Rodney Street

RODSTA-AME-XX-ZZ-CA-E-63003

External Lighting Calculations

Rev. C01

Ref	Date	Description	By
C01	07.11.24	Construction Issue	B.W.

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Rodney Street

RODSTA-AME-XX-ZZ-CA-E-63003

External Lighting Calculations

Rev. C01

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LDL LIGHTING

Rodney Street - External [Rev.1]

LIGHTING CALCULATIONS

Externals

Installation : Rodney Street

Project number :
Customer :
Processed by : DPW
Date : 08.10.2024

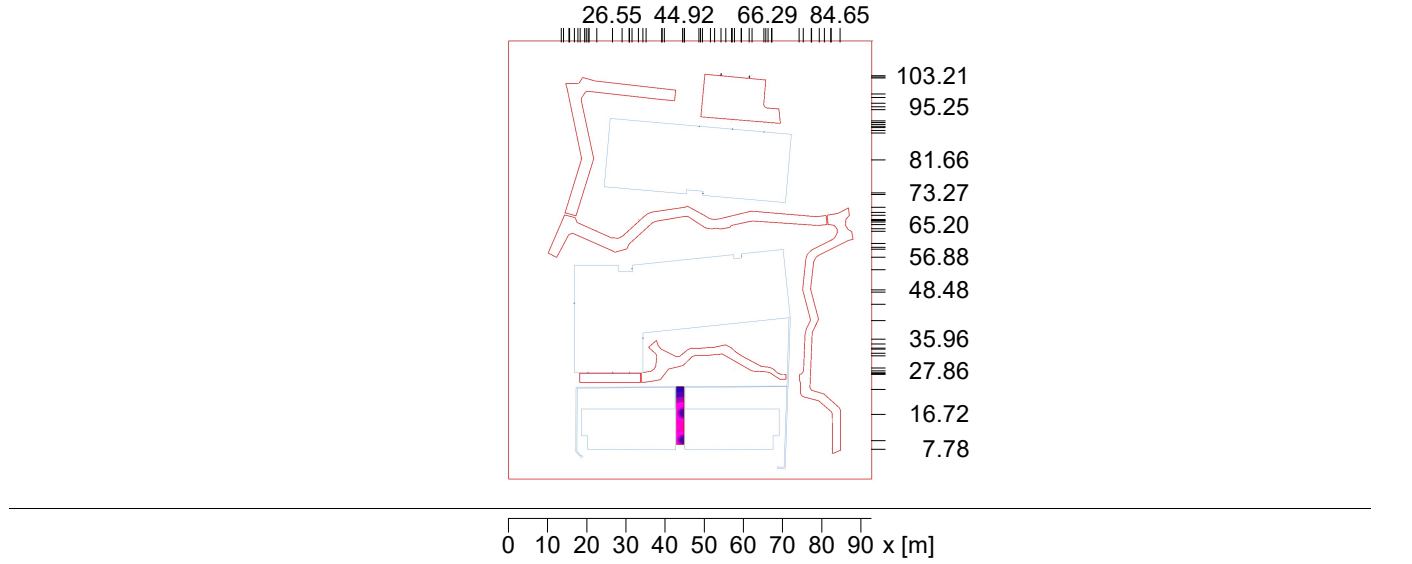
The following values are based on precise calculations performed on calibrated lamps and luminaires, and their configurations, whereby gradual, unavoidable deviations can occur in practice. All guarantee claims are excluded for the specified data.

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

Object	:	Externals
Installation	:	Rodney Street
Project number	:	
Date	:	08.10.2024

Summary, External

Result overview, Measuring area 7



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80
Total luminous flux	116696 lm
Total power	1283.9 W
Total power per area (10349.69 m²)	0.12 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	17.8 lx
Minimum illuminance	E_{min}	3.3 lx
Maximum illuminance	E_{max}	32.1 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:5.36 (0.19)
Diversity U_d	E_{min}/E_{max}	1:9.67 (0.1)

Type No.\Make

	LDL	
4 2 x	Order No.	: ST/M/L2/3200/74
	Luminaire name	: STREET Medium L2optic 3236lm 31w 740 300mA
	Equipment	: 1 x LED Backlight 30.82 W / 3236 lm
6 11 x	Order No.	: LUNA/L4/1300/74
	Luminaire name	: LUNA L4optic 1307lm 14w 740 250mA
	Equipment	: 1 x LED Backlight 13.78 W / 1307 lm

Object	:	Externals
Installation	:	Rodney Street
Project number	:	
Date	:	08.10.2024

Summary, External

Result overview, Measuring area 7

8 43 x 

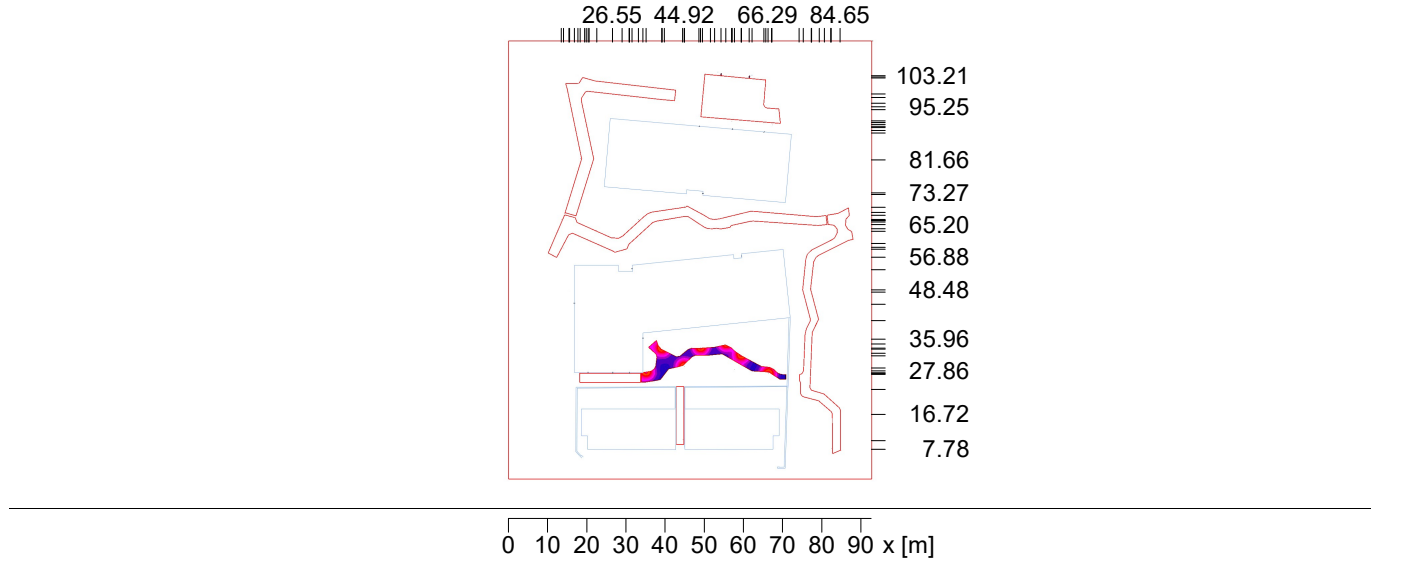
Order No.	: BER/10/2340/3
Luminaire name	: BER-10-2340-3
Equipment	: 1 x SMD2835 30K) 24.9 W / 2229 lm

Object	:	Externals
Installation	:	Rodney Street
Project number	:	
Date	:	08.10.2024

External

Summary, External

Result overview, Measuring area 1



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80
Total luminous flux	116696 lm
Total power	1283.9 W
Total power per area (10349.69 m²)	0.12 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	36 lx
Minimum illuminance	E_{min}	2 lx
Maximum illuminance	E_{max}	184 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:19.6 (0.05)
Diversity U_d	E_{min}/E_{max}	1:100 (0.01)

Type No.\Make

		LDL	
4	2 x	Order No.	: ST/M/L2/3200/74
		Luminaire name	: STREET Medium L2optic 3236lm 31w 740 300mA
		Equipment	: 1 x LED Backlight 30.82 W / 3236 lm
6	11 x	Order No.	: LUNA/L4/1300/74
		Luminaire name	: LUNA L4optic 1307lm 14w 740 250mA
		Equipment	: 1 x LED Backlight 13.78 W / 1307 lm

Object	:	Externals
Installation	:	Rodney Street
Project number	:	
Date	:	08.10.2024

External

Summary, External

Result overview, Measuring area 1

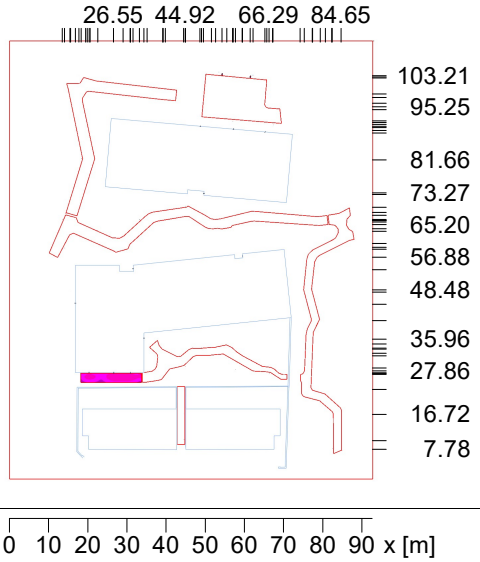
8 43 x 

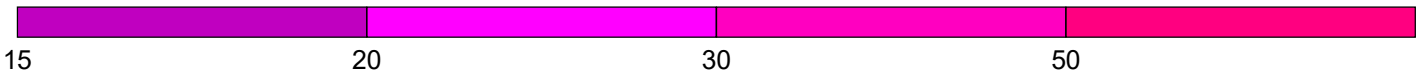
Order No.	: BER/10/2340/3
Luminaire name	: BER-10-2340-3
Equipment	: 1 x SMD2835 30K) 24.9 W / 2229 lm

Object	:	Externals
Installation	:	Rodney Street
Project number	:	
Date	:	08.10.2024

Summary, External

Result overview, Measuring area 2





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80
Total luminous flux	116696 lm
Total power	1283.9 W
Total power per area (10349.69 m²)	0.12 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	30.5 lx
Minimum illuminance	E_{min}	15.5 lx
Maximum illuminance	E_{max}	59.3 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.96 (0.51)
Diversity U_d	E_{min}/E_{max}	1:3.82 (0.26)

Type No.\Make

LDL

4 2 x



Order No.	: ST/M/L2/3200/74
Luminaire name	: STREET Medium L2optic 3236lm 31w 740 300mA
Equipment	: 1 x LED Backlight 30.82 W / 3236 lm

6 11 x



Order No.	: LUNA/L4/1300/74
Luminaire name	: LUNA L4optic 1307lm 14w 740 250mA
Equipment	: 1 x LED Backlight 13.78 W / 1307 lm

Object	:	Externals
Installation	:	Rodney Street
Project number	:	
Date	:	08.10.2024

Summary, External

Result overview, Measuring area 2

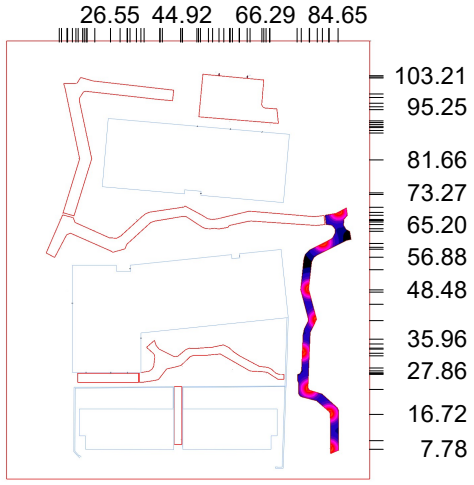
8 43 x 

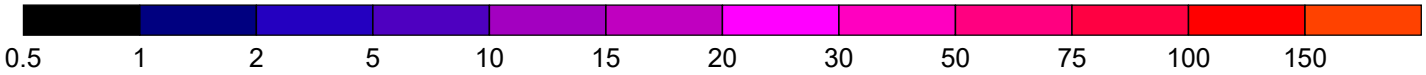
Order No.	: BER/10/2340/3
Luminaire name	: BER-10-2340-3
Equipment	: 1 x SMD2835 30K) 24.9 W / 2229 lm

Object	:	Externals
Installation	:	Rodney Street
Project number	:	
Date	:	08.10.2024

Summary, External

Result overview, Measuring area 5





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80
Total luminous flux	116696 lm
Total power	1283.9 W
Total power per area (10349.69 m²)	0.12 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	28 lx
Minimum illuminance	E_{min}	1 lx
Maximum illuminance	E_{max}	185 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:53.7 (0.02)
Diversity U_d	E_{min}/E_{max}	1:351 (0)

Type No.\Make

4 2 x — **LDL**
Order No. : ST/M/L2/3200/74
Luminaire name : STREET Medium L2optic 3236lm 31w 740 300mA
Equipment : 1 x LED Backlight 30.82 W / 3236 lm

6 11 x
Order No. : LUNA/L4/1300/74
Luminaire name : LUNA L4optic 1307lm 14w 740 250mA
Equipment : 1 x LED Backlight 13.78 W / 1307 lm

Object	:	Externals
Installation	:	Rodney Street
Project number	:	
Date	:	08.10.2024

Summary, External

Result overview, Measuring area 5

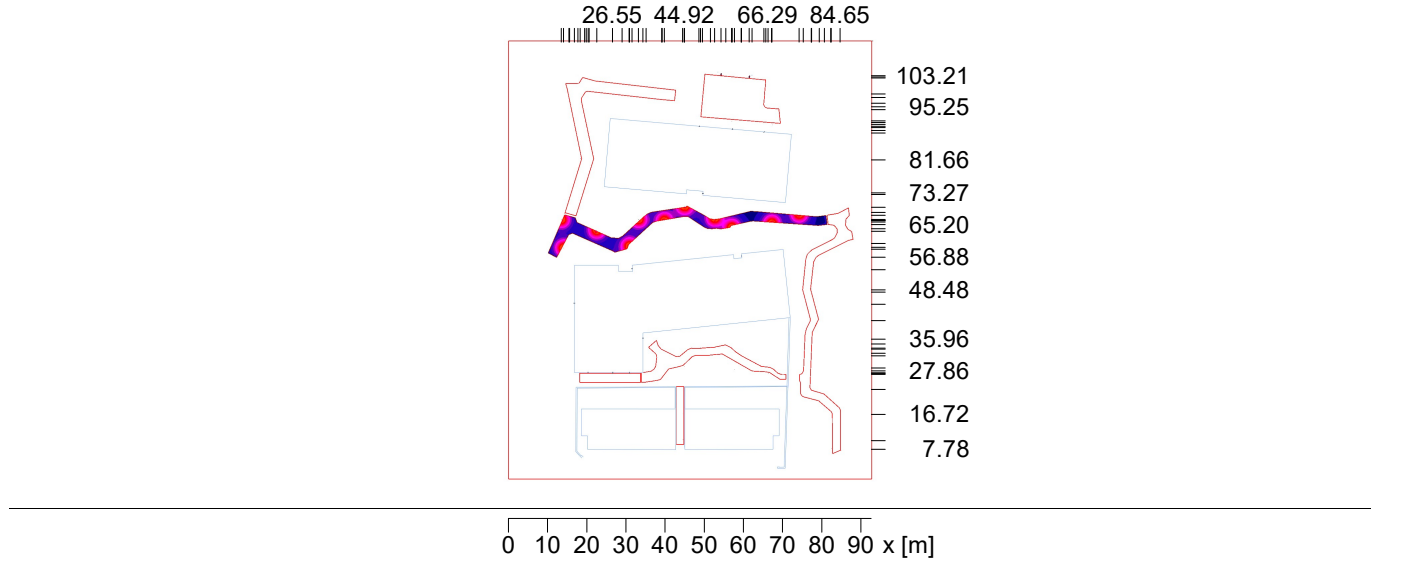
8 43 x 

Order No.	: BER/10/2340/3
Luminaire name	: BER-10-2340-3
Equipment	: 1 x SMD2835 30K) 24.9 W / 2229 lm

Object	:	Externals
Installation	:	Rodney Street
Project number	:	
Date	:	08.10.2024

Summary, External

Result overview, Measuring area 3



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80
Total luminous flux	116696 lm
Total power	1283.9 W
Total power per area (10349.69 m²)	0.12 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	29 lx
Minimum illuminance	E_{min}	1 lx
Maximum illuminance	E_{max}	185 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:21.8 (0.05)
Diversity U_d	E_{min}/E_{max}	1:140 (0.01)

Type No.\Make

		LDL	
4	2 x	Order No.	: ST/M/L2/3200/74
		Luminaire name	: STREET Medium L2optic 3236lm 31w 740 300mA
		Equipment	: 1 x LED Backlight 30.82 W / 3236 lm
6	11 x	Order No.	: LUNA/L4/1300/74
		Luminaire name	: LUNA L4optic 1307lm 14w 740 250mA
		Equipment	: 1 x LED Backlight 13.78 W / 1307 lm

Object	:	Externals
Installation	:	Rodney Street
Project number	:	
Date	:	08.10.2024

Summary, External

Result overview, Measuring area 3

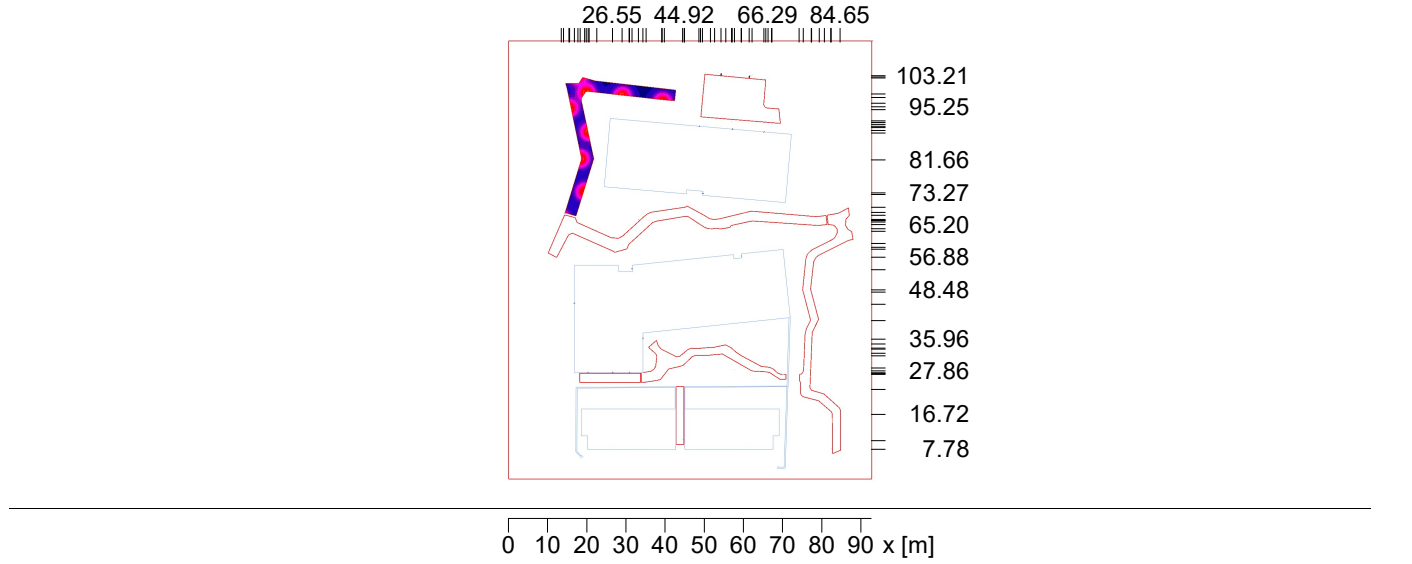
8 43 x 

Order No.	: BER/10/2340/3
Luminaire name	: BER-10-2340-3
Equipment	: 1 x SMD2835 30K) 24.9 W / 2229 lm

Object	:	Externals
Installation	:	Rodney Street
Project number	:	
Date	:	08.10.2024

Summary, External

Result overview, Measuring area 4



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80
Total luminous flux	116696 lm
Total power	1283.9 W
Total power per area (10349.69 m²)	0.12 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	24 lx
Minimum illuminance	E_{min}	1 lx
Maximum illuminance	E_{max}	181 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:20.7 (0.05)
Diversity U_d	E_{min}/E_{max}	1:158 (0.01)

Type No.\Make

4 2 x — **LDL**
Order No. : ST/M/L2/3200/74
Luminaire name : STREET Medium L2optic 3236lm 31w 740 300mA
Equipment : 1 x LED Backlight 30.82 W / 3236 lm

6 11 x
Order No. : LUNA/L4/1300/74
Luminaire name : LUNA L4optic 1307lm 14w 740 250mA
Equipment : 1 x LED Backlight 13.78 W / 1307 lm

Object	:	Externals
Installation	:	Rodney Street
Project number	:	
Date	:	08.10.2024

Summary, External

Result overview, Measuring area 4

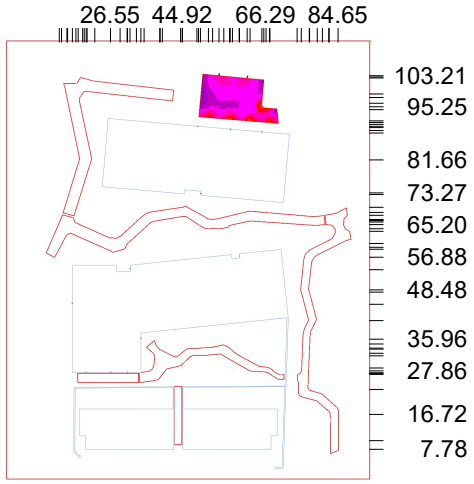
8 43 x 

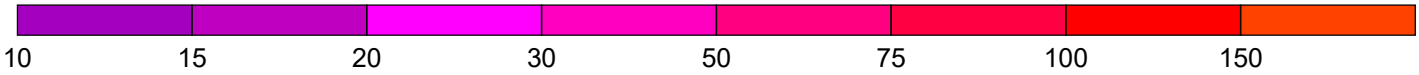
Order No.	: BER/10/2340/3
Luminaire name	: BER-10-2340-3
Equipment	: 1 x SMD2835 30K) 24.9 W / 2229 lm

Object	:	Externals
Installation	:	Rodney Street
Project number	:	
Date	:	08.10.2024

Summary, External

Result overview, Measuring area 6





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80
Total luminous flux	116696 lm
Total power	1283.9 W
Total power per area (10349.69 m²)	0.12 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	34 lx
Minimum illuminance	E_{min}	12 lx
Maximum illuminance	E_{max}	186 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:2.92 (0.34)
Diversity U_d	E_{min}/E_{max}	1:15.9 (0.06)

Type No.\Make

4	2 x	**LDL**	
		Order No.	: ST/M/L2/3200/74
		Luminaire name	: STREET Medium L2optic 3236lm 31w 740 300mA
		Equipment	: 1 x LED Backlight 30.82 W / 3236 lm
6	11 x	Order No.	: LUNA/L4/1300/74
		Luminaire name	: LUNA L4optic 1307lm 14w 740 250mA
		Equipment	: 1 x LED Backlight 13.78 W / 1307 lm

Object	:	Externals
Installation	:	Rodney Street
Project number	:	
Date	:	08.10.2024

Summary, External

Result overview, Measuring area 6

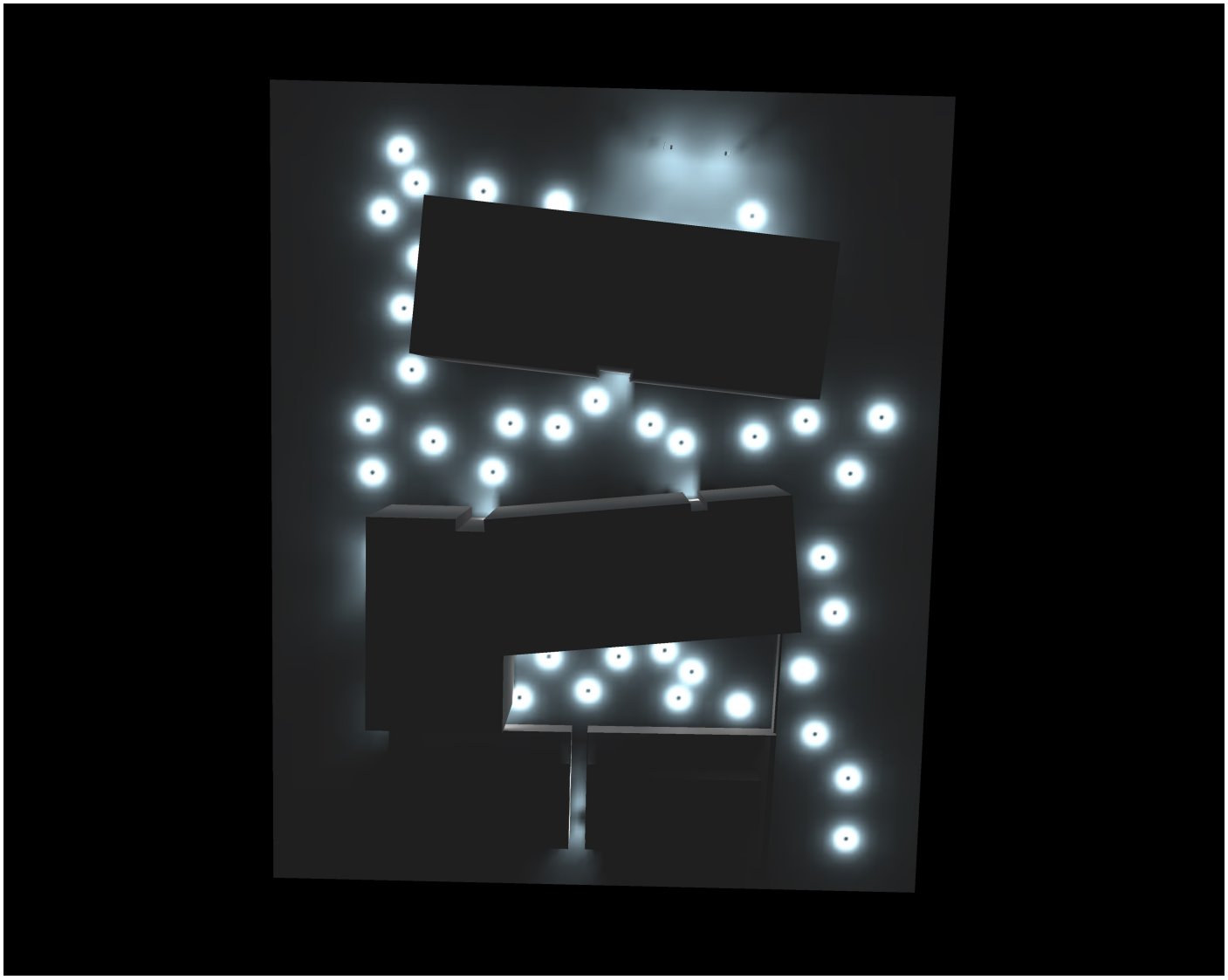
8 43 x 

Order No.	: BER/10/2340/3
Luminaire name	: BER-10-2340-3
Equipment	: 1 x SMD2835 30K) 24.9 W / 2229 lm

Object	:	Externals
Installation	:	Rodney Street
Project number	:	
Date	:	08.10.2024

Calculation results, External

3D luminance, View 1



Luminance in the scene

Minimum:	: 0 cd/m²
Maximum:	: 87.5 cd/m²