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Operator:
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Date:
05/09/2019

22680 Old Sawley Grange Rev. B

Calculation based on standard reflectances.

Room/exterior area dimensions and floor to ceiling/mounting heights issued from wholesaler.

PLEASE NOTE: All room/exterior area dimensions to be checked on-site prior to installation.

Lighting designed to CIBSE guidelines where applicable and/or client requirements, all stated lux values are for overall averages across the room reference plane.

If dimmable luminaires have been specified, then it is the responsibility of the contractor to establish which dimming ballasts/system is required by the lighting control ethos/specification.

Emergency lighting design conforms to BS5266/EN1838 where applicable. Please note that ‘points of emphasis’ such as locations of fire fighting equipment also require emergency lighting, these locations are to be confirmed by contractor. Please note that the emergency lighting calculation MUST be produced using the emergency lighting calculation facility within this program, failure to use the correct method will show false results.

Building Regulations defines the size of open area that must have emergency lighting is given to any room larger than 60m². Any area smaller than 60m² will still have emergency fittings within them, but will not have an emergency calculation needed. Emergency escape routes or areas of hazard will require 1lx minimum throughout, while open areas will only require 0.5lx minimum throughout.

Location of critical emergency items (Plant or Switch rooms location of task, Reception telephone, First Aid Points, Extinguisher points, Call points, push bars, fire panels, etc.) are not present on issued drawings, therefore higher require lux levels under emergency conditions cannot be design in this stage.

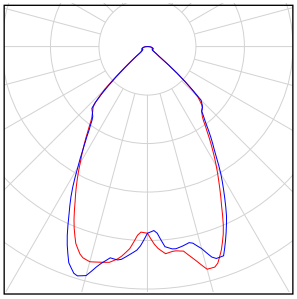
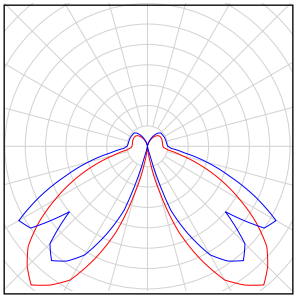
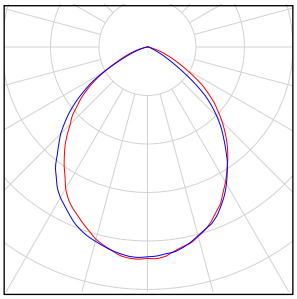
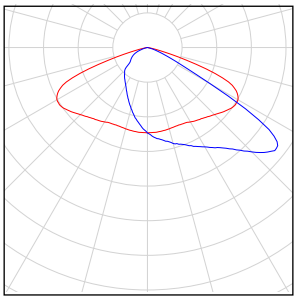
Please Note: the Onix are installed on top of 5m columns - columns not provided by Ansell Lighting. Wall mounted floodlight are installed at 3.0m.

The floodlight installed on the back of the building will work on a PIR so it will light up only when the sensor will detect presence.

Rev. B (05/09/2019) - removed bollards on the driveway; added some extra bollards on the opposite side.

Content

22680 Old Sawley Grange Rev. B

Quantity	Luminaire (Luminous emittance)		
13	Ansell Lighting - ACLLED/GR Calisto AC LED Wall/Ceiling Luminous emittance 1 Fitting: 1xACLLED/GR Absolute photometry Luminaire luminous flux: 181 lm Power: 4.0 W Luminous efficacy: 45.2 lm/W Colourimetric data 1xACLLED/GR: CCT 4000 K, CRI 80		
33	Ansell Lighting - ALEOLED/CCT/100/GR-4000K Leo CCT LED Polycarbonate Bollard Luminous emittance 1 Fitting: 1xLEO Absolute photometry Luminaire luminous flux: 879 lm Power: 12.2 W Luminous efficacy: 72.0 lm/W Colourimetric data 1xLEO: CCT 4000 K, CRI 80		
8	Ansell Lighting - AMLED10 Mira LED Floodlight Luminous emittance 1 Fitting: 1xMIRA 10 Absolute photometry Luminaire luminous flux: 718 lm Power: 10.0 W Luminous efficacy: 71.8 lm/W Colourimetric data 1xMIRA 10: CCT 4750 K, CRI 70		
10	Ansell Lighting - AONIXLED/1 Onix LED Street Light Luminous emittance 1 Fitting: 1xONIX Absolute photometry Luminaire luminous flux: 1973 lm Power: 19.4 W Luminous efficacy: 101.7 lm/W Colourimetric data 1xONIX: CCT 5000 K, CRI 70		

Total lamp luminous flux: 56834 lm, Total luminaire luminous flux: 56834 lm, Total Load: 728.6 W, Luminous efficacy: 78.0 lm/W

Ansell Lighting ACLLED/GR Calisto AC LED Wall/Ceiling 1xACLLED/GR

ACLLED/GR
AMENITY
Callisto AC LED Wall/Ceiling
No Driver Required

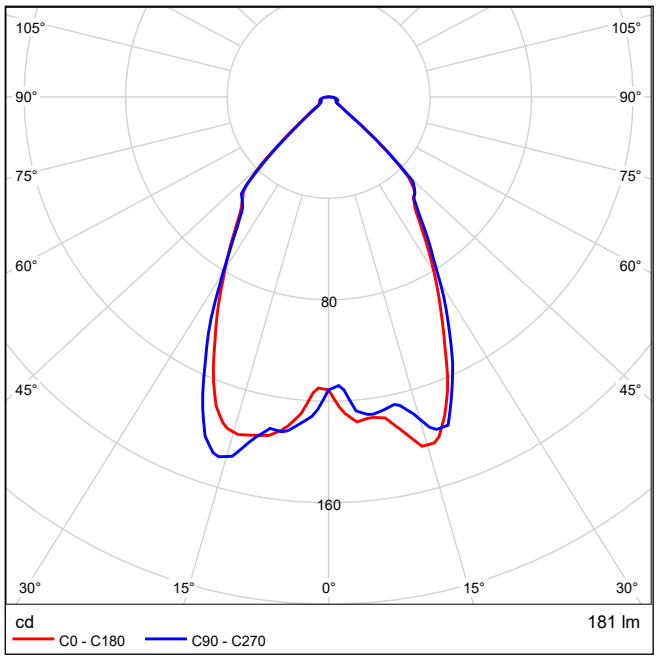
• Modern surface mounted ultra-slim wall/ceiling light
• Die-cast aluminium construction with choice of white or graphite paint finish
• Tamper-proof stainless steel allen key screws
• LED lifespan L70 50,000 hours
• Non-dimmable

• Suitable for both internal and external use
• 3 Year Product Warranty
• AC LED
• IP65

Absolute photometry
Luminaire luminous flux: 181 lm
Power: 4.0 W
Luminous efficacy: 45.2 lm/W

Colourimetric data
1xACLLED/GR: CCT 4000 K, CRI 80

Luminous emittance 1 / Polar LDC



Ansell Lighting ALEOLED/CCT/100/GR-4000K Leo CCT LED Polycarbonate Bollard 1xLEO

ALEOLED/CCT/100/GR-4000K
AMENITY
Leo CCT LED Polycarbonate Bollard
LED 12W - Cool White

Supplied c/w Integral Driver

- Modern styled bollard with polycarbonate construction
- White reflector with clear polycarbonate diffuser
- Polycarbonate construction is ideal for coastal applications
- Suitable for domestic and commercial applications
- Supplied c/w root mounting kit, can be surface mounted with rawbolts
- CCT selectable between 3000K and 4000K
- LED lifespan L70 61,000 hours
- Non-dimmable

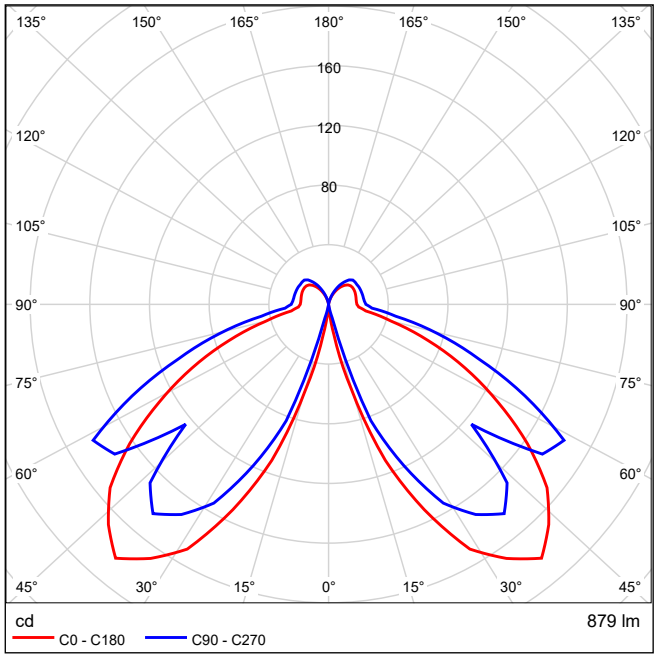
Operating Temp -20°C to 50°C

- Suitable for external use only
- 3 Year Product Warranty
- IP65

Absolute photometry
Luminaire luminous flux: 879 lm
Power: 12.2 W
Luminous efficacy: 72.0 lm/W

Colourimetric data
1xLEO: CCT 4000 K, CRI 80

Luminous emittance 1 / Polar LDC



Ansell Lighting AMLED10 Mira LED Floodlight 1xMIRA 10

AMLED10
FLOODLIGHTING
Mira LED Floodlight
LED 10W - Cool White

Supplied c/w Integral Driver

- Architectural slim die-cast LED floodlight
- 10W LED ideal for halogen replacement
- 30W LED comparable light output to 35W HQI
- 50W LED comparable light output to 70W HQI
- 100W LED exceeds performance of 150W HQI
- 200W LED comparable performance to 400W HQI
- Optically textured glass for enhanced light output
- Heat sink design provides optimum LED life
- Graphite textured paint finish
- Pre-wired with 1 metre of rubber insulated cable for ease of installation
- PIR versions complete with manual override facility
- LED lifespan L70 50,000 hours
- Non-dimmable

Note: 100W and 200W versions are not suitable for interior use

Options
/PC Electronic Photocell

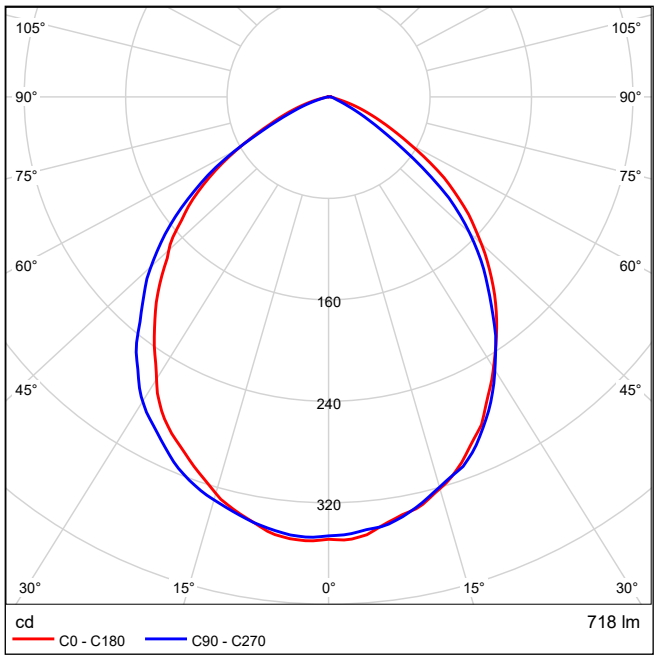
Operating Temp -20°C to 50°C

- Suitable for both internal and external use
- 5 Year Product Warranty
- IP65

Absolute photometry
Luminaire luminous flux: 718 lm
Power: 10.0 W
Luminous efficacy: 71.8 lm/W

Colourimetric data
1xMIRA 10: CCT 4750 K, CRI 70

Luminous emittance 1 / Polar LDC



Ansell Lighting AONIXLED/1 Onix LED Street Light 1xONIX

AONIXLED/1
FLOODLIGHTING
Onix LED Street Light
LED 20W - Cool White

Supplied c/w Integral Driver

• Die-cast aluminium construction for optimal heat dissipation for optimal performance
• UV stabilized polycarbonate cover
• Tooless gear tray removal for ease of maintenance
• Built in anti-tamper isolation facility
• Compatible with post top or side entry utility 76mm spigot
• IK10 Rated
• G3 Glare Rating
• Surge protection
• Available in standard, complete with photocell option
• LED lifespan L70 50,000 hours

Options
/PC Electronic Photocell

Accessories
AONIXLED/SBA 48-60mm Spigot Bracket

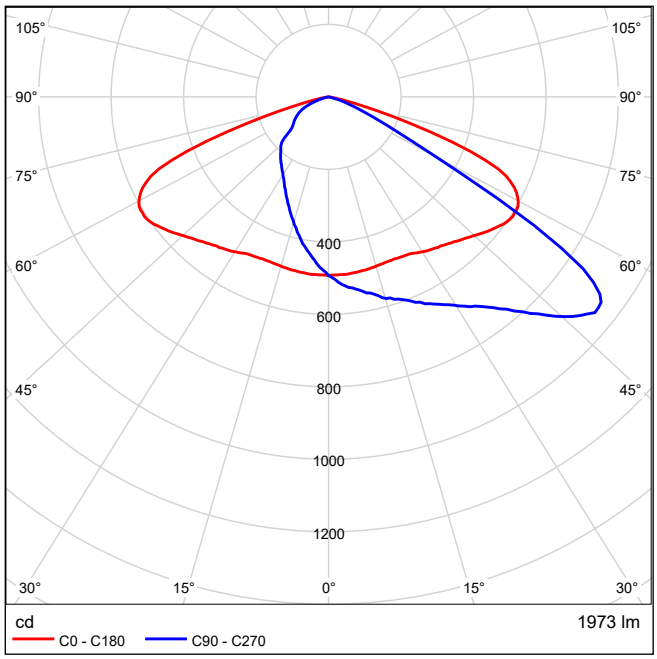
Operating Temp -40°C to 50°C

• 5 Year Product Warranty
• IP66

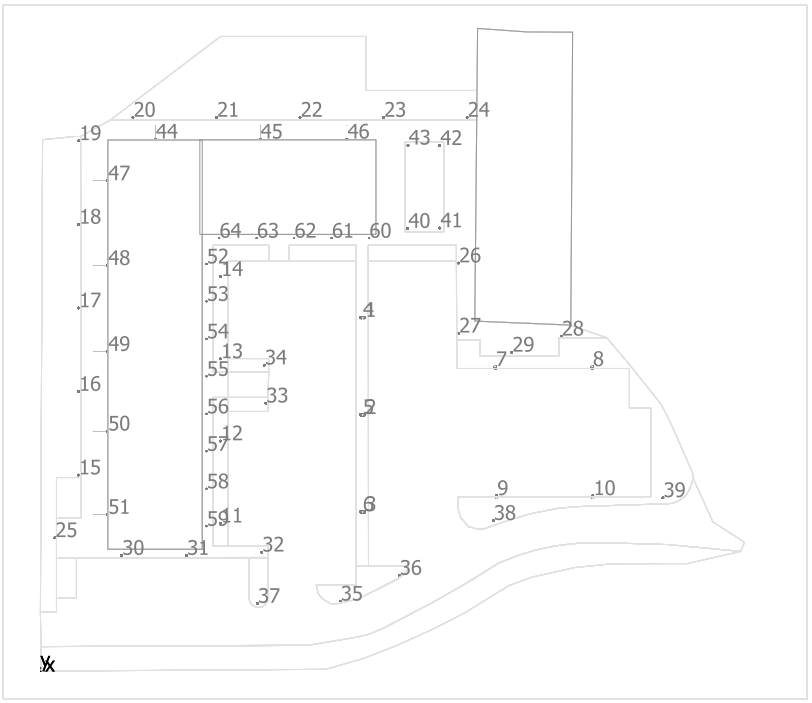
Absolute photometry
Luminaire luminous flux: 1973 lm
Power: 19.4 W
Luminous efficacy: 101.7 lm/W

Colourimetric data
1xONIX: CCT 5000 K, CRI 70

Luminous emittance 1 / Polar LDC



Site 1



Ansell Lighting AONIXLED/1 Onix LED Street Light

No.	X [m]	Y [m]	Mounting height [m]	Maintenance factor
1	40.393	44.173	5.000	0.80
2	40.393	32.040	5.000	0.80
3	40.393	19.906	5.000	0.80
4	40.079	44.173	5.000	0.80
5	40.079	32.040	5.000	0.80
6	40.079	19.906	5.000	0.80
7	56.799	37.941	5.000	0.80
8	68.909	37.941	5.000	0.80
9	56.964	21.815	5.000	0.80
10	68.990	21.815	5.000	0.80

Ansell Lighting ALEOLED/CCT/100/GR-4000K Leo CCT LED Polycarbonate Bollard

No.	X [m]	Y [m]	Mounting height [m]	Maintenance factor
11	22.443	18.502	0.100	0.80
12	22.452	28.767	0.100	0.80
13	22.462	39.033	0.100	0.80
14	22.471	49.298	0.100	0.80
15	4.709	24.513	0.100	0.80
16	4.720	34.953	0.100	0.80
17	4.731	45.392	0.100	0.80
18	4.743	55.832	0.100	0.80
19	4.754	66.272	0.100	0.80
20	11.531	69.196	0.100	0.80
21	21.971	69.196	0.100	0.80
22	32.411	69.196	0.100	0.80

No.	X [m]	Y [m]	Mounting height [m]	Maintenance factor
23	42.850	69.196	0.100	0.80
24	53.290	69.196	0.100	0.80
25	1.761	16.675	0.100	0.80
26	52.211	50.999	0.100	0.80
27	52.211	42.234	0.100	0.80
28	65.049	41.856	0.100	0.80
29	58.862	39.848	0.100	0.80
30	10.127	14.459	0.100	0.80
31	18.236	14.459	0.100	0.80
32	27.623	14.871	0.100	0.80
33	28.132	33.498	0.100	0.80
34	27.955	38.246	0.100	0.80
35	37.435	8.741	0.100	0.80
36	44.810	11.963	0.100	0.80
37	27.092	8.459	0.100	0.80
38	56.563	18.821	0.100	0.80
39	77.761	21.671	0.100	0.80
40	45.870	55.315	0.100	0.80
41	49.878	55.379	0.100	0.80
42	49.851	65.663	0.100	0.80
43	45.908	65.717	0.100	0.80

Ansell Lighting AMLED10 Mira LED Floodlight

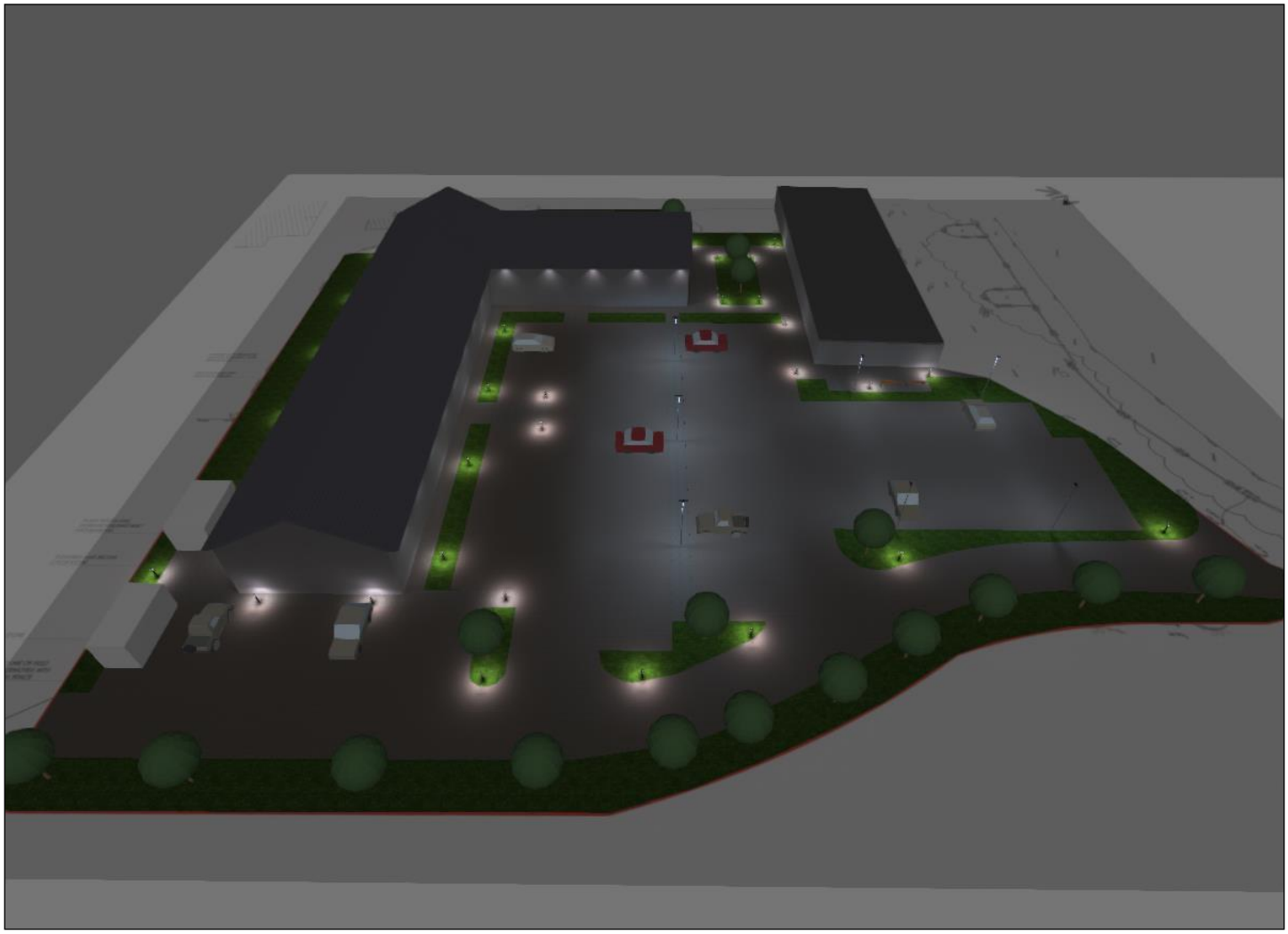
No.	X [m]	Y [m]	Mounting height [m]	Maintenance factor
44	14.333	66.470	3.100	0.80
45	27.423	66.470	3.100	0.80
46	38.279	66.470	3.100	0.80
47	8.339	61.267	3.100	0.80
48	8.339	50.678	3.100	0.80
49	8.339	39.942	3.100	0.80
50	8.339	29.999	3.100	0.80
51	8.339	19.589	3.100	0.80

Ansell Lighting ACLLED/GR Calisto AC LED Wall/Ceiling

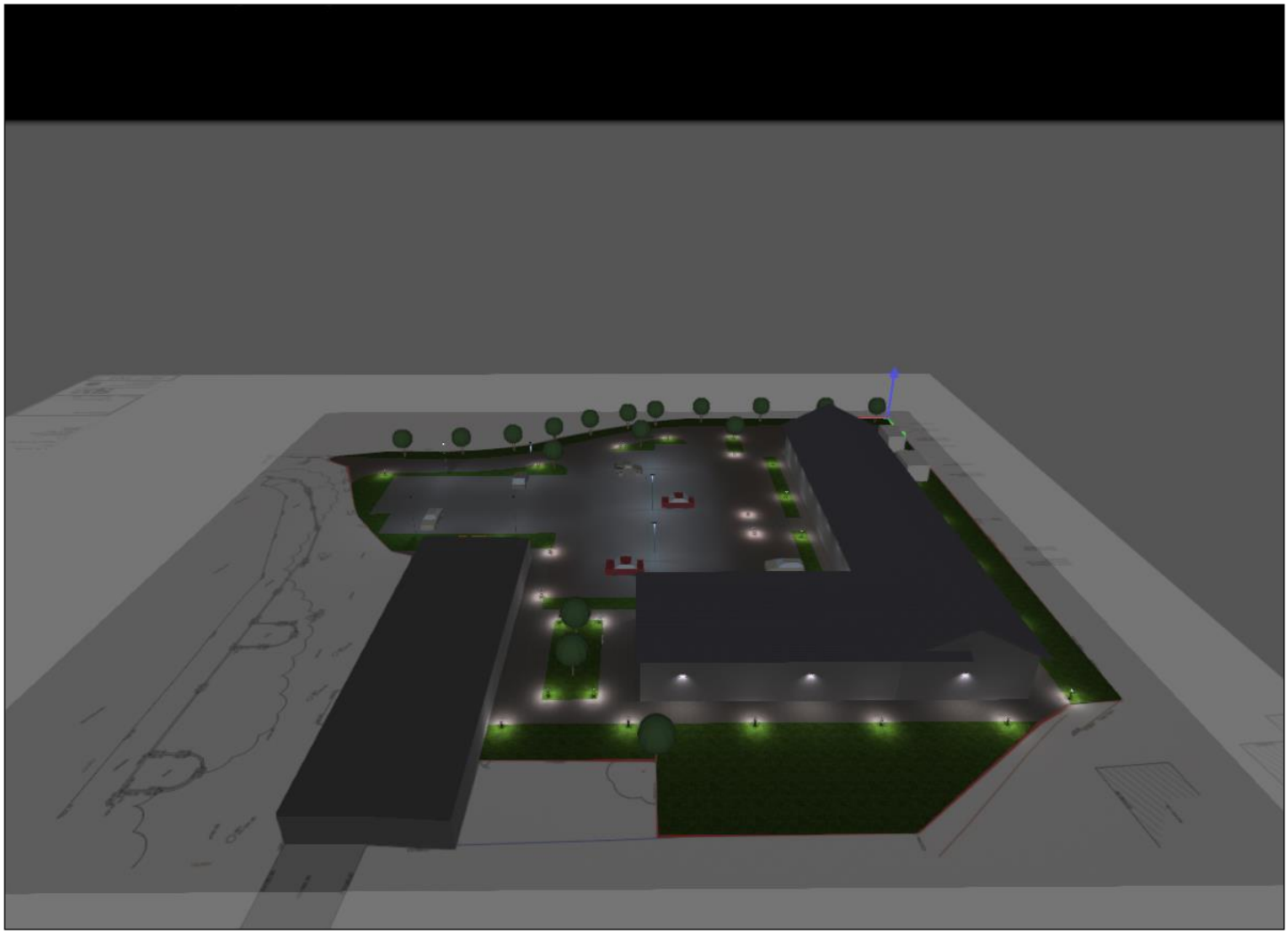
No.	X [m]	Y [m]	Mounting height [m]	Maintenance factor
52	20.728	50.903	4.975	0.80
53	20.728	46.220	4.975	0.80
54	20.728	41.537	4.975	0.80
55	20.728	36.853	4.975	0.80
56	20.728	32.170	4.975	0.80
57	20.728	27.486	4.975	0.80
58	20.728	22.803	4.975	0.80
59	20.728	18.120	4.975	0.80
60	41.042	54.118	4.975	0.80
61	36.358	54.118	4.975	0.80
62	31.675	54.118	4.976	0.80
63	26.992	54.118	4.976	0.80
64	22.308	54.118	4.976	0.80

Site 1

Front View



Back View



The floodlight installed on the back of the building will work on a PIR so it will light up only when the sensor will detect presence.

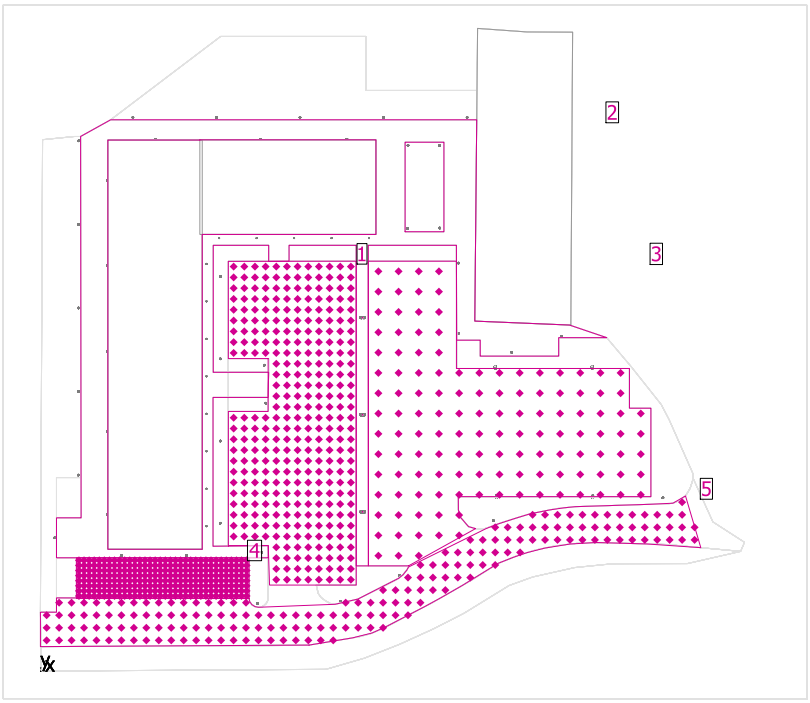
Car Park

Driveway

Back Footpath

The floodlight installed on the back of the building will work on a PIR so it will light up only when the sensor will detect presence.

Site 1



Maintenance factor: 0.80

General

	Surface	Result	Average (Target)	Min	Max	Min/average	Min/max
1	Car Park 01	Perpendicular illuminance [lx] Height: 0.100 m	7.97	0.91	27.2	0.11	0.033
3	Car Park 02	Perpendicular illuminance [lx] Height: 0.100 m	10.4	2.18	23.0	0.21	0.095
4	Car Park 03	Perpendicular illuminance [lx] Height: 0.100 m	5.07	0.19	126	0.037	0.002
5	Driveway	Perpendicular illuminance [lx] Height: 0.100 m	3.30	0.041	115	0.012	0.000

Surface result objects

2	Walkway	Perpendicular illuminance (adaptive) [lx]	16.4	0.65	156	0.040	0.004
		Luminance [cd/m²]	1.44	0.057	13.7	0.040	0.004

The results were calculated without consideration of objects and furniture. No results were determined on their surfaces.