

Level 06 Block D Roof

Installation : Mount Pleasant Externals

Project number :
Customer : Caldwell
Processed by : DRT
Date : 05.05.2021

Please note Orlight offer light level calculations as a bespoke complimentary service to valued clients. Orlight only act as a supplier of lighting and as such calculations are provided for informative purposes only.

All information is provided in good faith and is dependent on a multitude of variables including drawing scales and finishes. Adjustment of any such parameters may result in an alteration in light levels. As such Orlight will not be held responsible for and inaccuracies whatsoever.

In some cases photometric data (Eulumdat File) may be altered in the calculation software in an effort to better simulate the environment the luminaire is in, an example being reducing the luminaires height to create a recessed effect in the ceiling.

LDR-01 V1 28/10/19

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.

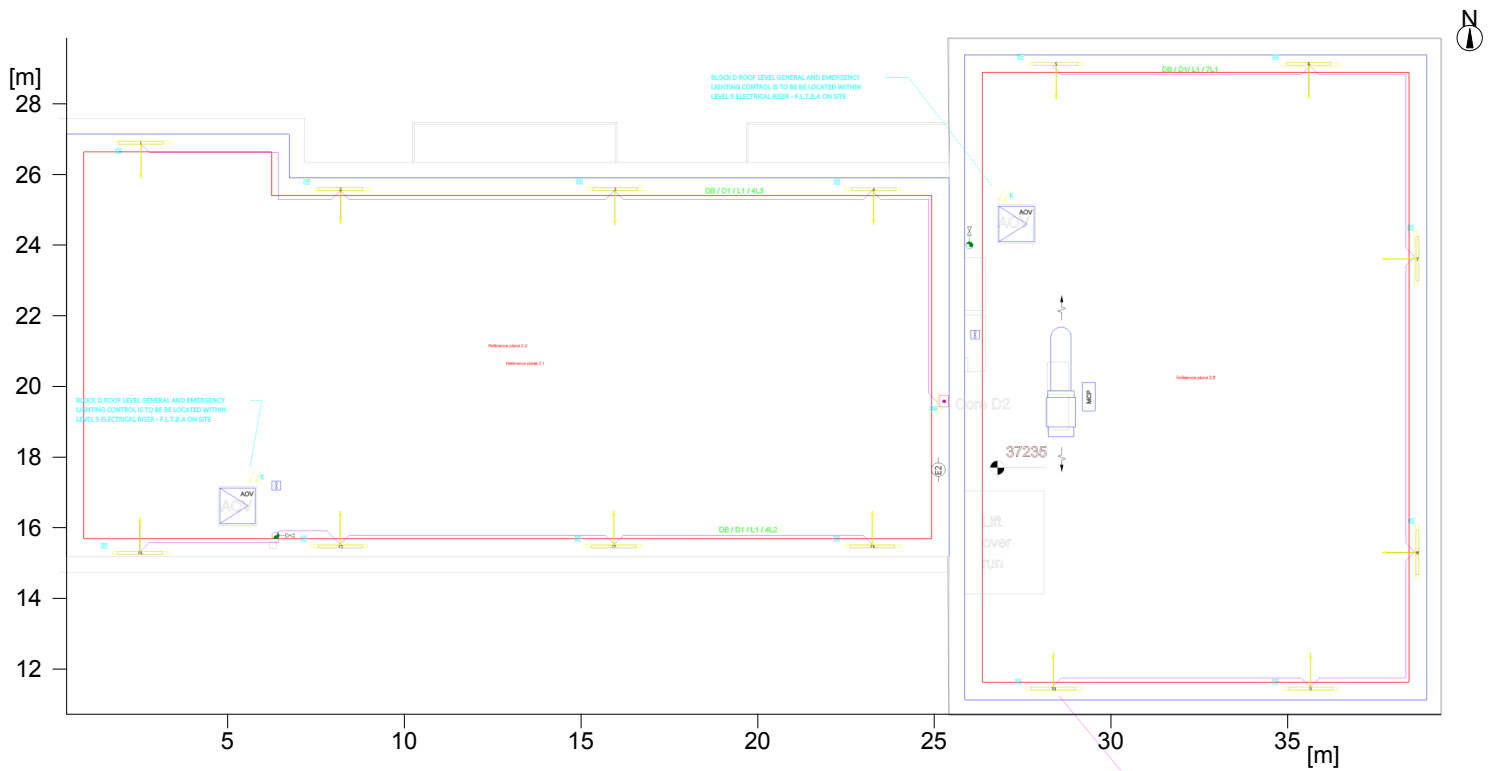
Relux and the luminaire manufacturers accept no liability for consequential damage and damage which is occasioned to the user or to third parties.

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1 Exterior 1

1.1 Description, Exterior 1

1.1.1 Floor plan



Object : Level 06 Block D Roof
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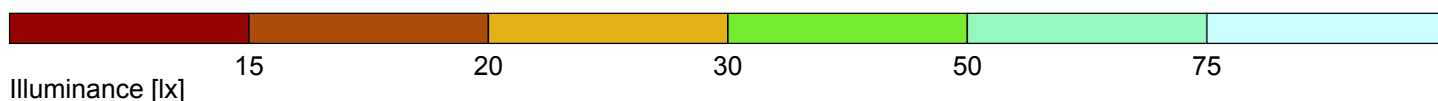
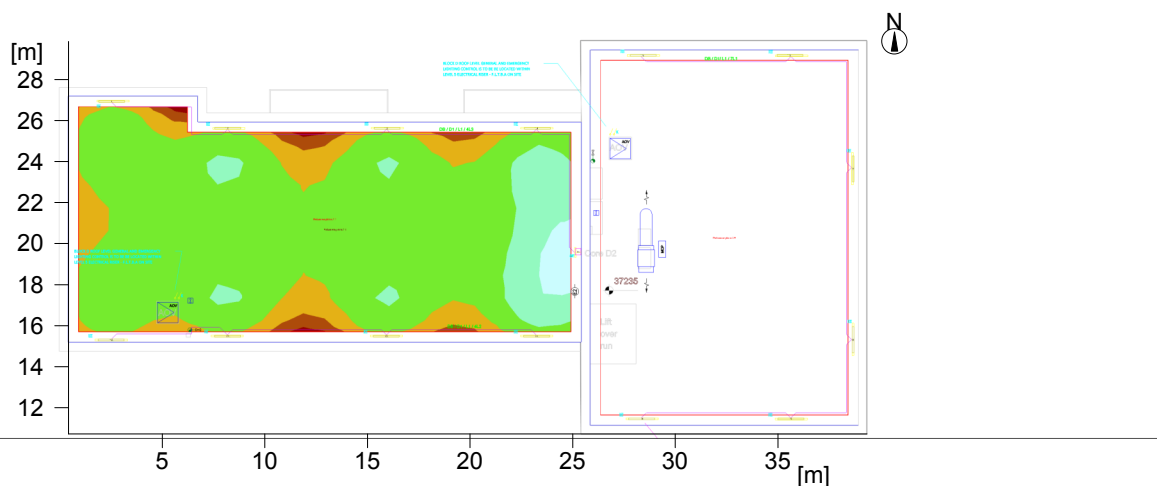


FROM SOURCE TO SITE

1 Exterior 1

1.2 Summary, Exterior 1

1.2.1 Result overview, Evaluation area 2



General

Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80
Total luminous flux of all lamps	38485.00 lm
Total power	285.0 W
Total power per area (275.12 m ²)	1.04 W/m ² (2.74 W/m ² /100lx)

Evaluation area 2

Reference plane 2.1

	Horizontal
Em	37.8 lx
Emin	15.4 lx
Emin/Eav (Uo)	0.41
Emin/Emax (Ud)	0.17
Position	0.00 m

Type No.\Make

1	8	Orlight Ltd.
		Order No. : Ref IE - ORLWP4-34W-LED
		Luminaire name : Ref IE - ORLWP4-34W-LED
		Equipment : 1 x 34 W / 4575 lm

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FROM SOURCE TO SITE

1 Exterior 1

1.2 Summary, Exterior 1

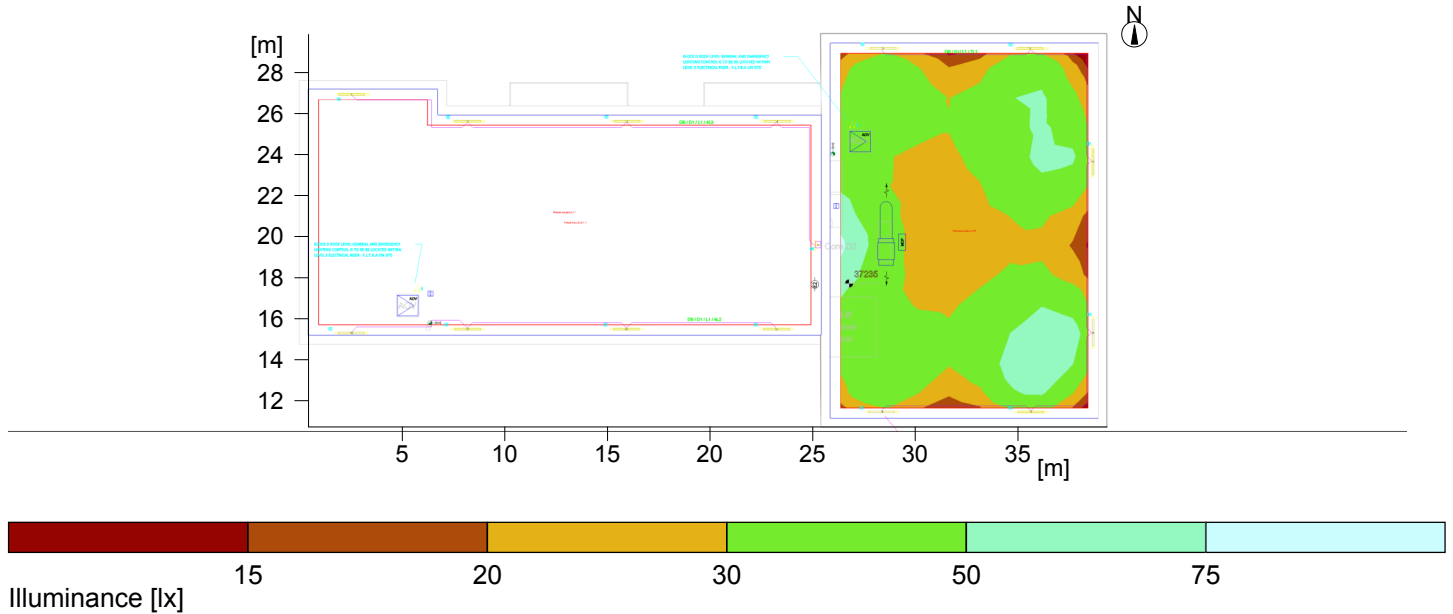
1.2.1 Result overview, Evaluation area 2

2	1	Orlight Ltd	
		Order No.	: Ref SE - FALCON-BL-3K-13W
		Luminaire name	: Ref SE - FALCON-BL-3K-13W
		Equipment	: 1 x 13 W / 1885 lm

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1.2 Summary, Exterior 1

1.2.2 Result overview, Evaluation area 3



General

Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80
Total luminous flux of all lamps	27450.00 lm
Total power	204.0 W
Total power per area (238.18 m ²)	0.86 W/m ² (2.45 W/m ² /100lx)

Evaluation area 3

Reference plane 3.1

	Horizontal
Em	34.9 lx
Emin	18.2 lx
Emin/Eav (Uo)	0.52
Emin/Emax (Ud)	0.28
Position	0.00 m

Type No.\Make

1	6	Orlight Ltd.
		Order No. : Ref IE - ORLWP4-34W-LED
		Luminaire name : Ref IE - ORLWP4-34W-LED
		Equipment : 1 x 34 W / 4575 lm

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1 Exterior 1

1.3 Calculation results, Exterior 1

1.3.1 Table, Emergency area 2.2 (E)

[m]	4.63	5.76	4.99	3.44	2.54																		
-1	5.69	6.8	6.23	4.9	4.3	4.89	5.91	5.65	4.12	2.81	(2.3)	2.5	3.48	5	5.76	4.8	3.39	2.69	2.83	3.82	5.46	6.44	5.79
-2	5.04	5.83	5.78	5.36	5.48	6.52	7.67	7.41	5.75	4.17	3.49	3.77	5	6.72	7.51	6.52	4.91	4.01	4.17	5.36	7.14	[8.05]	7.21
-3	4.22	4.82	5.06	5.17	5.57	6.37	7.05	6.86	5.82	4.71	4.18	4.39	5.27	6.38	6.86	6.32	5.31	4.68	4.79	5.63	6.74	7.25	6.71
-4	3.78	4.29	4.64	4.91	5.27	5.76	6.07	5.93	5.35	4.71	4.39	4.51	5.02	5.62	5.88	5.64	5.14	4.81	4.9	5.37	5.94	6.17	5.85
-5	3.78	4.3	4.63	4.88	5.16	5.48	5.66	5.53	5.13	4.66	4.4	4.5	4.88	5.3	5.48	5.34	5.01	4.79	4.87	5.22	5.61	5.73	5.47
-6	4.23	4.83	5.09	5.18	5.35	5.7	5.94	5.79	5.27	4.68	4.39	4.52	5	5.55	5.77	5.55	5.1	4.81	4.9	5.35	5.87	6.05	5.72
-7	5.08	5.87	5.91	5.62	5.68	6.25	6.81	6.61	5.67	4.68	4.22	4.45	5.28	6.28	6.67	6.16	5.26	4.72	4.86	5.65	6.65	7.05	6.5
-8	5.84	6.98	6.59	5.62	5.44	6.39	7.51	7.28	5.74	4.25	3.62	3.92	5.15	6.81	7.5	6.52	5.01	4.18	4.35	5.54	7.24	8.03	7.14
-9	5.06	6.27	5.57	4.24	3.88	4.81	6.09	5.92	4.34	2.98	2.45	2.71	3.82	5.47	6.23	5.15	3.65	2.92	3.09	4.2	5.96	6.92	6.1
-10																							
		2		4		6		8		10		12		14		16		18		20		22	[m]
	Illuminance [lx]																						



Required minimum illuminance : 1 lx

Minimum illuminance Emin : 2.3 lx (* 1.7 lx)

Maximum illuminance Emax : 8 lx (* 8.1 lx)

Diversity Emin/Emax : 1 : 3.51 (0.28) (Threshold value 1:40) (* 1:3.50)

Height : 0 m

Calculation algorithm used : Direct component

Maintenance factor : 0.8

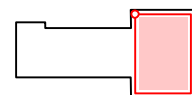
*: Values on fine measuring grid (0.1m - 0.5m)!

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1.3 Calculation results, Exterior 1

1.3.2 Table, Emergency area 3.2 (E)

	4.68	6.22	4.32	2.87	3.53	5.9	6.25	3.32			
[m]											
-2	5.34	6.49	5.27	4.17	4.93	7	7.44	4.8			
-4	4.55	4.87	4.5	4.25	4.93	6.42	7.48	6.06			
-6	4.33	3.98	3.82	3.91	4.56	5.93	7.78	7.46			
-8	4	3.48	3.29	3.37	3.72	4.23	4.51	3.47			
-10	4	3.46	3.27	3.34	3.6	3.9	3.79	(2.7)			
-12	4.12	3.59	3.42	3.52	3.9	4.42	4.63	3.51			
-14	4.12	3.92	3.81	3.9	4.53	5.69	6.91	6.05			
-16	4.45	4.89	4.53	4.34	5.2	7.13	9.12	8.31			
-16	5.46	6.57	5.26	4.29	5.32	8.05	[9.59]	7.16			
	4.71	6.12	4.2	2.96	3.82	6.5	7.35	4.29			
	1	2	3	4	5	6	7	8	9	10	11 [m]
	Illuminance [lx]										



Required minimum illuminance		: 1 lx
Minimum illuminance	Emin	: 2.7 lx (* 1.3 lx)
Maximum illuminance	Emax	: 9.6 lx (* 9.7 lx)
Diversity	Emin/Emax	: 1 : 3.55 (0.28) (Threshold value 1:40) (* 1:3.50)
Height		: 0 m
Calculation algorithm used		: Direct component
Maintenance factor		: 0.8

*: Values on fine measuring grid (0.1m - 0.5m)!