# Installation : External

| | | |
|---|---|---|
| Project number | : | Spalding Academy |
| Customer | : | Kier |
| Processed by | : | James Bird |
| Date | : | 31.03.2021 |

The following values are based on exact calculations on calibrated lamps, luminaires and their arrangement. In practice, gradual divergences can occur.

Guarantee claims for luminaire data are excluded.

Relux and the luminaire manufacturers accept no liability for consequential damage and damage which is occasioned to the user or to third parties.

# 1 Luminaire data

## 1.1 Dextra Group PLC, DEXTRA LIGHTING - AMEN... (!AMEX L16 ES C8...)

### 1.1.1 Data sheet

**Manufacturer: Dextra Group PLC**

**!AMEX L16 ES C84 E3 surface-mounted luminaire DEXTRA LIGHTING - AMENITY EXTERIOR LED**
AMEX L16 ES C84 - Amenity exterior 1600 lumen LED luminaire, surface mounted (wall or ceiling). IP65 rated, die cast aluminium body with eyelid, finished in silver powder coat paint, opal polycarbonate diffuser. Electronic LED driver, with optional 3 hour maintained integral emergency control gear.

Optional extras:
M3 - Emergency control gear (435 lumens)
ST3 - Self test
AT3 - DALI Autotest

S - Switch Dimming
D - Digital Dimming (DSI)
A - Digital Addressable Lighting Interface (DALI)
C - Bi-Level Dimming (Corridor Function).Will only dim the luminaire to 10% during absence and brightout, it will not turn the luminaire off.

R25E - R25 On/Off – High Frequency
R25C - R25 Bi-Level Dimming (manual switch off)
R25W - Reacta Wave Wireless DALI sensor
R25WE - Reacta Wave Wireless on/off sensor

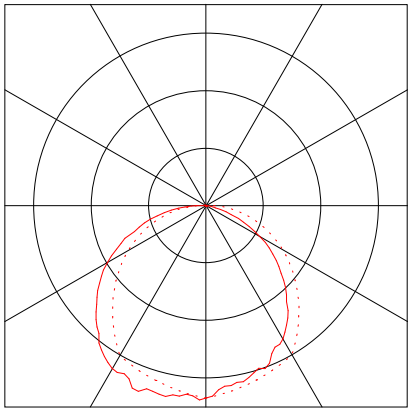
**Luminaire data**

| | | |
|---|---|---|
| Luminaire efficiency | : | 100% |
| Luminaire efficacy | : | 105.26 lm/W |
| Classification | : | A40 ↓99.4% ↑0.6% |
| CIE Flux Codes | : | 46 77 94 99 100 |
| UGR 4H 8H | : | 18.6 / 23.6 |
| Control gear | : | electronic ballast |
| Power | : | 15.2 W |
| Luminous flux | : | 1600 lm |

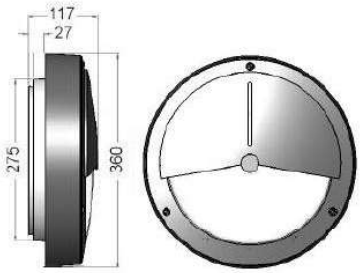
**Equipped with**

| | | |
|---|---|---|
| Quantity | : | 1 |
| Designation | : | Dextra |
| Colour | : | 4000K |
| Luminous flux | : | 1600 lm |
| Colour reproduction | : | 1B |

Dimensions : 360 mm x 360 mm x 117 mm



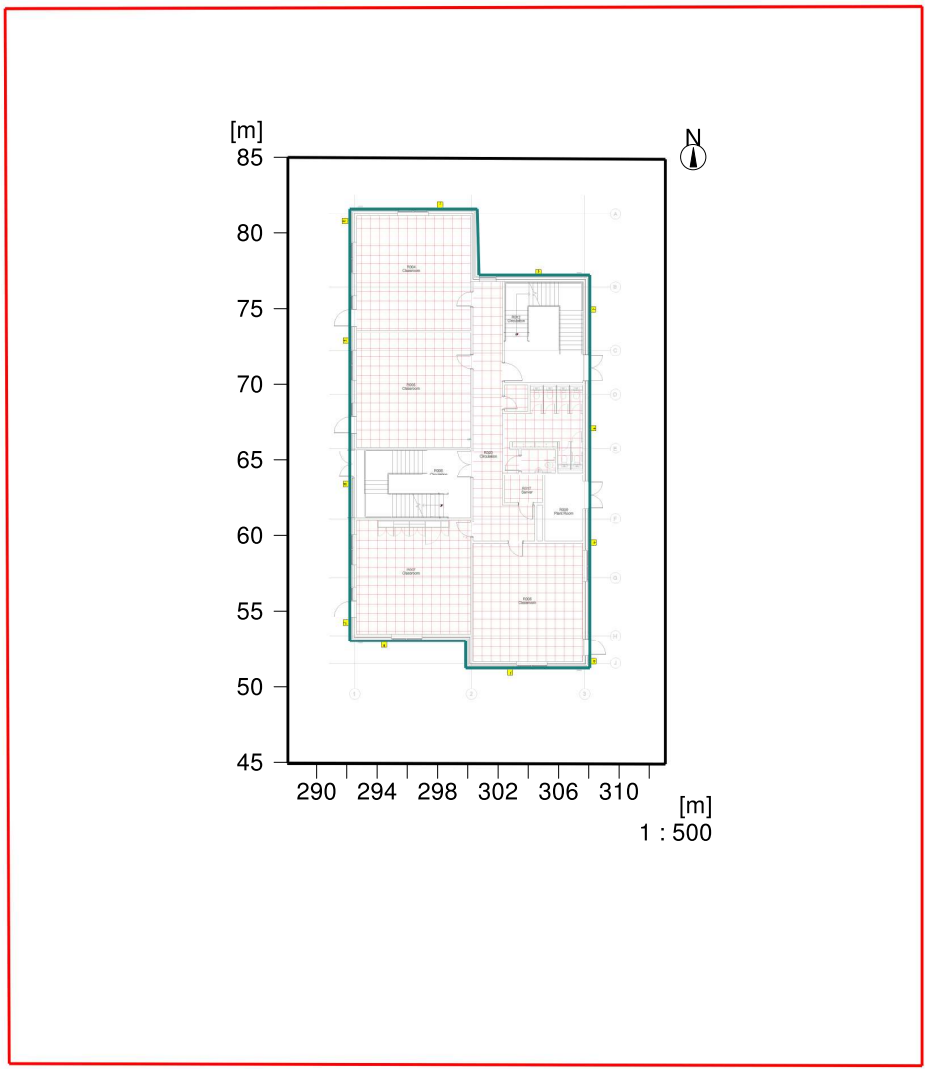




# 2 Exterior 1

## 2.1 Description, Exterior 1

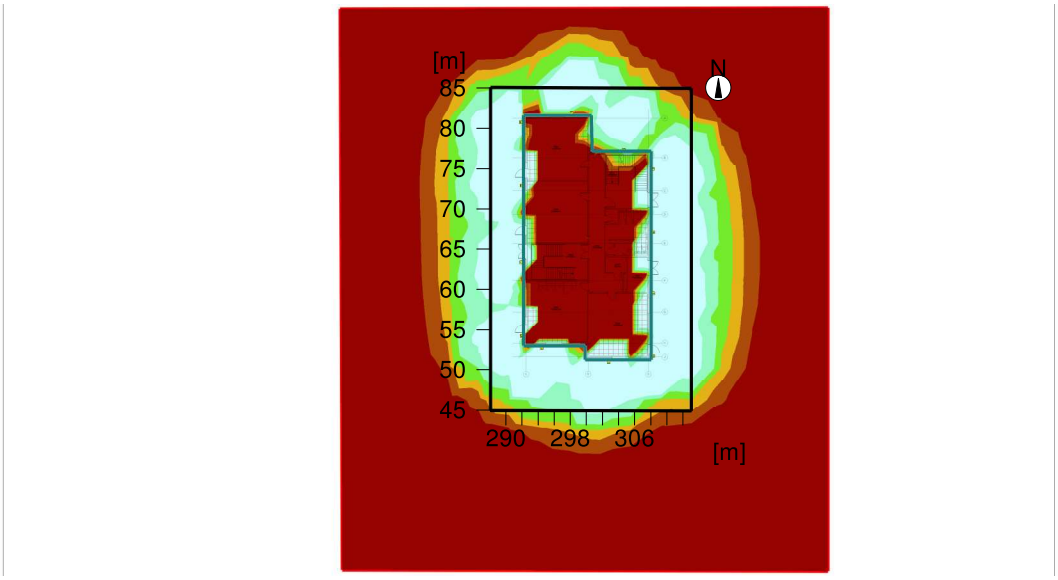
### 2.1.1 Floor plan

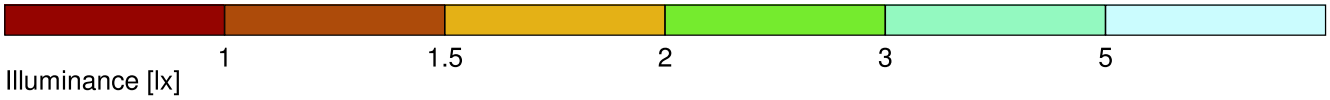


# 2 Exterior 1

## 2.2 Summary, Exterior 1

### 2.2.1 Result overview, Measuring area 1




Illuminance [lx]

**General**

| | |
|---|---|
| Calculation algorithm used | Average indirect fraction |
| Height of evaluation surface | 0.00 m |
| photometric centre height. [m]: | 2.00 m |
| Maintenance factor | 0.85 |
| | |
| Total luminous flux of all lamps | 19200 lm |
| Total power | 182.4 W |
| Total power per area (998.61 m²) | 0.18 W/m² |

**Illuminance**

| | | |
|---|---|---|
| Average illuminance | Eav | 2.2 lx |
| Minimum illuminance | Emin | 0 lx |
| Maximum illuminance | Emax | 40.9 lx |
| Uniformity Uo | Emin/Em | 1:--- (---) |
| Diversity Ud | Emin/Emax | 1:--- (---) |

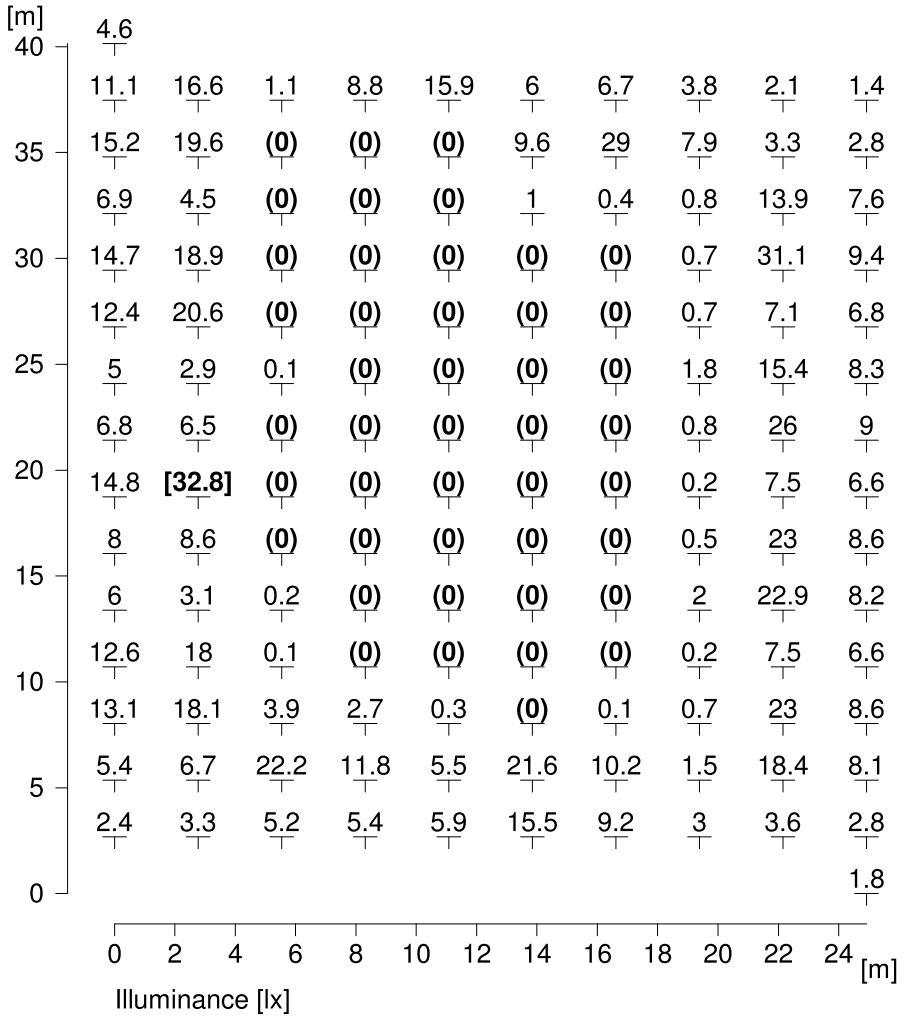
**Type No.\Make**

| | | | |
|---|---|---|---|
| | | **Dextra Group PLC** | |
| 1 | 12 | Order No. | : !AMEX L16 ES C84 E3 |
| | | Luminaire name | : DEXTRA LIGHTING - AMENITY EXTERIOR LED |
| | | Equipment | : 1 x Dextra 15.2 W / 1600 lm |

# 2 Exterior 1

## 2.3 Calculation results, Exterior 1

### 2.3.1 Table, Floor (E)



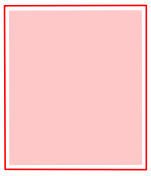

| | | | |
|---|---|---|---|
| Average illuminance | Eav | : 5.9 lx |
| Minimum illuminance | Emin | : 0 lx |
| Maximum illuminance | Emax | : 32.8 lx |
| Uniformity Uo | Emin/Eav | : --- |
| Diversity Ud | Emin/Emax | : --- |

## 2.3 Calculation results, Exterior 1

### 2.3.2 Table, Measuring area 1 (E)

| [m] | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 60 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.6 | 0.8 | 0.8 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 |
| | 0.2 | 0.2 | 0.3 | 0.5 | 0.7 | 0.8 | 1.6 | 2.6 | 2.1 | 1.1 | 0.7 | 0.5 | 0.3 | 0.2 | 0.2 | 0.1 |
| | 0.2 | 0.3 | 0.5 | 1 | 2.2 | 2.8 | 3.1 | 16.7 | 5.8 | 2.5 | 1.3 | 0.8 | 0.5 | 0.3 | 0.2 | 0.2 |
| 50 | 0.2 | 0.4 | 0.7 | 1.6 | 5.6 | 38.1 | (0) | (0) | 5.7 | 10.4 | 2.8 | 1.5 | 0.9 | 0.5 | 0.3 | 0.2 |
| | 0.3 | 0.4 | 0.8 | 1.8 | 4.7 | 6.6 | (0) | (0) | 1.2 | 3.6 | 7.6 | 4.9 | 1.5 | 0.7 | 0.4 | 0.2 |
| | 0.3 | 0.5 | 0.9 | 1.8 | 5.8 | 36.3 | (0) | (0) | (0) | (0) | 19.6 | 7 | 2.1 | 0.9 | 0.5 | 0.3 |
| 40 | 0.3 | 0.5 | 0.8 | 1.7 | 4.1 | 5.8 | (0) | (0) | (0) | (0) | 7.7 | 6.3 | 2.3 | 1 | 0.5 | 0.3 |
| | 0.3 | 0.5 | 0.8 | 1.7 | 4.6 | 11.5 | (0) | (0) | (0) | (0) | 20.7 | 7.5 | 2.4 | 1.1 | 0.6 | 0.3 |
| | 0.3 | 0.5 | 0.8 | 1.7 | 5.1 | 19.8 | (0) | (0) | (0) | (0) | 9.5 | 6.7 | 2.4 | 1.1 | 0.6 | 0.3 |
| 30 | 0.3 | 0.4 | 0.8 | 1.6 | 3.8 | 4.6 | (0) | (0) | (0) | (0) | 17.1 | 7.1 | 2.3 | 1 | 0.6 | 0.3 |
| | 0.2 | 0.4 | 0.7 | 1.5 | 5.6 | [40.9] | (0) | (0) | (0) | (0) | 8.7 | 6.2 | 2.1 | 0.9 | 0.5 | 0.3 |
| | 0.2 | 0.3 | 0.5 | 1.1 | 2.8 | 6 | 24.3 | 5.8 | 22.8 | 5 | 18.6 | 6.2 | 1.7 | 0.7 | 0.4 | 0.3 |
| 20 | 0.2 | 0.2 | 0.4 | 0.6 | 1.1 | 2.1 | 3.5 | 3.8 | 7.2 | 4.6 | 1.8 | 1.8 | 1 | 0.5 | 0.3 | 0.2 |
| | 0.1 | 0.2 | 0.3 | 0.4 | 0.6 | 0.8 | 1.1 | 1.5 | 1.7 | 1.3 | 0.8 | 0.7 | 0.5 | 0.3 | 0.2 | 0.2 |
| | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 |
| 10 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 |
| | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 0 | (0) | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | [m] | | | |

Illuminance [lx]



Height of the reference plane : 0.00 m

| | | |
|---|---|---|
| Average illuminance | Eav | : 2.2 lx |
| Minimum illuminance | Emin | : 0 lx |
| Maximum illuminance | Emax | : 40.9 lx |
| Uniformity Uo | Emin/Eav | : --- |
| Diversity Ud | Emin/Emax | : --- |