No.3 Circle Square

Installation : Roof Level

Project number	:	
Customer	:	SES
Processed by	:	Matt Newsome
Date	:	11.08.2025

The following values are based on precise calculations performed on calibrated lamps and luminaires, and their configurations, whereby gradual, unavoidable deviations can occur in practice. All guarantee claims are excluded for the specified data.

This exclusion of liability applies irrespective of the legal grounds for both damages and consequential damages suffered by users and third parties.

Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

1 Luminaire data

1.1 Southgate Lighting Ltd., Neptune 1500mm 4350Lm ... (SGL/LED/15/4350...)

1.1.1 Data sheet

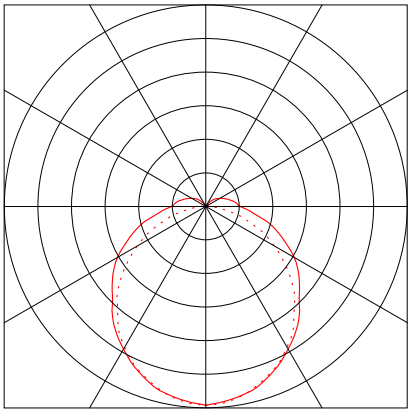
Manufacturer: Southgate Lighting Ltd.

SGL/LED/15/4350/NT/200mA **Neptune 1500mm 4350Lm LED IP65 200mA**

Luminaire data		
Luminaire efficiency	:	100%
Luminaire efficacy	:	164.27 lm/W
Classification	:	A31 ↓91.1% ↑8.9%
CIE Flux Codes	:	43 72 91 91 100
UGR 4H 8H	:	22.9 / 21.6
Power	:	23.2 W
Luminous flux	:	3810.9 lm

Equipped with		
Quantity	:	3
Designation	:	Tridonic LLE 560mm ADV5
Colour	:	4000K
Luminous flux	:	1270.3 lm
Colour reproduction	:	>80

Dimensions : 1510 mm x 110 mm x 75 mm

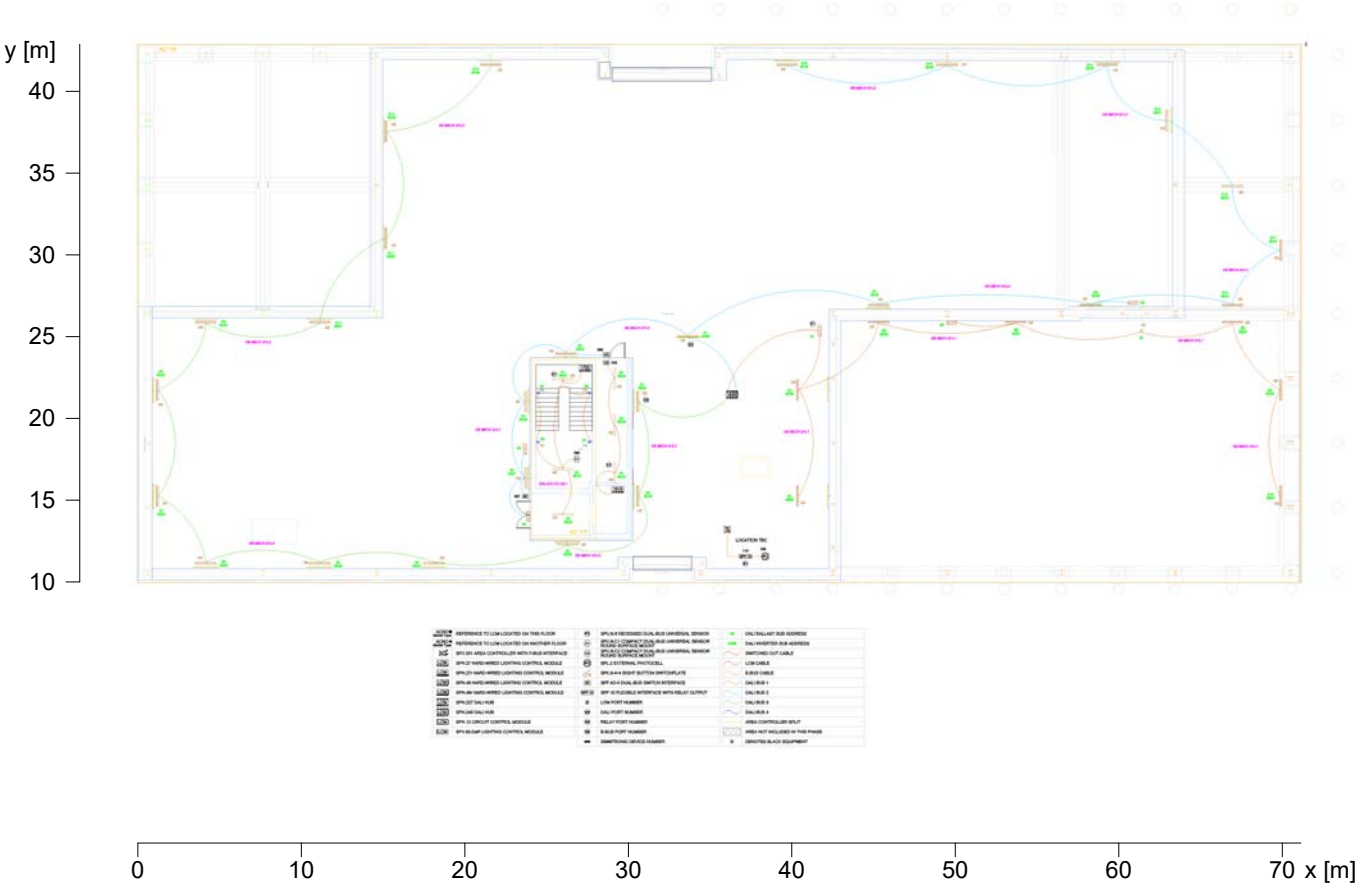


Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

2 Roof Level 50% Dimmed

2.1 Description, Roof Level 50% Dimmed

2.1.1 Floor plan

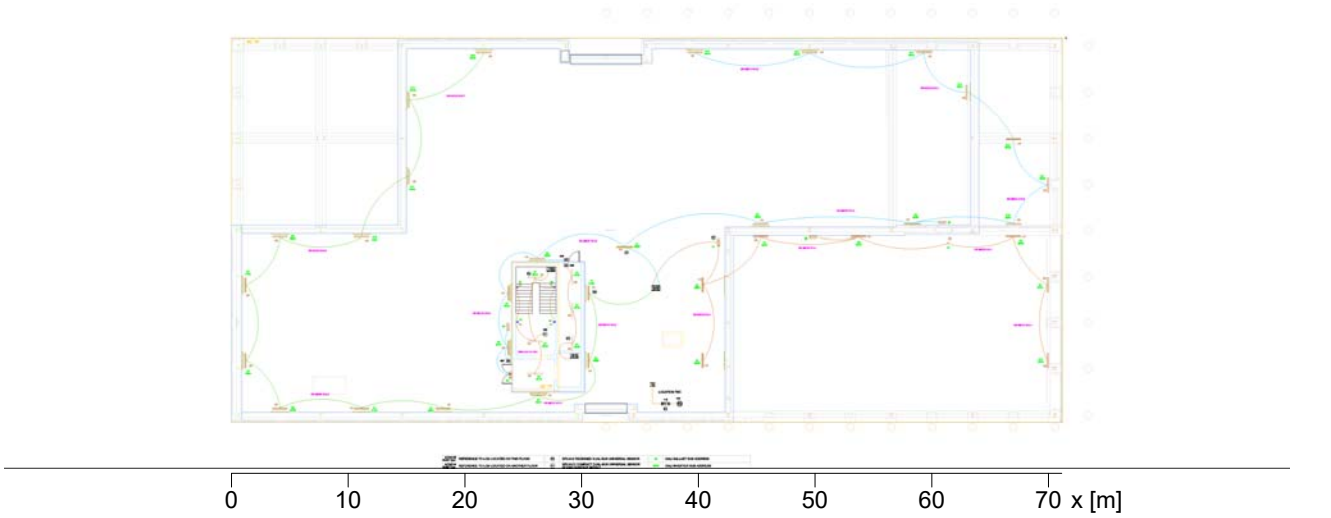


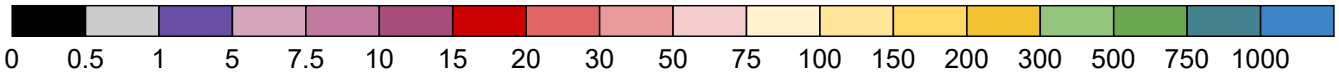
Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

2 Roof Level 50% Dimmed

2.2 Summary, Roof Level 50% Dimmed

2.2.1 Result overview, Bat Box East Elevation 1





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height (phot.centre) [m]:	1.00 m
Maintenance factor	0.80
Total luminous flux	47637.5 lm (dimmed to 50.00%)
(Luminaires have been dimmed. For details see output page "Luminaire data/Room elements".)	
Total power	580 W
Total power per area (2339.01 m²)	0.25 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	9.1 lx
Minimum illuminance	E_{min}	7.9 lx
Maximum illuminance	E_{max}	13.8 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.15 (0.87)
Diversity U_d	E_{min}/E_{max}	1:1.75 (0.57)

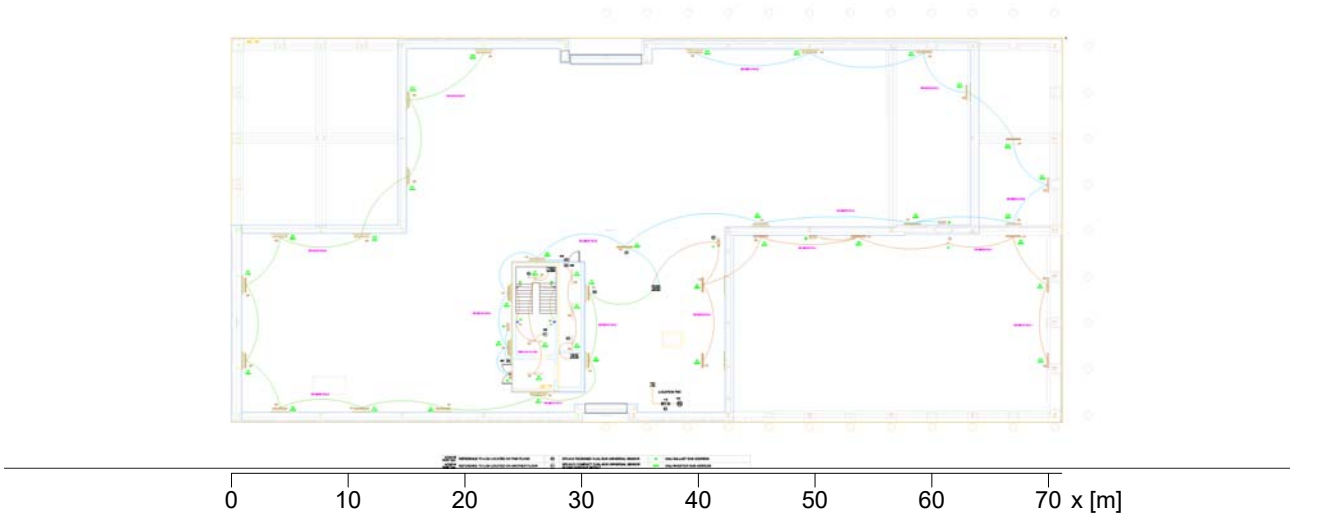
Type No.\Make

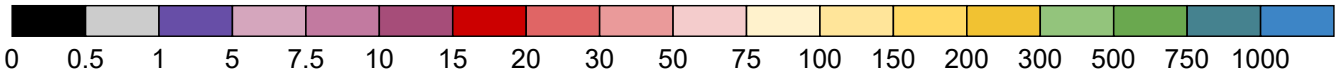
		Southgate Lighting Ltd.
1	25 x	Order No. : SGL/LED/15/4350/NT/200mA
		Luminaire name : Neptune 1500mm 4350Lm LED IP65 200mA
		Equipment : 3 x Tridonic LLE 560mm ADV5 / 1270.33 lm

Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

2.2 Summary, Roof Level 50% Dimmed

2.2.2 Result overview, Bat Box East Elevation 2





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height (phot.centre) [m]:	1.00 m
Maintenance factor	0.80

Total luminous flux 47637.5 lm (dimmed to 50.00%)
(Luminaires have been dimmed. For details see output page "Luminaire data/Room elements".)

Total power	580 W
Total power per area (2339.01 m²)	0.25 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	9.3 lx
Minimum illuminance	E_{min}	8.1 lx
Maximum illuminance	E_{max}	13.9 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.15 (0.87)
Diversity U_d	E_{min}/E_{max}	1:1.72 (0.58)

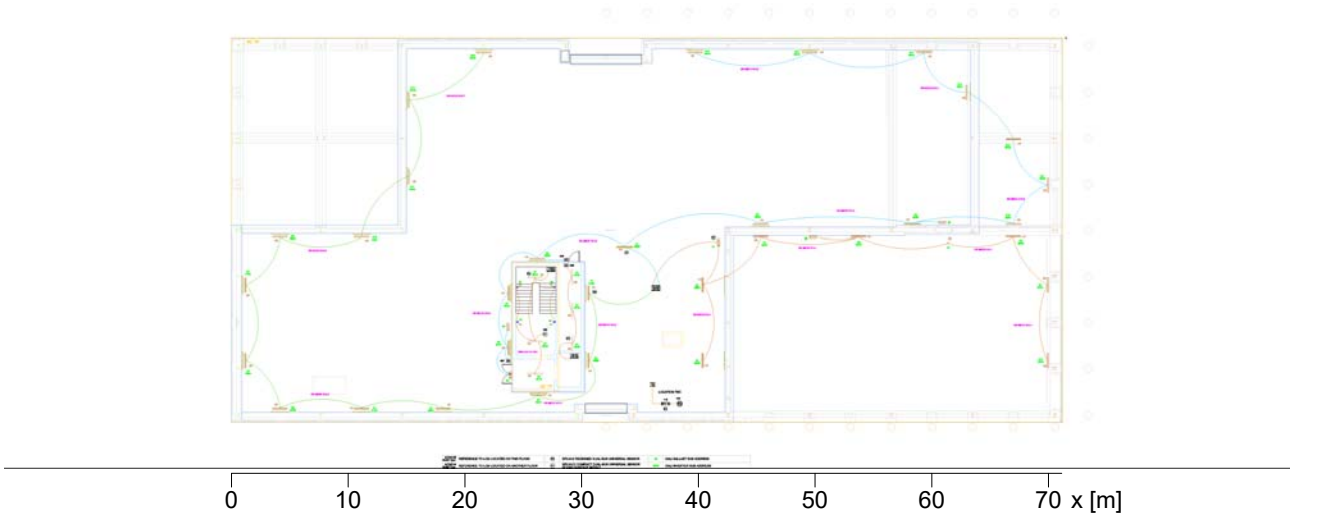
Type No.\Make

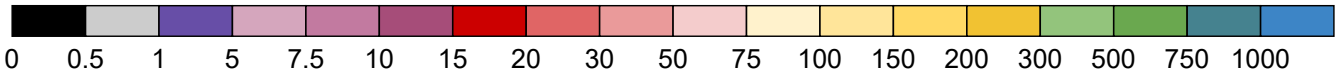
		Southgate Lighting Ltd.	
1	25 x	Order No.	: SGL/LED/15/4350/NT/200mA
		Luminaire name	: Neptune 1500mm 4350Lm LED IP65 200mA
		Equipment	: 3 x Tridonic LLE 560mm ADV5 / 1270.33 lm

Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

2.2 Summary, Roof Level 50% Dimmed

2.2.3 Result overview, Bat Box West Elevation 1





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height (phot.centre) [m]:	1.00 m
Maintenance factor	0.80
Total luminous flux	47637.5 lm (dimmed to 50.00%)

(Luminaires have been dimmed. For details see output page "Luminaire data/Room elements".)

Total power	580 W
Total power per area (2339.01 m²)	0.25 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	8.71 lx
Minimum illuminance	E_{min}	8.43 lx
Maximum illuminance	E_{max}	8.99 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.03 (0.97)
Diversity U_d	E_{min}/E_{max}	1:1.07 (0.94)

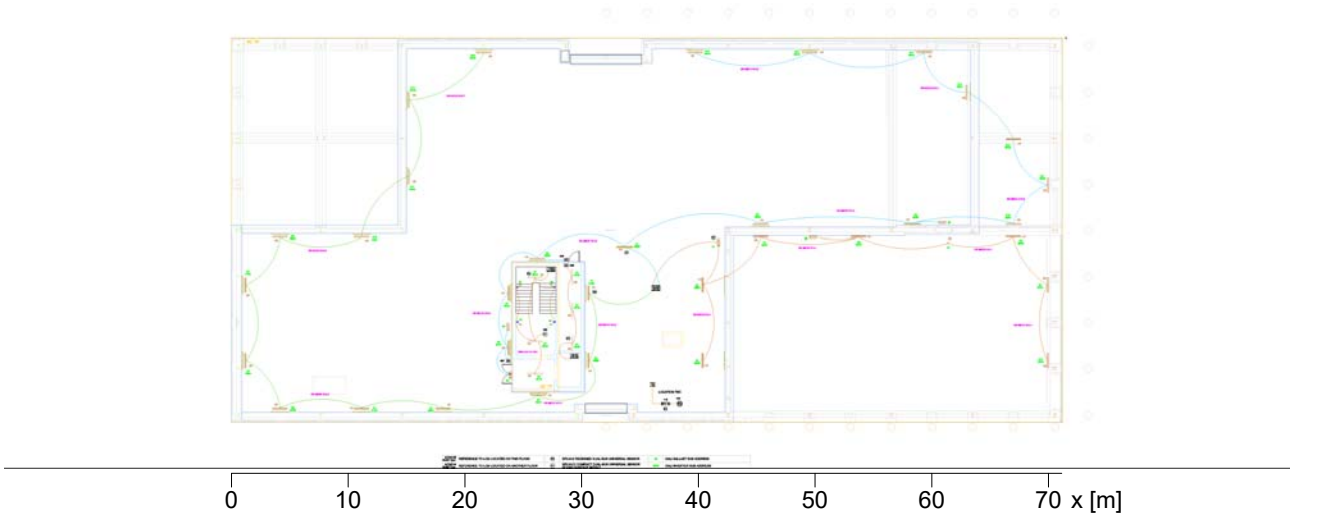
Type No.\Make

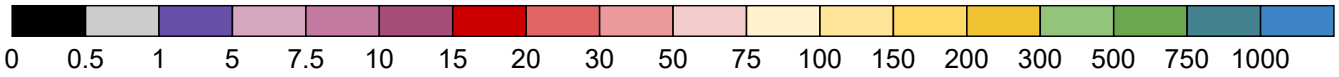
		Southgate Lighting Ltd.
1	25 x	Order No. : SGL/LED/15/4350/NT/200mA
		Luminaire name : Neptune 1500mm 4350Lm LED IP65 200mA
		Equipment : 3 x Tridonic LLE 560mm ADV5 / 1270.33 lm

Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

2.2 Summary, Roof Level 50% Dimmed

2.2.4 Result overview, Bat Box West Elevation 2





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height (phot.centre) [m]:	1.00 m
Maintenance factor	0.80

Total luminous flux 47637.5 lm (dimmed to 50.00%)
(Luminaires have been dimmed. For details see output page "Luminaire data/Room elements".)

Total power	580 W
Total power per area (2339.01 m²)	0.25 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	12 lx
Minimum illuminance	E_{min}	9.4 lx
Maximum illuminance	E_{max}	21.7 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.27 (0.79)
Diversity U_d	E_{min}/E_{max}	1:2.3 (0.43)

Type No.\Make

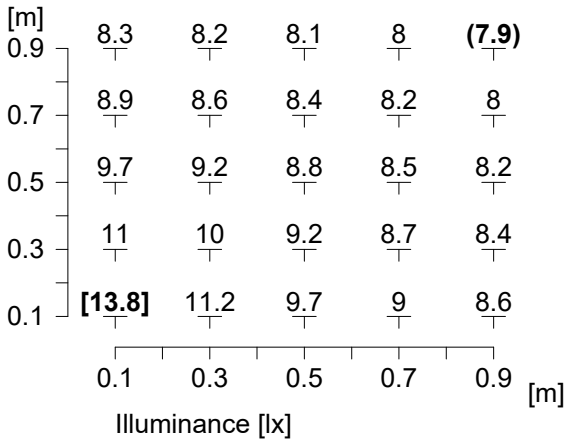
		Southgate Lighting Ltd.	
1	25 x	Order No.	: SGL/LED/15/4350/NT/200mA
		Luminaire name	: Neptune 1500mm 4350Lm LED IP65 200mA
		Equipment	: 3 x Tridonic LLE 560mm ADV5 / 1270.33 lm

Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

2 Roof Level 50% Dimmed

2.3 Calculation results, Roof Level 50% Dimmed

2.3.1 Table, Bat Box East Elevation 1 (E)

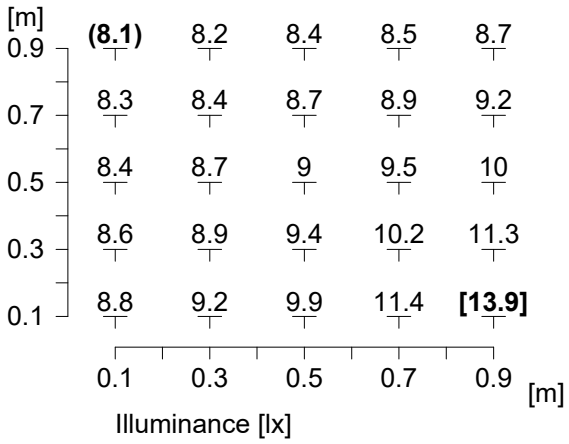


Average illuminance	$\bar{E}_m$	: 9.1 lx
Minimum illuminance	E_{min}	: 7.9 lx
Maximum illuminance	E_{max}	: 13.8 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 1.15 (0.87)
Diversity U_d	E_{min}/E_{max}	: 1 : 1.75 (0.57)

Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

2.3 Calculation results, Roof Level 50% Dimmed

2.3.2 Table, Bat Box East Elevation 2 (E)

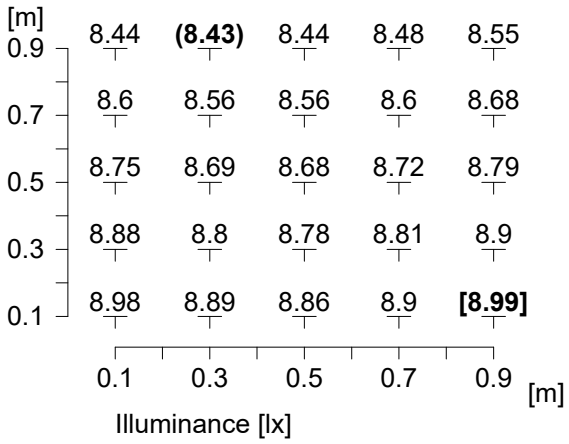


Average illuminance	$\bar{E}_m$	: 9.3 lx
Minimum illuminance	E_{min}	: 8.1 lx
Maximum illuminance	E_{max}	: 13.9 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 1.15 (0.87)
Diversity U_d	E_{min}/E_{max}	: 1 : 1.72 (0.58)

Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

2.3 Calculation results, Roof Level 50% Dimmed

2.3.3 Table, Bat Box West Elevation 1 (E)



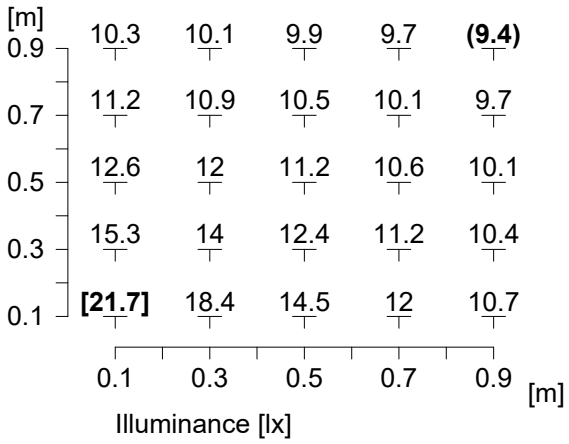


Average illuminance	$\bar{E}_m$	: 8.71 lx
Minimum illuminance	E_{min}	: 8.43 lx
Maximum illuminance	E_{max}	: 8.99 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 1.03 (0.97)
Diversity U_d	E_{min}/E_{max}	: 1 : 1.07 (0.94)

Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

2.3 Calculation results, Roof Level 50% Dimmed

2.3.4 Table, Bat Box West Elevation 2 (E)



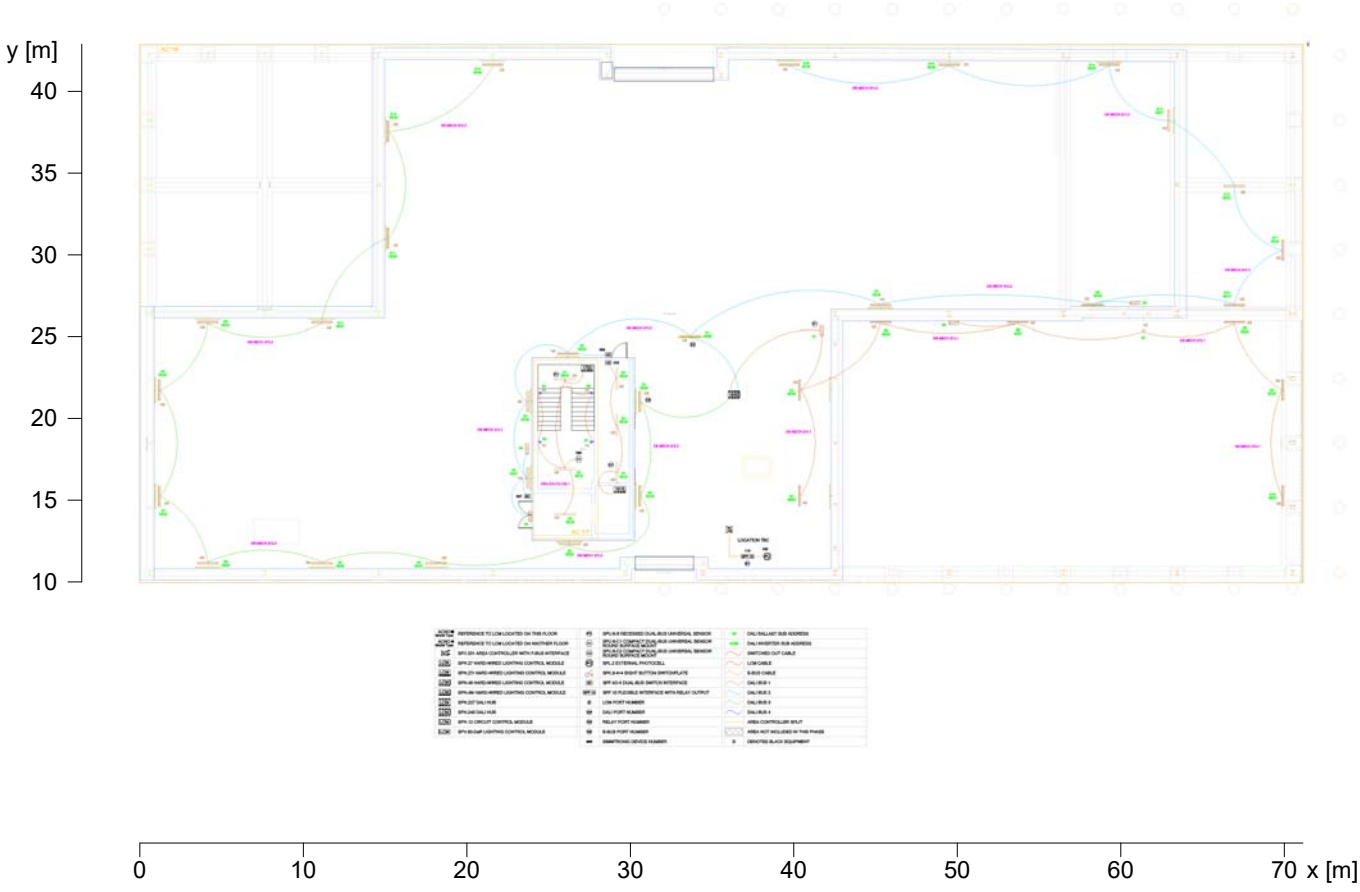
Average illuminance	$\bar{E}_m$	: 12 lx
Minimum illuminance	E_{min}	: 9.4 lx
Maximum illuminance	E_{max}	: 21.7 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 1.27 (0.79)
Diversity U_d	E_{min}/E_{max}	: 1 : 2.30 (0.43)

Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

3 Roof Level 1% Dimmed

3.1 Description, Roof Level 1% Dimmed

3.1.1 Floor plan

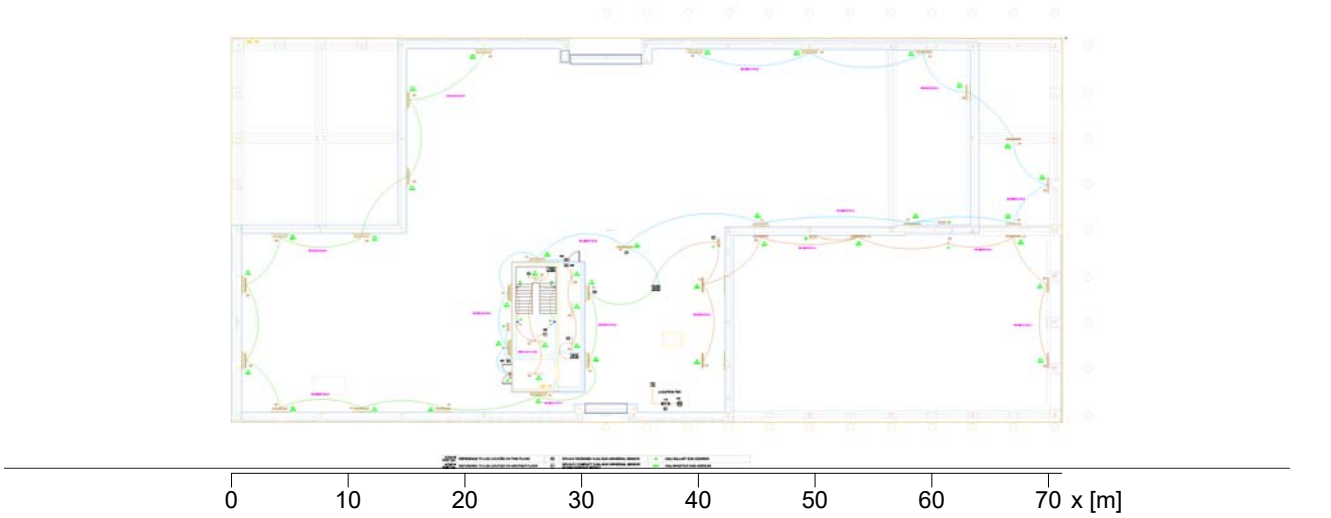


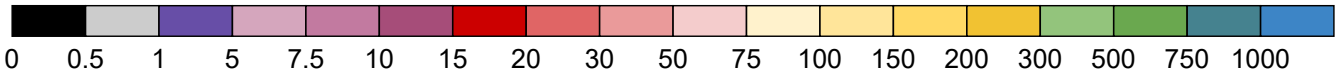
Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

3 Roof Level 1% Dimmed

3.2 Summary, Roof Level 1% Dimmed

3.2.1 Result overview, Bat Box East Elevation 1





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height (phot.centre) [m]:	1.00 m
Maintenance factor	0.80
Total luminous flux	952.700012 lm (dimmed to 1.00%)

(Luminaires have been dimmed. For details see output page "Luminaire data/Room elements".)

Total power	580 W
Total power per area (2339.01 m²)	0.25 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	0.19 lx
Minimum illuminance	E_{min}	0.16 lx
Maximum illuminance	E_{max}	0.28 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.15 (0.87)
Diversity U_d	E_{min}/E_{max}	1:1.75 (0.57)

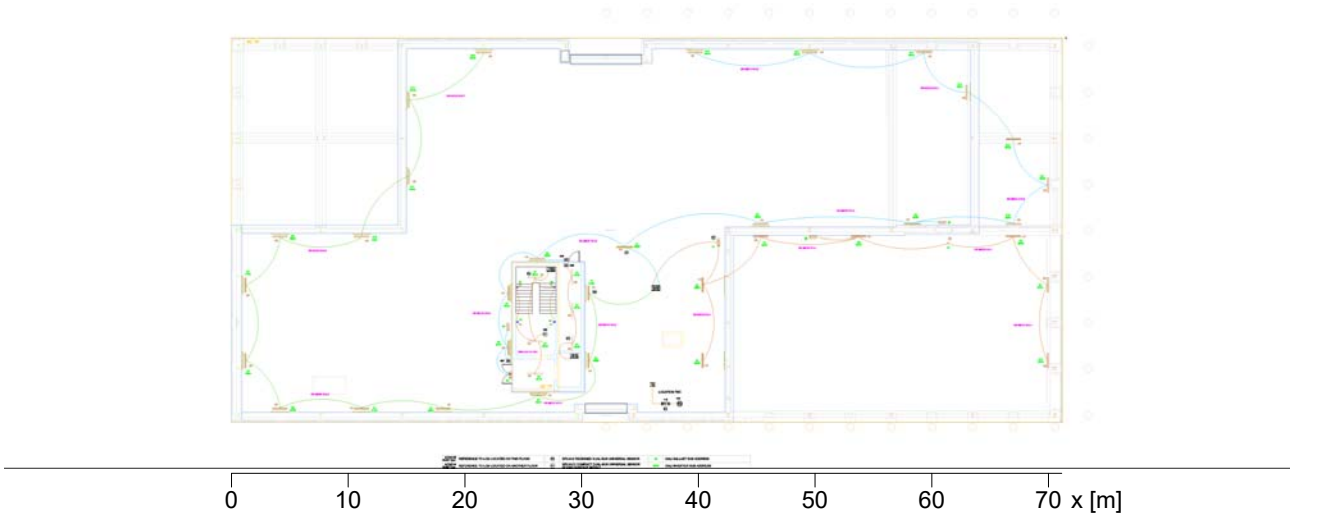
Type No.\Make

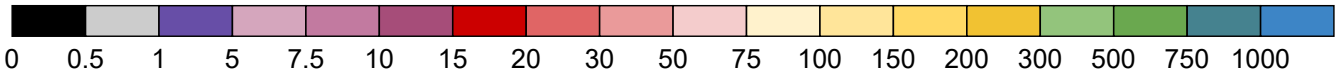
		Southgate Lighting Ltd.	
1	25 x	Order No.	: SGL/LED/15/4350/NT/200mA
		Luminaire name	: Neptune 1500mm 4350Lm LED IP65 200mA
		Equipment	: 3 x Tridonic LLE 560mm ADV5 / 1270.33 lm

Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

3.2 Summary, Roof Level 1% Dimmed

3.2.2 Result overview, Bat Box East Elevation 2





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height (phot.centre) [m]:	1.00 m
Maintenance factor	0.80
Total luminous flux	952.700012 lm (dimmed to 1.00%)

(Luminaires have been dimmed. For details see output page "Luminaire data/Room elements".)

Total power	580 W
Total power per area (2339.01 m²)	0.25 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	0.19 lx
Minimum illuminance	E_{min}	0.17 lx
Maximum illuminance	E_{max}	0.29 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.16 (0.87)
Diversity U_d	E_{min}/E_{max}	1:1.73 (0.58)

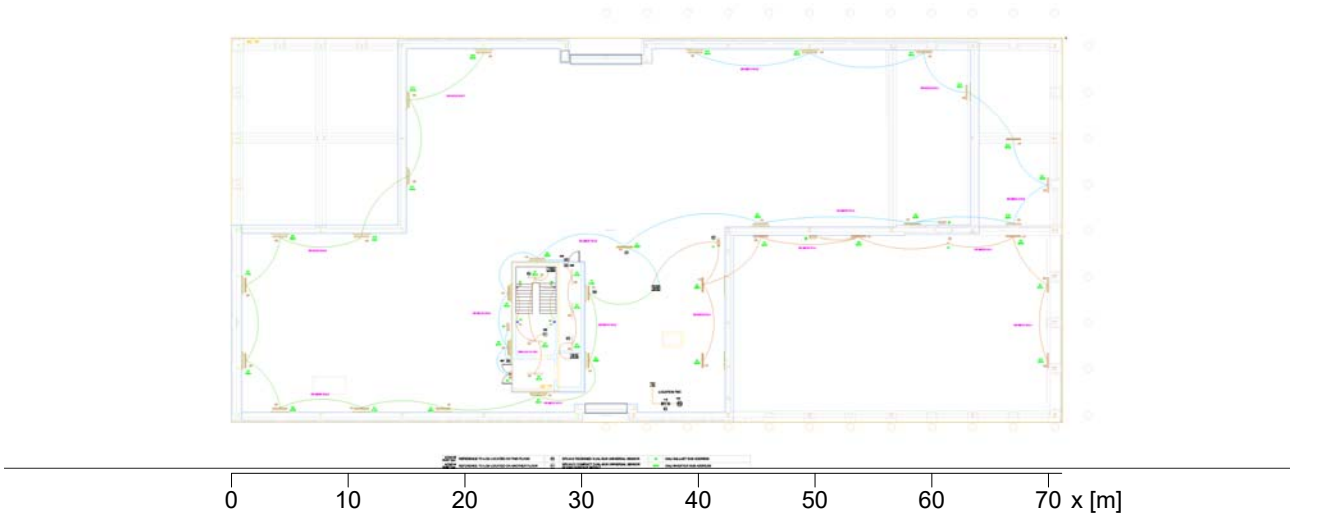
Type No.\Make

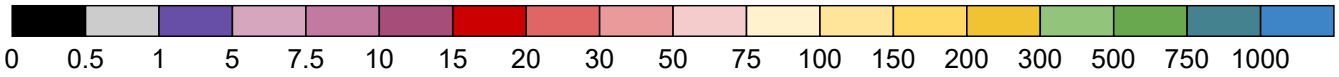
		Southgate Lighting Ltd.	
1	25 x	Order No.	: SGL/LED/15/4350/NT/200mA
		Luminaire name	: Neptune 1500mm 4350Lm LED IP65 200mA
		Equipment	: 3 x Tridonic LLE 560mm ADV5 / 1270.33 lm

Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

3.2 Summary, Roof Level 1% Dimmed

3.2.3 Result overview, Bat Box West Elevation 1





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height (phot.centre) [m]:	1.00 m
Maintenance factor	0.80
Total luminous flux	952.700012 lm (dimmed to 1.00%)

(Luminaires have been dimmed. For details see output page "Luminaire data/Room elements".)

Total power	580 W
Total power per area (2339.01 m²)	0.25 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	0.18 lx
Minimum illuminance	E_{min}	0.17 lx
Maximum illuminance	E_{max}	0.19 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.03 (0.97)
Diversity U_d	E_{min}/E_{max}	1:1.07 (0.93)

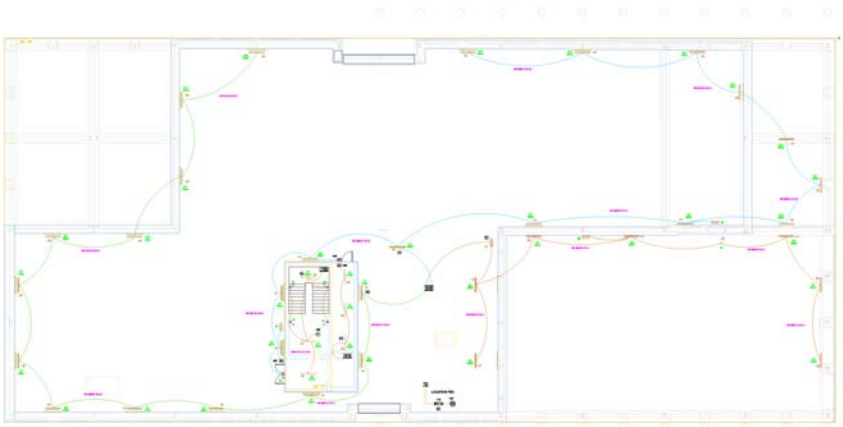
Type No.\Make

		Southgate Lighting Ltd.	
1	25 x	Order No.	: SGL/LED/15/4350/NT/200mA
		Luminaire name	: Neptune 1500mm 4350Lm LED IP65 200mA
		Equipment	: 3 x Tridonic LLE 560mm ADV5 / 1270.33 lm

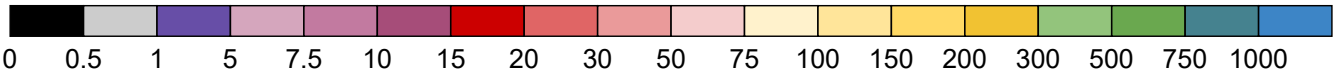
Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

3.2 Summary, Roof Level 1% Dimmed

3.2.4 Result overview, Bat Box West Elevation 2



0 10 20 30 40 50 60 70 x [m]



0 0.5 1 5 7.5 10 15 20 30 50 75 100 150 200 300 500 750 1000

Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height (phot.centre) [m]:	1.00 m
Maintenance factor	0.80

Total luminous flux 952.700012 lm (dimmed to 1.00%)
(Luminaires have been dimmed. For details see output page "Luminaire data/Room elements".)

Total power	580 W
Total power per area (2339.01 m²)	0.25 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	0.24 lx
Minimum illuminance	E_{min}	0.19 lx
Maximum illuminance	E_{max}	0.44 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.27 (0.79)
Diversity U_d	E_{min}/E_{max}	1:2.29 (0.44)

Type No.\Make

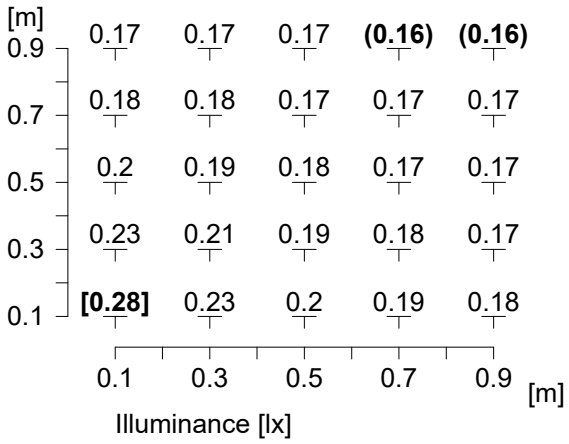
		Southgate Lighting Ltd.	
1	25 x	Order No.	: SGL/LED/15/4350/NT/200mA
		Luminaire name	: Neptune 1500mm 4350Lm LED IP65 200mA
		Equipment	: 3 x Tridonic LLE 560mm ADV5 / 1270.33 lm

Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

3 Roof Level 1% Dimmed

3.3 Calculation results, Roof Level 1% Dimmed

3.3.1 Table, Bat Box East Elevation 1 (E)

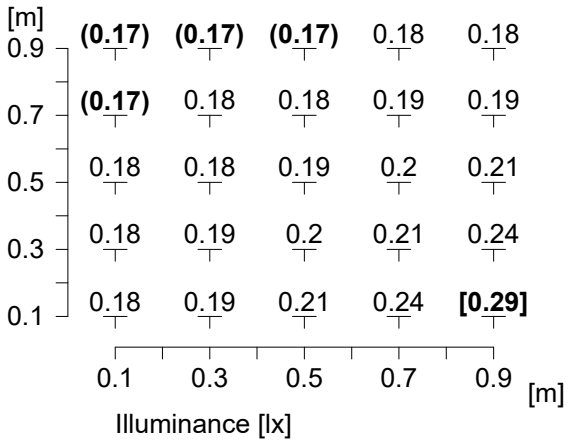


Average illuminance	$\bar{E}_m$	: 0.19 lx
Minimum illuminance	E_{min}	: 0.16 lx
Maximum illuminance	E_{max}	: 0.28 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 1.15 (0.87)
Diversity U_d	E_{min}/E_{max}	: 1 : 1.75 (0.57)

Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

3.3 Calculation results, Roof Level 1% Dimmed

3.3.2 Table, Bat Box East Elevation 2 (E)

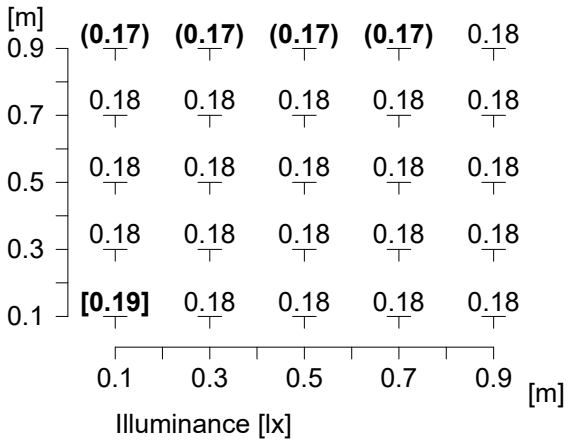


Average illuminance	$\bar{E}_m$	: 0.19 lx
Minimum illuminance	E_{min}	: 0.17 lx
Maximum illuminance	E_{max}	: 0.29 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 1.16 (0.87)
Diversity U_d	E_{min}/E_{max}	: 1 : 1.73 (0.58)

Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

3.3 Calculation results, Roof Level 1% Dimmed

3.3.3 Table, Bat Box West Elevation 1 (E)



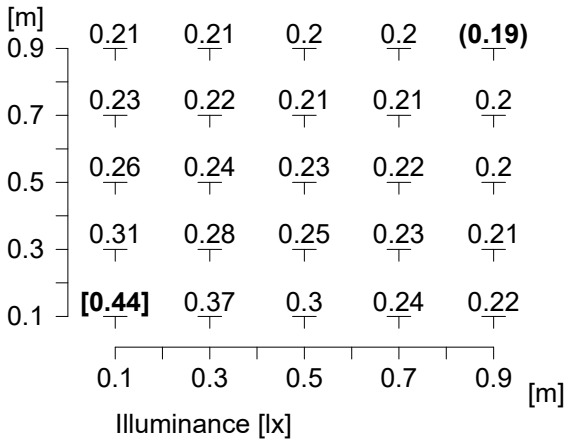


Average illuminance	$\bar{E}_m$	: 0.18 lx
Minimum illuminance	E_{min}	: 0.17 lx
Maximum illuminance	E_{max}	: 0.19 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 1.03 (0.97)
Diversity U_d	E_{min}/E_{max}	: 1 : 1.07 (0.93)

Object : No.3 Circle Square
Installation : Roof Level
Project number :
Date : 11.08.2025

3.3 Calculation results, Roof Level 1% Dimmed

3.3.4 Table, Bat Box West Elevation 2 (E)





Average illuminance	$\bar{E}_m$	: 0.24 lx
Minimum illuminance	E_{min}	: 0.19 lx
Maximum illuminance	E_{max}	: 0.44 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 1.27 (0.79)
Diversity U_d	E_{min}/E_{max}	: 1 : 2.29 (0.44)