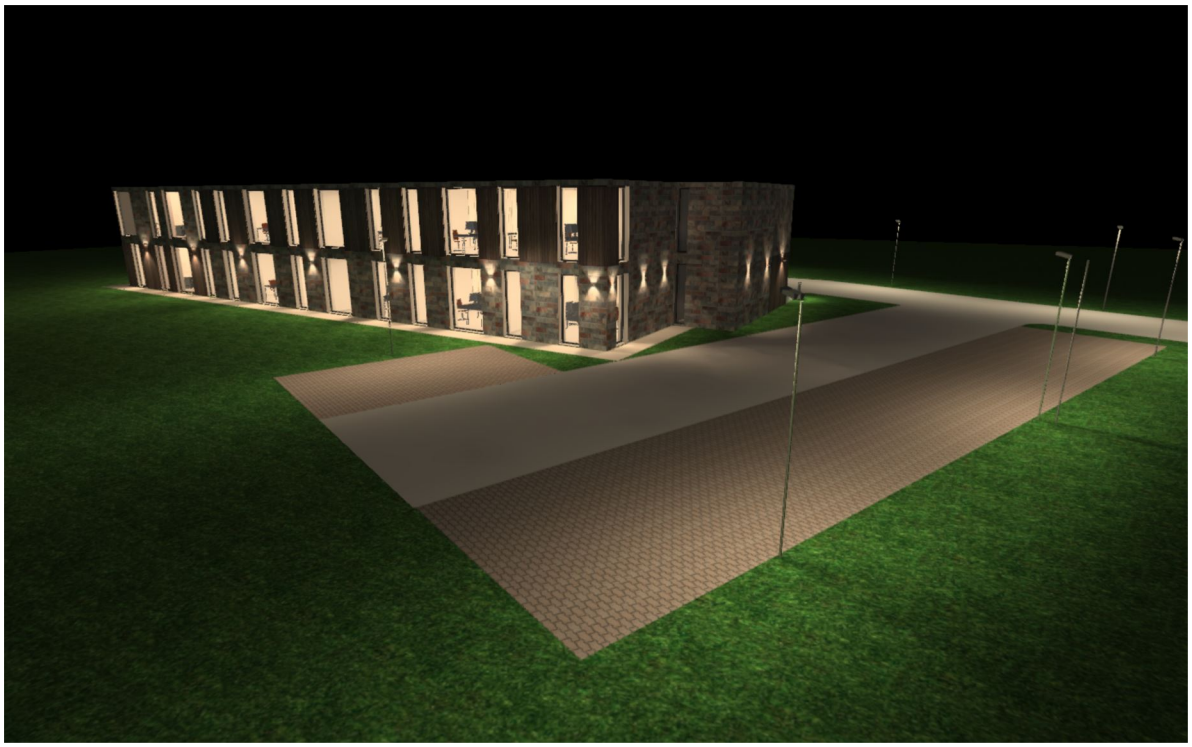
Date 28/03/2024



24DL100

Editor
Raymond Beekmans

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Contacts

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Images

Technische specificaties	242008
Vermogen	30 Watt
Lichtstroom	3960 lm
Kleurtemperatuur	3000 K
Dimbaar	Mogelijk, Dali / Smart
Gradenbundel	90°
Power Factor	0.9
Afmetingen	600 x 600 mm
Doorvoerbedrading	Nee
Levensduur	L90B50 50000 uur
Garantie	5 Jaar
Optioneel	Noodunit

Noxion Delta Pro V3.0 600 x 600mm 30W 3000K

Images

Technische specificaties	248323
Vermogen	9 Watt
Lichtstroom	1030 lm
Kleurtemperatuur	3000 K
Dimbaar	Mogelijk
Gradenbundel	60°
Power Factor	0.9
Afmetingen	Gatmaat Ø120 x 92 mm Buitenmaat Ø145 mm
Doorvoerbedrading	Nvt
Garantie	5 Jaar
Optioneel	vergrotingsring

Noxion Apollo V2 9 W 3000K ALU

Images

Technische specificaties	248323
Vermogen	12 Watt
Lichtstroom	1360 lm
Kleurtemperatuur	3000 K
Dimbaar	Mogelijk
Gradenbundel	60°
Power Factor	0.9
Afmetingen	Gatmaat Ø120 x 92 mm Buitenmaat Ø145 mm
Doorvoerbedrading	Nvt
Garantie	5 Jaar
Optioneel	vergrotingsring

Noxion Apollo V2 12 W 3000K ALU

Images

Technische specificaties	248325
Vermogen	15 Watt
Lichtstroom	1680 lm
Kleurtemperatuur	3000 K
Dimbaar	Mogelijk
Gradenbundel	60°
Power Factor	0.9
Afmetingen	Gatmaat Ø150 x 108 mm Buitenmaat Ø170 mm
Doorvoerbedrading	Nvt
Garantie	5 Jaar
Optioneel	vergrotingsring

Noxion Apollo V2 15 W 3000K ALU

Images

Technische specificaties	245469
Vermogen	3 Watt
Lichtstroom	240 lm
Kleurtemperatuur	5000K
Gradenbundel	140°
Power Factor	0.9
Afmetingen	Ø140 x 29.5 mm
Autonomie	3 uur
Levensduur	L70B50 50000 uur
Garantie	3 Jaar

Noxion noodverlichting inbouw plafond montage

Images

Technische specificaties	239389
Vermogen	5.1 Watt
Lichtstroom	70 lm
Kleurtemperatuur	5000K
Gradenbundel	Symmetrisch
Power Factor	0.9
Afmetingen	336 x 246 x 45 mm
Autonomie	3 uur
Levensduur	L70B50 50000 uur
Garantie	1 Jaar

Noxion noodverlichting wand/plafond montage

Images

Technische specificaties	245362
Vermogen	12 Watt
Lichtstroom	940 lm
Kleurtemperatuur	CCT 3000 K
Dimbaar	Nee
Gradenbundel	90°
Power Factor	0.9
Afmetingen	Ø180 x 1000 mm
Doorvoerbedrading	Nvt
Garantie	3 Jaar

Ansell bollard Leo 12W CCT IP65

Images

Technische specificaties	248624
Vermogen	30 Watt
Lichtstroom	3900 lm
Kleurtemperatuur	3000 K
Dimbaar	Nee
Gradenbundel	160x58°
Power Factor	0.9
Afmetingen	448 x 172 x 73 mm
Doorvoerbedrading	Nvt
Garantie	5 Jaar

Ledvance Streetlight 30W 730 IP66

Images

Technische specificaties	247251
Vermogen	8 Watt
Lichtstroom	500 lm
Kleurtemperatuur	3000 K
Dimbaar	Nee
Gradenbundel	36° / 36°
Power Factor	0.9
Afmetingen	94x 160x 58 mm
Doorvoerbedrading	Nee
Garantie	5 Jaar

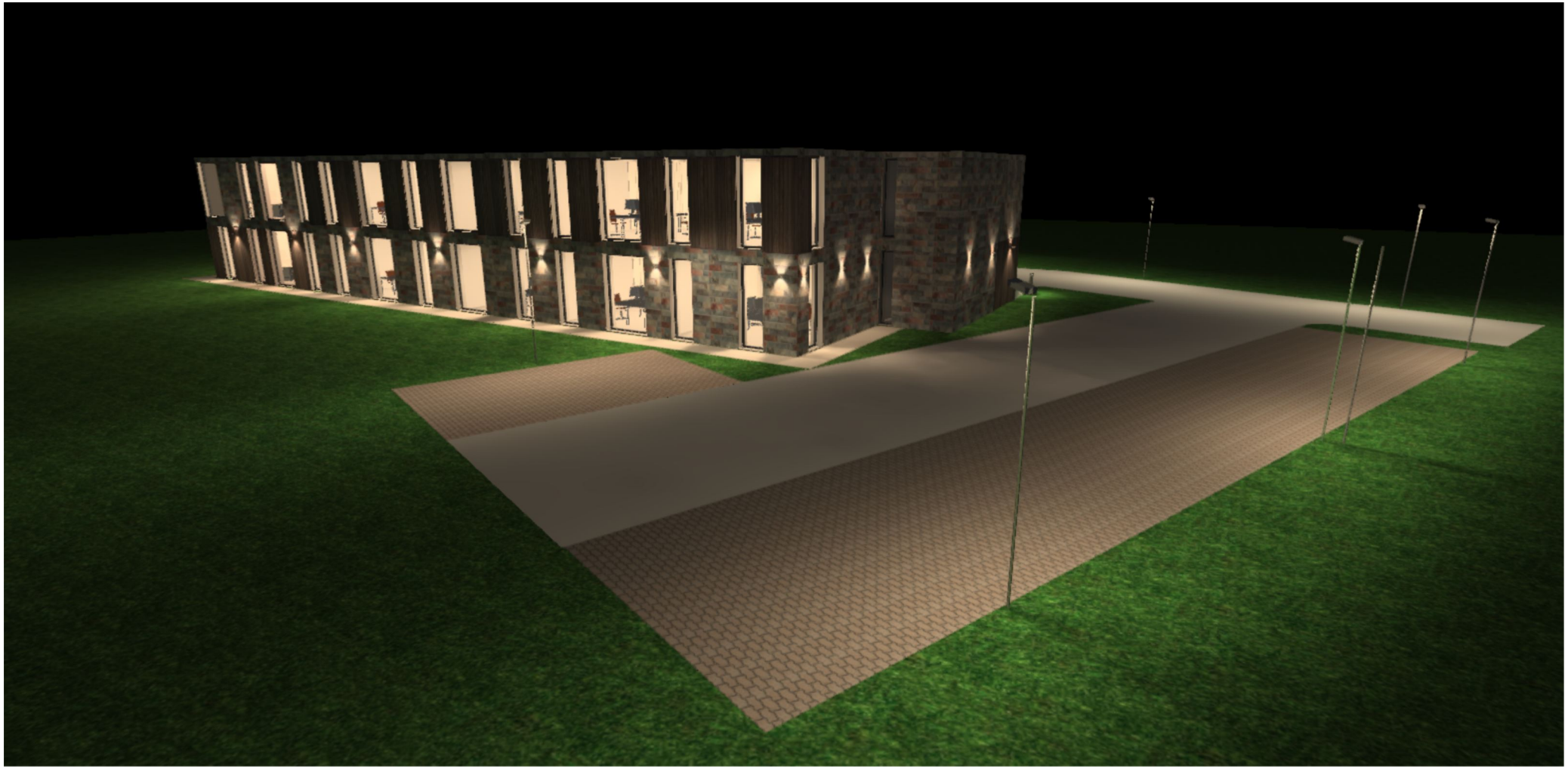
Thorneco Holly cone up/down IP65

Luminaire list

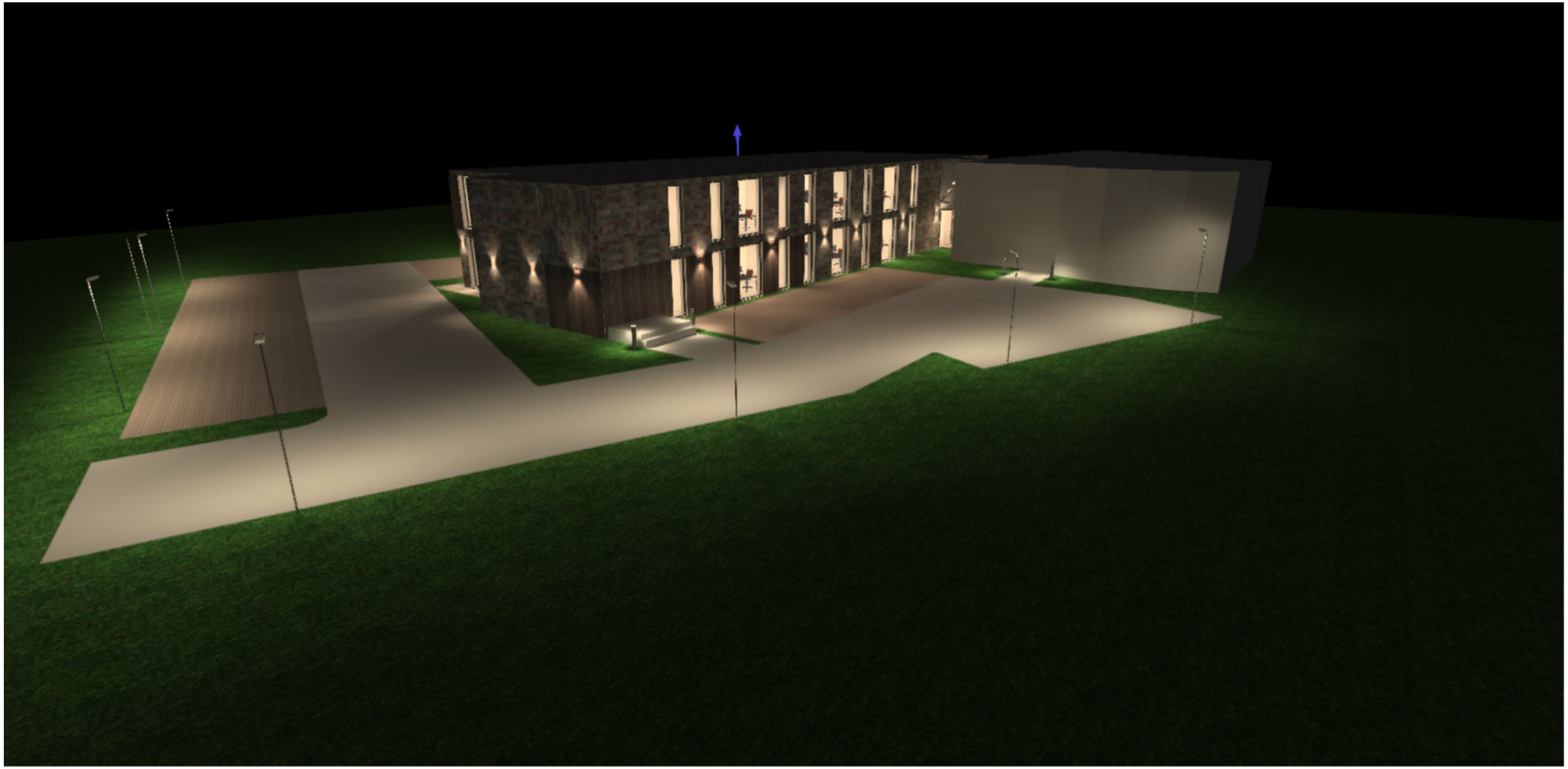
Φ_{total}	P_{total}	Luminous efficacy	$\Phi_{Emergency\ lighting}$	$P_{Emergency\ lighting}$
785907 lm	6089.2 W	129.1 lm/W	1172 lm	44.2 W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy	Index
4	Ansell Lighting	ALEOLED/CCT/100/GR - CW	BOLLARDS - Leo	12.3 W	1447 lm	117.6 lm/W	
8	LEDVANCE	4099854030291	STREETLIGHT AREA SMALL RV20ST 30W 730 RV20ST GY	30.0 W	3900 lm	130.0 lm/W	
4	NOXION	245469	245469 Noxion LED Emergency Spot 3W autotest Ã˜cutout 85-105mm	3.4 W	188 lm (100 %)	–	NV1
6	Noxion	239389	Noxion LED Emergency Exit Light	5.1 W	70 lm	13.7 lm/W	
				5.1 W	70 lm (100 %)	–	
130	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm	131.7 lm/W	
84	Noxion	247469	Noxion LED T5 Batline V2.0 600mm - 8W - 1080lm - 3CCT 3000K	7.8 W	975 lm	125.0 lm/W	
4	Noxion	248325	Noxion LED Downlight Apollo V2.0 12W 3000K Cutout ?150mm Frame ?175mm	12.4 W	1590 lm	128.2 lm/W	
8	Noxion	248325	Noxion LED Downlight Apollo V2.0 9W 3000K Cutout ?150mm Frame ?175mm	9.1 W	1200 lm	131.9 lm/W	
58	Noxion	248327	Noxion LED Downlight Apollo V2.0 15W 3000K Cutout ?200mm Frame ?220mm	15.1 W	2129 lm	141.0 lm/W	
27	Thorn Lighting	96633684 (STD - standard)	HOLLY CONE ROUND UP/DOWN IP65 500 830	8.0 W	501 lm	62.6 lm/W	

Images

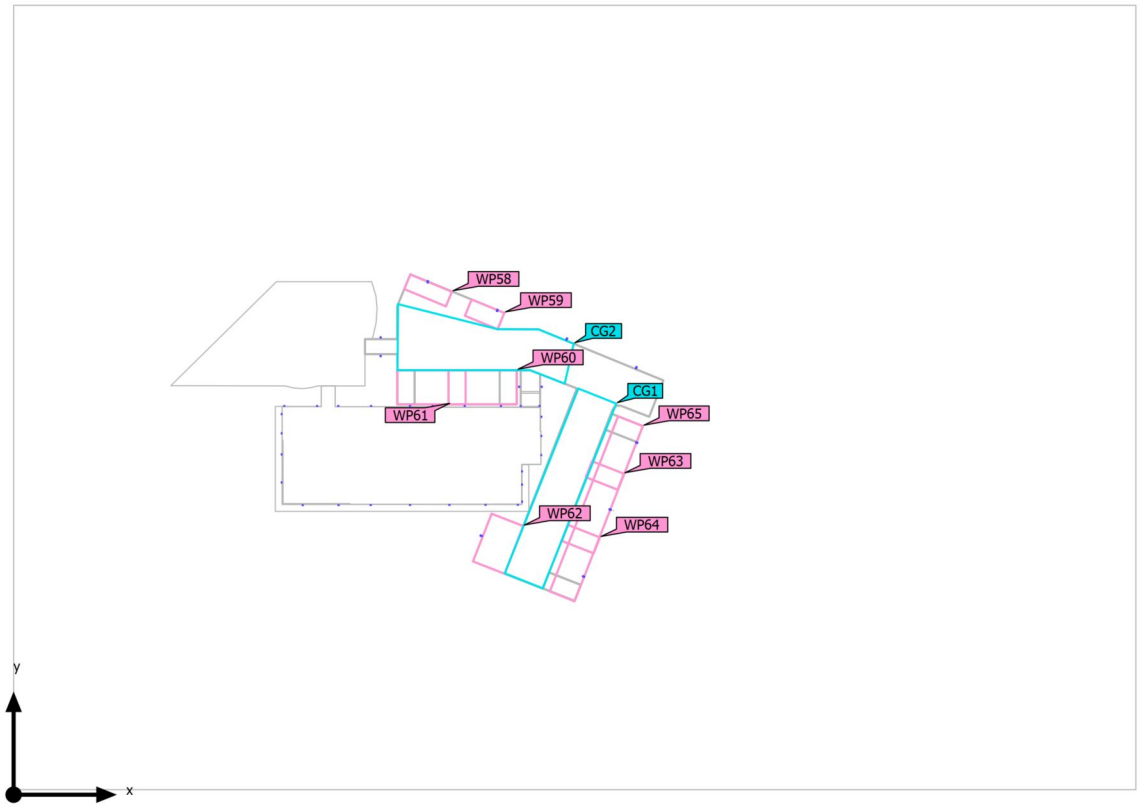


Images



Site 1 (Light scene 1)

Calculation objects



Site 1 (Light scene 1)

Calculation objects

Working planes

Properties	Ē (Target)	E_{min}	E_{max}	U_o (g_1) (Target)	g_2	Index
Working plane (Fietsenstalling 1) Perpendicular illuminance Height: 0.002 m, Wall zone: 0.000 m	48.6 lx (≥ 5.00 lx) ✓	21.9 lx	60.8 lx	0.45 (≥ 0.25) ✓	0.36	WP58
Working plane (Fietsenstalling 2) Perpendicular illuminance Height: 0.002 m, Wall zone: 0.000 m	50.5 lx (≥ 5.00 lx) ✓	35.6 lx	62.1 lx	0.70 (≥ 0.25) ✓	0.57	WP59
Working plane (Parkeervak 15 t/m 21) Perpendicular illuminance Height: 0.002 m, Wall zone: 0.000 m	34.3 lx (≥ 10.0 lx) ✓	13.7 lx	226 lx	0.40 (≥ 0.25) ✓	0.061	WP60
Working plane (Parkeervak 18) Perpendicular illuminance Height: 0.000 m, Wall zone: 0.000 m	25.9 lx (≥ 10.0 lx) ✓	17.6 lx	54.4 lx	0.68 (≥ 0.25) ✓	0.32	WP61
Working plane (Parkeervakken 12 t/m 14) Perpendicular illuminance Height: 0.002 m, Wall zone: 0.000 m	49.5 lx (≥ 10.0 lx) ✓	17.6 lx	79.0 lx	0.36 (≥ 0.25) ✓	0.22	WP62
Working plane (Parkeervak 4) Perpendicular illuminance Height: 0.000 m, Wall zone: 0.000 m	21.7 lx (≥ 10.0 lx) ✓	6.42 lx	50.3 lx	0.30 (≥ 0.25) ✓	0.13	WP63
Working plane (Parkeervak 8) Perpendicular illuminance Height: 0.000 m, Wall zone: 0.000 m	21.8 lx (≥ 10.0 lx) ✓	6.20 lx	46.0 lx	0.28 (≥ 0.25) ✓	0.13	WP64
Working plane (Parkeervakken 1 t/m 11) Perpendicular illuminance Height: 0.002 m, Wall zone: 0.000 m	32.2 lx (≥ 10.0 lx) ✓	9.71 lx	79.8 lx	0.30 (≥ 0.25) ✓	0.12	WP65

Calculation surfaces

Properties	Ē	E_{min}	E_{max}	U_o (g_1)	g_2	Index
Calculation surface 3 Perpendicular illuminance Height: -0.001 m	7.25 lx	2.66 lx	36.7 lx	0.37	0.072	CG1

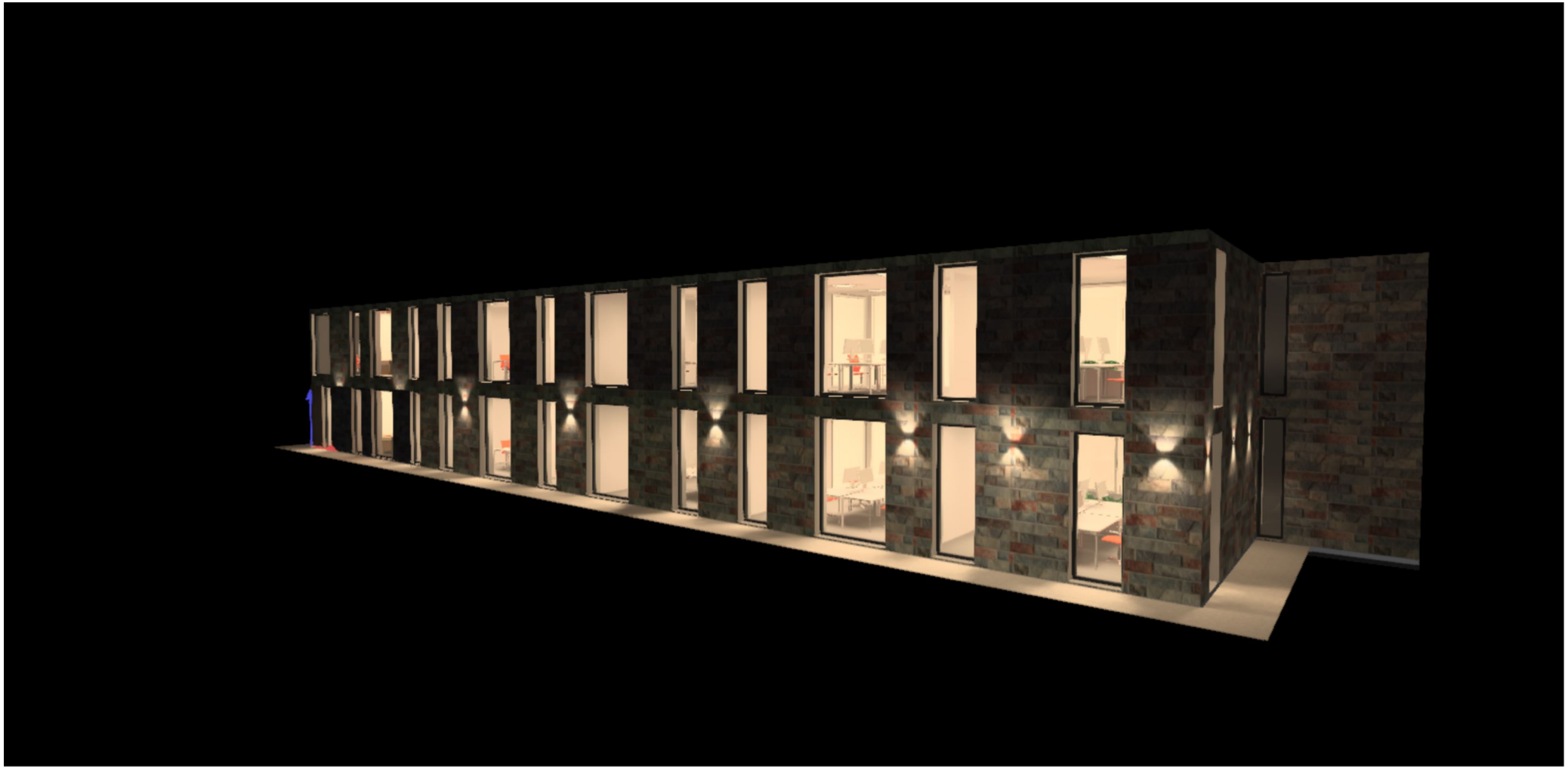
Site 1 (Light scene 1)

Calculation objects

Calculation surface 4 Perpendicular illuminance Height: -0.001 m	22.7 lx	8.60 lx	60.1 lx	0.38	0.14	CG2

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

Images



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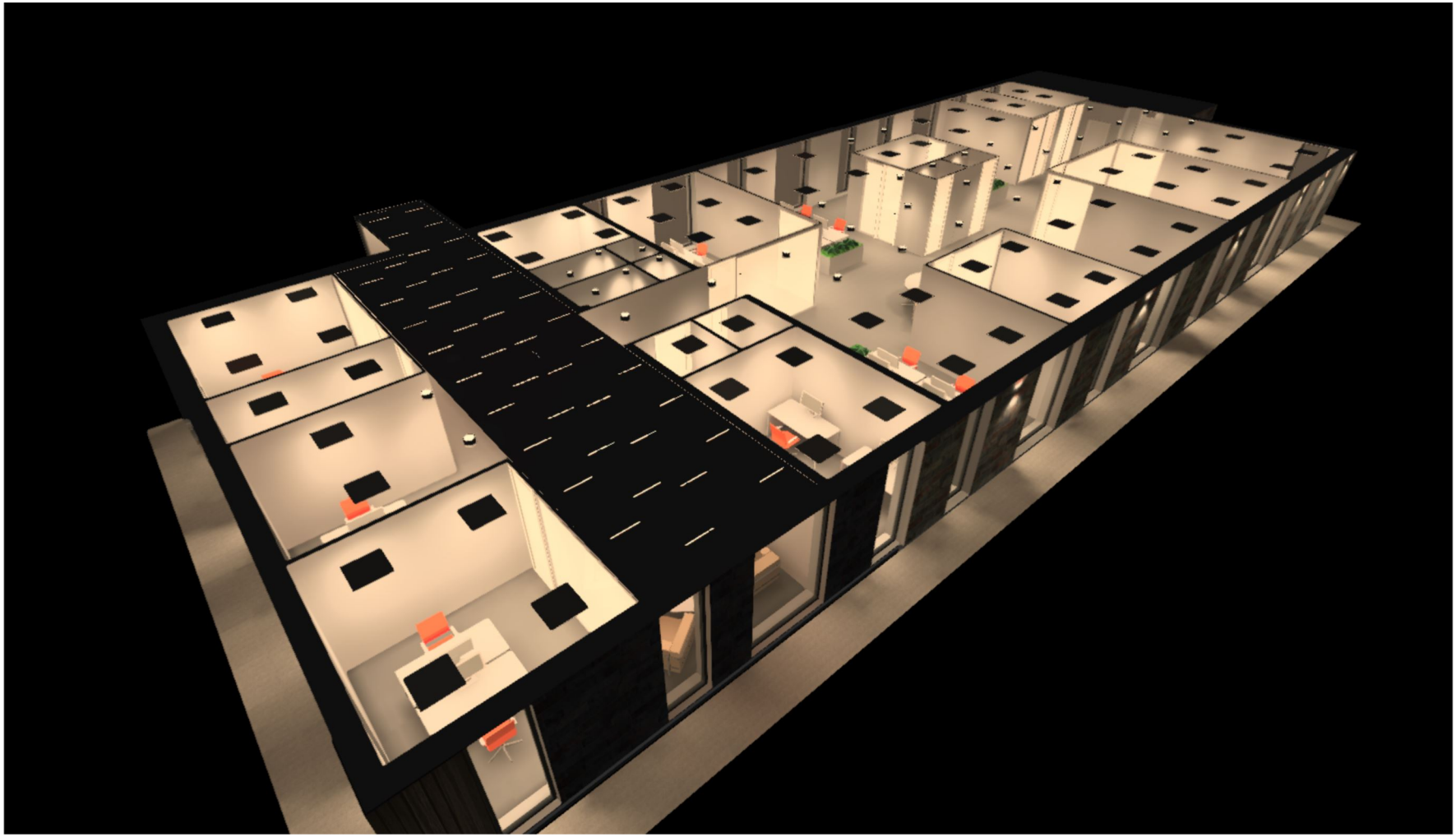

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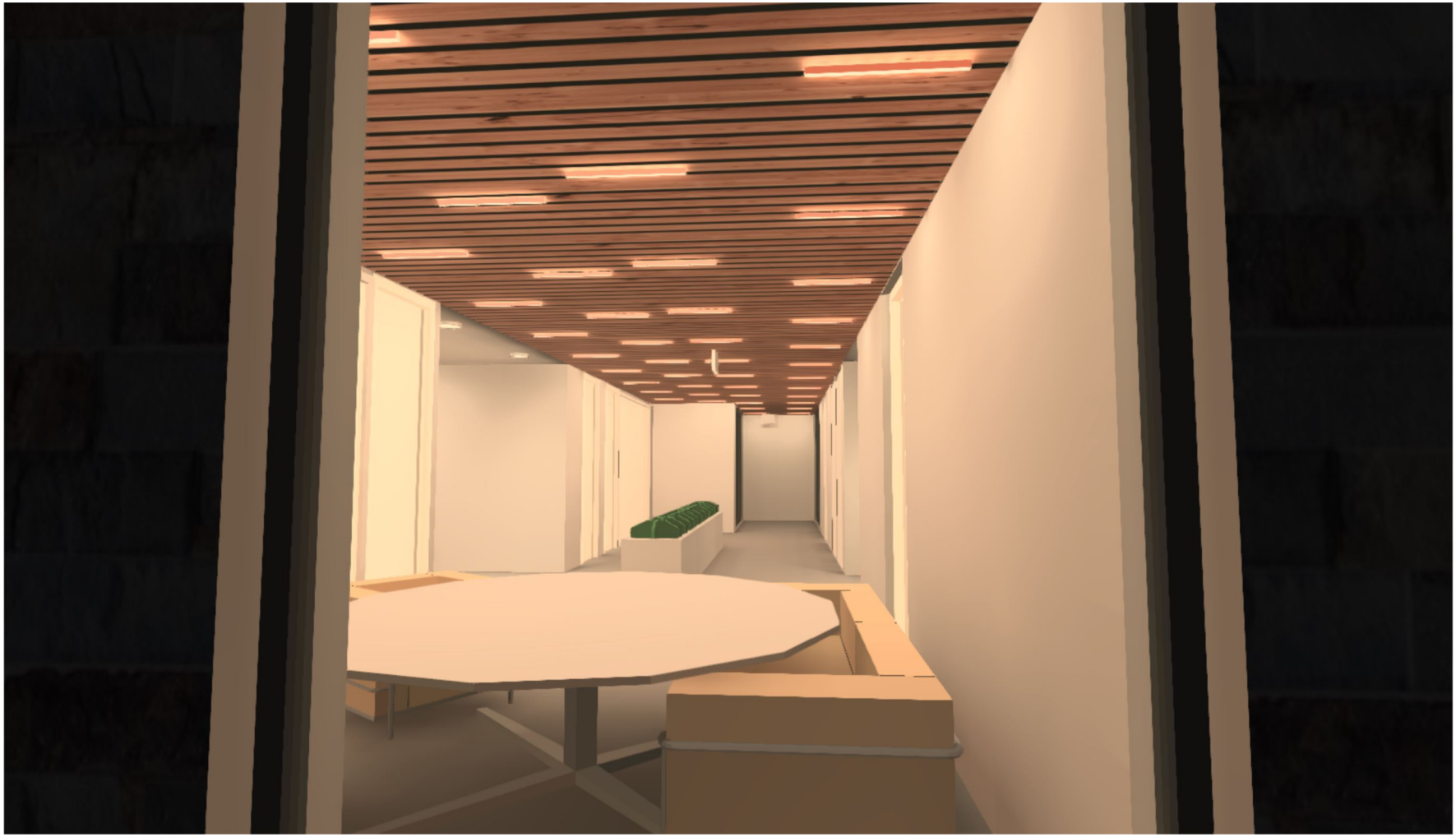
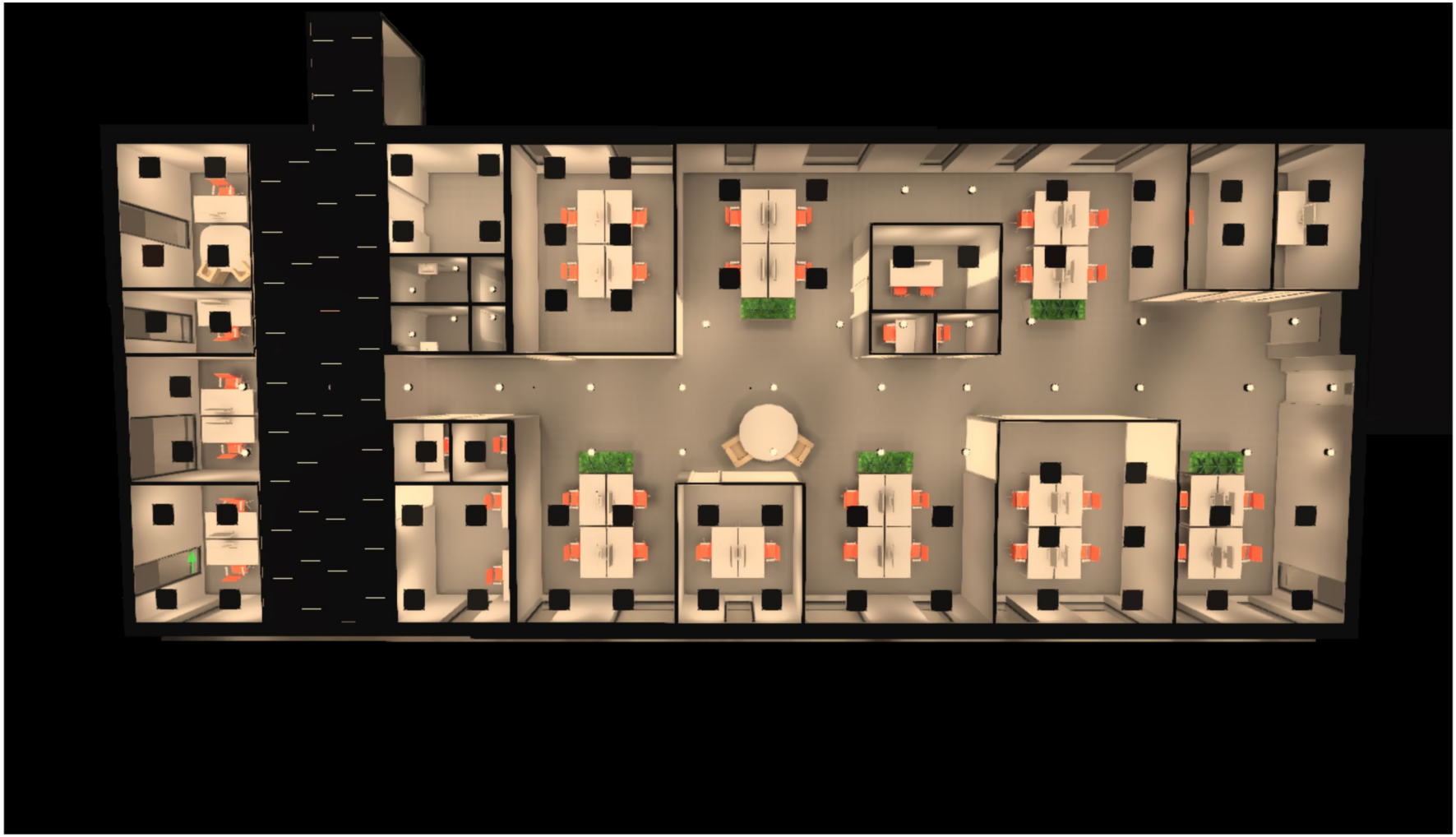


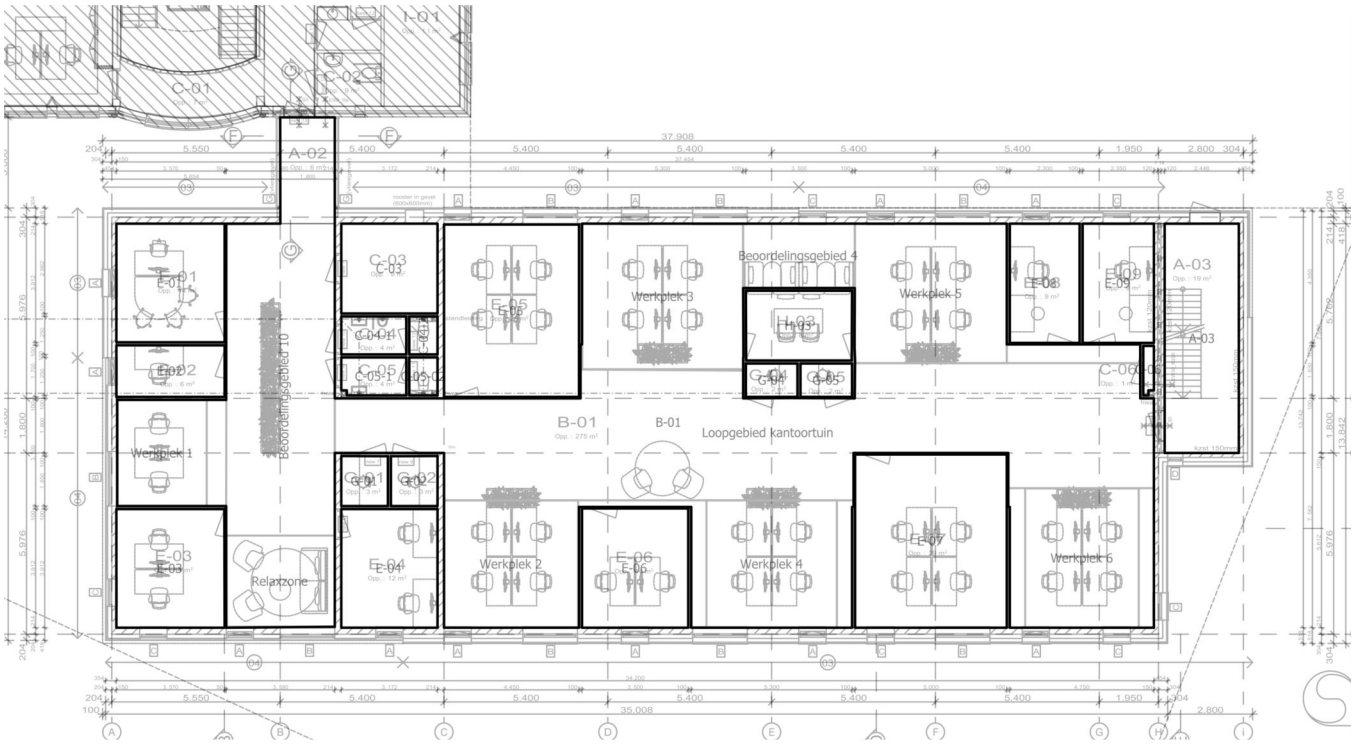
Images

Images



Building 1 · Begane Grond (Light scene 1)

Room list



Building 1 · Begane Grond (Light scene 1)

Room list

B-01

P_{total}	A_{Room}	Lighting power density
30.2 W	280.67 m²	0.11 W/m² (Room)

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	248327	Noxion LED Downlight Apollo V2.0 15W 3000K Cutout ?200mm Frame ? 220mm	15.1 W	2129 lm

C-03

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	9.40 m²	12.77 W/m² = 1.60 W/m²/100 lx (Room) 28.16 W/m² = 3.53 W/m²/100 lx (Working plane)	797 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

C-04-1

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
18.2 W	2.68 m²	6.80 W/m² = 1.61 W/m²/100 lx (Room) 12.29 W/m² = 2.91 W/m²/100 lx (Working plane)	423 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	248325	Noxion LED Downlight Apollo V2.0 9W 3000K Cutout ?150mm Frame ? 175mm	9.1 W	1200 lm

Building 1 · Begane Grond (Light scene 1)

Room list

C-04-2

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
12.4 W	1.16 m²	10.67 W/m² = 2.36 W/m²/100 lx (Room) 27.52 W/m² = 6.10 W/m²/100 lx (Working plane)	452 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
1	Noxion	248325	Noxion LED Downlight Apollo V2.0 12W 3000K Cutout ?150mm Frame ? 175mm	12.4 W	1590 lm

C-05-1

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
18.2 W	2.65 m²	6.87 W/m² = 1.55 W/m²/100 lx (Room) 12.55 W/m² = 2.84 W/m²/100 lx (Working plane)	442 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	248325	Noxion LED Downlight Apollo V2.0 9W 3000K Cutout ?150mm Frame ? 175mm	9.1 W	1200 lm

C-05-02

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
12.4 W	1.16 m²	10.67 W/m² = 2.38 W/m²/100 lx (Room) 27.52 W/m² = 6.13 W/m²/100 lx (Working plane)	449 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
1	Noxion	248325	Noxion LED Downlight Apollo V2.0 12W 3000K Cutout ?150mm Frame ? 175mm	12.4 W	1590 lm

Building 1 · Begane Grond (Light scene 1)

Room list

E-01

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	13.97 m²	8.59 W/m² = 1.18 W/m²/100 lx (Room) 12.20 W/m² = 1.67 W/m²/100 lx (Working plane)	729 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

E-02

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
60.0 W	6.07 m²	9.89 W/m² = 1.38 W/m²/100 lx (Room) 33.35 W/m² = 4.65 W/m²/100 lx (Working plane)	717 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

E-03

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	13.95 m²	8.60 W/m² = 1.24 W/m²/100 lx (Room) 16.07 W/m² = 2.31 W/m²/100 lx (Working plane)	695 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

Building 1 · Begane Grond (Light scene 1)

Room list

E-04

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	12.41 m²	9.67 W/m² = 1.31 W/m²/100 lx (Room) 18.97 W/m² = 2.56 W/m²/100 lx (Working plane)	740 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

E-05

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
180.0 W	25.28 m²	7.12 W/m² = 0.94 W/m²/100 lx (Room) 11.14 W/m² = 1.47 W/m²/100 lx (Working plane)	760 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
6	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

E-06

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	13.76 m²	8.72 W/m² = 1.21 W/m²/100 lx (Room) 16.37 W/m² = 2.27 W/m²/100 lx (Working plane)	720 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

Building 1 · Begane Grond (Light scene 1)

Room list

E-07

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
180.0 W	28.56 m²	6.30 W/m² = 0.95 W/m²/100 lx (Room) 9.55 W/m² = 1.45 W/m²/100 lx (Working plane)	661 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
6	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

E-08

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
60.0 W	9.04 m²	6.63 W/m² = 0.96 W/m²/100 lx (Room) 15.74 W/m² = 2.28 W/m²/100 lx (Working plane)	690 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

E-09

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
60.0 W	9.24 m²	6.49 W/m² = 0.95 W/m²/100 lx (Room) 15.16 W/m² = 2.22 W/m²/100 lx (Working plane)	683 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

Building 1 · Begane Grond (Light scene 1)

Room list

G-01

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
30.0 W	2.53 m²	11.86 W/m² = 1.81 W/m²/100 lx (Room) 86.57 W/m² = 13.22 W/m²/100 lx (Working plane)	655 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
1	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

G-02

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
30.0 W	2.53 m²	11.86 W/m² = 1.85 W/m²/100 lx (Room) 86.57 W/m² = 13.53 W/m²/100 lx (Working plane)	640 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
1	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

G-04

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
15.1 W	1.87 m²	8.07 W/m² = 1.41 W/m²/100 lx (Room) 55.93 W/m² = 9.79 W/m²/100 lx (Working plane)	571 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
1	Noxion	248327	Noxion LED Downlight Apollo V2.0 15W 3000K Cutout ?200mm Frame ? 220mm	15.1 W	2129 lm

Building 1 · Begane Grond (Light scene 1)

Room list

G-05

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
15.1 W	1.87 m²	8.08 W/m² = 1.35 W/m²/100 lx (Room) 55.93 W/m² = 9.35 W/m²/100 lx (Working plane)	598 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
1	Noxion	248327	Noxion LED Downlight Apollo V2.0 15W 3000K Cutout ?200mm Frame ? 220mm	15.1 W	2129 lm

H-03

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
60.0 W	8.03 m²	7.47 W/m² = 1.15 W/m²/100 lx (Room) 18.53 W/m² = 2.85 W/m²/100 lx (Working plane)	650 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

Loopgebied kantoortuin

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
352.4 W	91.17 m²	3.87 W/m² = 0.86 W/m²/100 lx (Space) 5.43 W/m² = 1.20 W/m²/100 lx (Working plane)	451 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
1	Noxion	239389	Noxion LED Emergency Exit Light	5.1 W	70 lm
23	Noxion	248327	Noxion LED Downlight Apollo V2.0 15W 3000K Cutout ?200mm Frame ? 220mm	15.1 W	2129 lm

Building 1 · Begane Grond (Light scene 1)

Room list

Relaxzone

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
62.4 W	10.75 m²	5.81 W/m² = 1.58 W/m²/100 lx (Space) 12.08 W/m² = 3.28 W/m²/100 lx (Working plane)	369 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
8	Noxion	247469	Noxion LED T5 Batline V2.0 600mm - 8W - 1080lm - 3CCT 3000K	7.8 W	975 lm

Space 4

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
30.2 W	7.77 m²	3.89 W/m² = 0.89 W/m²/100 lx (Space) 10.13 W/m² = 2.32 W/m²/100 lx (Working plane)	436 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	248327	Noxion LED Downlight Apollo V2.0 15W 3000K Cutout ?200mm Frame ? 220mm	15.1 W	2129 lm

Space 10

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
275.4 W	53.76 m²	5.12 W/m² = 1.72 W/m²/100 lx (Space) 8.00 W/m² = 2.69 W/m²/100 lx (Working plane)	297 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	239389	Noxion LED Emergency Exit Light	5.1 W	70 lm
34	Noxion	247469	Noxion LED T5 Batline V2.0 600mm - 8W - 1080lm - 3CCT 3000K	7.8 W	975 lm

Building 1 · Begane Grond (Light scene 1)

Room list

Werkplek 1

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
60.0 W	10.29 m²	5.83 W/m² = 0.93 W/m²/100 lx (Space) 12.37 W/m² = 1.97 W/m²/100 lx (Working plane)	628 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

Werkplek 2

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	18.55 m²	6.47 W/m² = 1.11 W/m²/100 lx (Space) 10.98 W/m² = 1.89 W/m²/100 lx (Working plane)	582 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

Werkplek 3

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	25.44 m²	4.72 W/m² = 0.89 W/m²/100 lx (Space) 7.34 W/m² = 1.38 W/m²/100 lx (Working plane)	531 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

Building 1 · Begane Grond (Light scene 1)

Room list

Werkplek 4

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	18.06 m²	6.64 W/m² = 1.27 W/m²/100 lx (Space) 11.36 W/m² = 2.17 W/m²/100 lx (Working plane)	524 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

Werkplek 5

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	23.02 m²	5.21 W/m² = 0.89 W/m²/100 lx (Space) 8.32 W/m² = 1.43 W/m²/100 lx (Working plane)	584 lx

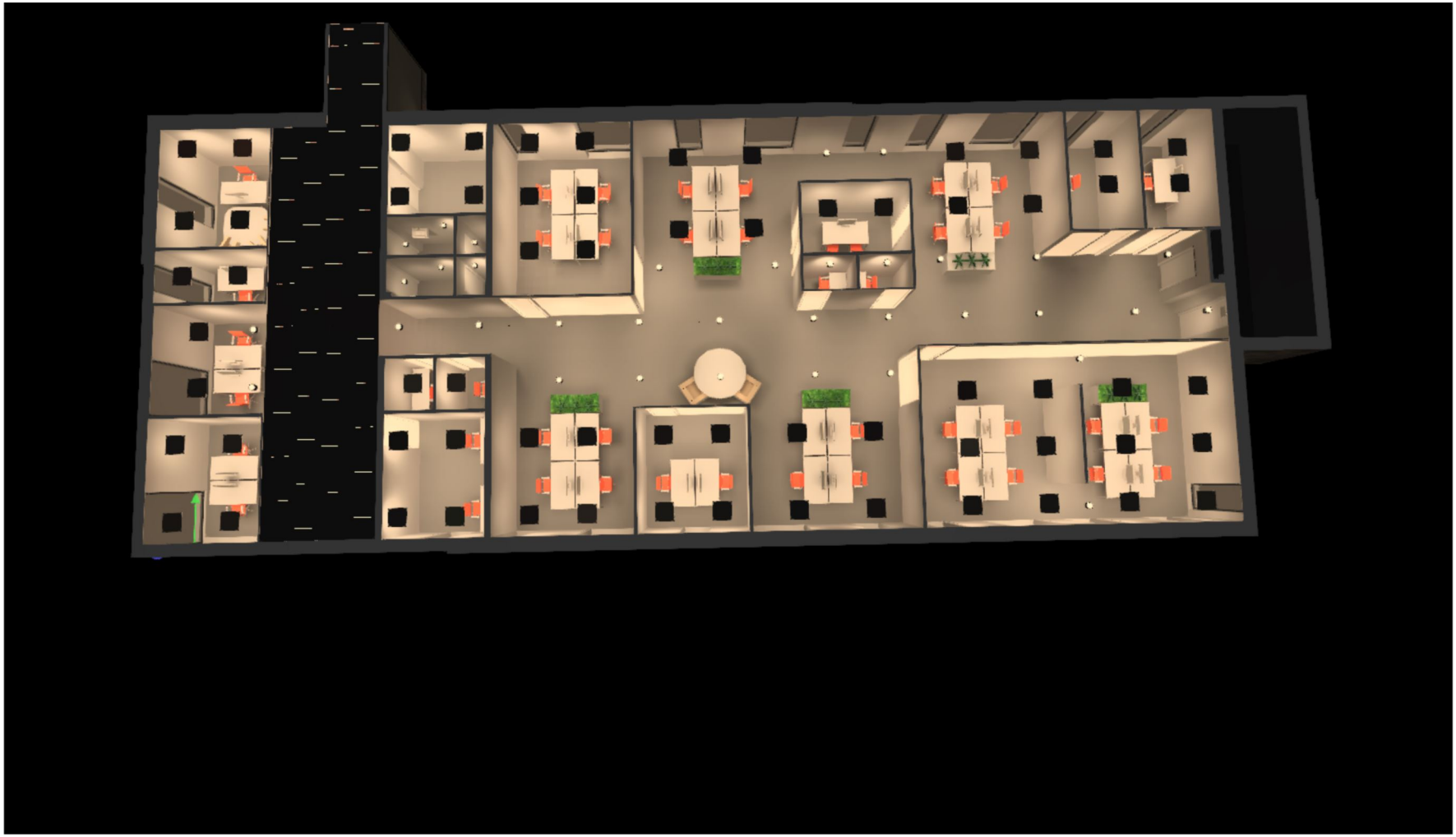
pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

Werkplek 6

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	17.19 m²	6.98 W/m² = 1.32 W/m²/100 lx (Space) 12.18 W/m² = 2.30 W/m²/100 lx (Working plane)	529 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

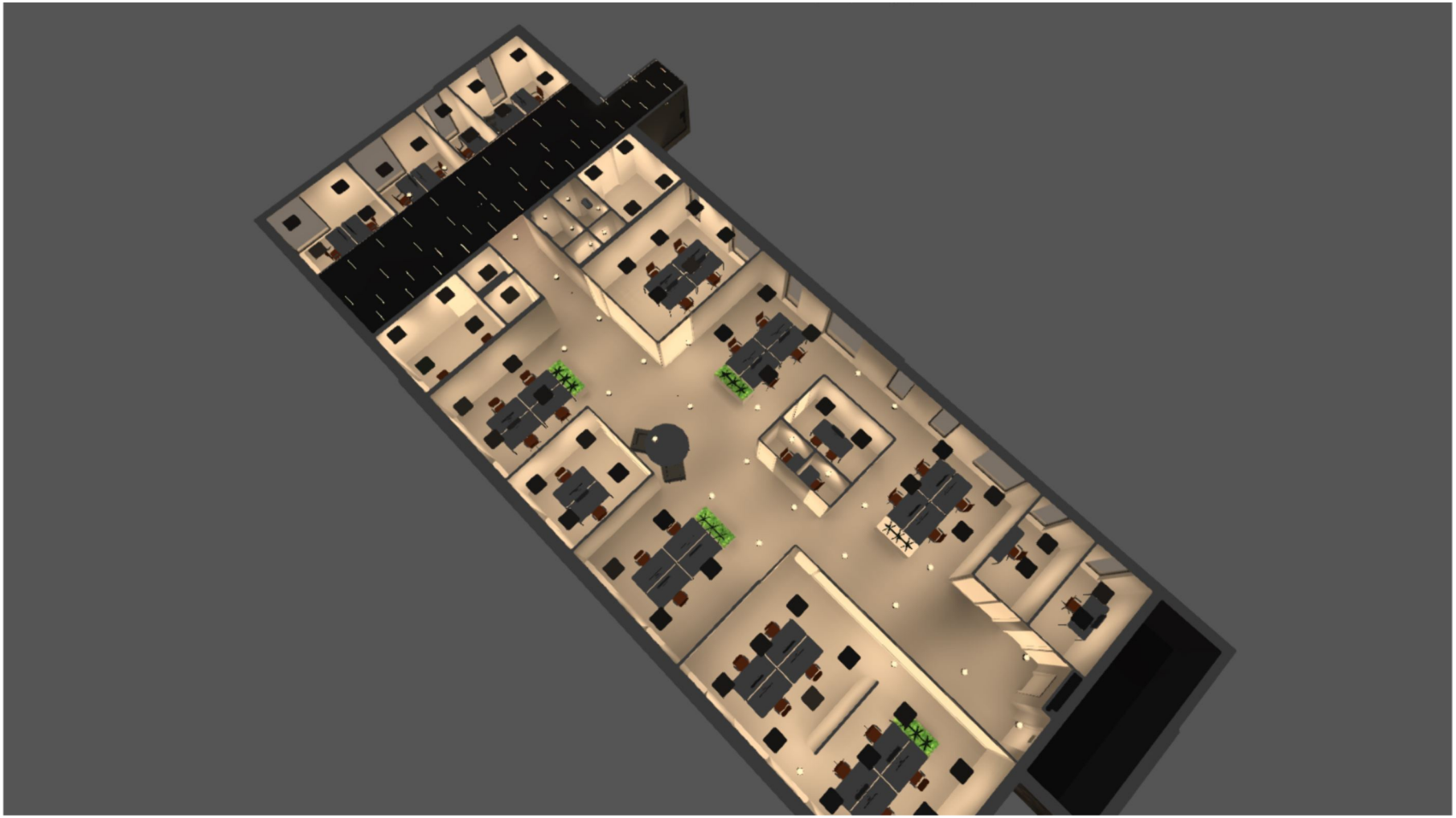
Images



Images

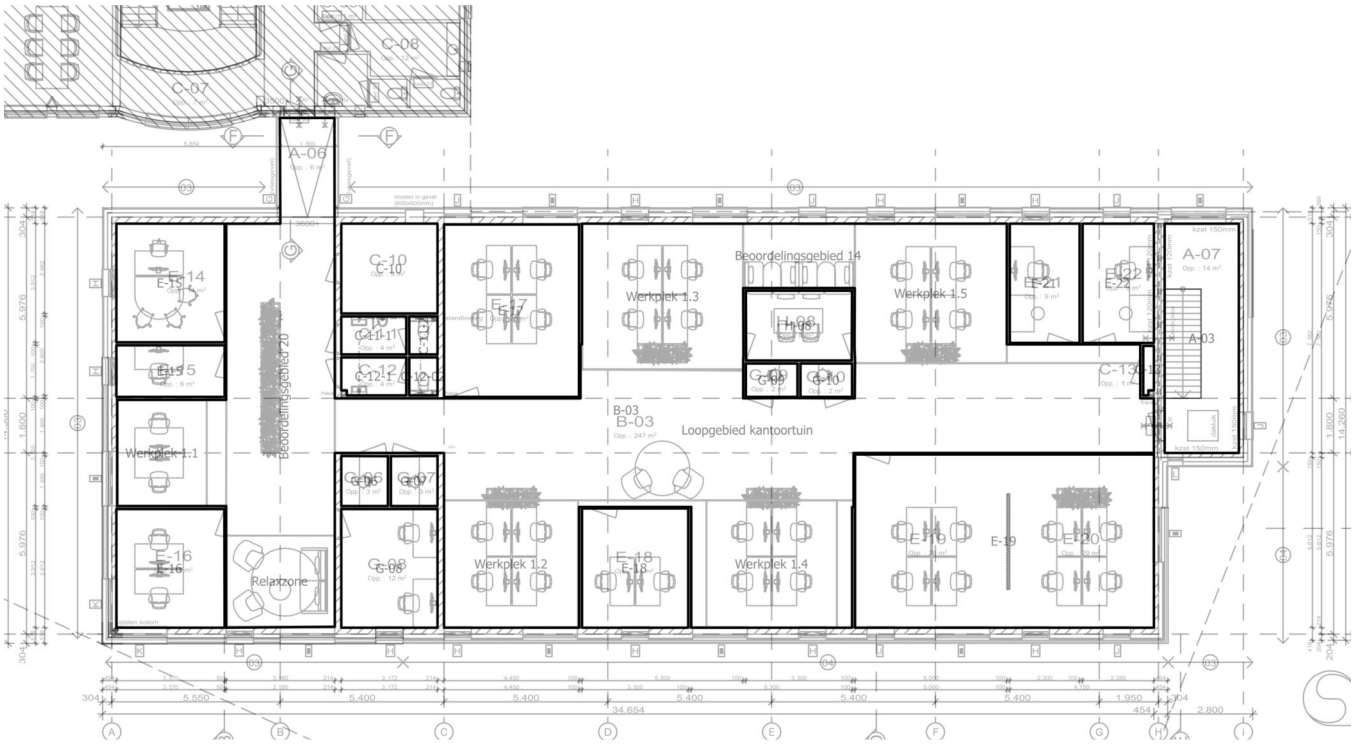
Images

Images



Building 1 · 1ste verdieping (Light scene 1)

Room list



Building 1 · 1ste verdieping (Light scene 1)

Room list

B-03

P_{total}	A_{Room}	Lighting power density
38.0 W	253.14 m²	0.15 W/m² (Room)

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
1	Noxion	247469	Noxion LED T5 Batline V2.0 600mm - 8W - 1080lm - 3CCT 3000K	7.8 W	975 lm
2	Noxion	248327	Noxion LED Downlight Apollo V2.0 15W 3000K Cutout ?200mm Frame ? 220mm	15.1 W	2129 lm

C-10

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	9.40 m²	12.77 W/m² = 1.60 W/m²/100 lx (Room) 28.16 W/m² = 3.53 W/m²/100 lx (Working plane)	797 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

C-11-1

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
18.2 W	2.68 m²	6.80 W/m² = 1.60 W/m²/100 lx (Room) 12.29 W/m² = 2.90 W/m²/100 lx (Working plane)	424 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	248325	Noxion LED Downlight Apollo V2.0 9W 3000K Cutout ?150mm Frame ? 175mm	9.1 W	1200 lm

Building 1 · 1ste verdieping (Light scene 1)

Room list

C-11-2

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
12.4 W	1.16 m²	10.67 W/m² = 2.36 W/m²/100 lx (Room) 27.52 W/m² = 6.09 W/m²/100 lx (Working plane)	452 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
1	Noxion	248325	Noxion LED Downlight Apollo V2.0 12W 3000K Cutout ?150mm Frame ? 175mm	12.4 W	1590 lm

C-12-1

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
18.2 W	2.65 m²	6.87 W/m² = 1.55 W/m²/100 lx (Room) 12.55 W/m² = 2.83 W/m²/100 lx (Working plane)	443 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	248325	Noxion LED Downlight Apollo V2.0 9W 3000K Cutout ?150mm Frame ? 175mm	9.1 W	1200 lm

C-12-02

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
12.4 W	1.16 m²	10.67 W/m² = 2.39 W/m²/100 lx (Room) 27.52 W/m² = 6.17 W/m²/100 lx (Working plane)	446 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
1	Noxion	248325	Noxion LED Downlight Apollo V2.0 12W 3000K Cutout ?150mm Frame ? 175mm	12.4 W	1590 lm

Building 1 · 1ste verdieping (Light scene 1)

Room list

E-15

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	13.97 m²	8.59 W/m² = 1.17 W/m²/100 lx (Room) 12.20 W/m² = 1.67 W/m²/100 lx (Working plane)	731 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

E-15

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
60.0 W	6.07 m²	9.89 W/m² = 1.36 W/m²/100 lx (Room) 33.35 W/m² = 4.60 W/m²/100 lx (Working plane)	725 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

E-16

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	13.95 m²	8.60 W/m² = 1.27 W/m²/100 lx (Room) 16.07 W/m² = 2.37 W/m²/100 lx (Working plane)	679 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

Building 1 · 1ste verdieping (Light scene 1)

Room list

E-17

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
180.0 W	25.28 m²	7.12 W/m² = 0.96 W/m²/100 lx (Room) 11.14 W/m² = 1.50 W/m²/100 lx (Working plane)	742 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
6	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

E-18

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	13.76 m²	8.72 W/m² = 1.23 W/m²/100 lx (Room) 12.42 W/m² = 1.75 W/m²/100 lx (Working plane)	712 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

E-19

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
390.2 W	56.26 m²	6.94 W/m² = 0.96 W/m²/100 lx (Room) 9.36 W/m² = 1.30 W/m²/100 lx (Working plane)	721 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
12	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm
2	Noxion	248327	Noxion LED Downlight Apollo V2.0 15W 3000K Cutout ?200mm Frame ? 220mm	15.1 W	2129 lm

Building 1 · 1ste verdieping (Light scene 1)

Room list

E-21

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
60.0 W	9.04 m²	6.63 W/m² = 0.96 W/m²/100 lx (Room) 15.74 W/m² = 2.28 W/m²/100 lx (Working plane)	691 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

E-22

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
60.0 W	9.24 m²	6.49 W/m² = 0.95 W/m²/100 lx (Room) 15.16 W/m² = 2.23 W/m²/100 lx (Working plane)	681 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

G-06

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
30.0 W	2.53 m²	11.86 W/m² = 1.82 W/m²/100 lx (Room) 86.57 W/m² = 13.26 W/m²/100 lx (Working plane)	653 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
1	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

Building 1 · 1ste verdieping (Light scene 1)

Room list

G-07

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
30.0 W	2.53 m²	11.86 W/m² = 1.81 W/m²/100 lx (Room) 86.57 W/m² = 13.20 W/m²/100 lx (Working plane)	656 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
1	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

G-08

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	12.41 m²	9.67 W/m² = 1.30 W/m²/100 lx (Room) 18.97 W/m² = 2.55 W/m²/100 lx (Working plane)	743 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

G-09

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
15.1 W	1.87 m²	8.07 W/m² = 1.36 W/m²/100 lx (Room) 55.93 W/m² = 9.42 W/m²/100 lx (Working plane)	594 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
1	Noxion	248327	Noxion LED Downlight Apollo V2.0 15W 3000K Cutout ?200mm Frame ? 220mm	15.1 W	2129 lm

Building 1 · 1ste verdieping (Light scene 1)

Room list

G-10

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
15.1 W	1.87 m²	8.08 W/m² = 1.37 W/m²/100 lx (Room) 55.93 W/m² = 9.46 W/m²/100 lx (Working plane)	591 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
1	Noxion	248327	Noxion LED Downlight Apollo V2.0 15W 3000K Cutout ?200mm Frame ? 220mm	15.1 W	2129 lm

H-08

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
60.0 W	8.03 m²	7.47 W/m² = 1.15 W/m²/100 lx (Room) 18.53 W/m² = 2.86 W/m²/100 lx (Working plane)	649 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

Loopgebied kantoortuin

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
322.2 W	85.59 m²	3.76 W/m² = 0.85 W/m²/100 lx (Space) 5.35 W/m² = 1.21 W/m²/100 lx (Working plane)	443 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
1	Noxion	239389	Noxion LED Emergency Exit Light	5.1 W	70 lm
21	Noxion	248327	Noxion LED Downlight Apollo V2.0 15W 3000K Cutout ?200mm Frame ? 220mm	15.1 W	2129 lm

Building 1 · 1ste verdieping (Light scene 1)

Room list

Relaxzone

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
62.4 W	10.75 m²	5.81 W/m² = 1.66 W/m²/100 lx (Space) 12.08 W/m² = 3.45 W/m²/100 lx (Working plane)	350 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
8	Noxion	247469	Noxion LED T5 Batline V2.0 600mm - 8W - 1080lm - 3CCT 3000K	7.8 W	975 lm

Space 14

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
30.2 W	7.77 m²	3.89 W/m² = 0.88 W/m²/100 lx (Space) 10.13 W/m² = 2.31 W/m²/100 lx (Working plane)	440 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	248327	Noxion LED Downlight Apollo V2.0 15W 3000K Cutout ?200mm Frame ? 220mm	15.1 W	2129 lm

Space 20

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
259.8 W	53.76 m²	4.83 W/m² = 1.66 W/m²/100 lx (Space) 7.55 W/m² = 2.59 W/m²/100 lx (Working plane)	292 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	239389	Noxion LED Emergency Exit Light	5.1 W	70 lm
32	Noxion	247469	Noxion LED T5 Batline V2.0 600mm - 8W - 1080lm - 3CCT 3000K	7.8 W	975 lm

Building 1 · 1ste verdieping (Light scene 1)

Room list

Werkplek 1.1

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
60.0 W	10.29 m²	5.83 W/m² = 0.94 W/m²/100 lx (Space) 12.37 W/m² = 1.99 W/m²/100 lx (Working plane)	622 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
2	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

Werkplek 1.2

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	18.55 m²	6.47 W/m² = 1.11 W/m²/100 lx (Space) 10.98 W/m² = 1.88 W/m²/100 lx (Working plane)	584 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

Werkplek 1.3

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	25.44 m²	4.72 W/m² = 0.89 W/m²/100 lx (Space) 7.34 W/m² = 1.38 W/m²/100 lx (Working plane)	533 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

Building 1 · 1ste verdieping (Light scene 1)

Room list

Werkplek 1.4

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	18.06 m²	6.64 W/m² = 1.27 W/m²/100 lx (Space) 11.36 W/m² = 2.17 W/m²/100 lx (Working plane)	525 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

Werkplek 1.5

P_{total}	A_{Room}	Lighting power density	$\bar{E}_{perpendicular\ (Working\ plane)}$
120.0 W	23.02 m²	5.21 W/m² = 0.89 W/m²/100 lx (Space) 8.32 W/m² = 1.42 W/m²/100 lx (Working plane)	588 lx

pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{Luminaire}$
4	Noxion	242012	LED Panel Delta Pro V3 30W 3000K 60x60 UGR19	30.0 W	3951 lm

Glossary

A

A	Formula symbol for a surface in the geometry

B

Background area	The background area borders the direct ambient area according to DIN EN 12464-1 and reaches up to the borders of the room. In larger rooms, the background area is at least 3 m wide. It is located horizontally at floor level.

C

CCT	(Engl. correlated colour temperature) Body temperature of a thermal radiator which serves to describe its light colour. Unit: Kelvin [K]. The lesser the numerical value the redder; the greater the numerical value the bluer the light colour. The colour temperature of gas-discharge lamps and semi-conductors are termed "correlated colour temperature" in contrast to the colour temperature of thermal radiators. Allocation of the light colours to the colour temperature ranges acc. to EN 12464-1: Light colour - colour temperature [K] warm white (ww) < 3,300 K neutral white (nw) ≥ 3,300 – 5,300 K daylight white (dw) > 5,300 K
Clearance height	The designation for the distance between upper edge of the floor and bottom edge of the ceiling (in the completely furnished status of room).
Control group	A group of luminaires that are dimmed and controlled together. For each lighting scene, a control group provides its own dimming value. All luminaires within a control group share this dimming value. The control groups with their luminaires are automatically determined by DIALux on the basis of the created light scenes and their luminaire groups.
CRI	(Engl. colour rendering index) Designation for the colour rendering index of a luminaire or a lamp acc. to DIN 6169: 1976 or CIE 13.3: 1995. The general colour rendering index Ra (or CRI) is a dimensionless figure that describes the quality of a white light source in regards to its similarity with the remission spectra of defined 8 test colours (see DIN 6169 or CIE 1974) to a reference light source.

Glossary

D

Daylight autonomy	Describes what percentage of the daily working time the required illuminance is met by daylight. The nominal illuminance is used from the room profile, unlike described in EN 17037. The calculation is not done in the centre of the room but at the placed sensor measuring point. A room is considered sufficiently supplied with daylight if it achieves at least 50% daylight autonomy.
Daylight factor	Ratio of the illuminance achieved solely by daylight incidence at a point in the inside to the horizontal illuminance in the outer area under an unobstructed sky. Formula symbol: D (Engl. daylight factor) Unit: %
Daylight quotient effective area	A calculation surface within which the daylight quotient is calculated.

E

Energy evaluation	Based on an hourly calculation procedure for daylight in indoor spaces, considering the project geometry and any existing daylight control systems. Orientation and location of the project are also considered. The calculation uses the specified system power of the luminaires to determine the energy demand. A linear relationship between power and luminous flux in the dimmed state is assumed for daylight-controlled luminaires. Times of use and nominal illuminance are determined from the usage profiles of the spaces. Switched-on luminaires that are explicitly excluded from control also consider the specified times-of-use. The daylight control systems use a simplified control logic that closes them at an outdoor horizontal illuminance of 27,500lx. The calendar year 2022 is used as a reference only. It is not a simulation of this year. The reference year is only used to assign the days of the week to the calculated results. The changeover to summer time is not considered. The reference sky type used is the average sky described in CIE 110 without direct sunlight. The method was developed together with the Fraunhofer Institute for Building Physics and is available for review by the Joint Working Group 1 ISO TC 274 as an extension of the previous annual regression-based method.
Eta (η)	(light output ratio) The light output ratio describes what percentage of the luminous flux of a free radiating lamp (or LED module) is emitted by the luminaire when installed. Unit: %

Glossary

G

g_1	Often also U_o (Engl. overall uniformity) Designates the overall uniformity of the illuminance on a surface. It is the quotient from E_{min} to $\bar{E}$ and is required, for instance, in standards for illumination of workstations.
g_2	Actually it designates the "non-uniformity" of the illuminance on a surface. It is the quotient of E_{min} to E_{max} and is generally only relevant for certifying the emergency lighting acc. to EN 1838.

I

Illuminance	Describes the ratio of the luminous flux that strikes a certain surface to the size of this surface (lm/m^2 = lx). The illuminance is not tied to an object surface. It can be determined anywhere in space (inside or outside). The illuminance is not a product feature because it is a recipient value. Luxometers are used for measuring. Unit: Lux Abbreviation: lx Formula symbol: E
Illuminance, adaptive	For the determining of the middle adaptive illuminance on a surface, this is rastered "adaptively". In the area of large illuminance differences within the surface, the raster is subdivided finer; within lesser differences, a rougher classification is made.
Illuminance, horizontal	Illuminance that is calculated or measured on a horizontal (level) surface (this can be for example a table top or the floor). The horizontal illuminance is usually identified by the formula letter E_h.
Illuminance, perpendicular	Illuminance that is calculated or measured plumb-vertical to a surface. This needs to be taken into account for tilted surfaces. If the surface is horizontal or vertical, then there is no difference between the perpendicular and the horizontal or vertical illuminance.
Illuminance, vertical	Illuminance that is calculated or measured on a vertical surface (this can be for example the front of some shelves). The vertical illuminance is usually identified by the formula letter E_v.

L

LENI	(Engl. lighting energy numeric indicator) Lighting energy numeric indicator acc. to EN 15193 Unit: $kWh/(m^2 * a)$

Glossary

LLMF	(Engl. lamp lumen maintenance factor)/acc. to CIE 97: 2005 Lamp flux maintenance factor that takes the luminous flux reduction into account of a luminaire or an LED module in the course of the operating time. The lamp flux maintenance factor is specified as a decimal digit and can have a maximum value of 1 (no luminous flux reduction existing).
LMF	(Engl. luminaire maintenance factor)/acc. to CIE 97: 2005 Luminaire maintenance factor that takes the soiling into account of the luminaire in the course of the operating time. The luminaire maintenance factor is specified as a decimal digit and can have a maximum value of 1 (no soiling existing).
LSF	(Engl. lamp survival factor)/acc. to CIE 97: 2005 Lamp survival factor that takes the total failure into account of a luminaire in the course of the operating time. The lamp survival factor is specified as a decimal digit and can have a maximum value of 1 (no failures existing within the time concerned or prompt replacement after the failure).
Luminance	Dimension for the "brightness impression" that the human eye has of a surface. The surface itself can emit light thereby or light striking it can be reflected (emitter value). It is the only photometric value that the human eye can perceive. Unit: Candela per square metre Abbreviation: cd/m^2 Formula symbol: L
Luminous efficacy	Ratio of the emitted luminous flux Φ [lm] to the absorbed electrical power P [W] Unit: lm/W. This ratio can be formed for the lamp or LED module (lamp or module light output), the lamp or module with control gear (system light output) and the complete luminaire (luminaire light output).
Luminous flux	Dimension for the total light output that is emitted from one light source in all directions. It is thus an "emitter value" that specifies the entire emitting output. The luminous flux of a light source can only be determined in a laboratory. A difference is made between the lamp or LED module luminous flux and the luminaire luminous flux. Unit: Lumen Abbreviation: lm Formula symbol: Φ
Luminous intensity	Describes the intensity of the light in a certain direction (emitter value). The luminous intensity is a matter of the luminous flux Φ that is emitted in a certain spherical angle Ω. The radiation characteristics of a light source are presented graphically in a light distribution curve (LDC). The luminous intensity is an SI base unit. Unit: Candela Abbreviation: cd Formula symbol: I

Glossary

M

Maintenance factor	See MF
MF	(Engl. maintenance factor)/acc. to CIE 97: 2005 Maintenance factor as decimal number between 0 and 1 that describes the ratio of the new value of a photometric planning parameter (e.g. of the illuminance) to a maintenance value after a certain time. The maintenance factor takes into account the soiling of luminaires and rooms as well as the luminous flux reduction and the failure of light sources. The maintenance factor is taken into account either overall or determined in detail acc. to CIE 97: 2005 by the formula RMF x LMF x LLMF x LSF.

P

P	(Engl. power) Electric power consumption Unit: watt Abbreviation: W

R

$R_{(UG)}$ max	Measure of the psychological glare in indoor spaces. In addition to the luminance of luminaires, the level of the $R_{(UG)}$ value also depends on the observer position, the viewing direction and the ambient luminance. The calculation is made according to the table method, see CIE 117. Among other things, EN 12464-1:2021 specifies maximum permissible $R_{(UG)}$- values $R_{(UGL)}$ for various indoor workplaces.
Reflection factor	The reflection factor of a surface describes how much of the striking light is reflected back. The reflection factor is defined by the colour of the surface.
RMF	(Engl. room maintenance factor)/acc. to CIE 97: 2005 Room maintenance factor that takes the soiling into account of the space encompassing surfaces in the course of the operating time. The room maintenance factor is specified as a decimal digit and can have a maximum value of 1 (no soiling existing).

S

Surrounding area	The ambient area directly borders the area of the visual task and should be planned with a width of at least 0.5 m according to DIN EN 12464-1. It is at the same height as the area of the visual task.

Glossary

U

UGR (max)	(unified glare rating) Measure for the psychological glare effect in interiors. In addition to luminaire luminance, the UGR value also depends on the position of the observer, the viewing direction and the ambient luminance. Among other things, EN 12464-1 specifies maximum permissible UGR values for various indoor workplaces.
UGR observer	Calculation point in the room, for the DIALux the UGR value is determined. The location and height of the calculation point should correspond to the typical observer position (position and eye level of the user).

V

Visual task area	The area that is needed for carrying out the visual task in accordance with DIN EN 12464 -1. The height corresponds with the height at which the visual task is executed.

W

Wall zone	Circumferential area between working plane and walls which is not taken into account for the calculation.
Working plane	Virtual measuring or calculation surface at the height of the visual task that generally follows the room geometry. The working plane may also feature a wall zone.