



Cornelscourt Residential Development

Proposed Site Lighting layout

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DOCUMENT CONTROL & HISTORY

OCSC Job No.: A587	Project Code	Originator Code	Zone Code	Level Code	File Type	Role Type	Number Series	Status/ Suitability Code	Revision
	A587	OCSC	XX	XX	RP	E	0001	S8	P02
Rev.	Status	Authors	Checked	Authorised	Issue Date				
P02	S8	LC	DW	MD	07.11.19				
P01	S8	LC	DW	MD	02.05.19				



Design Criteria:

The public lighting scheme has been designed in accordance with the General Specification for Public Lighting Design and Installation in Residential ,Industrial and Commercial Developments in Dublin City Council areas.

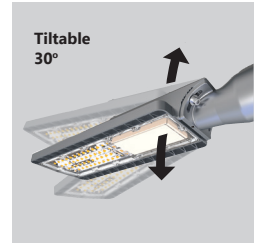
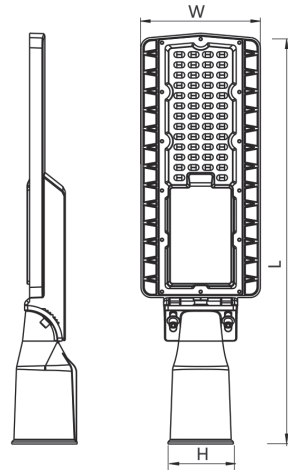
The scheme has been designed to comply with Class P4 of BS 5489:2013.

PRELUX

Valo 50W 4000K Datasheet

7000lm LED Street Light

PXVALO50W



Tiltable
30°



Horizontal or
Perpendicular
Installation

Watts (W)	50
L (mm)	494
W (mm)	155
H (mm)	76
Pole Ø (mm)	60



Enlarging
76mm Spigot
Available
(to be
ordered
separately)
Product
Code:
PXSP76



RoHS

IP65

LED



140
Lm/W

Dimensions	494*155*76mm
Wattage	50W
Input Voltage	100-240V
Frequency	50-60Hz
Current (A)	0.24
Colour Temperature	4000K
Ra	≥70
Power Factor	≥0.9
Ta(°C)	-20~45
Lumens	7000
Efficiency	140Lm/W
Lifetime	50,000h
Colour	Dark Grey
Beam Angle	Type II
Tiltable	30°
IP Rating	IP65
Certification	CE, CB, ENEC
Fitting Warranty	5 Years

Features & Applications

- Tiltable 30°
- 4000K colour temperature
- Highly Efficient 140 Lm/W
- Excellent photometric design
- IP65 protection rating
- 60mm pole diameter size
- 76mm spigot available (to be ordered separately)
- 50,000 hour lifetime
- Excellent heat dissipation to extend the life of the LEDs.
- 5 year warranty

Object : Cornelscourt (DAR)
Installation : Exterior Lighting, Rev 6
Project number : E19077
Date : 05.11.2019

1 Luminaire data

1.1 Edison, Prelux VALO SP2 Street 50W 4K (!PXSP2)

1.1.1 Data sheet

Manufacturer: Edison

!PXSP2 Prelux VALO SP2 Street 50W 4K

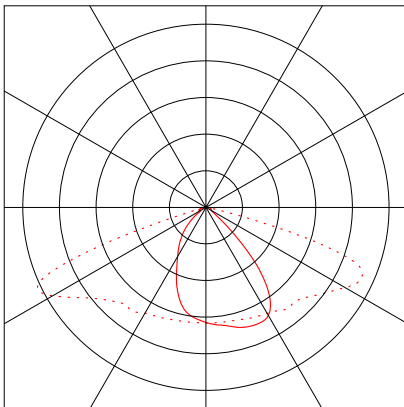
Luminaire data

Luminaire efficiency : 100%
Luminaire efficacy : 150.79 lm/W
Classification : A40 ↓98.7% ↑1.3%
CIE Flux Codes : 47 80 99 99 100
UGR 4H 8H : 23.5 / 31.2
Power : 51 W
Luminous flux : 7690.2 lm

Equipped with

Quantity : 1
Designation : LED
Colour : 4000
Luminous flux : 7690.2 lm
Colour reproduction : 70

Dimensions : 155 mm x 494 mm x 76 mm

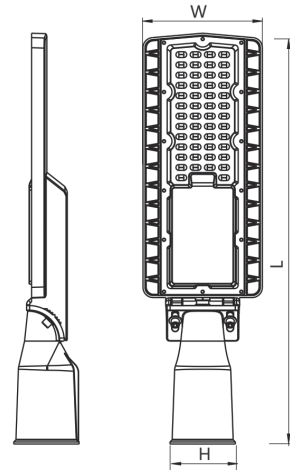


PRELUX

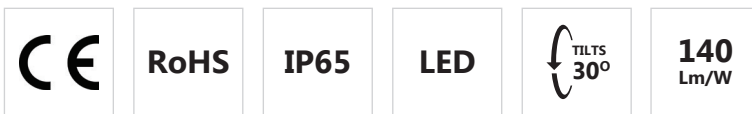
Valo 30W 4000K Datasheet

4200lm LED Street Light

PXVALO30W



Watts (W)	30
L (mm)	425
W (mm)	117
H (mm)	76
Pole Ø (mm)	60



Dimensions	425*117*76mm
Wattage	30W
Input Voltage	100-240V
Frequency	50-60Hz
Current (A)	0.14
Colour Temperature	4000K
Ra	≥70
Power Factor	≥0.9
Ta(°C)	-20~45
Lumens	4200
Efficiency	140Lm/W
Lifetime	50,000h
Colour	Dark Grey
Beam Angle	Type II
Tiltable	30°
IP Rating	IP65
Certification	CE, CB, ENEC
Fitting Warranty	5 Years

Features & Applications

- Tiltable 30°
- 4000K colour temperature
- Highly Efficient 140 Lm/W
- Excellent photometric design
- IP65 protection rating
- 60mm pole diameter size
- 76mm spigot available (to be ordered separately)
- 50,000 hour lifetime
- Excellent heat dissipation to extend the life of the LEDs.
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Object : Cornelscourt (DAR)
Installation : Exterior Lighting, Rev 6
Project number : E19077
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1 Luminaire data

1.2 HML, Prelux VALO SP 30W 4K (!PXVAL30W)

1.2.1 Data sheet

Manufacturer: HML

!PXVAL30W Prelux VALO SP 30W 4K

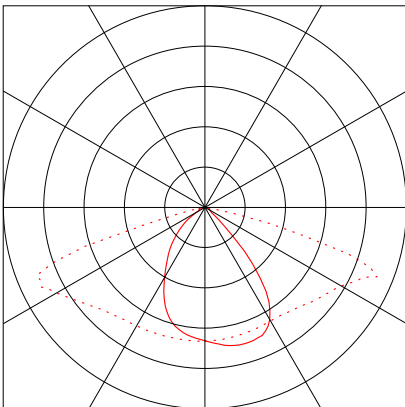
Luminaire data

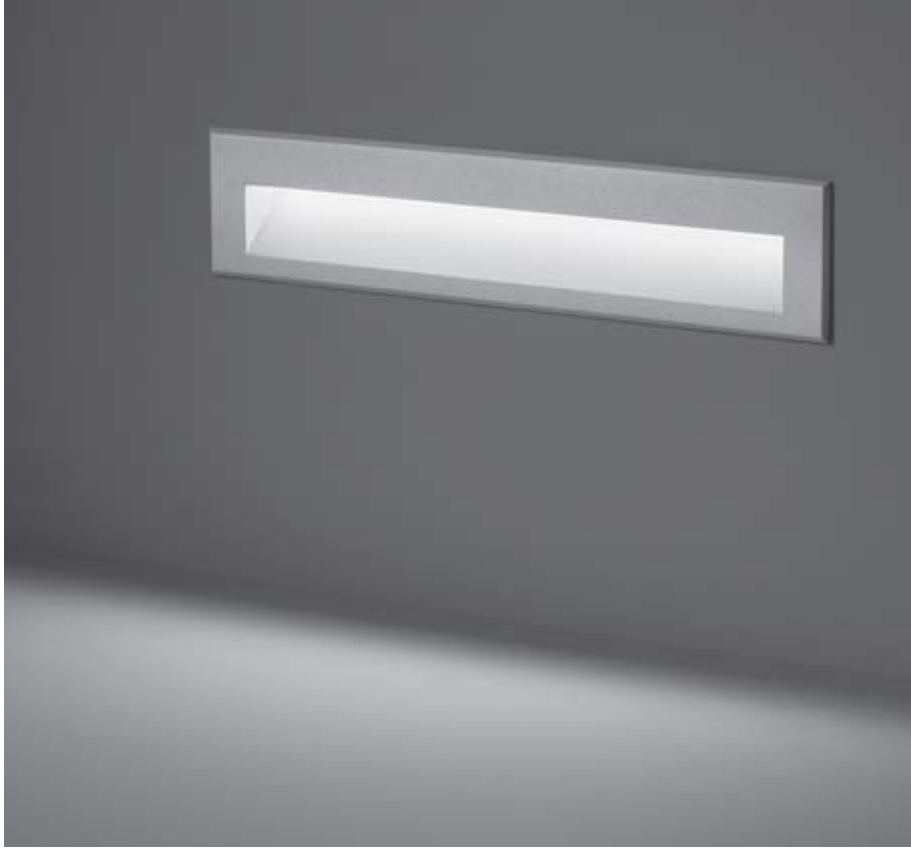
Luminaire efficiency : 100%
Luminaire efficacy : 140.48 lm/W
Classification : A40 ↓99.3% ↑0.7%
CIE Flux Codes : 48 81 99 99 100
UGR 4H 8H : 22.7 / 32.7
Power : 29 W
Luminous flux : 4074 lm

Equipped with

Quantity : 1
Designation : LED
Colour : 4000K
Luminous flux : 4074 lm
Colour reproduction : 70

Dimensions : 117 mm x 425 mm x 76 mm

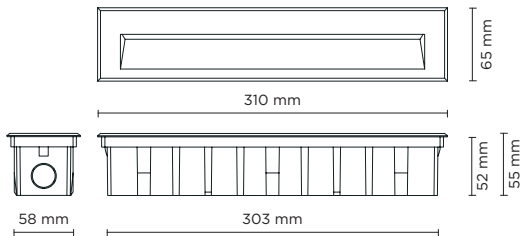




502020

STEP LINEAR 07

Recessed linear steplight for outdoor installation in the wall, phospho-chromatised and polyester powder coated die-cast copper-free aluminium body and frame, tempered frosted glass diffuser, polypropilene housing for recess, moulded silicone gasket and stainless steel screws. Built-in LED driver 220-240V 50-60Hz, with 30 low-power SMD5630 LED. IP65 rating.



light source	light beam options	lumen output (lm)	lumin. efficacy (lm/w)
3000°K warm-white			
low power led	Asymmetric 120°	360	34.28

Finish color options:

 Textured Grey
RAL 9006

Technical features



Technical data

Wattage	10.5 WATT
IP Rating	IP65
IK Rating	IK08
Material	High corrosion resistance die-cast copper-free aluminum body and frame.
Coating	Polyester powder coating with phosphocromating pre-finish
Light source	NR. 30 x SMD5630 LED
Screws	Stainless steel
Transformer	Electronic power supply 220/240V 50/60Hz built-in
Cable	0.5 mt. neoprene power cable included
Gasket	Silicone rubber
Glass	Tempered
Gross weight	1,50 Kg



Object : Cornelscourt (DAR)
Installation : Exterior Lighting, Rev 6
Project number : E19077
Date : 05.11.2019

1 Luminaire data

1.3 PUK ITALIA, HYDROSTEP LINEAR 07 LE... (PUK ITALIA 375-...)

1.3.1 Data sheet

Manufacturer: PUK ITALIA

**PUK ITALIA 375-QL18-S04 HYDROSTEP LINEAR 07 LED COD 502020.LDT
07 LED COD 502020**

HYDROSTEP LINEAR

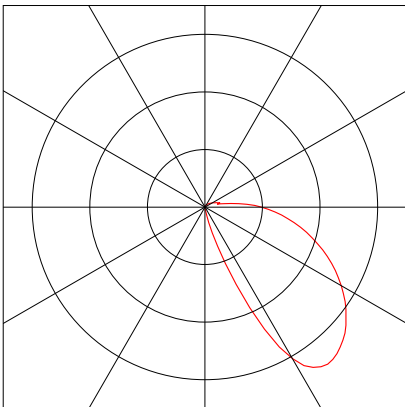
Luminaire data

Luminaire efficiency : 100%
Luminaire efficacy : 31.18 lm/W
Classification : A11 ↓91.9% ↑8.1%
CIE Flux Codes : 20 55 83 92 100
UGR 4H 8H : 37.8 / 29.7
Power : 10.4 W
Luminous flux : 324.3 lm

Equipped with

Quantity : 1
Designation : LED
Colour :
Luminous flux : 324.3 lm

Dimensions : 310 mm x 58 mm x 65 mm



2 Exterior 1

2.1 Description, Exterior 1

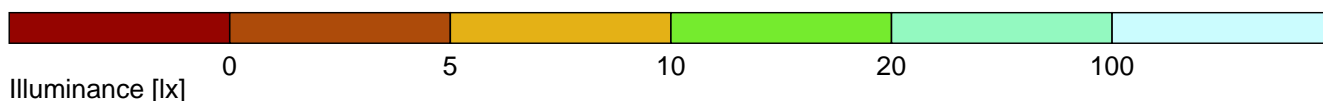
2.1.1 Floor plan



2 Exterior 1

2.2 Summary, Exterior 1

2.2.1 Result overview, DCC Area 1



General


Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80
Total luminous flux of all lamps	239945.6 lm
Total power	1889.6 W
Total power per area (22770.50 m ²)	0.08 W/m ²

Illuminance

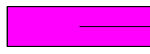
Average illuminance	Em	38.9 lx
Minimum illuminance	Emin	21.4 lx
Maximum illuminance	Emax	59 lx
Uniformity U _o	Emin/Em	1:1.81 (0.55)
Diversity U _d	Emin/Emax	1:2.75 (0.36)

Type No. Make

Edison

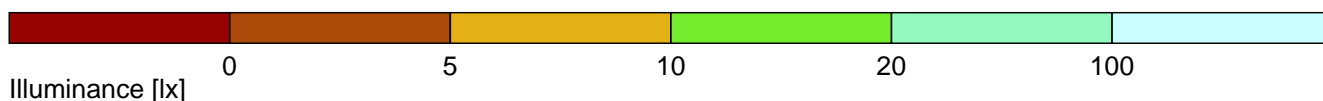
1	25	Order No.	: !PXSP2
		Luminaire name	: Prelux VALO SP2 Street 50W 4K
		Equipment	: 1 x LED 51 W / 7690.2 lm

HML

2	9	Order No.	: !PXVAL30W
		Luminaire name	: Prelux VALO SP 30W 4K
		Equipment	: 1 x LED 29 W / 4074 lm

2.2 Summary, Exterior 1

2.2.2 Result overview, DCC Area 2



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80

Total luminous flux of all lamps	239945.6 lm
Total power	1889.6 W
Total power per area (22770.50 m ²)	0.08 W/m ²

Illuminance

Average illuminance	Em	37.5 lx
Minimum illuminance	Emin	21.1 lx
Maximum illuminance	E _{max}	64.1 lx
Uniformity U _o	E _{min} /E _m	1:1.78 (0.56)
Diversity U _d	E _{min} /E _{max}	1:3.04 (0.33)

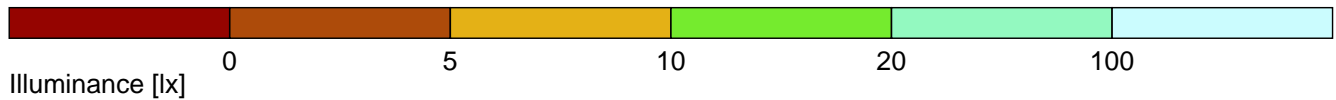
Type No. Make

Edison	
1	25
Order No.	: !PXSP2
Luminaire name	: Prelux VALO SP2 Street 50W 4K
Equipment	: 1 x LED 51 W / 7690.2 lm

HML	
2	9
Order No.	: !PXVAL30W
Luminaire name	: Prelux VALO SP 30W 4K
Equipment	: 1 x LED 29 W / 4074 lm

2.2 Summary, Exterior 1

2.2.3 Result overview, P2 Area 1



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80


Total luminous flux of all lamps	239945.6 lm
Total power	1889.6 W
Total power per area (22770.50 m ²)	0.08 W/m ²

Illuminance

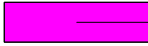
Average illuminance	Em	15.8 lx
Minimum illuminance	Emin	4.8 lx
Maximum illuminance	Emax	31.4 lx
Uniformity Uo	Emin/Em	1:3.3 (0.3)
Diversity Ud	Emin/Emax	1:6.55 (0.15)

Type No. Make

Edison

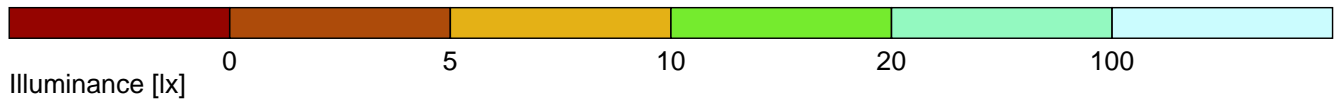
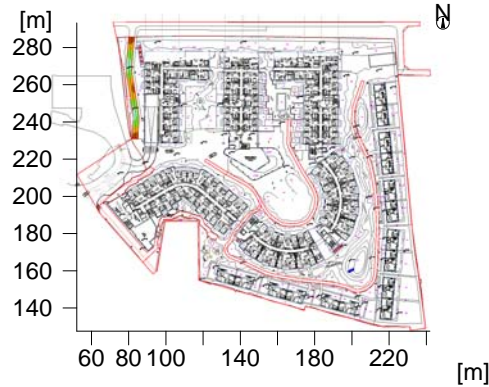
1	25	Order No.	: !PXSP2
		Luminaire name	: Prelux VALO SP2 Street 50W 4K
		Equipment	: 1 x LED 51 W / 7690.2 lm

HML

2	9	Order No.	: !PXVAL30W
		Luminaire name	: Prelux VALO SP 30W 4K
		Equipment	: 1 x LED 29 W / 4074 lm

2.2 Summary, Exterior 1

2.2.4 Result overview, P2 Area 2



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80


Total luminous flux of all lamps	239945.6 lm
Total power	1889.6 W
Total power per area (22770.50 m ²)	0.08 W/m ²

Illuminance


Average illuminance	Em	12.5 lx
Minimum illuminance	Emin	2.3 lx
Maximum illuminance	Emax	29.2 lx
Uniformity Uo	Emin/Em	1:5.38 (0.19)
Diversity Ud	Emin/Emax	1:12.6 (0.08)

Type No.Make

Edison

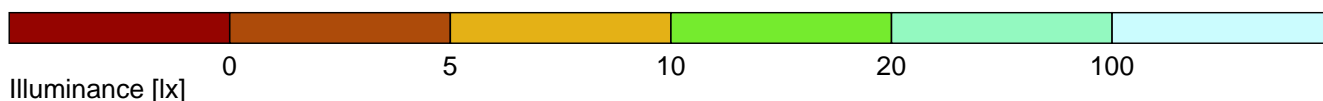
1	25	Order No.	: !PXSP2
		Luminaire name	: Prelux VALO SP2 Street 50W 4K
		Equipment	: 1 x LED 51 W / 7690.2 lm

HML

2	9	Order No.	: !PXVAL30W
		Luminaire name	: Prelux VALO SP 30W 4K
		Equipment	: 1 x LED 29 W / 4074 lm

2.2 Summary, Exterior 1

2.2.5 Result overview, Stair Ramp 1



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80

Total luminous flux of all lamps	239945.6 lm
Total power	1889.6 W
Total power per area (22770.50 m ²)	0.08 W/m ²

Illuminance

Average illuminance	Em	202 lx
Minimum illuminance	Emin	106 lx
Maximum illuminance	Emax	335 lx
Uniformity Uo	Emin/Em	1:1.9 (0.53)
Diversity Ud	Emin/Emax	1:3.16 (0.32)

Type No. Make

Edison

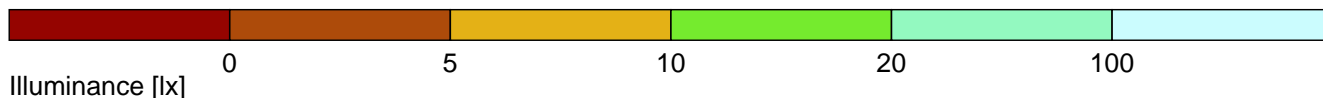
1	25	Order No.	: !PXSP2
		Luminaire name	: Prelux VALO SP2 Street 50W 4K
		Equipment	: 1 x LED 51 W / 7690.2 lm

HML

2	9	Order No.	: !PXVAL30W
		Luminaire name	: Prelux VALO SP 30W 4K
		Equipment	: 1 x LED 29 W / 4074 lm

2.2 Summary, Exterior 1

2.2.6 Result overview, Stair 2



General

Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80
Total luminous flux of all lamps	239945.6 lm
Total power	1889.6 W
Total power per area (22770.50 m ²)	0.08 W/m ²

Illuminance

Average illuminance	Em	175 lx
Minimum illuminance	Emin	105 lx
Maximum illuminance	Emax	272 lx
Uniformity U _o	Emin/Em	1:1.67 (0.6)
Diversity U _d	Emin/Emax	1:2.59 (0.39)

Type No.Make

Edison

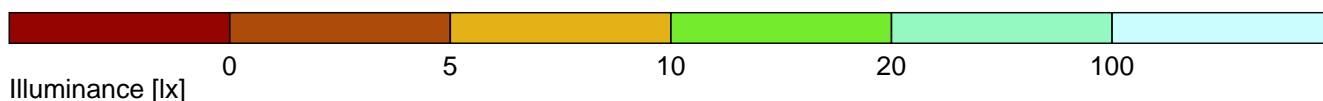
1	25	Order No.	: !PXSP2
		Luminaire name	: Prelux VALO SP2 Street 50W 4K
		Equipment	: 1 x LED 51 W / 7690.2 lm

HML

2	9	Order No.	: !PXVAL30W
		Luminaire name	: Prelux VALO SP 30W 4K
		Equipment	: 1 x LED 29 W / 4074 lm

2.2 Summary, Exterior 1

2.2.7 Result overview, Stair 3



General

Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80
Total luminous flux of all lamps	239945.6 lm
Total power	1889.6 W
Total power per area (22770.50 m ²)	0.08 W/m ²

Illuminance

Average illuminance	Em	209 lx
Minimum illuminance	Emin	105 lx
Maximum illuminance	Emax	397 lx
Uniformity Uo	Emin/Em	1:2 (0.5)
Diversity Ud	Emin/Emax	1:3.79 (0.26)

Type No.Make

Edison

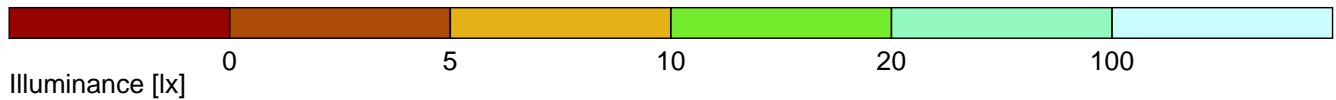
1	25	Order No.	: !PXSP2
		Luminaire name	: Prelux VALO SP2 Street 50W 4K
		Equipment	: 1 x LED 51 W / 7690.2 lm

HML

2	9	Order No.	: !PXVAL30W
		Luminaire name	: Prelux VALO SP 30W 4K
		Equipment	: 1 x LED 29 W / 4074 lm

2.2 Summary, Exterior 1

2.2.8 Result overview, Stair 4



General


Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80
Total luminous flux of all lamps	239945.6 lm
Total power	1889.6 W
Total power per area (22770.50 m ²)	0.08 W/m ²

Illuminance

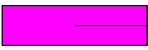
Average illuminance	Em	224 lx
Minimum illuminance	Emin	110 lx
Maximum illuminance	Emax	442 lx
Uniformity U _o	Emin/Em	1:2.03 (0.49)
Diversity U _d	Emin/Emax	1:4 (0.25)

Type No.Make

Edison

1	25	Order No.	: !PXSP2
		Luminaire name	: Prelux VALO SP2 Street 50W 4K
		Equipment	: 1 x LED 51 W / 7690.2 lm


HML

2	9	Order No.	: !PXVAL30W
		Luminaire name	: Prelux VALO SP 30W 4K
		Equipment	: 1 x LED 29 W / 4074 lm

Object : Cornelscourt (DAR)
Installation : Exterior Lighting, Rev 6
Project number : E19077
Date : 05.11.2019

2.2 Summary, Exterior 1

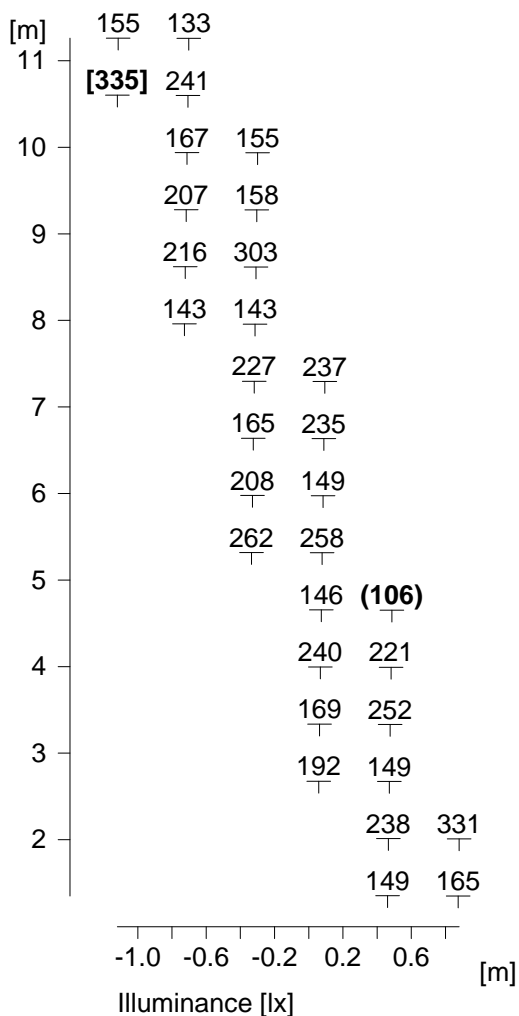
2.2.8 Result overview, Stair 4

		PUK ITALIA	
3	34	Order No.	: PUK ITALIA 375-QL18-S04 HYDROSTEP LINEAR 07 LED COD 502020.LDT
		Luminaire name	: HYDROSTEP LINEAR 07 LED COD 502020
		Equipment	: 1 x LED 10.4 W / 324.25 lm

2 Exterior 1

2.3 Calculation results, Exterior 1

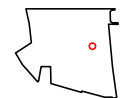
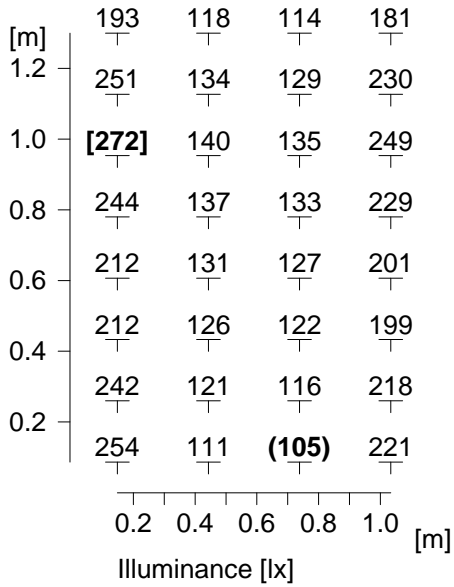
2.3.1 Table, Stair Ramp 1 (E)



Height reference plane		: 0.00 m
Average illuminance	Em	: 202 lx
Minimum illuminance	Emin	: 106 lx
Maximum illuminance	Emax	: 335 lx
Uniformity Uo	Emin/Em	: 1 : 1.90 (0.53)
Diversity Ud	Emin/Emax	: 1 : 3.16 (0.32)

2.3 Calculation results, Exterior 1

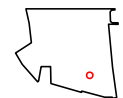
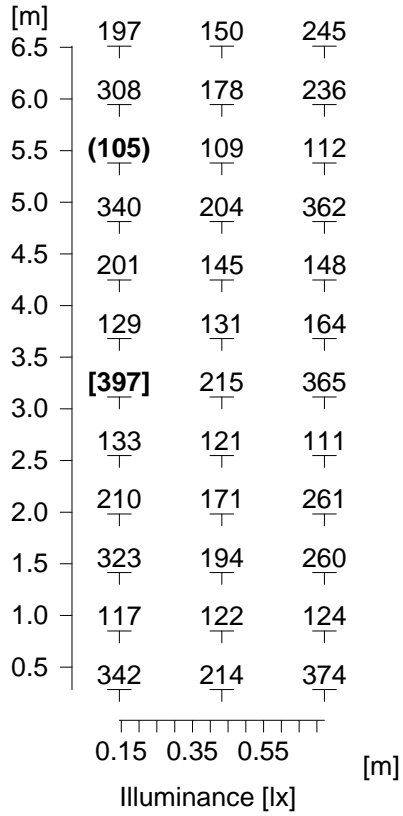
2.3.2 Table, Stair 2 (E)



Average illuminance	Em	: 175 lx
Minimum illuminance	Emin	: 105 lx
Maximum illuminance	Emax	: 272 lx
Uniformity Uo	Emin/Em	: 1 : 1.67 (0.60)
Diversity Ud	Emin/Emax	: 1 : 2.59 (0.39)

2.3 Calculation results, Exterior 1

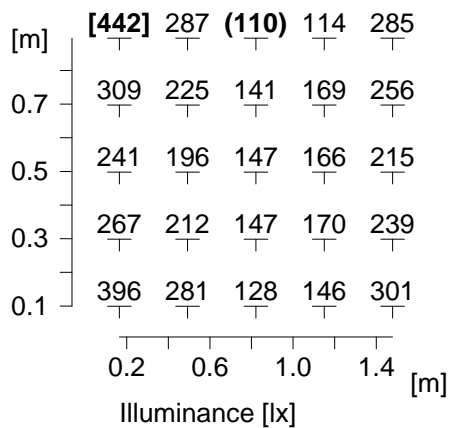
2.3.3 Table, Stair 3 (E)



Average illuminance	Em	: 209 lx
Minimum illuminance	Emin	: 105 lx
Maximum illuminance	Emax	: 397 lx
Uniformity Uo	Emin/Em	: 1 : 2.00 (0.50)
Diversity Ud	Emin/Emax	: 1 : 3.79 (0.26)

2.3 Calculation results, Exterior 1

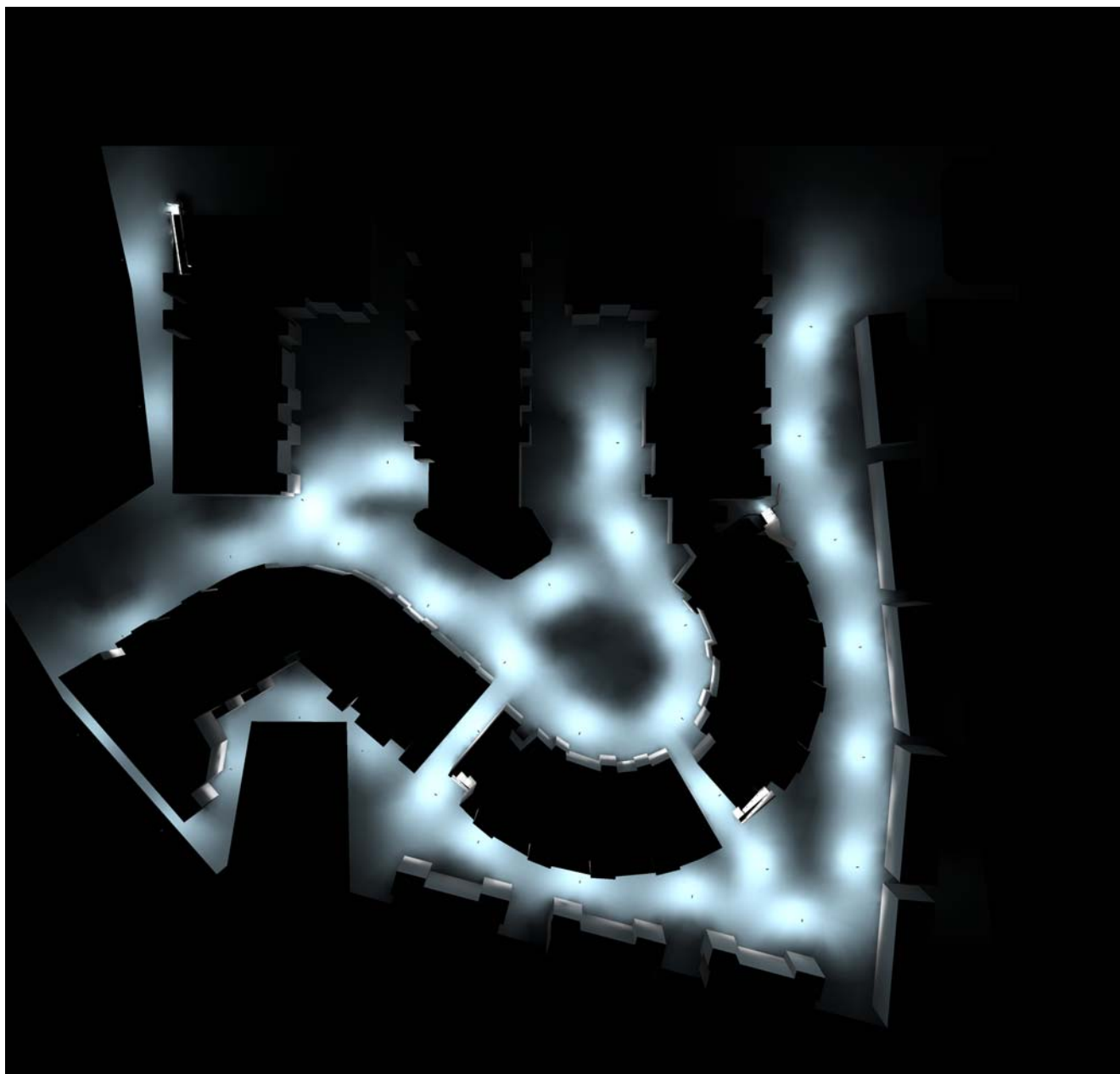
2.3.4 Table, Stair 4 (E)



Average illuminance	Em	: 224 lx
Minimum illuminance	Emin	: 110 lx
Maximum illuminance	Emax	: 442 lx
Uniformity Uo	Emin/Em	: 1 : 2.03 (0.49)
Diversity Ud	Emin/Emax	: 1 : 4.00 (0.25)

2.3 Calculation results, Exterior 1

2.3.5 3D luminance, View from above



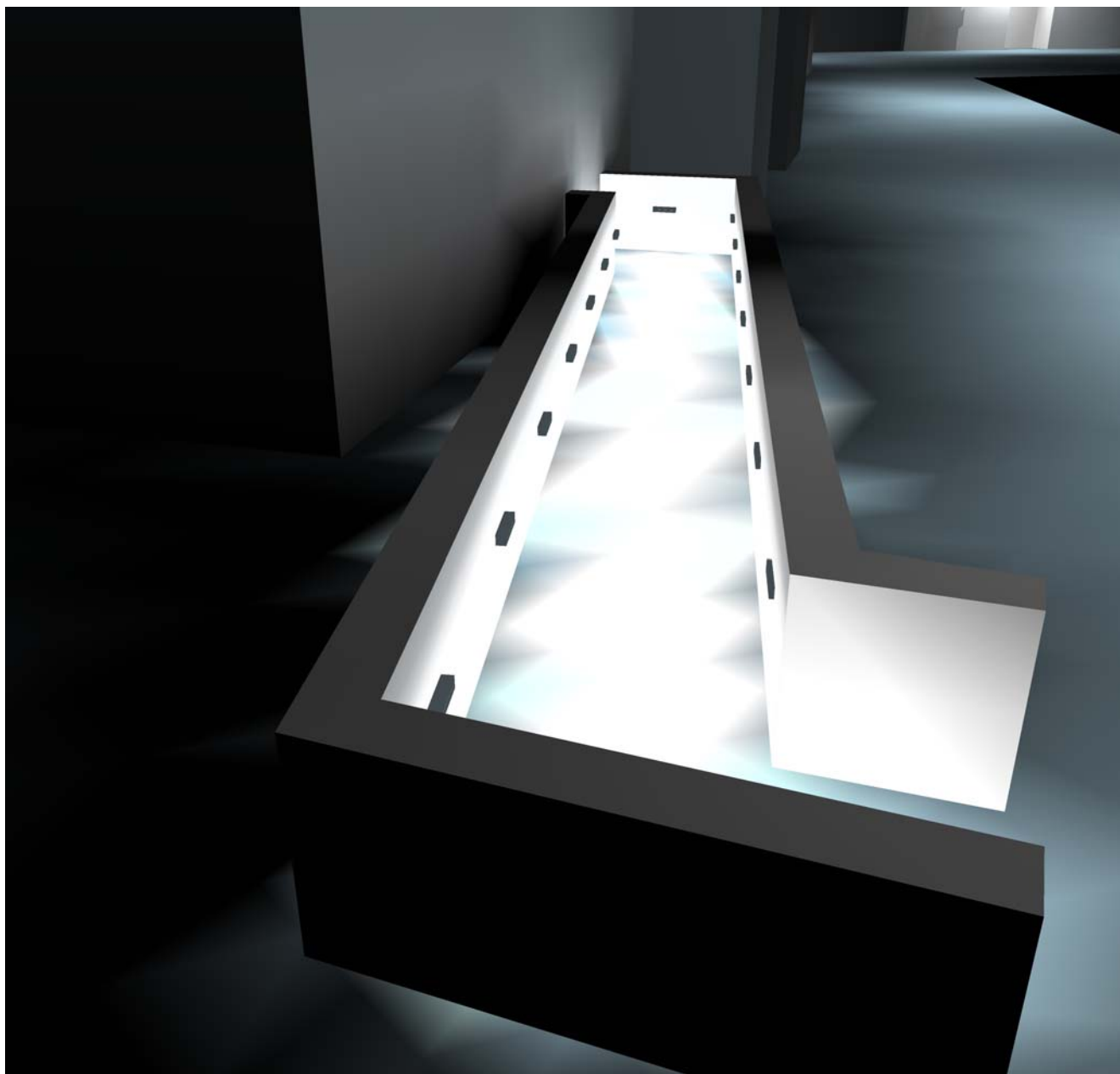
Luminance in the scene

Minimum: : 0 cd/m²

Maximum: : 52.4 cd/m²

2.3 Calculation results, Exterior 1

2.3.6 3D luminance, View 2

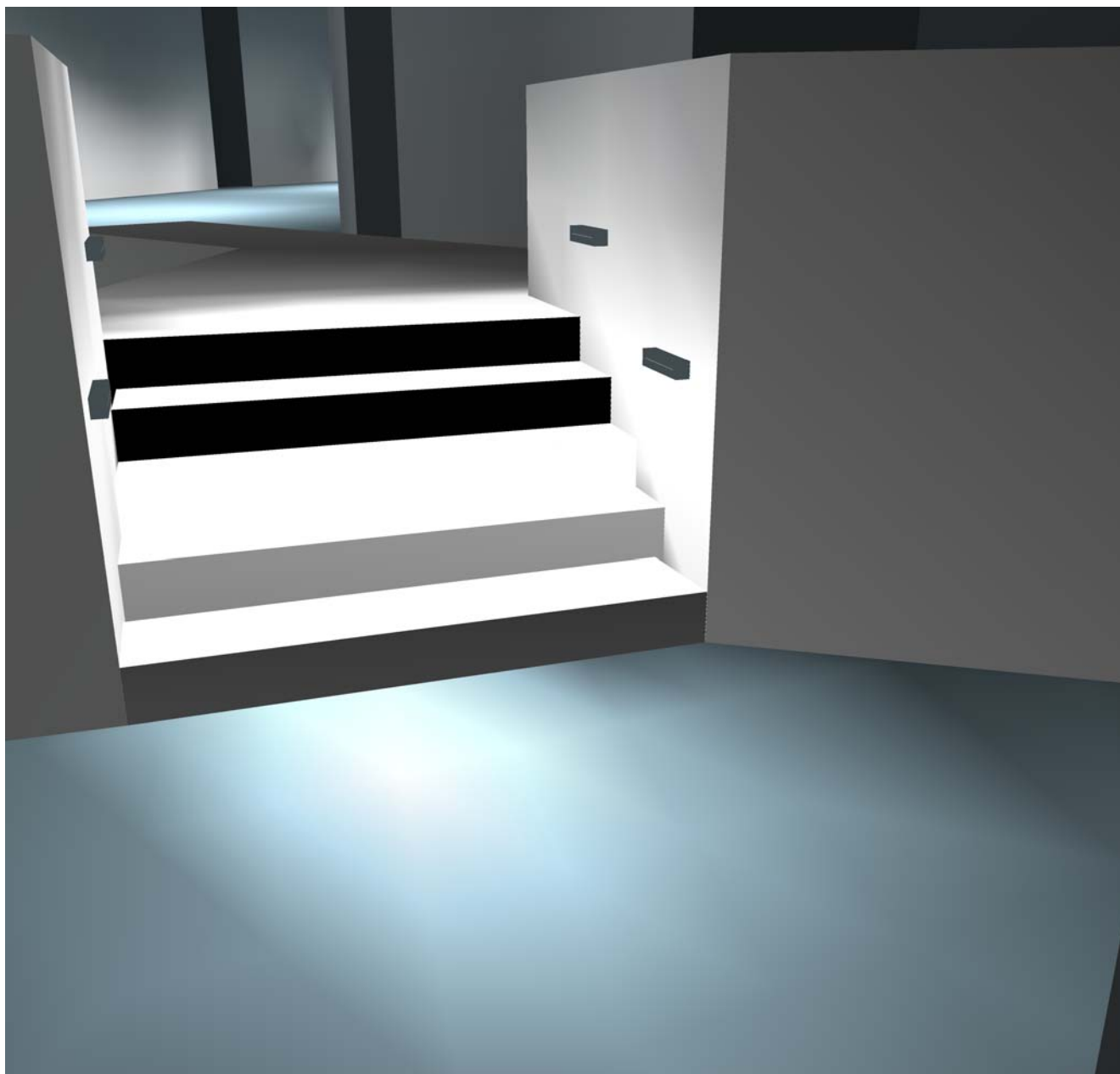


Luminance in the scene

Minimum: : 0 cd/m²
Maximum: : 52.4 cd/m²

2.3 Calculation results, Exterior 1

2.3.7 3D luminance, View 3



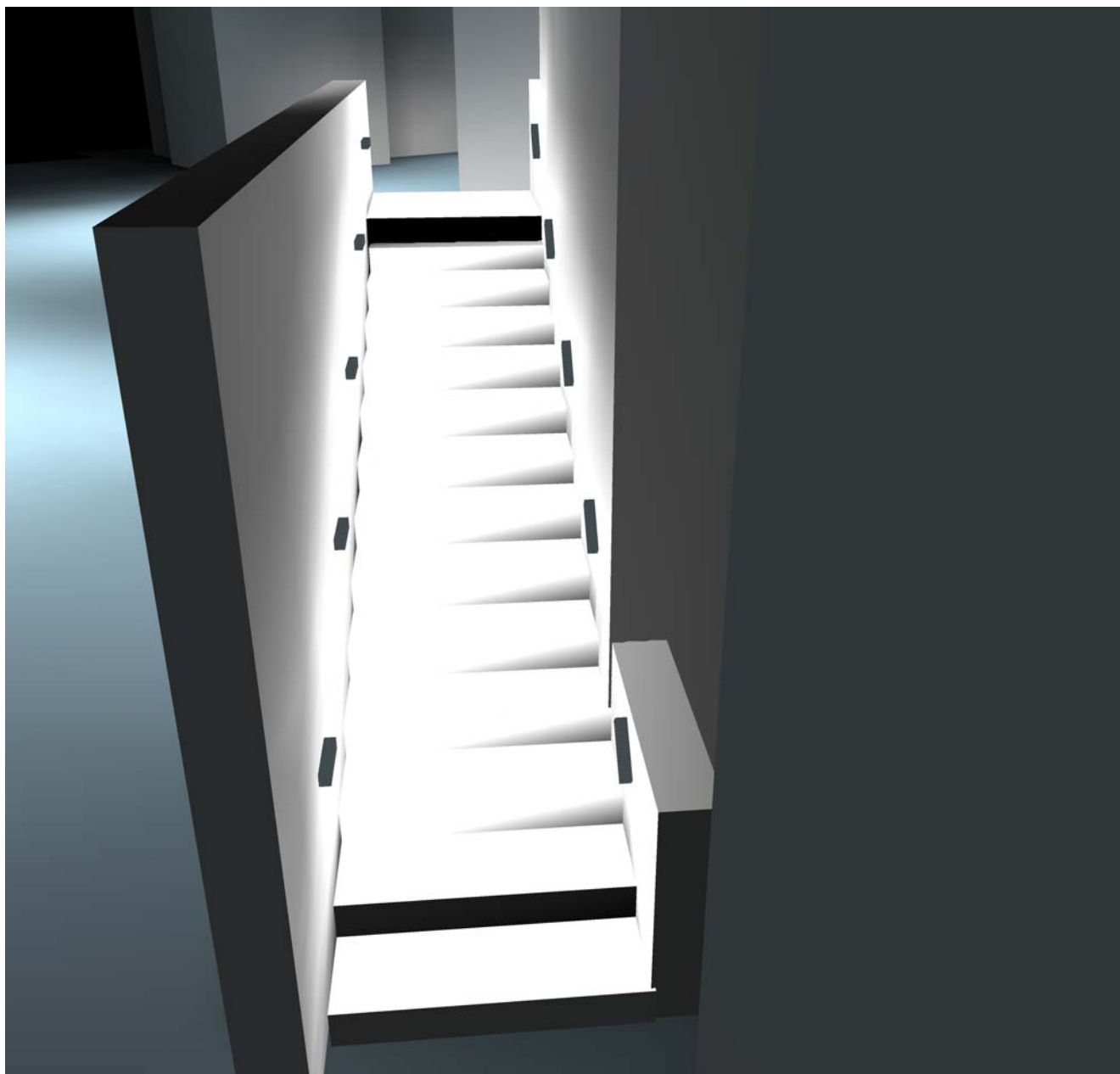
Luminance in the scene

Minimum: : 0 cd/m²

Maximum: : 52.4 cd/m²

2.3 Calculation results, Exterior 1

2.3.8 3D luminance, View 4



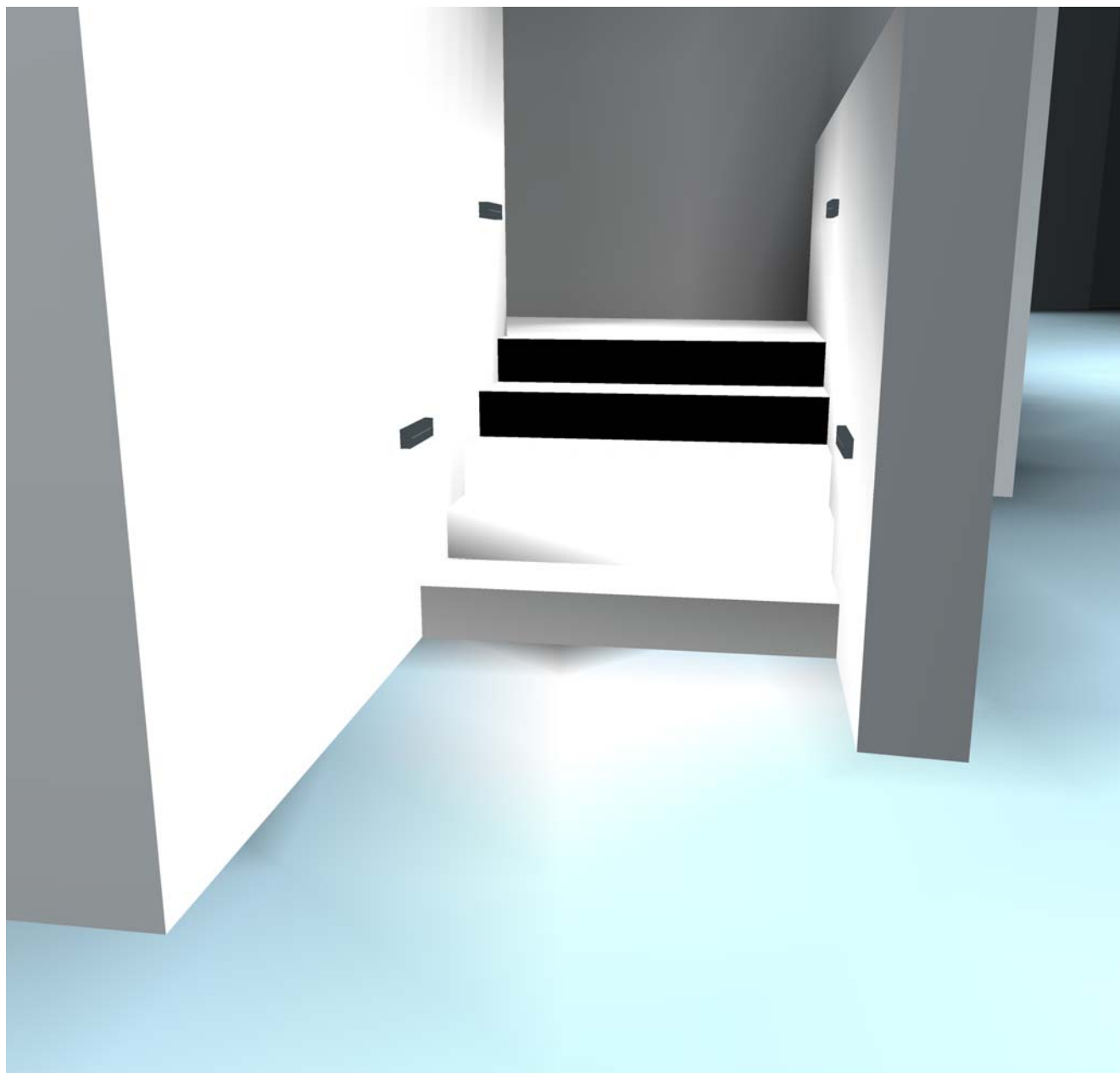
Luminance in the scene

Minimum: : 0 cd/m²

Maximum: : 52.4 cd/m²

2.3 Calculation results, Exterior 1

2.3.9 3D luminance, View 5



Luminance in the scene

Minimum: : 0 cd/m²

Maximum: : 52.4 cd/m²