

Emergency lighting - Specifying de-rating factors.

De-rating factors can be applied by the user in 2 screens:

Configure luminaire for emergency lighting

Configure luminaire for emergency lighting

Luminaire only used for emergency lighting
 Luminaire used for both emergency and normal artificial lighting
 Luminaire cannot be used for emergency lighting

Luminaire name: PROFILE CRE8
 Luminaire number: CRE8W/HF/249/PNAL
 Equipment: 2 x FDH-Ø16 49 (4300 lm)

Calculate luminous flux for emergency lighting: 559 lm
 Luminous flux factor (emergency/rated): 6.5 %

Calculate luminous flux for artificial lighting:
 rated lumin
 Luminous flux for emergency light: 8600 lm

Check the technical details of the company!
In some cases the luminaires are measured for emergency lighting!

Buttons: Planning aid..., OK, Cancel, Help

This screen is used to define all factors to be applied to the luminaire.

Calculation manager – Room X - Emergency lighting

Calculation manager - Room 1 - Emergency lighting

Room 1

- Artificial light
- Daylight
- Artificial and daylight
- Emergency luminaire
- Sensors
- Solar altitude graph
- Raytracing calculation
- Relux Valid

Reduction factor: 1

Miscellaneous:

- Consider luminaires shadows
- Calculate external faces
- Show selected results automatically

Buttons: Save results after calculation, Close, Cancel, Start

This screen is used to define all factors to be applied to the room.

It is left to the user to apply factors appropriately.

Examples of factors:

BLF = Ballast Lumen Factor
is a luminaire factor.

MLF = Minimum Lumen Factor (sometimes referred to as K factor)
is a luminaire factor derived from:

F5 = The light output at 5 sec

F60 = The light output at 1 minute

Fnom = The light output when supplied at the nominal emergency supply voltage

Fend = The light output at the end of rated duration

ELIFE = Maintained Ratio to allow for lamp lumen depreciation
is a luminaire factor.

Typical values are:

1.00 for Non Maintained operation

0.85 for Maintained operation

SF = Emergency Luminaire Service Factor, to allow for the effects of dirt and ageing
is either a luminaire factor or a room factor.

Typical value is 0.8