Small Office

Installation : CCP Summer Works

Project number : 1059CLN
Customer : Simon Wheeler @ Vickery Holman
Processed by : Chris Norsworthy
Date : 19.06.2017

Project description:
I have carried out calculations as per your instructions and guidance. Please check and confirm all details are correct. All areas have been assumed as being open plan without any obstructions above the working plane. Please be aware of L2 requirements and check that conformity has been met where required. SBEM calculations are the responsibility of the contractor.
If our design has been submitted with emergency lighting coverage, it was designed as a service to provide an overall illuminance in line with current emergency lighting recommendations, but to be strictly in line with guidelines, other factors need to be considered including, but not limited to,

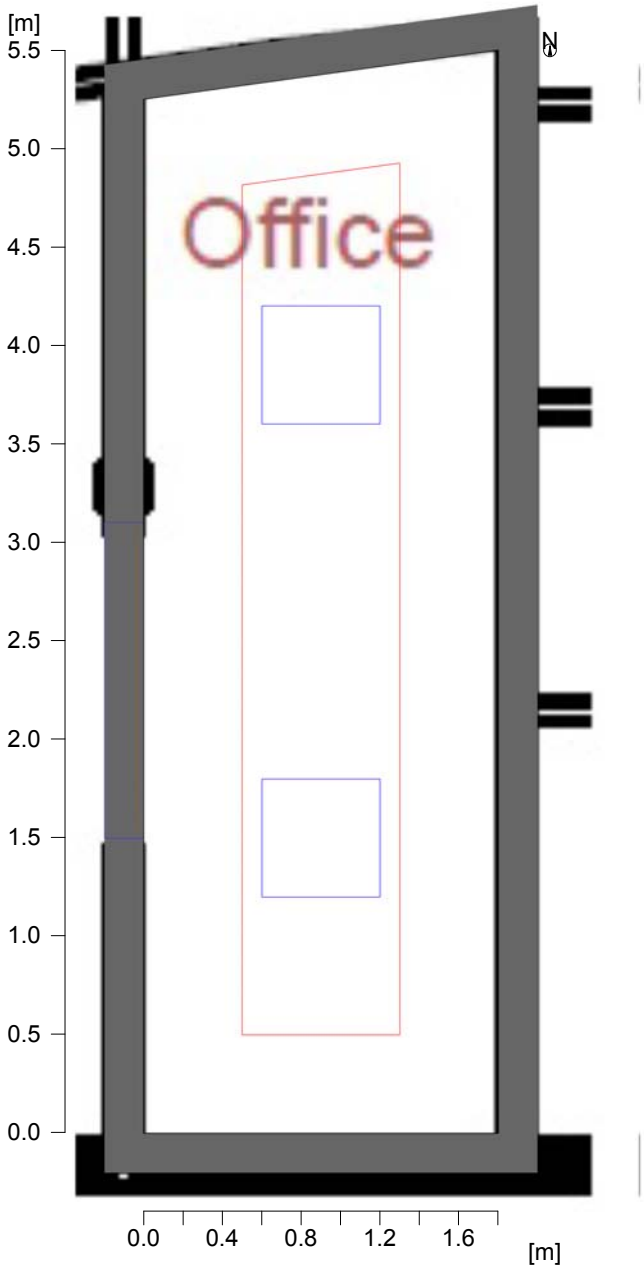
- Any change of direction requires emergency lighting consideration.
- Any change in floor levels (Including a step or ramp) requires additional consideration.
- Any fire-fighting equipment (Hoses or extinguishers) needs additional consideration.
- Any fire assembly areas require additional considerations.
- All fire call points require additional consideration.
- Exit routes need extra considerations.

We have not carried out a risk assessment for emergency lighting on the site. We accept no responsibility for current requirements that under HSE and fire regulations are the responsibilities of the 'Responsible Person' or management of the site owners or operators. The emergency scheme must be checked and confirmed with a local building/fire control officer and ultimately approved by the owner of the building.
We have used common design parameters in order to carry out all our calculations and if any divergences that are not accepted , please contact us in order for re calculations to be carried out prior to an order. Please ensure that this lighting scheme complies with all requirements, and if further details/ calculations are required please contact us on the above number. Final quantities are to be confirmed prior to an order/installation.
Whilst every effort will be made by Fitzgerald to adhere to the written or product specification, it is always the responsibility of the customer to ensure that any scheme, specification or product satisfies the end users requirements.

1 Room 1

1.1 Description, Room 1

1.1.1 Floor plan

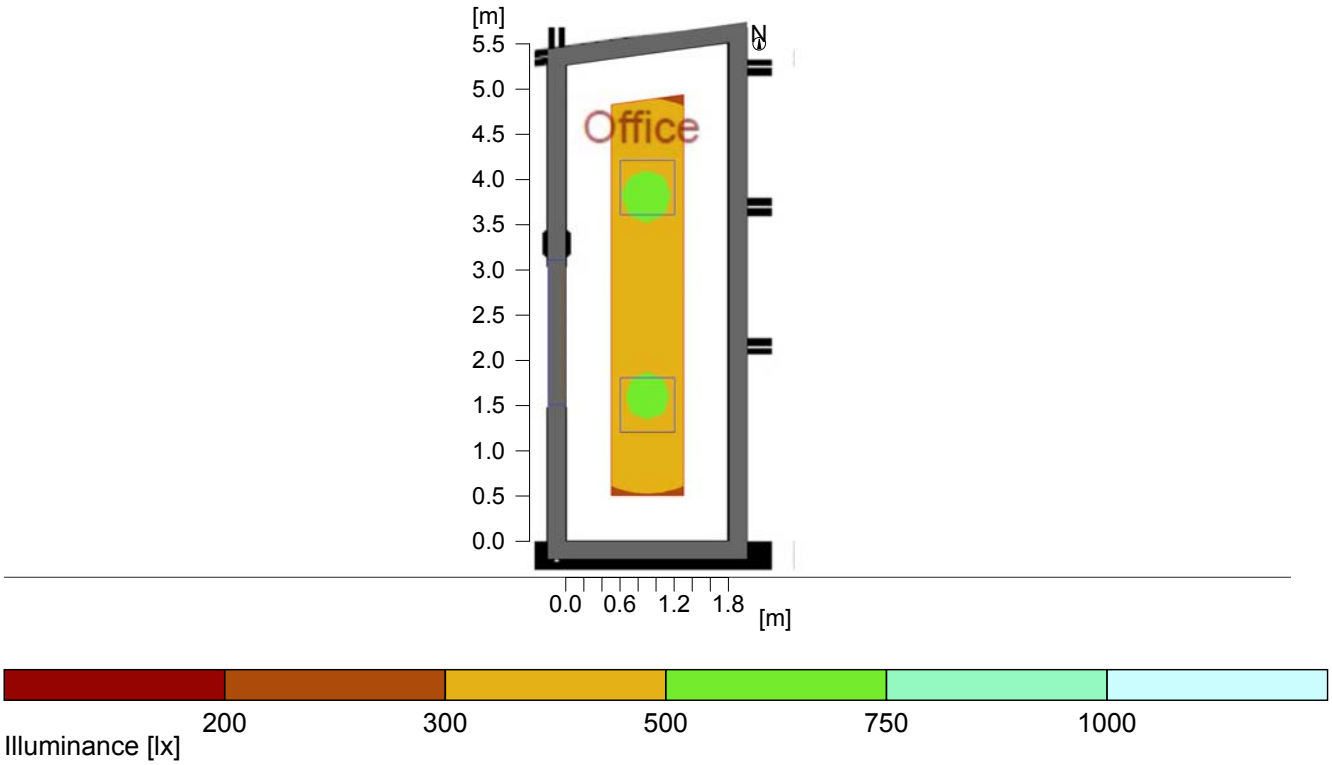


Wall	x	y	Length	Reflectance
1	2.15 m	0.70 m	1.80 m	50.0 %
2	2.15 m	6.20 m	5.50 m	50.0 %
3	0.35 m	5.95 m	1.82 m	50.0 %
4	0.35 m	0.70 m	5.25 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.40 m		
Height of reference plane		0.75 m		

1 Room 1

1.2 Summary, Room 1

1.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.40 m
Maintenance factor	0.85
Total luminous flux of all lamps	7020 lm
Total power	66.0 W
Total power per area (9.68 m²)	6.82 W/m² (1.56 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**
Horizontal	
Em	437 lx
Emin	298 lx
Emin/Eav (Uo)	0.68
UGR (1.5H 4.6H)	<=19.7
Position	0.75 m

Major surfaces Uo

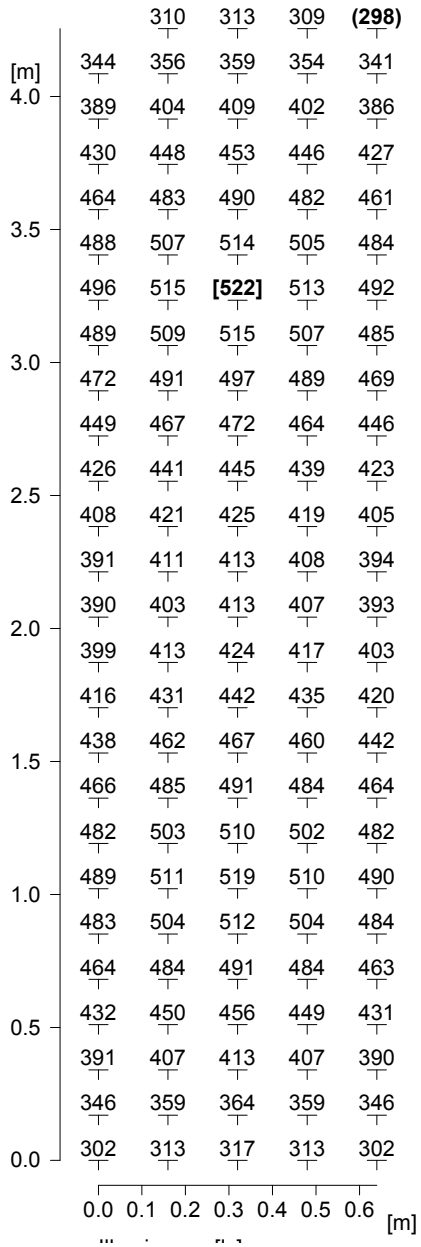
Type No.\Make

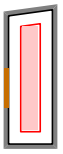
1 2 **Fitzgerald Lighting**
Order No. : CE35/B/CO/840
Luminaire name : Celestial LED
Equipment : 1 x LED PANEL / 3510 lm

1 Room 1

1.3 Calculation results, Room 1

1.3.1 Table, Reference plane 1.1 (E)



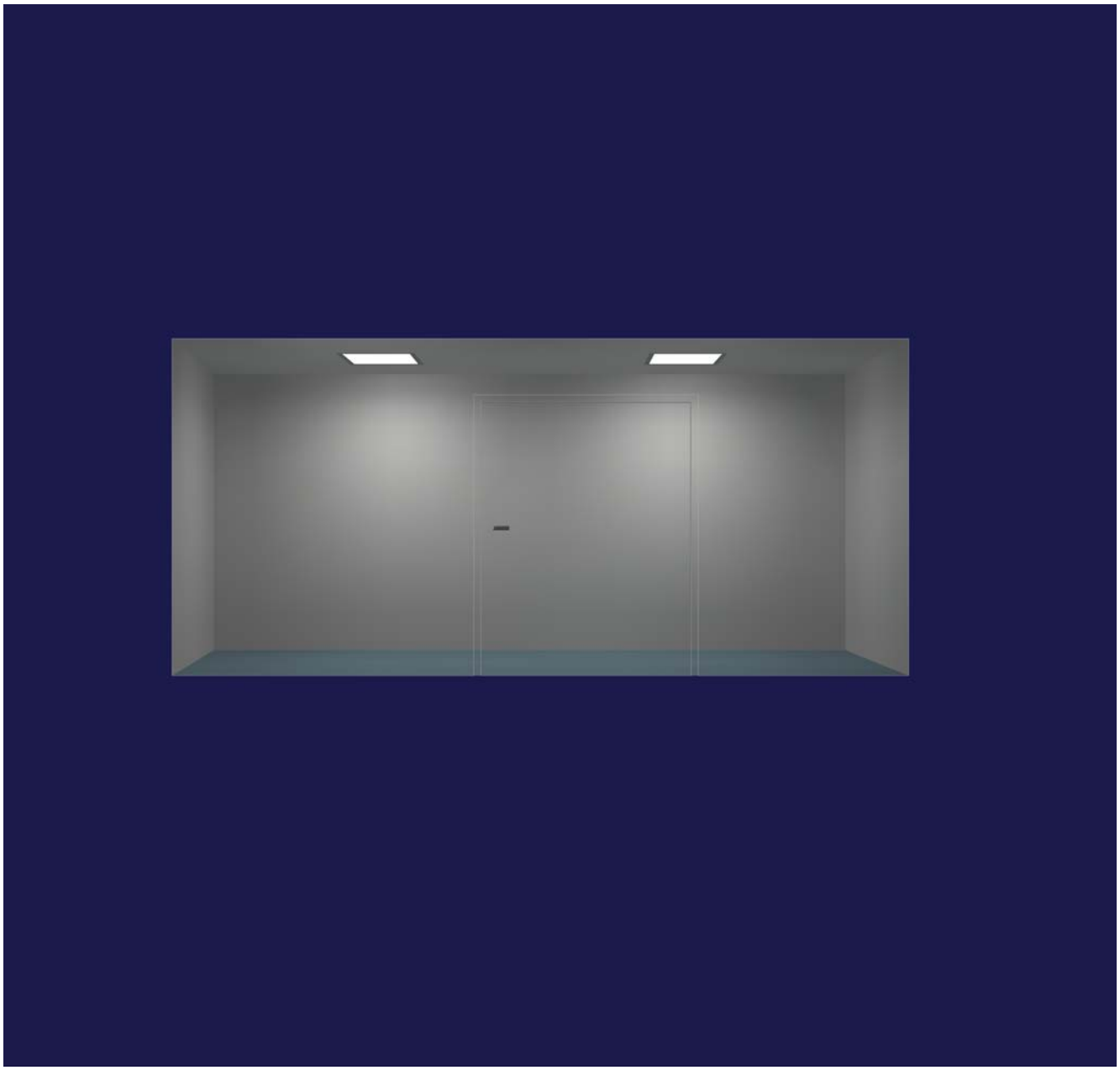


Height of the reference plane : 0.75 m

Average illuminance	Eav	: 437 lx
Minimum illuminance	Emin	: 298 lx
Maximum illuminance	Emax	: 522 lx
Uniformity Uo	Emin/Eav	: 1 : 1.47 (0.68)

1.3 Calculation results, Room 1

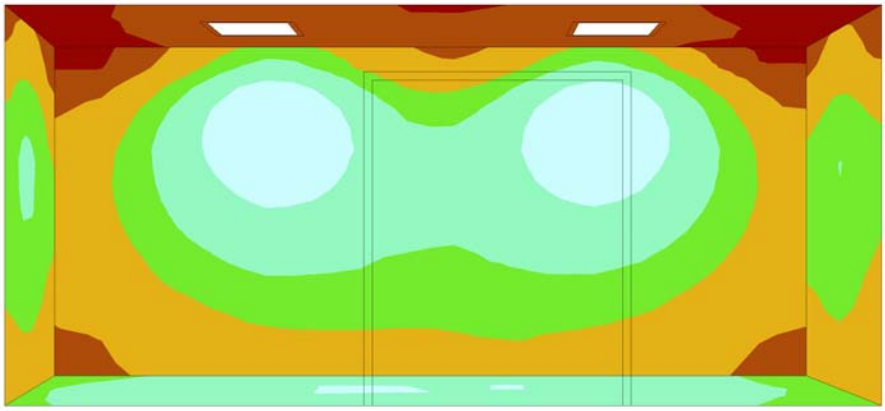
1.3.2 3D luminance, View from the left



Luminance in the scene
Minimum: : 0 cd/m²
Maximum: : 65.1 cd/m²

1.3 Calculation results, Room 1

1.3.3 3D pseudo colours, View from the left (E)



Illuminance [lx]