

External Walkway

Installation : Chancery Alley

Project number : DB2189HALI

Customer :

Processed by : Dean Bramley

Date : 25.04.2016

Project description:

We have the pleasure of providing you the enclosed proposal with all calculations based on the information, drawings and specifications provided. Please check to confirm that all details are correct, especially dimensions of the rooms and specification of the fittings as the information provided may not be precise.

Areas are assumed to be open areas without any obstructions above the working plane.

Where applicable the designs conform to BS EN12464-1 and 2 :2011, SLL Code of Lighting 2012, CIBSE LG3 1996/2001, BS5489 - 1 2003 and LG7 recommendations and guidelines. If conformity to LG7 is to be proved with exact figures, we may need to add or change the Luminaire types. Please be aware of the Part L2 requirements and check that conformity has been met where required.

Illuminance levels and uniformity are shown for your approval as are the proposed luminaire types , please ensure that this choice is suitable for the room usage.

We have used common design parameters for ceiling heights and reflection factors of the room surfaces - (wall 60% ceiling 80% floor 20%), as well as Maintenance Factors (LED light source 0.9), in our calculations unless details were provided or otherwise stated. If any of these are not acceptable, please contact us to enable re-calculations to be carried out prior to ordering.

Any emergency lighting scheme should be checked and confirmed with a local building/fire control officer and ultimately by the owner of the building. Emergency Lighting will be designed to recommended guidelines set out in BS5266 2013.

All calculations have been based on rated lumen outputs and Photometric Data supplied by the manufacturers, but these may vary with ambient site temperatures.

Whilst every effort will be made by YESSS Electrical to adhere to the written or product specification provided, it is always the responsibility of the customer to ensure that any design scheme, specification or product supplied satisfies fully, complies with the end users requirements and is suitable for the installation required

If unsure of any suggested fittings it is advisable to order samples in advance.

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.

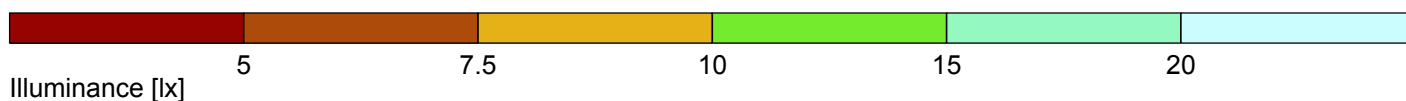
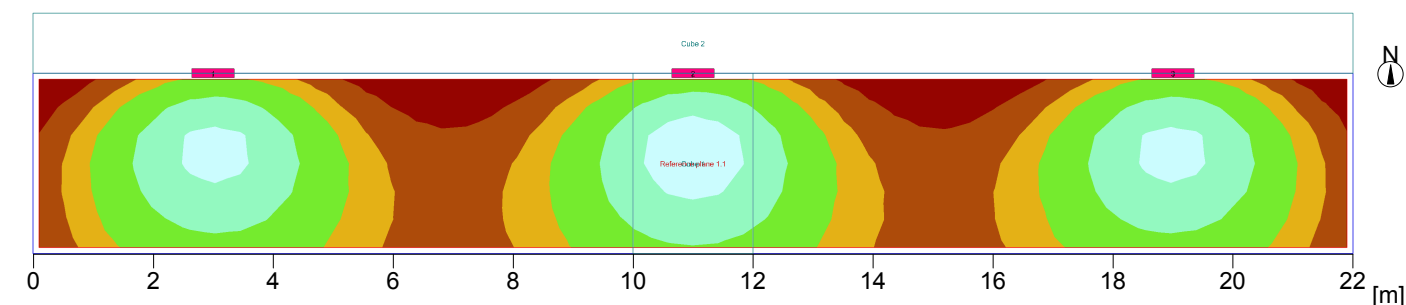
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2 Exterior 1

2.1 Summary, Exterior 1

2.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 photometric centre height.
 Maintenance factor

Average indirect fraction
 2.50 m
 0.85

Total luminous flux of all lamps
 Total power
 Total power per area (66.00 m²)

4080 lm
 70.2 W
 1.06 W/m² (9.83 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

Horizontal
 Em 10.8 lx
 Emin 2.7 lx
 Emin/Eav (Uo) 0.25
 Emin/Emax (Ud) 0.12
 Upward light ratio (ULR) 0.43
 Position 0.00 m

Type No. Make

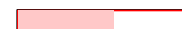
		NVC Lighting Ltd	
1	3	Order No.	: NBY22/LED/840
		Luminaire name	: BROOKLYN LED WALL LUMINAIRE
		Equipment	: 1 x LED MODULE 23.4 W / 1360 lm

2 Exterior 1

2.2 Calculation results, Exterior 1

2.2.1 Table, Reference plane 1.1 (E)

[m]	(2.7)	3.5	4.6	6	7.7	9.2	10.4	10.7	10.4	9.2	7.8	6.4	5	4.1	3.5	3.1	3	3.1	3.3	3.8	4.6	5.7	7	8.6	10.2	11.5	11.8	11.5	10.3	8.7
2.50	4	5.3	7.1	9.5	12	14.7	16.8	17.7	16.7	14.7	12.1	9.7	7.6	6	5	4.4	4.2	4.3	4.6	5.4	6.6	8.3	10.6	13.1	15.8	18	19	18.1	16	13.2
2.00	5.1	6.9	9.1	11.9	15.2	18.2	20.5	21.1	20.4	18.3	15.3	12.2	9.7	7.7	6.3	5.6	5.2	5.3	5.8	6.7	8.2	10.5	13.1	16.4	19.5	21.8	22.4	21.9	19.6	16.6
1.50	5.8	7.6	10	12.8	15.9	18.6	20.7	21.4	20.7	18.7	16.1	13.2	10.6	8.7	7.3	6.4	6	6.1	6.7	7.7	9.3	11.4	14.1	17.2	19.9	22	[22.8]	22.1	20.1	17.4
1.00	6	7.7	9.8	12.2	14.9	17.2	18.8	19.4	18.9	17.3	15.2	12.7	10.6	8.8	7.6	6.8	6.5	6.6	7.1	8	9.4	11.3	13.6	16.3	18.5	20.3	20.9	20.3	18.7	16.4
0.50	5.8	7.3	9.1	11.2	13.2	14.9	16.1	16.5	16.2	15.1	13.6	11.8	10	8.6	7.6	6.9	6.6	6.7	7.1	7.9	9.1	10.7	12.7	14.6	16.3	17.5	17.9	17.5	16.4	14.8
0.00	5.5	6.7	8.1	9.7	11.1	12.3	13.1	13.5	13.3	12.6	11.7	10.4	9.1	8	7.2	6.7	6.5	6.6	6.9	7.6	8.5	9.8	11.2	12.6	13.7	14.5	14.8	14.5	13.8	12.7
	0				2					4					6					8					10					12
	Illuminance [lx]																													



Part1

Height of the reference plane

Average illuminance	Eav	: 0.00 m
Minimum illuminance	Emin	: 10.8 lx
Maximum illuminance	Emax	: 2.7 lx
Uniformity Uo	Emin/Eav	: 22.8 lx
Diversity Ud	Emin/Emax	: 1 : 4.01 (0.25)
		: 1 : 8.45 (0.12)

2 Exterior 1

2.2 Calculation results, Exterior 1

2.2.1 Table, Reference plane 1.1 (E)

7.1	5.7	4.6	3.8	3.3	3.1	3	3.1	3.4	4	4.9	6.2	7.6	9	10.2	10.6	10.4	9.3	7.8	6.1	4.7	3.6	(2.7)
10.7	8.4	6.6	5.4	4.7	4.3	4.2	4.4	4.9	5.9	7.4	9.5	11.9	14.5	16.6	17.7	16.9	14.8	12.1	9.6	7.2	5.4	4.1
13.3	10.6	8.3	6.8	5.8	5.3	5.2	5.5	6.3	7.5	9.6	12	15.1	18.1	20.3	21	20.5	18.4	15.4	12	9.3	7	5.2
14.3	11.5	9.4	7.8	6.7	6.1	6	6.4	7.2	8.5	10.5	13	15.8	18.5	20.6	21.4	20.8	18.7	16.1	13	10.1	7.8	5.9
13.8	11.4	9.5	8.1	7.1	6.6	6.5	6.8	7.5	8.7	10.4	12.5	15	17.1	18.8	19.4	18.9	17.3	15	12.4	9.9	7.8	6.1
12.8	10.8	9.2	8	7.2	6.7	6.6	6.9	7.5	8.5	9.8	11.7	13.4	15	16.1	16.5	16.1	15	13.3	11.3	9.2	7.4	5.9
11.3	9.9	8.6	7.6	7	6.6	6.5	6.7	7.2	7.9	9	10.3	11.5	12.5	13.2	13.5	13.2	12.4	11.3	9.8	8.3	6.8	5.5
			14				16				18				20				[m]			



2.2 Calculation results, Exterior 1

2.2.2 3D pseudo colours, View 1 (E)

