

**Installation :**

Project number :  
Customer : O'Neills  
Processed by :  
Date : 05.06.2018

Project description:  
Dimensions as per plans provided

The design offered by Eterna Lighting is created based on information as provided, including dimensions declared. If there is a possibility that actual site conditions will differ from those made known to Eterna Lighting at the design stage, it is the responsibility of the client to check and ensure that the design fulfils all required criteria before final acceptance and adoption of such proposals are implemented.

Any lighting design carried out by Eterna Lighting will assume the following unless information is provided in advance in writing advising to the contrary:

- 1.The area will be lit in accordance with the relevant standard using a luminaire arrangement which considers the purpose of meeting the requirements specified and also commercial considerations.
- 2.Room reflectance shall be considered to be in accordance with relevant guidelines.
- 3.Ambient temperature shall be assumed as 25°C nominally.
- 4.Site voltage shall be assumed 230V nominal, frequency 50Hz.
- 5.Where a luminaire is supplied with lamps these will be what are deemed by Eterna Lighting to be standard issue lamps for the product.
- 6.Overall and ongoing maintenance levels for the project are assumed as good with a clean installation area unless otherwise notified.

Emergency lighting designs do not include emergency exit signs, these should be separately specified for the individual project.

For further details please call Eterna Lighting Design on 01933 673144.

Instruction manuals for all products offered by Eterna Lighting are available at [www.eterna-lighting.co.uk](http://www.eterna-lighting.co.uk) or by request on the above number.

This statement is not exhaustive and is primarily intended to alert the client to the potential variances to the design plan.

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

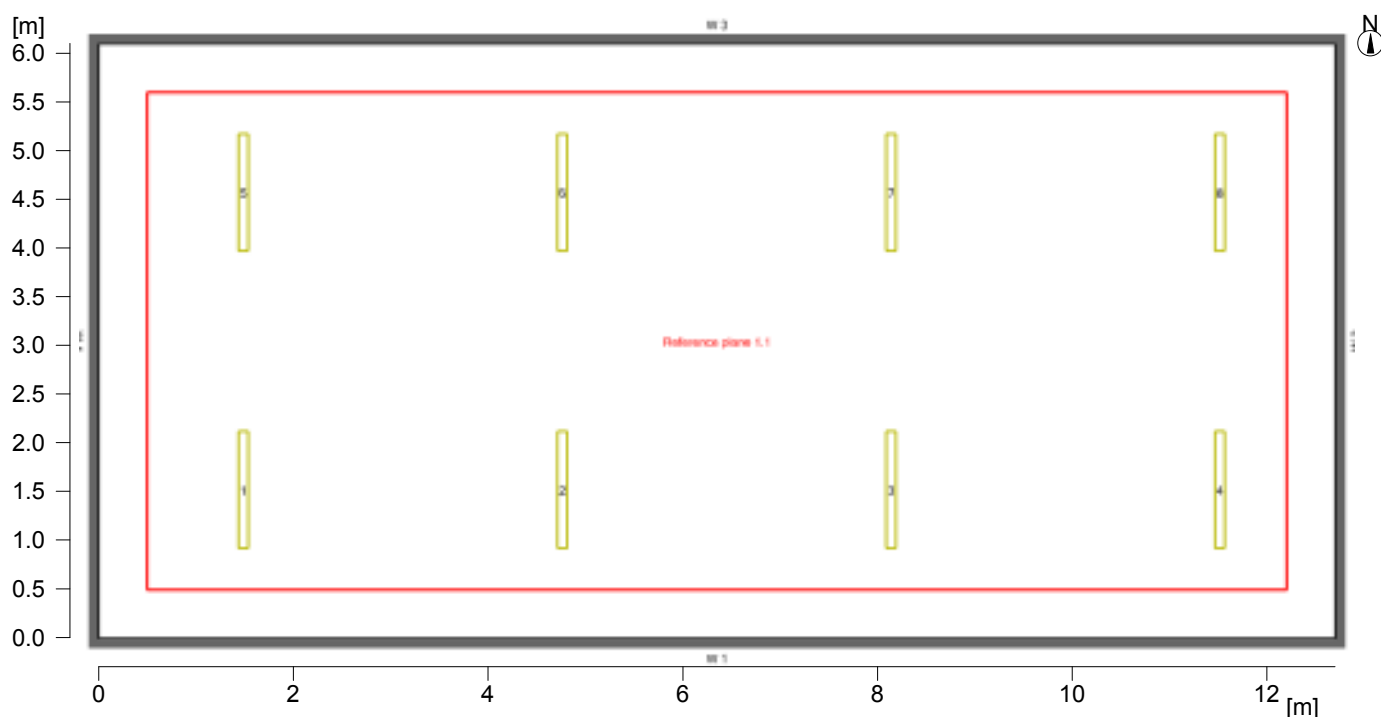
Guarantee claims for luminaire data are excluded.

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

# 1 LEDLBAY120

## 1.1 Description, LEDLBAY120

### 1.1.1 Floor plan



#### Room data:

W1 : 12.70  
 W2 : 6.10  
 W3 : 12.70  
 W4 : 6.10  
 W5 : ----  
 W6 : ----

Floor: ----  
 Ceiling: ----

Room height [m]:  
 Height of reference plane [m]:  
 Height of luminaire plane [m]:

#### Reflectance:

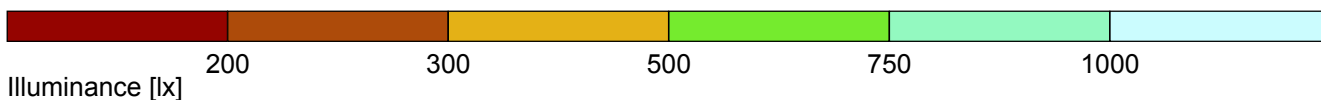
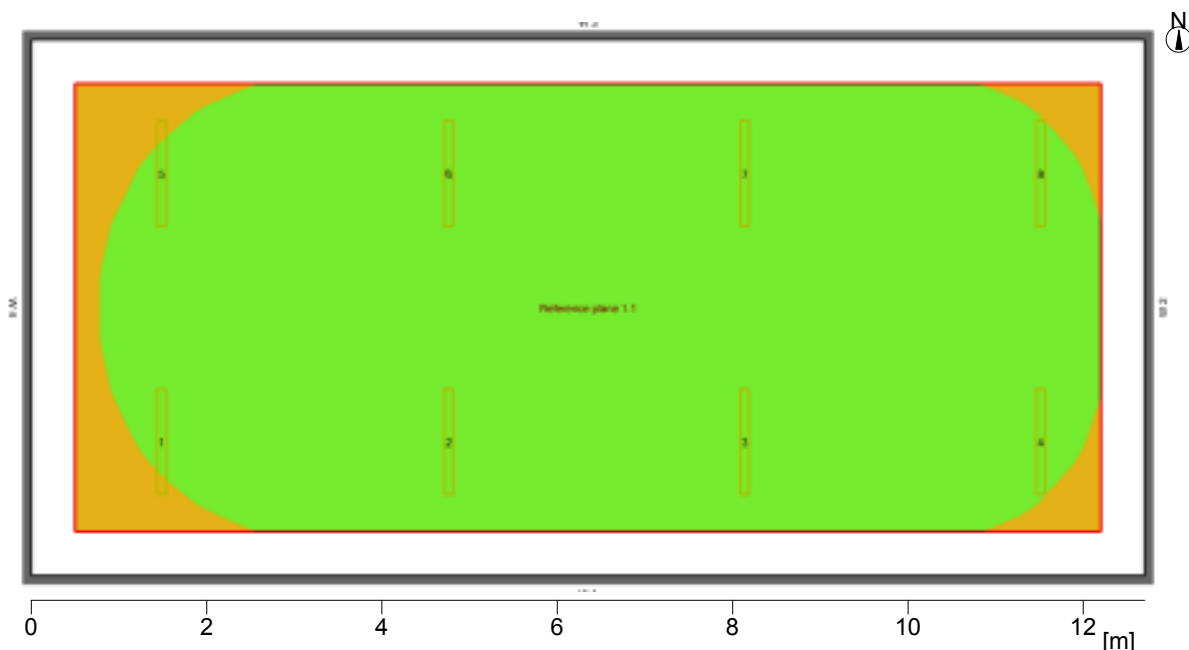
50.0 %  
 50.0 %  
 50.0 %  
 50.0 %  
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 20.0 %  
 70.0 %

6.10  
 0.75  
 6.10

# 1 LEDLBAY120

## 1.2 Summary, LEDLBAY120

### 1.2.1 Result overview, Evaluation area 1



#### General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	6.10 m
Maintenance factor	0.80
Total luminous flux of all lamps	98368.00 lm
Total power	960.0 W
Total power per area (77.47 m <sup>2</sup> )	12.39 W/m <sup>2</sup> (2.12 W/m <sup>2</sup> /100lx)

#### Evaluation area 1

User profile


#### Reference plane 1.1

Educational premises - Educational buildings  
 5.36.24 (EN 12464-1, 8.2011) Sports halls, gymnasiums, swimming pools (Ra >80.00)

	Horizontal		cylindrical	
Em	585 lx	(>= 300 lx)	193 lx	(>= 50 lx)
Emin	406 lx		129 lx	
Emin/Eav (Uo)	0.69	(>= 0.60)	0.67	(>= 0.10)
Emin/Emax (Ud)	0.60			
UGR (1.2H 2.6H)	<=24.9	(< 22.00)		
Position	0.75 m		1.20 m	

#### Type No.Make

#### Eterna Lighting Ltd

1	8	Order No.	: LEDLBAY120.IES
		Luminaire name	: LEDLBAY120
		Equipment	: 1 x 120 W / 12296 lm

## 1 LEDLBAY120

### 1.3 Calculation results, LEDLBAY120

#### 1.3.1 3D luminance, View 1



Luminance in the scene

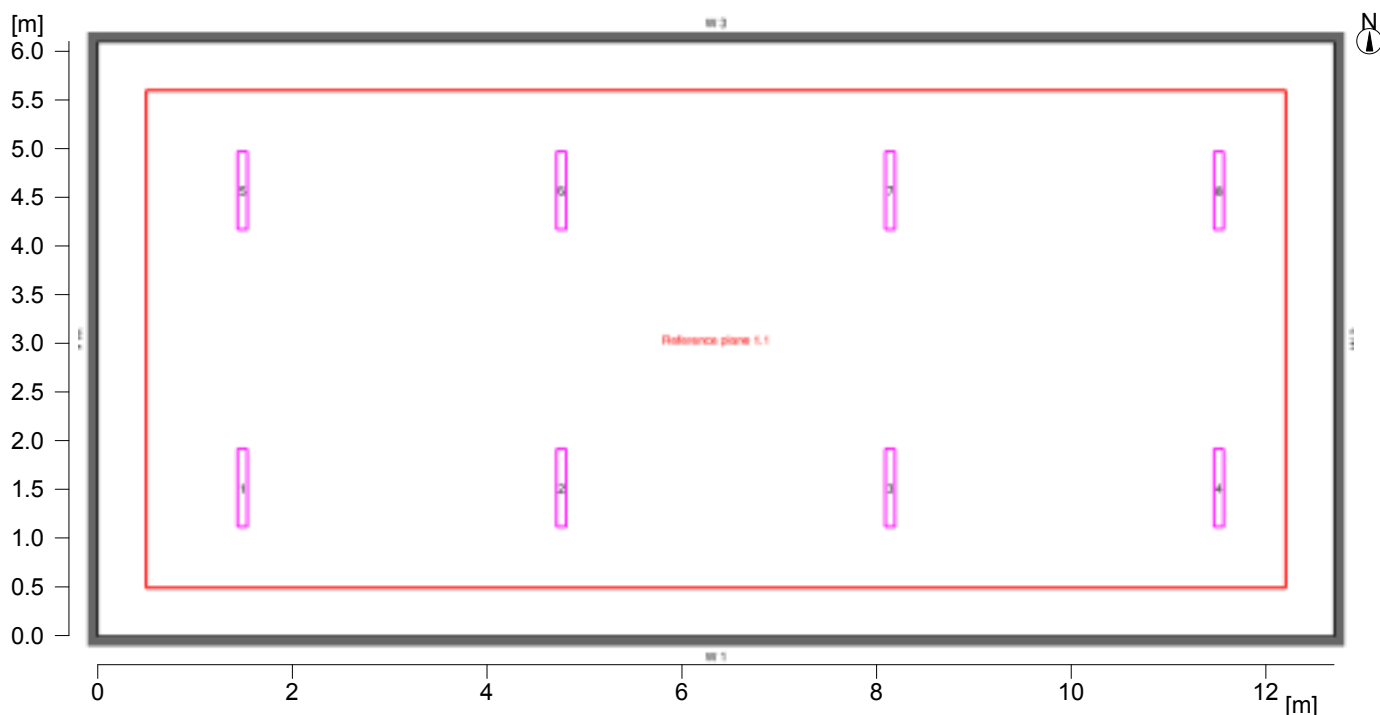
Minimum: : 16.1 cd/m<sup>2</sup>

Maximum: : 104 cd/m<sup>2</sup>

## 2 LEDLBAY80

### 2.1 Description, LEDLBAY80

#### 2.1.1 Floor plan



#### Room data:

W1 : 12.70  
 W2 : 6.10  
 W3 : 12.70  
 W4 : 6.10  
 W5 : ----  
 W6 : ----

Floor: ----  
 Ceiling: ----

Room height [m]:  
 Height of reference plane [m]:  
 Height of luminaire plane [m]:

#### Reflectance:

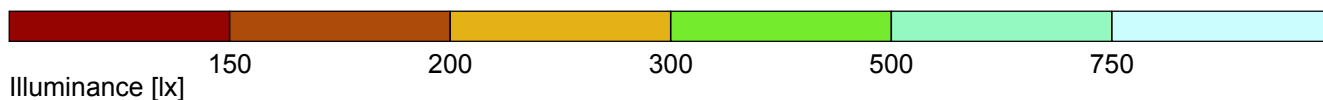
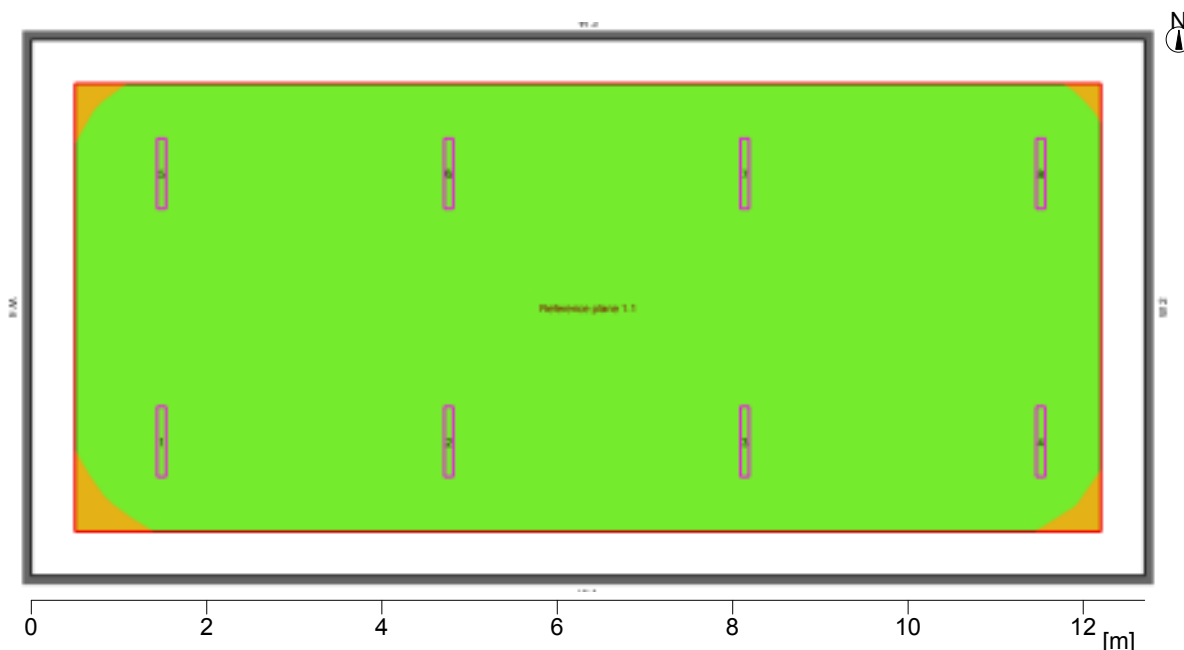
50.0 %  
 50.0 %  
 50.0 %  
 50.0 %  
 ----  
 ----  
 20.0 %  
 70.0 %

6.10  
 0.75  
 6.10

## 2 LEDLBAY80

### 2.2 Summary, LEDLBAY80

#### 2.2.1 Result overview, Evaluation area 1



#### General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	6.10 m
Maintenance factor	0.80
Total luminous flux of all lamps	65424.00 lm
Total power	640.0 W
Total power per area (77.47 m <sup>2</sup> )	8.26 W/m <sup>2</sup> (2.11 W/m <sup>2</sup> /100lx)

#### Evaluation area 1

User profile

#### Reference plane 1.1

Educational premises - Educational buildings  
 5.36.24 (EN 12464-1, 8.2011) Sports halls, gymnasiums, swimming pools (Ra >80.00)

	Horizontal		cylindrical	
Em	392 lx	(>= 300 lx)	132 lx	(>= 50 lx)
Emin	280 lx		97 lx	
Emin/Eav (Uo)	0.71	(>= 0.60)	0.73	(>= 0.10)
Emin/Emax (Ud)	0.62			
UGR (1.2H 2.6H)	<=25.3	(< 22.00)		
Position	0.75 m		1.20 m	

#### Type No.Make

#### Eterna Lighting Ltd

2	8	Order No.	: LEDLBAY80.IES
		Luminaire name	: LEDLBAY80
		Equipment	: 1 x 80 W / 8178 lm

## 2 LEDLBAY80

### 2.3 Calculation results, LEDLBAY80

#### 2.3.1 3D luminance, View from the left



Luminance in the scene

Minimum: : 8.1 cd/m<sup>2</sup>

Maximum: : 76.5 cd/m<sup>2</sup>