



# EXTERNAL LIGHTING

Installation : WICKWOODS COUNTRY CLUB

Project number : LS0680-1

Customer : DE

Processed by : LS

Date : 05.02.2024

Project description:

SAMPLE CALCULATION BASED ON:

PADEL COURT LIGHTING

-1 REVISION WITH PADEL CANOPY REMOVED

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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Mechanical and Electrical  
Design and Build Contractors

## 1 Luminaire data

### 1.1 BELL Lighting Limited, Skyline Virtus 150W-300W 4000K Asy... (11491)

#### 1.1.1 Data sheet

Manufacturer: BELL Lighting Limited

#### 11491 Skyline Virtus 150W-300W 4000K Asymmetric Floodlight

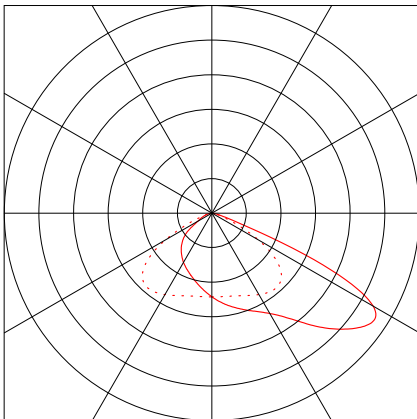
##### Luminaire data

Luminaire efficiency : 100%  
Luminaire efficacy : 153.64 lm/W  
Classification : A40 ↓100.0% ↑0.0%  
CIE Flux Codes : 41 84 99 100 100  
UGR 4H 8H : 38.2 / 32.1  
Power : 225 W  
Luminous flux : 34568 lm

##### Equipped with

Quantity : 1  
Designation : LED 840  
Colour : 4000K  
Luminous flux : 34568 lm  
Colour reproduction : 80

Dimensions : 380 mm x 380 mm x 75 mm





## 2 Exterior 1

### 2.1 Description, Exterior 1

#### 2.1.1 Floor plan



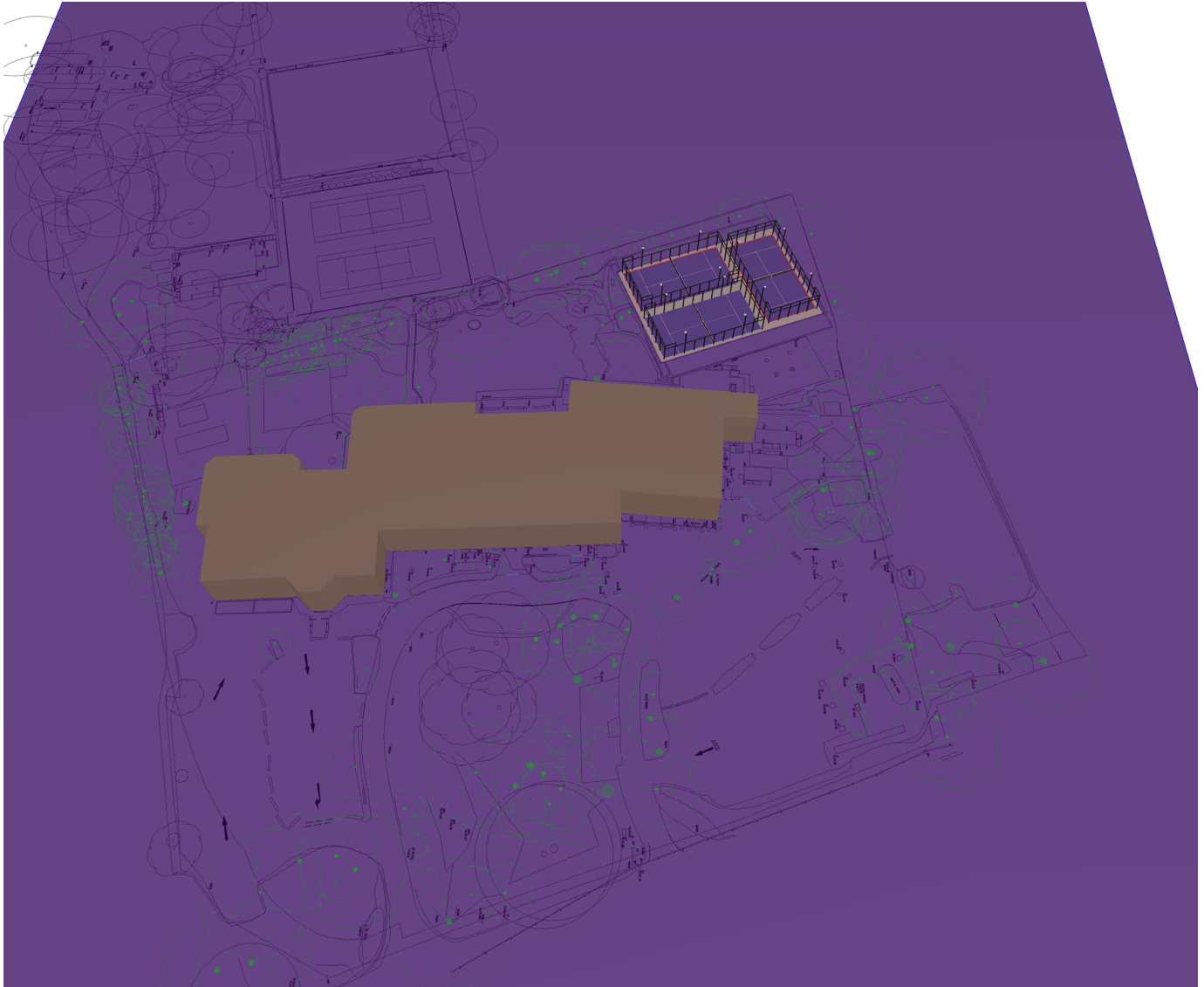
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## 2.1 Description, Exterior 1

### 2.1.2 3D view, View 1



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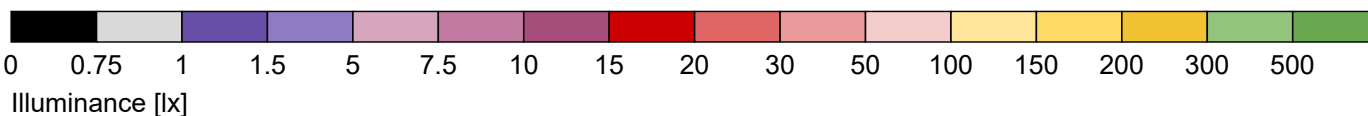


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## 2 Exterior 1

### 2.2 Summary, Exterior 1

#### 2.2.1 Result overview, FULL PADEL COURT 1



#### General


Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.08 m
Height (phot. centre) [m]:	5.96 m
Maintenance factor	0.85

Total luminous flux	414816 lm
Total power	2700 W
Total power per area (76799.25 m <sup>2</sup> )	0.04 W/m <sup>2</sup>

#### Illuminance

Average illuminance	$E_m$	315 lx
Minimum illuminance	$E_{min}$	188 lx
Maximum illuminance	$E_{max}$	430 lx
Uniformity $U_o$	$E_{min}/E_m$	1:1.68 (0.59)
Diversity $U_d$	$E_{min}/E_{max}$	1:2.29 (0.44)

#### Type No. Make

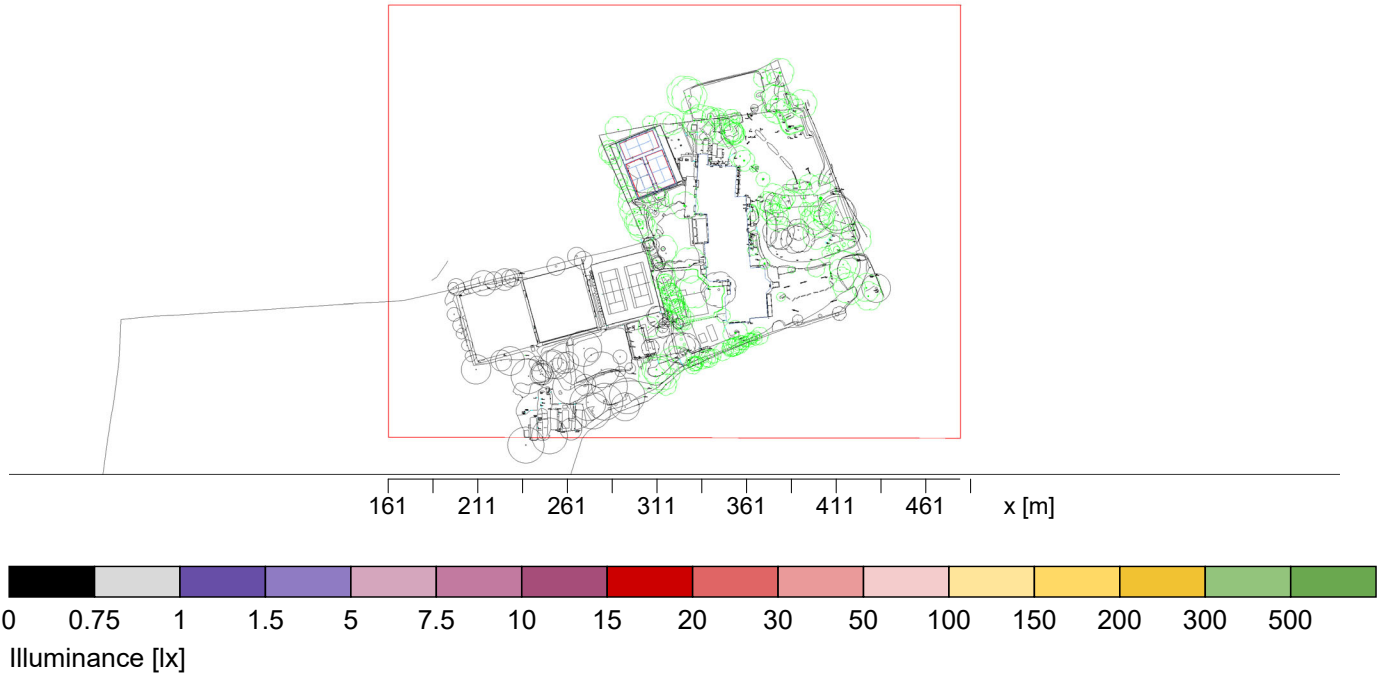
1	12 x	<b>BELL Lighting Limited</b>
	Order No.	: 11491
	Luminaire name	: Skyline Virtus 150W-300W 4000K Asymmetric Floodlight
	Equipment	: 1 x LED 840 225 W / 34568 lm

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## 2.2 Summary, Exterior 1

### 2.2.2 Result overview, FULL PADEL COURT 2



#### General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.07 m
Height (phot. centre) [m]:	5.96 m
Maintenance factor	0.85
Total luminous flux	414816 lm
Total power	2700 W
Total power per area (76799.25 m <sup>2</sup> )	0.04 W/m <sup>2</sup>

#### Illuminance

Average illuminance	$E_m$	327 lx
Minimum illuminance	$E_{min}$	195 lx
Maximum illuminance	$E_{max}$	453 lx
Uniformity $U_o$	$E_{min}/E_m$	1:1.68 (0.6)
Diversity $U_d$	$E_{min}/E_{max}$	1:2.32 (0.43)

#### Type No. Make

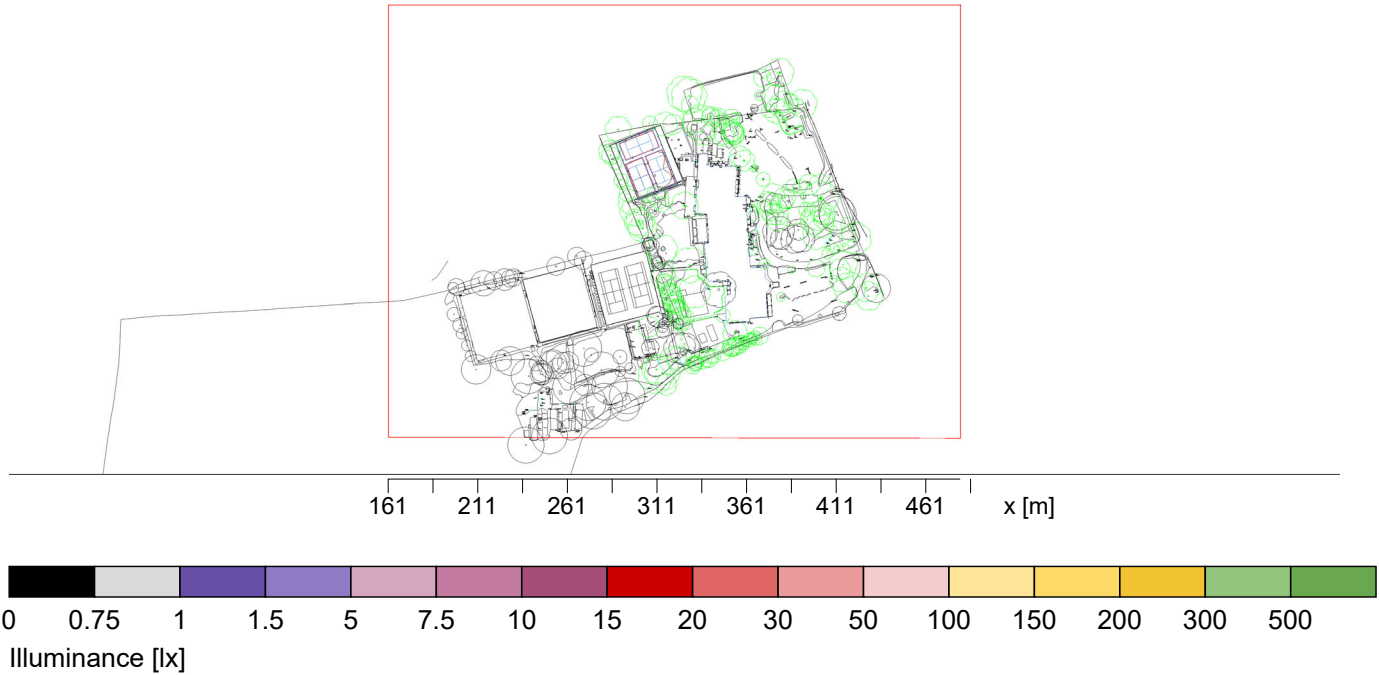
1	12 x		<b>BELL Lighting Limited</b>	
			Order No.	: 11491
			Luminaire name	: Skyline Virtus 150W-300W 4000K Asymmetric Floodlight
			Equipment	: 1 x LED 840 225 W / 34568 lm

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## 2.2 Summary, Exterior 1

### 2.2.3 Result overview, FULL PADEL COURT 3



#### General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.07 m
Height (phot. centre) [m]:	5.96 m
Maintenance factor	0.85
Total luminous flux	414816 lm
Total power	2700 W
Total power per area (76799.25 m <sup>2</sup> )	0.04 W/m <sup>2</sup>

#### Illuminance

Average illuminance	$E_m$	325 lx
Minimum illuminance	$E_{min}$	191 lx
Maximum illuminance	$E_{max}$	453 lx
Uniformity $U_o$	$E_{min}/E_m$	1:1.71 (0.59)
Diversity $U_d$	$E_{min}/E_{max}$	1:2.38 (0.42)

#### Type No. Make

1	12 x		<b>BELL Lighting Limited</b>	
			Order No.	: 11491
			Luminaire name	: Skyline Virtus 150W-300W 4000K Asymmetric Floodlight
			Equipment	: 1 x LED 840 225 W / 34568 lm





## 2 Exterior 1

### 2.3 Calculation results, Exterior 1

#### 2.3.2 3D pseudo colours, View 1 (E)

