



Residential Car Park Lighting

Installation : LED Solar Powered Street Lighting

Project number : TLA/VIV/DWH-CP

Customer : Vivid Housing Ltd

Processed by : DJT

Date : 14.04.2022

Project description:

Exterior Car Park lit to comply with BS EN 5489-1-2020 Maintained Lighting Levels For Outdoor Car Parks

Assumed Area Type and Usage:

Light traffic, eg parking areas of shops, terraced houses

Average Illuminance 5Lx, Uniformity 0.25

All posts 8m high

The following values are based on precise calculations performed on calibrated lamps and luminaires, and their configurations, whereby gradual, unavoidable deviations can occur in practice. All guarantee claims are excluded for the specified data.

This exclusion of liability applies irrespective of the legal grounds for both damages and consequential damages suffered by users and third parties.

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1 Luminaire data

1.1 E-Able Power, LED (AL-A030)

1.1.1 Data sheet

Manufacturer: E-Able Power

AL-A030 LED

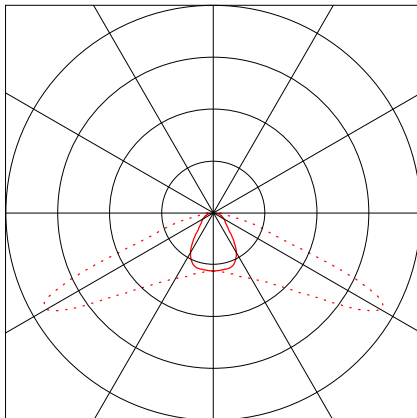
Luminaire data

Luminaire efficiency : 98.9%
Luminaire efficacy : 126.36 lm/W
Classification : A40 ↓ 99.8% ↑ 0.2%
CIE Flux Codes : 38 76 96 100 99
UGR 4H 8H : 24.4 / 35.4
Power : 30 W
Luminous flux : 3790.8 lm

Equipped with

Quantity : 1
Designation :
Colour :
Luminous flux : 3833 lm

Dimensions : 100 mm x 240 mm x 1 mm



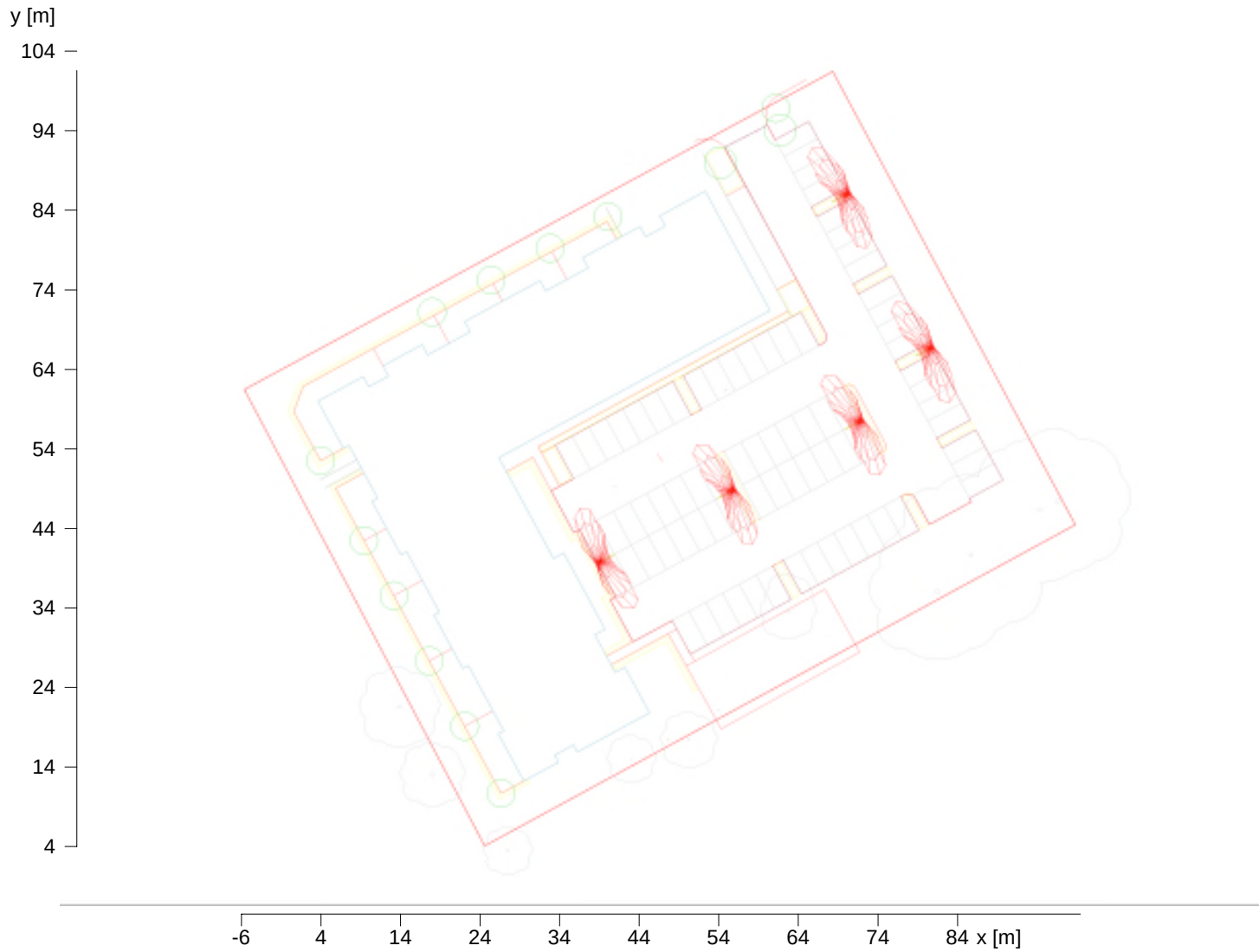
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2 Exterior 1

2.1 Description, Exterior 1

2.1.1 Floor plan



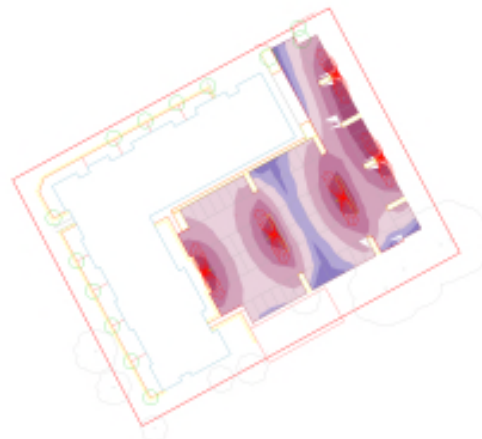
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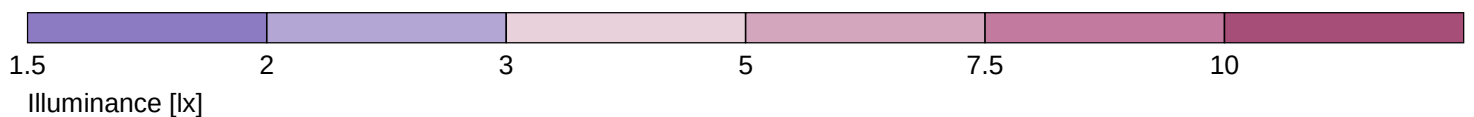
2 Exterior 1

2.2 Summary, Exterior 1

2.2.1 Result overview, Measuring area 1



-6 4 14 24 34 44 54 64 74 84 x [m]



General

Calculation algorithm used	High indirect fraction
Height of evaluation surface	0.00 m
Height (phot centre) [m]:	8.00 m
Maintenance factor	0.80

Total luminous flux	19165 lm
Total power	150 W
Total power per area (5460.52 m ²)	0.03 W/m ²

Illuminance

Average illuminance	Em	5.8 lx
Minimum illuminance	Emin	1.5 lx
Maximum illuminance	Emax	11.2 lx
Uniformity Uo	Emin/Em	1:3.75 (0.27)
Diversity Ud	Emin/Emax	1:7.23 (0.14)

Type No. \Make

E-Able Power

1	5 x	Order No.	: AL-A030
		Luminaire name	: LED
		Equipment	: 1 x 30 W / 3833 lm

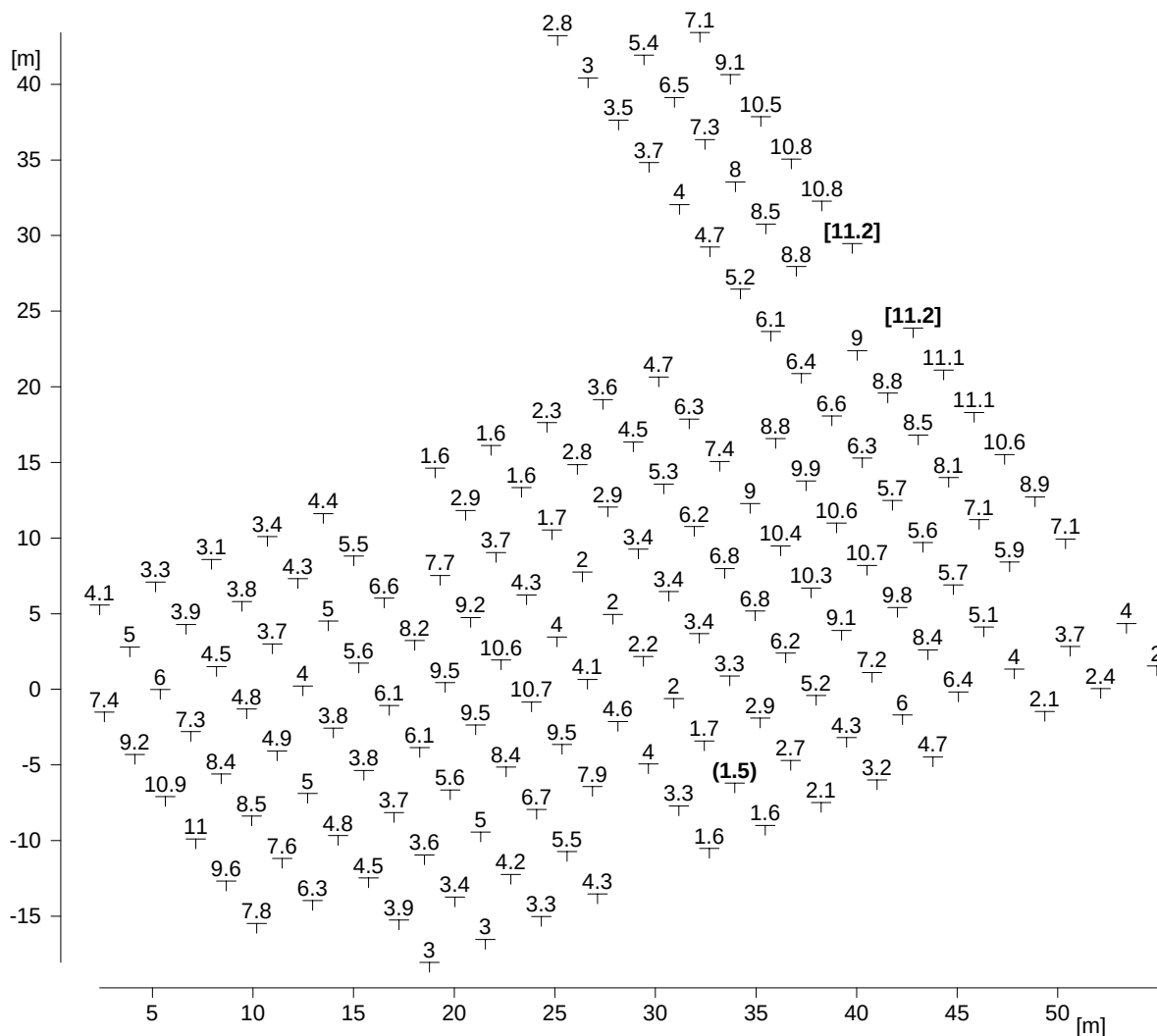
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2 Exterior 1

2.3 Calculation results, Exterior 1

2.3.1 Table, Measuring area 1 (E)



Height reference plane	: 0.00 m
Average illuminance	Em : 5.8 lx
Minimum illuminance	Emin : 1.5 lx
Maximum illuminance	Emax : 11.2 lx
Uniformity Uo	Emin/Em : 1 : 3.75 (0.27)
Diversity Ud	Emin/Emax : 1 : 7.23 (0.14)