

**26C001 Castle School, Thornbury
R2L2 Data Sheet**

R2L2

THORN

96268421 R2L2 S 12L70 740 RC CL2 GY

LED 28W R2L2_12L70-740RC	ISO 9223 C5	IP66	IK08		CE	EAC		T _a -25 +50	
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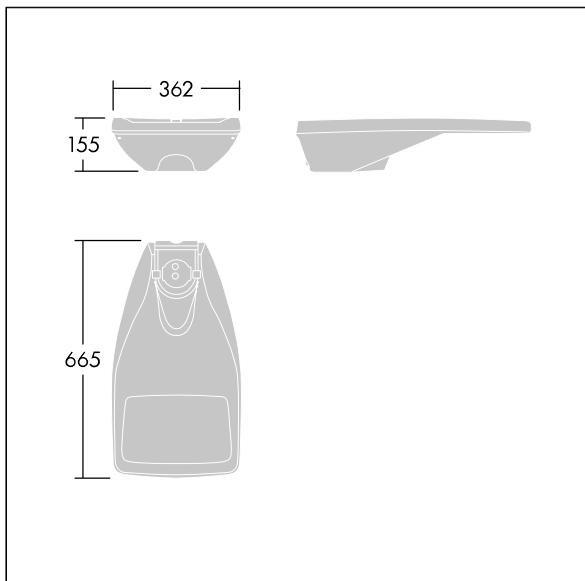
R2L2

A small size LED road lighting lantern with 12 LEDs driven at 700mA with Road & Comfort optic. LED driver Programmable. Class II electrical, IP66, IK08. Housing: die-cast aluminium (EN AC-44300), powder coated textured light grey. Enclosure: tempered flat glass. Screws: stainless steel, Ecolubric® treated. Post top ($\varnothing 60/76$ mm, tilted 0°/5°/10°) or lateral ($\varnothing 34/42/49/60$ mm, tilted 0°/-5°/-10°/-15°) mounting. For lateral mounting to $\varnothing 34/42$ mm spigots an adaptor (59005840 R2L2 MA34/42 NPA) should be ordered separately. Complete with 4000K LED.

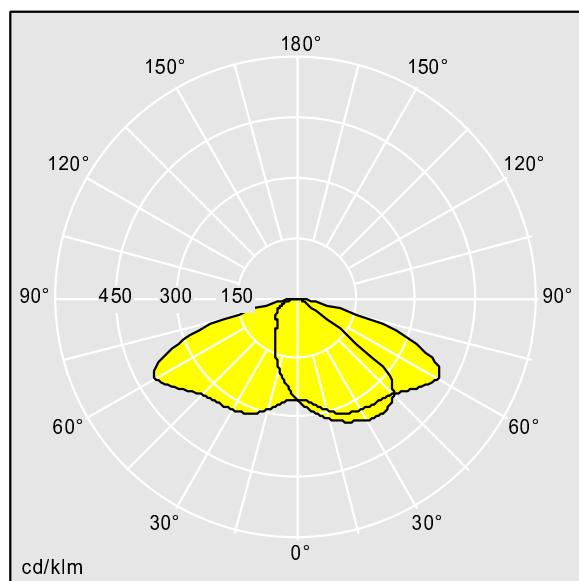
Dimensions: 655 x 362 x 155 mm
Luminaire input power: 28 W
Luminaire luminous flux: 3846 lm
Luminaire efficacy: 137 lm/W
Weight: 8.89 kg
Sx: 0.05 m²



TLG_R2L2_F_SPDB.jpg



TLG_R2L2_M_LDS.wmf



TL_RS12L70RC740.ldt

Lamp position: STD - standard
Light Source: LED
Luminaire luminous flux*: 3846 lm
Luminaire efficacy*: 137 lm/W
Colour Rendering Index min.: 70
Ballast: 1 x 87500884 LCO 40/200-1050/64 o4a NF C
EXC3

Correlated colour temperature*: 4000 Kelvin
Chromaticity tolerance (initial MacAdam): 5
Rated useful life (B10)*:
L90 100000h at 25°C
Luminaire input power*: 28 W Power factor = 0.95
Dimming: PROG
LOR: 1,00 ULOR: 0,00 DLOR: 1,00

This product contains a light source of energy efficiency class D.

All values marked with an * are rated values. Thorn uses tried and tested components from leading suppliers, however there may be isolated instances of technology-related failures of individual LEDs during the rated product lifetime. International standards set the tolerance in initial flux and connected load at ±10%. Unless stated otherwise, the values apply to an ambient temperature of 25°C.

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**26C001 Castle School, Thornbury
Piazza II Led Data Sheet
96666256**

Piazza II LED

96666256 PIAZZA II LED 1690-840 HF ANT

LED	15W TL_PIA2	IP65	IK10					T _a -20 +40
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Piazza II LED

A robust Wall mounted luminaire. Electronic, fixed output control gear. Back plate: die-cast aluminium, painted anthracite. Body: anthracite polycarbonate. Ø20mm cable entry via rear or side conduit entries, BESA compatible. IP65, IK10. Complete with 4000K LED.

Dimensions: 381 x 196 x 305 mm

Luminaire input power: 15.4 W

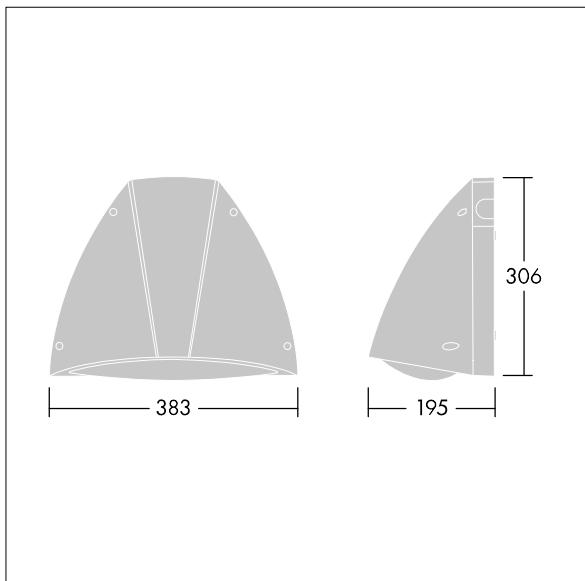
Luminaire luminous flux: 1844 lm

Luminaire efficacy: 120 lm/W

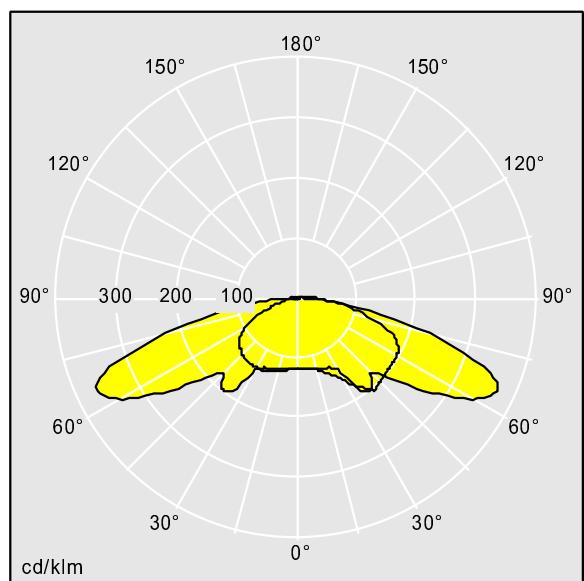
Weight: 2.8 kg



TLG_PIA2_F_PDB.jpg



TLG_PIA2_M_LD1.wmf



TLTP_PIA2_1690.ldt

Lamp position: STD - standard

Light Source: LED

Luminaire luminous flux*: 1844 lm

Luminaire efficacy*: 120 lm/W

Colour Rendering Index min.: 80

Ballast: 1 x 87500630 PIAZZA II LED 1690-840 HF ANT

Correlated colour temperature*: 4000 Kelvin

Chromaticity tolerance (initial MacAdam): 5

Rated median useful life*:

L70 60000h at 25°C

Luminaire input power*: 15.4 W

Dimming: FO

LOR: 1,00 ULOR: 0,02 DLOR: 0,98

This product contains a light source of energy efficiency class E.

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**26C001 Castle School, Thornbury
Piazza II Led Data Sheet
96666261**

Piazza II LED

96666261 PIAZZA II LED 2700-840 HF ANT

LED	25W TL_PIA2	IP65	IK10	(T _a -20 +40	
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Piazza II LED

A robust Wall mounted luminaire. Electronic, fixed output control gear. Back plate: die-cast aluminium, painted anthracite. Body: anthracite polycarbonate. Ø20mm cable entry via rear or side conduit entries, BESA compatible. IP65, IK10. Complete with 4000K LED.

Dimensions: 381 x 196 x 305 mm

Luminaire input power: 25 W

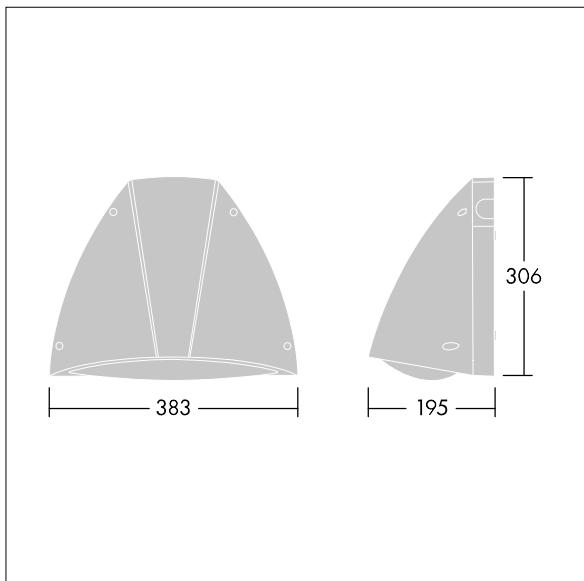
Luminaire luminous flux: 2910 lm

Luminaire efficacy: 116 lm/W

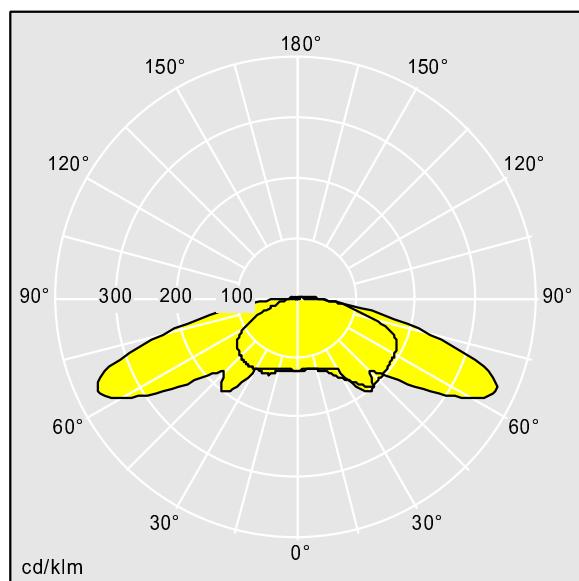
Weight: 2.8 kg



TLG_PIA2_F_PDB.jpg



TLG_PIA2_M_LD1.wmf



TLTP_PIA2_2700.ldt

Lamp position: STD - standard

Light Source: LED

Luminaire luminous flux*: 2910 lm

Luminaire efficacy*: 116 lm/W

Colour Rendering Index min.: 80

Ballast: 1 x 87500459 LC 25W 600mA fixC SC SNC

Correlated colour temperature*: 4000 Kelvin

Chromaticity tolerance (initial MacAdam): 5

Rated median useful life*:

L70 60000h at 25°C

Luminaire input power*: 25 W

Dimming: FO

LOR: 1,00 ULOR: 0,03 DLOR: 0,97

This product contains a light source of energy efficiency class E.

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**26C001 Castle School, Thornbury
EyeKon Led Data Sheet**

EyeKon LED

96665856 EYE VS LED400-840 HF E3 S ANT

LED	7W EYKL_VSSHE4K	EN 55015	IP65	IK10	(					850°C	T _a 0 +25	
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EyeKon LED

Round, impact resistant LED bulkhead luminaire. Electronic, fixed output control gear with 3 hour, manual test, emergency lighting circuit. Class I electrical, IP65, IK10. Body: small size, die-cast aluminium (LM6), powder coated anthracite. Diffuser: opal polycarbonate with die-cast aluminium visor feature. Electrical connection via 4 x 2 x 2.5mm² terminal block. Complete with 4000K LED

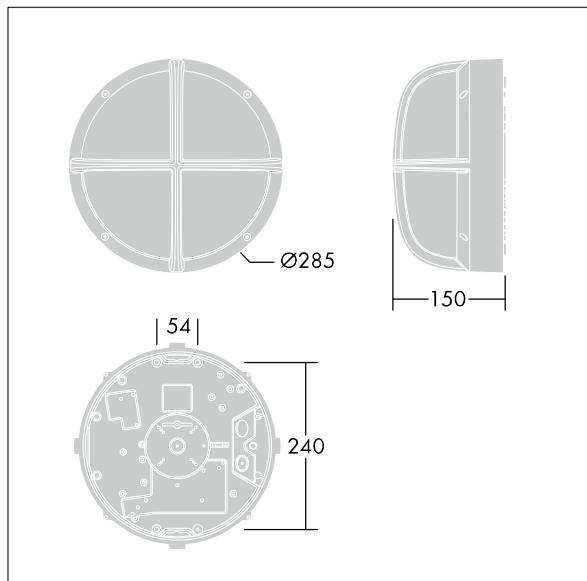
Dimensions: Ø285 x 150 mm

Luminaire input power: 7 W

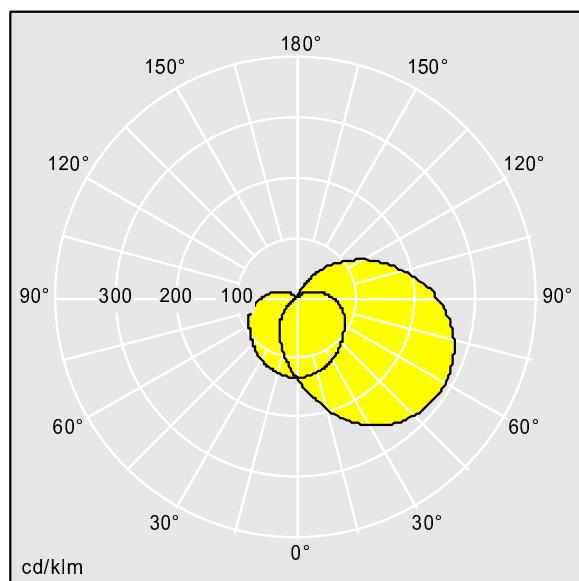
Weight: 2.8 kg



TLG_EYKN_F_SMVSANTHOP.jpg



TLG_EYKN_M_SML.wmf



TLG_SP_0042767.ldt

Lamp position: STD - standard

Light Source: LED

Luminaire luminous flux*: 435 lm

Total emergency luminous flux: 75 lm

Luminaire efficacy*: 62 lm/W

Colour Rendering Index min.: 80

Ballast 1: 1 x 28000704 LC 10W 150-400mA flexC SC EXC

LOR: 1,00 ULOR: 0,27 DLOR: 0,73

Ballast 2: 1 x 89899858 DRV EM TR LBS P MT NO 1W 1#Screw

Correlated colour temperature*: 4000 Kelvin

Chromaticity tolerance (initial MacAdam): 3

Rated median useful life*:

L90 50000h at 25°C

Luminaire input power*: 7 W

Charging power: 4 W

Dimming: FO

This product contains a light source of energy efficiency class C.

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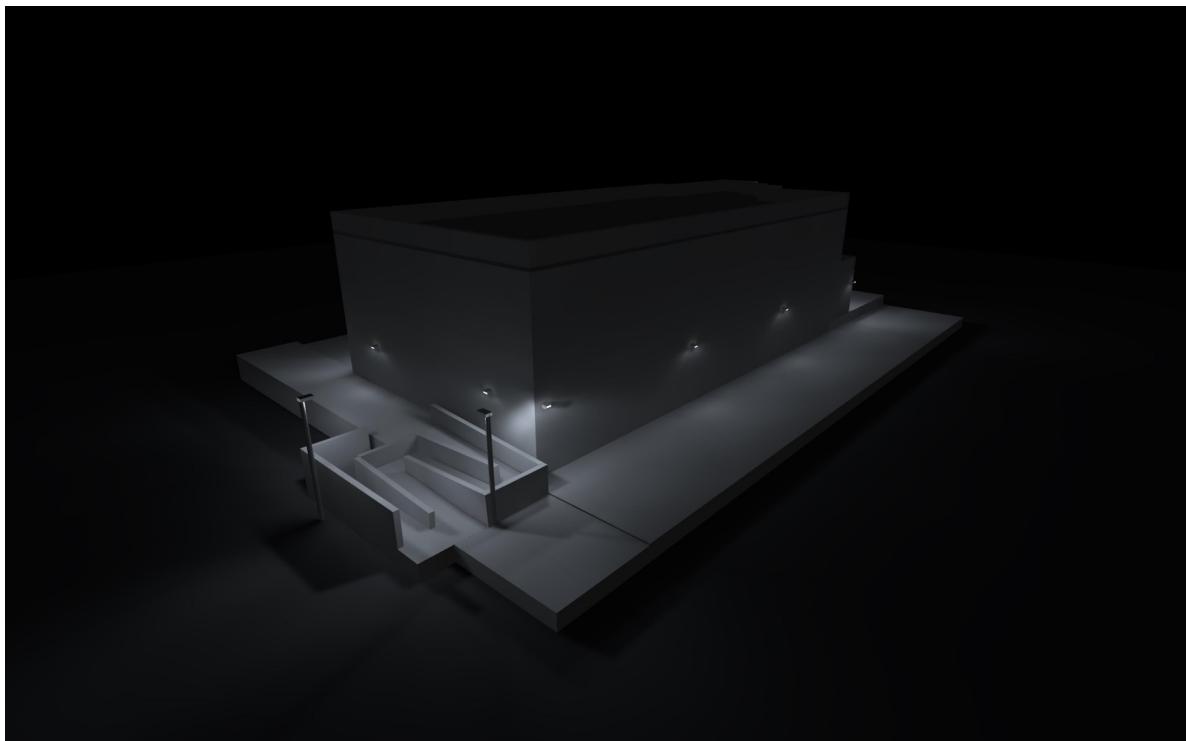
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**26C001 Castle School, Thornbury
General External Lighting
Calculations**

Date

29/11/2023



CASTLE ACADEMY (CSET) STEM BLOCK EXTENSION PROJECT

26C001 EXTERNAL GENERAL LIGHTING CALCULATIONS

26C001-WBS-XX-XX-CA-E-0005 C01

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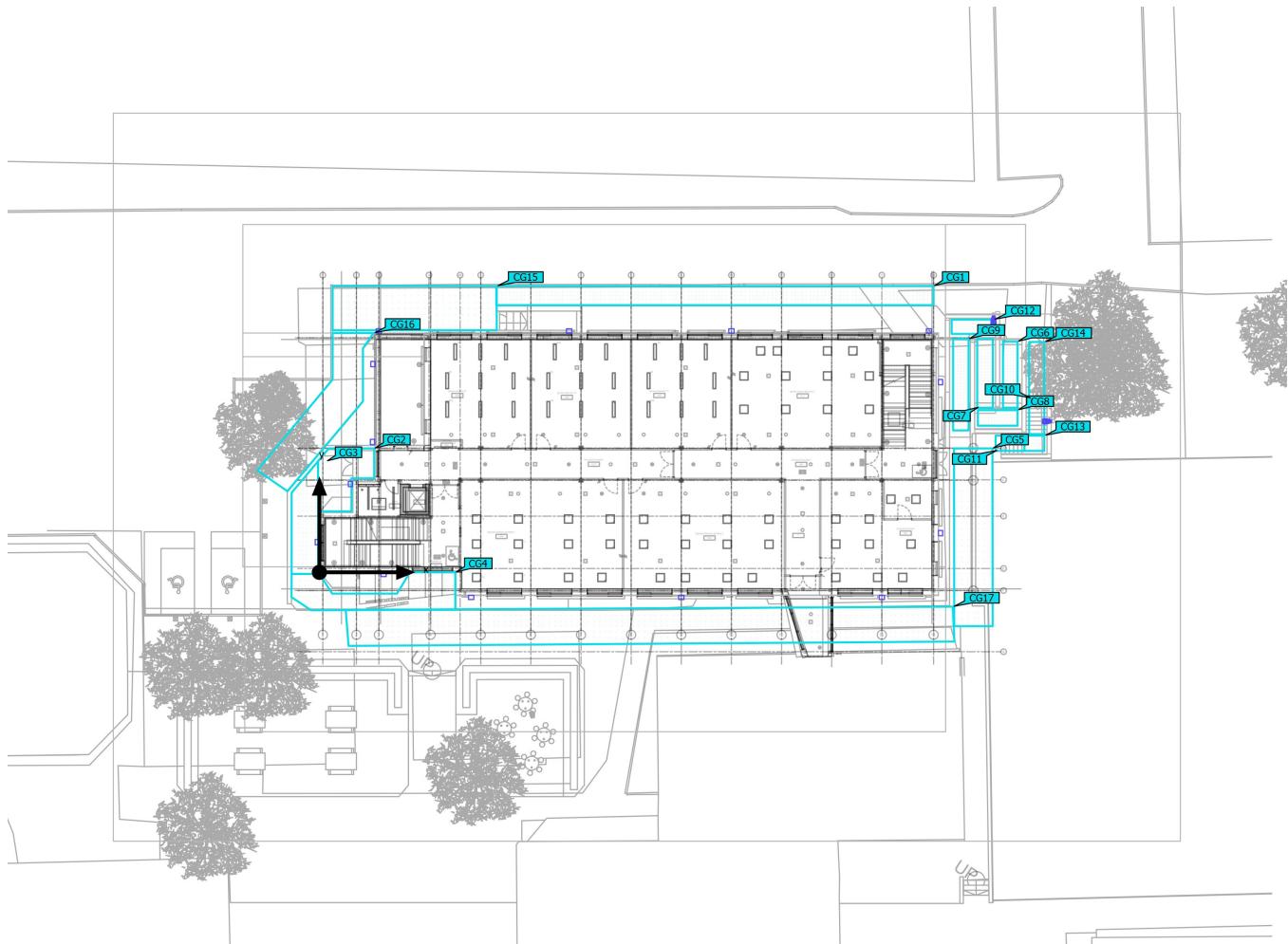
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Site 1 (Light scene 1)

Calculation objects



Site 1 (Light scene 1)

Calculation objects

Calculation surfaces

Properties	\bar{E}	E_{\min}	E_{\max}	$U_o (g_1)$	g_2	Index
Calculation surface 15 Perpendicular illuminance Height: 1.000 m	15.4 lx	10.9 lx	32.5 lx	0.71	0.34	CG1
Calculation surface 19 Perpendicular illuminance Height: 2.000 m	26.2 lx	10.9 lx	35.8 lx	0.42	0.30	CG2
Calculation surface 20 Perpendicular illuminance Height: 2.000 m	20.2 lx	5.98 lx	28.1 lx	0.30	0.21	CG3
Calculation surface 23 Perpendicular illuminance Height: 2.010 m	13.3 lx	4.00 lx	22.8 lx	0.30	0.18	CG4
Calculation surface 25 Perpendicular illuminance Height: 2.213 m	16.4 lx	5.62 lx	30.6 lx	0.34	0.18	CG5
Calculation surface 26 Perpendicular illuminance Height: 1.113 m	48.3 lx	42.2 lx	51.6 lx	0.87	0.82	CG6
Calculation surface 27 Perpendicular illuminance Height: 1.435 m	41.0 lx	14.8 lx	60.0 lx	0.36	0.25	CG7
Calculation surface 28 Perpendicular illuminance Height: 1.255 m	37.3 lx	24.6 lx	46.5 lx	0.66	0.53	CG8
Calculation surface 29 Perpendicular illuminance Height: 1.779 m	40.6 lx	21.1 lx	59.2 lx	0.52	0.36	CG9
Calculation surface 30 Perpendicular illuminance Height: 1.178 m	41.5 lx	35.7 lx	46.3 lx	0.86	0.77	CG10
Calculation surface 31 Perpendicular illuminance Height: 1.761 m	43.3 lx	37.4 lx	46.8 lx	0.86	0.80	CG11

Site 1 (Light scene 1)

Calculation objects

Calculation surface 33 Perpendicular illuminance Height: 1.578 m	63.9 lx	38.9 lx	78.5 lx	0.61	0.50	CG12
Calculation surface 34 Perpendicular illuminance Height: 1.500 m	45.0 lx	43.2 lx	46.7 lx	0.96	0.93	CG13
Calculation surface 35 Perpendicular illuminance Height: 0.926 m	39.6 lx	19.0 lx	47.6 lx	0.48	0.40	CG14
Calculation surface 38 Perpendicular illuminance Height: 1.000 m	13.3 lx	5.73 lx	23.4 lx	0.43	0.24	CG15
Calculation surface 37 Perpendicular illuminance Height: 2.000 m	19.1 lx	7.97 lx	28.9 lx	0.42	0.28	CG16
Calculation surface 39 Perpendicular illuminance Height: 2.000 m	11.2 lx	2.85 lx	27.0 lx	0.25	0.11	CG17

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))