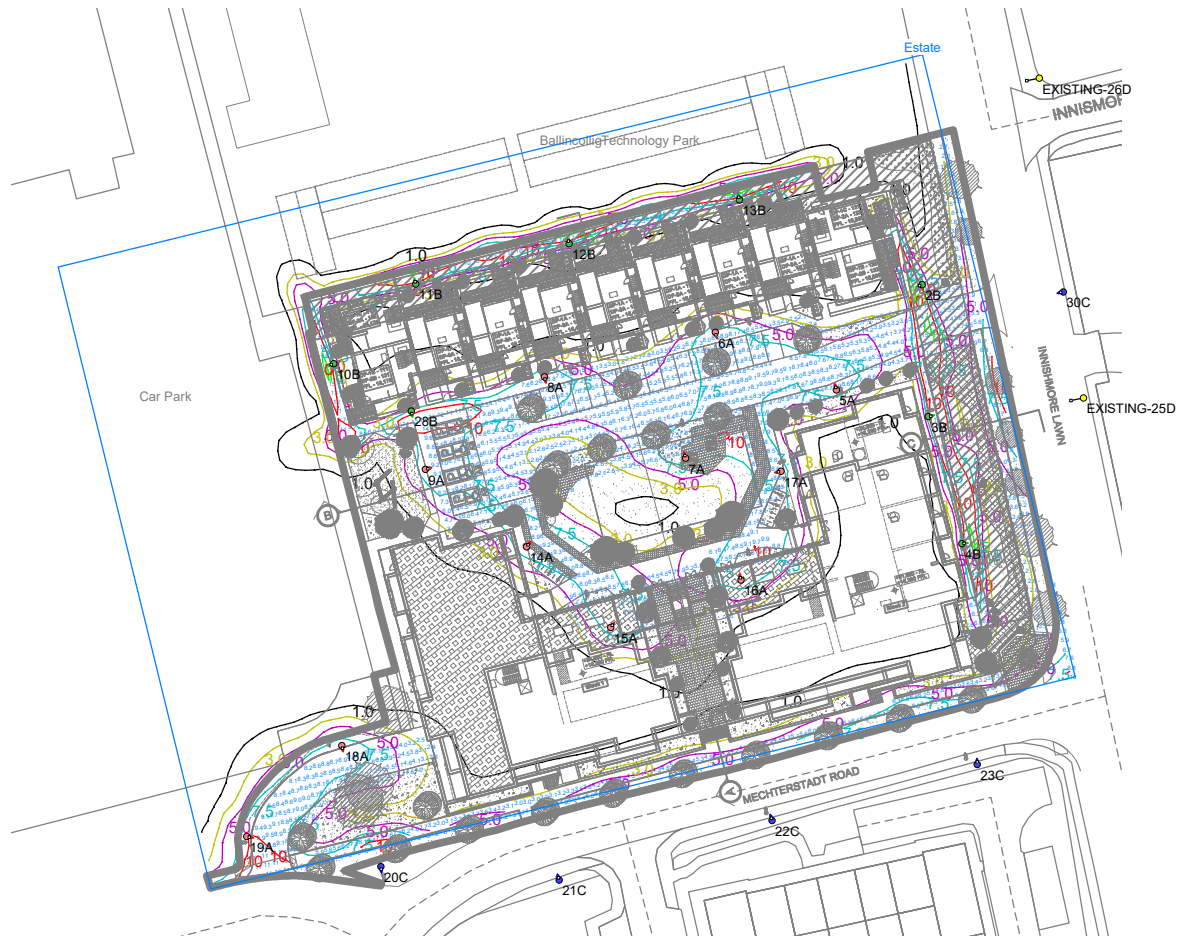


LCS	Lumens	%Lamp	%Lum
FL	489.3	4.9	5.7
FM	2866.4	28.7	33.4
FH	2577.5	25.8	30.1
FVH	21.9	0.2	0.3
BL	408.1	4.1	4.8
BM	1272.6	12.7	14.8
BH	925.7	9.3	10.8
BVH	9.9	0.1	0.1
UL	0.0	0.0	0.0
UH	0.0	0.0	0.0
Total	8571.9	85.7	100.0

BUG rating=B3-U0-G2

Horizontal Illuminance (lux)

Estate

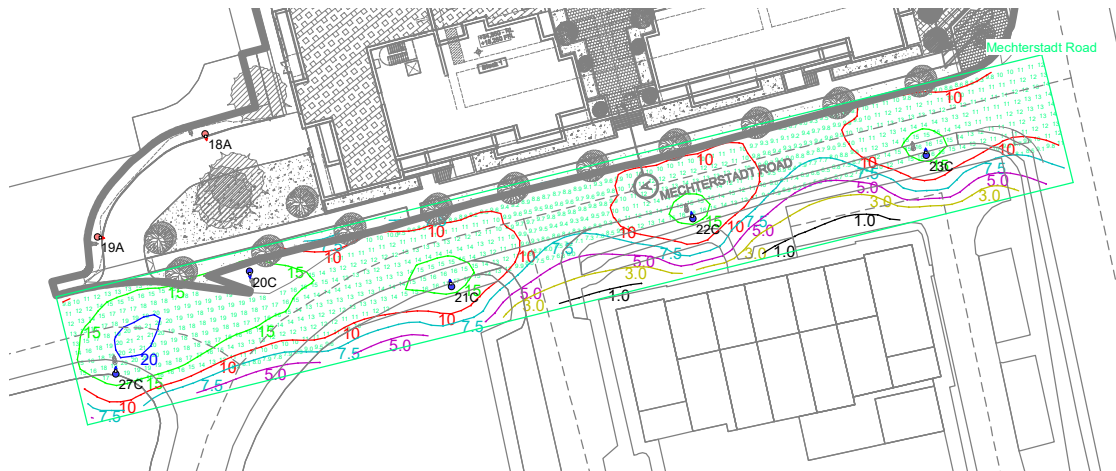


Results

Eav	6.95
Emin	1.45
Emax	16.76
Emin/Emax	0.09
Emin/Eav	0.21

Horizontal Illuminance (lux)

Mechterstadt Road

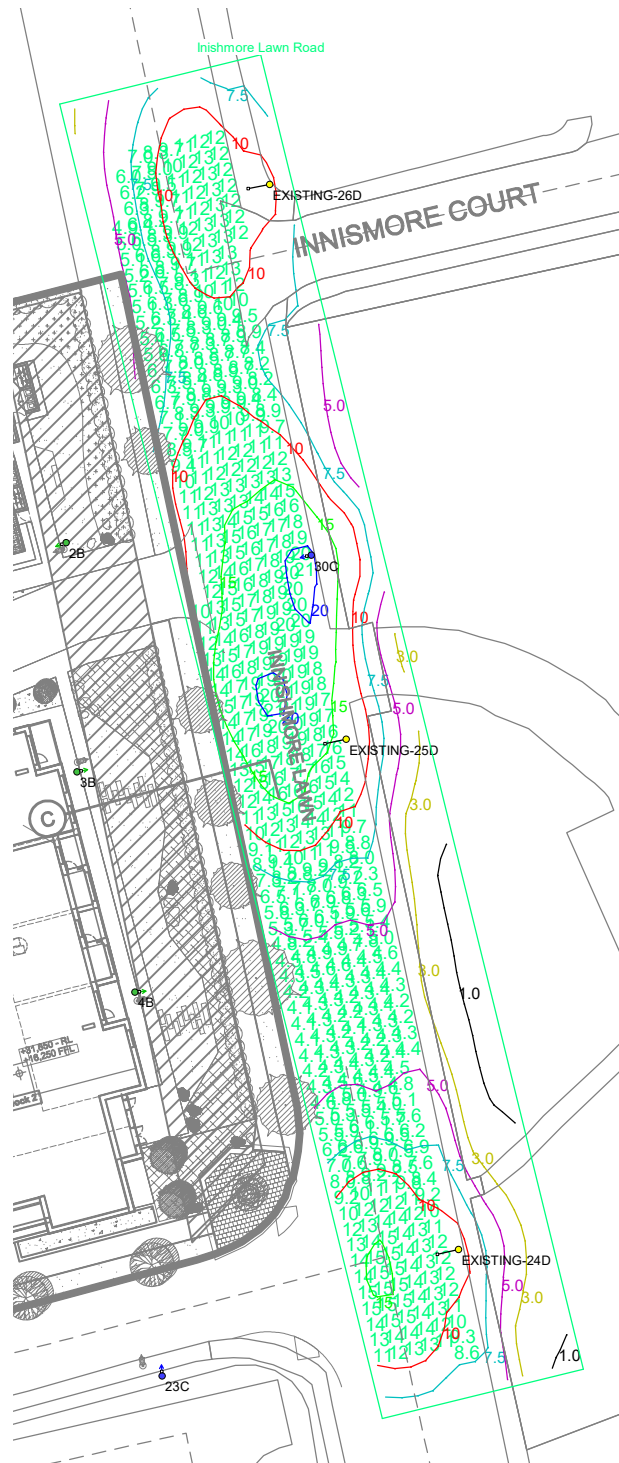


Results

Eav	12.62
Emin	5.54
E _{max}	20.91
E _{min} /E _{max}	0.26
E _{min} /E _{av}	0.44

Horizontal Illuminance (lux)

Inishmore Lawn Road

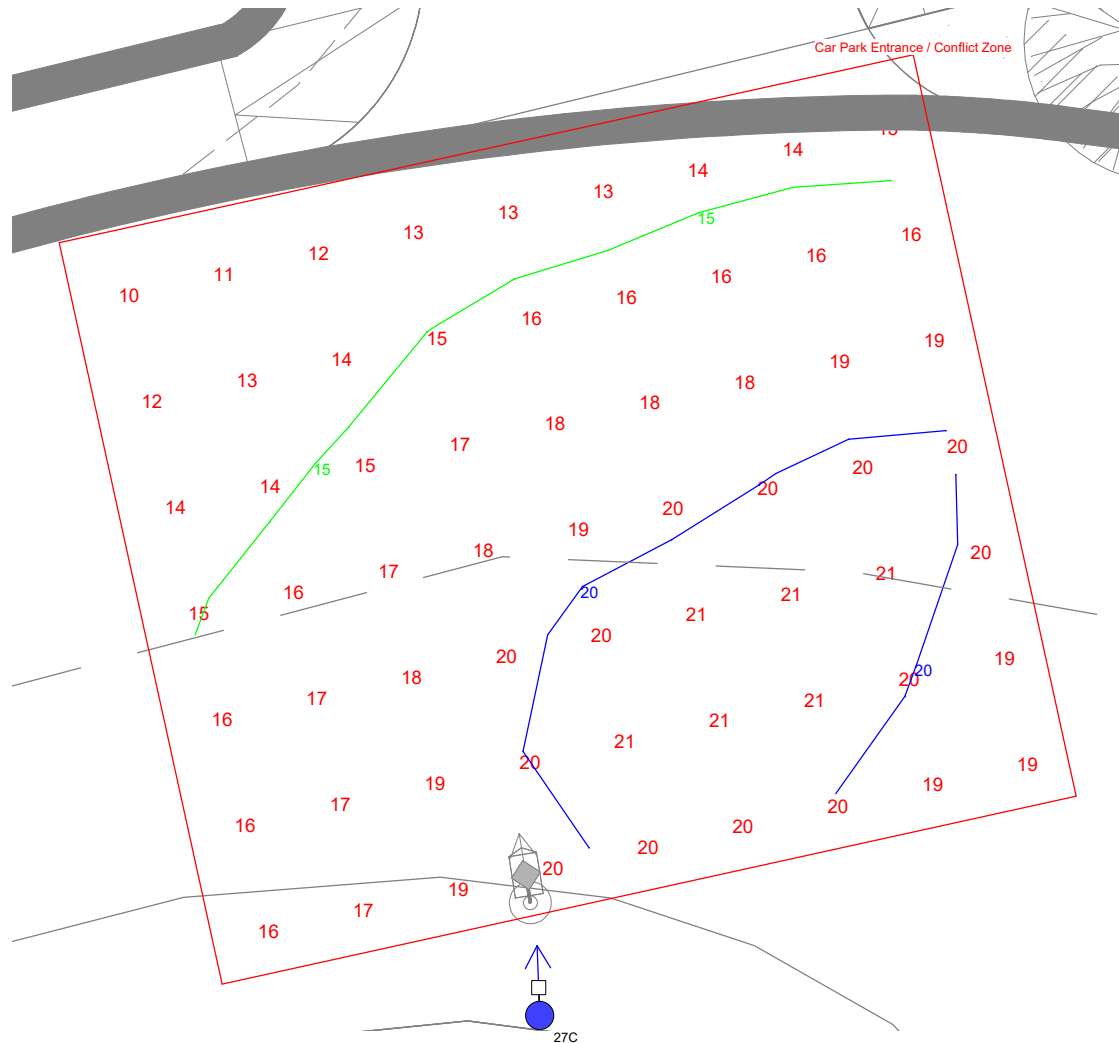


Results

Eav	10.81
Emin	4.10
E _{max}	20.68
E _{min} /E _{max}	0.20
E _{min} /E _{av}	0.38

Horizontal Illuminance (lux)

Car Park Entrance / Conflict Zone

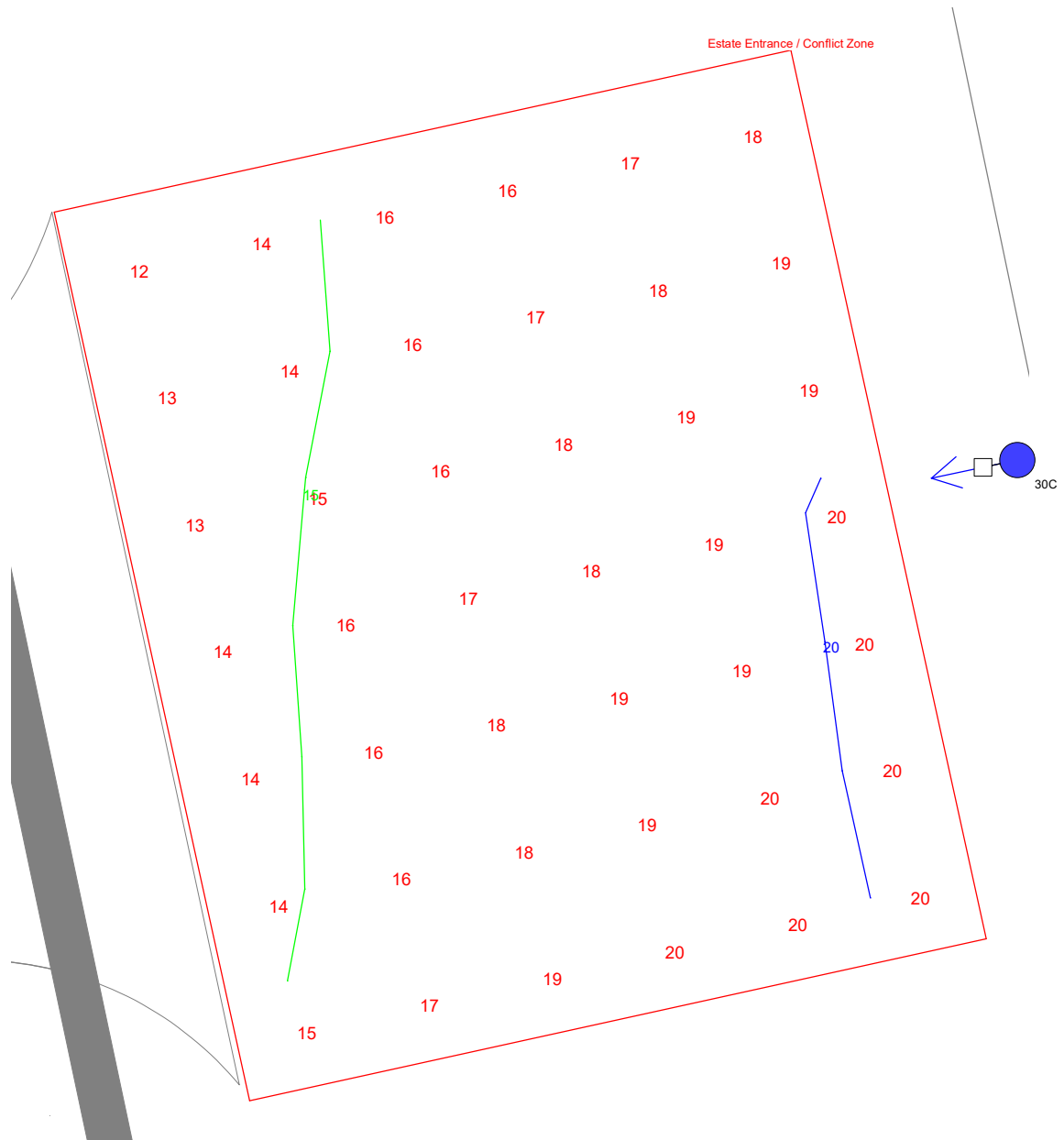


Results

Eav	17.18
Emin	10.30
E _{max}	20.88
Emin/E _{max}	0.49
Emin/Eav	0.60

Horizontal Illuminance (lux)

Estate Entrance / Conflict Zone



Results

Eav	17.12
Emin	12.40
Emax	20.22
Emin/Emax	0.61
Emin/Eav	0.72