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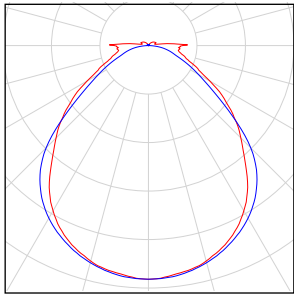
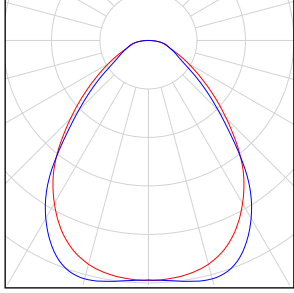
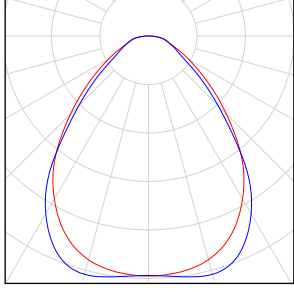


interior lightning tender

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interior lightning tender

Quantity	Luminaire (Luminous emittance)		
8	DIALux - FERN 38 W 4000K 1200mm FR 38 840 12RP D1N0 Luminous emittance 1 Fitting: 1xFERN Light output ratio: 100% Lamp luminous flux: 5200 lm Luminaire luminous flux: 5200 lm Power: 38.1 W Luminous efficacy: 136.5 lm/W Colorimetric data 1x: CCT 4010 K, CRI 83	See our luminaire catalog for an image of the luminaire.	
15	DIALux - Leaf Slim 35 W 4000 K Prismatic LFS 35 840 R0606 WU D10 H Luminous emittance 1 Fitting: 1xLeaf Slim 35 W Light output ratio: 100% Lamp luminous flux: 4380 lm Luminaire luminous flux: 4380 lm Power: 35.1 W Luminous efficacy: 124.9 lm/W Colorimetric data 1x: CCT 4000 K, CRI 83	See our luminaire catalog for an image of the luminaire.	
2	DIALux - Leaf Slim 39 W 4000 K Prismatic LFS 39 840 R0606 WU D10 H Luminous emittance 1 Fitting: 1xLeaf Slim 39 W Light output ratio: 100% Lamp luminous flux: 4921 lm Luminaire luminous flux: 4921 lm Power: 39.3 W Luminous efficacy: 125.3 lm/W Colorimetric data 1x: CCT 4000 K, CRI 83	See our luminaire catalog for an image of the luminaire.	

Total lamp luminous flux: 117142 lm, Total luminaire luminous flux: 117142 lm, Total Load: 909.9 W, Luminous efficacy: 128.7 lm/W

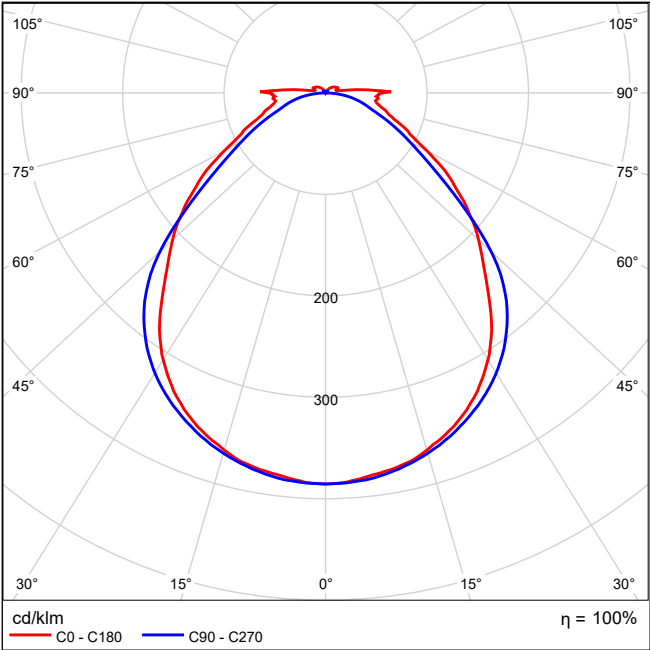
DIALux FERN 38 W 4000K 1200mm FR 38 840 12RP D1N0 1xFERN



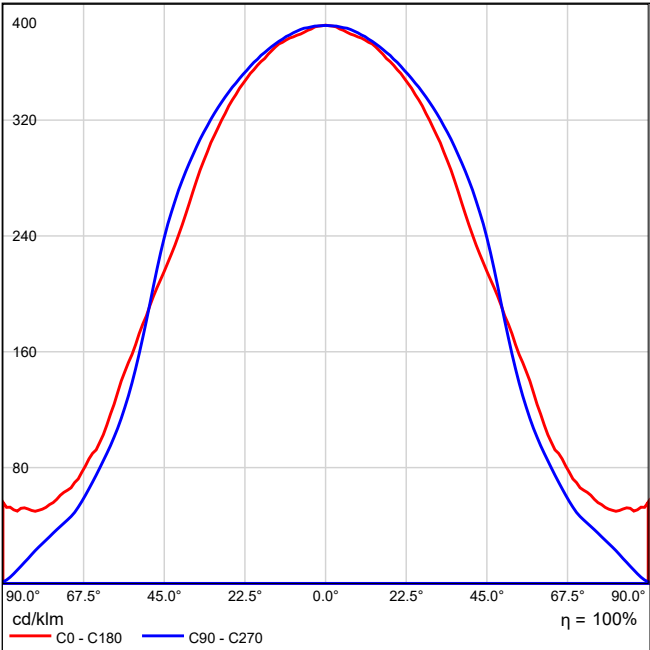
Light output ratio: 100%
Lamp luminous flux: 5200 lm
Luminaire luminous flux: 5200 lm
Power: 38.1 W
Luminous efficacy: 136.5 lm/W

Colorimetric data
1x: CCT 4010 K, CRI 83

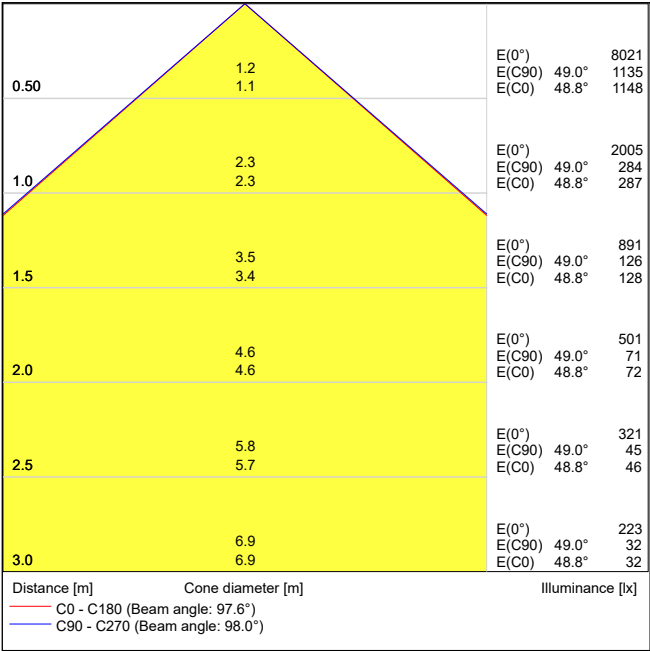
Luminous emittance 1 / Polar LDC



Luminous emittance 1 / Linear LDC

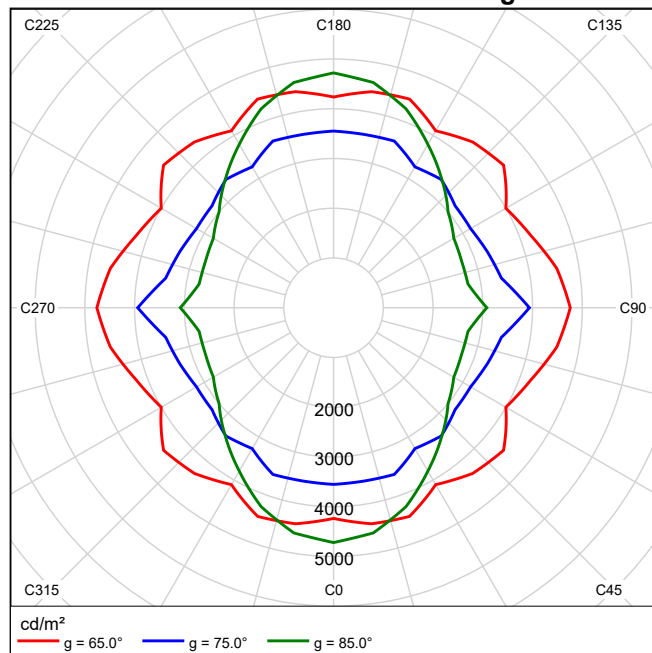


Luminous emittance 1 / Cone diagram



Site 1 / Building 2 / Storey 1 / DIALux FERN 38 W 4000K 1200mm FR 38 840 12RP D1N0 1xFERN / DIALux - FR 38 840 12RP D1N0 (1xFERN)

Luminous emittance 1 / Luminance diagram



Luminous emittance 1 / UGR diagram

Glare evaluation according to UGR												
ρ Ceiling		70	70	50	50	30	70	70	50	50	30	30
ρ Walls		50	30	50	30	30	50	30	50	30	30	30
ρ Floor		20	20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H	2H	18.1	19.3	18.5	19.6	20.0	18.3	19.5	18.6	19.8	20.1	20.1
	3H	19.2	20.3	19.6	20.6	21.0	19.0	20.1	19.4	20.5	20.8	20.8
	4H	19.7	20.7	20.1	21.1	21.5	19.4	20.4	19.8	20.7	21.1	21.1
	6H	20.2	21.2	20.7	21.6	22.0	19.7	20.6	20.1	21.0	21.4	21.4
	8H	20.6	21.5	21.0	21.9	22.3	19.8	20.7	20.2	21.1	21.5	21.5
	12H	21.0	21.9	21.4	22.3	22.7	19.9	20.7	20.3	21.1	21.6	21.6
4H	2H	18.6	19.6	19.0	19.9	20.3	18.7	19.7	19.1	20.0	20.4	20.4
	3H	19.8	20.6	20.2	21.1	21.5	19.6	20.5	20.0	20.9	21.3	21.3
	4H	20.5	21.2	20.9	21.6	22.1	20.1	20.8	20.5	21.3	21.7	21.7
	6H	21.2	21.8	21.7	22.3	22.8	20.5	21.2	21.0	21.6	22.1	22.1
	8H	21.6	22.2	22.1	22.7	23.2	20.7	21.3	21.2	21.8	22.3	22.3
	12H	22.2	22.7	22.7	23.2	23.8	20.8	21.4	21.3	21.8	22.4	22.4
8H	4H	20.6	21.3	21.1	21.7	22.3	20.3	20.9	20.8	21.4	21.9	21.9
	6H	21.5	22.0	22.1	22.6	23.1	20.8	21.4	21.4	21.9	22.4	22.4
	8H	22.1	22.6	22.7	23.1	23.7	21.1	21.6	21.7	22.1	22.7	22.7
	12H	22.9	23.3	23.4	23.8	24.4	21.3	21.7	21.9	22.3	22.9	22.9
12H	4H	20.6	21.2	21.2	21.7	22.2	20.3	20.9	20.8	21.4	21.9	21.9
	6H	21.6	22.0	22.1	22.6	23.2	20.9	21.4	21.5	21.9	22.5	22.5
	8H	22.2	22.6	22.8	23.2	23.8	21.3	21.6	21.8	22.2	22.8	22.8
Variation of the observer position for the luminaire distances S												
S = 1.0H		+0.1 / -0.2					+0.2 / -0.3					
S = 1.5H		+0.3 / -0.5					+0.6 / -0.7					
S = 2.0H		+0.6 / -0.9					+1.2 / -1.2					
Standard table		BK06					BK04					
Correction Summand		5.1					3.6					
Corrected glare indices referring to 5200lm Total luminous flux												

The UGR values are calculated in acc. with CIE Publ. 117. Spacing-to-height ratio = 0.25

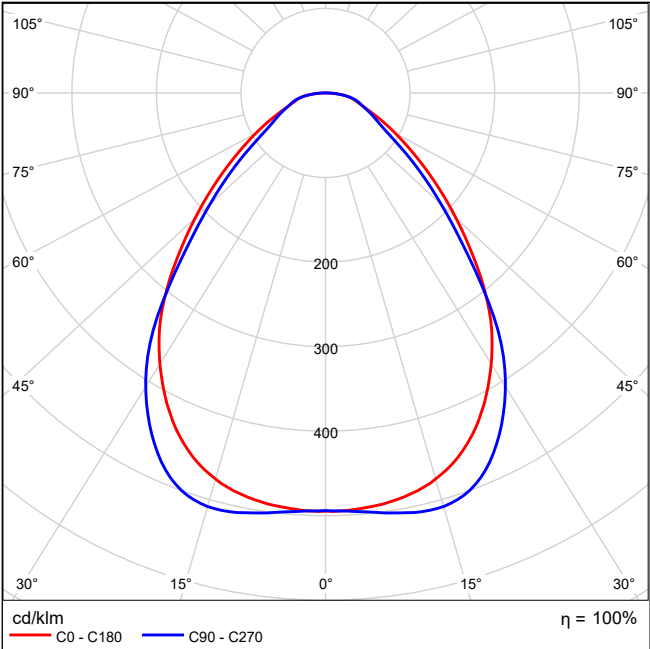
DIALux Leaf Slim 35 W 4000 K Prismatic LFS 35 840 R0606 WU D10 H 1xLeaf Slim 35 W



Light output ratio: 100%
Lamp luminous flux: 4380 lm
Luminaire luminous flux: 4380 lm
Power: 35.1 W
Luminous efficacy: 124.9 lm/W

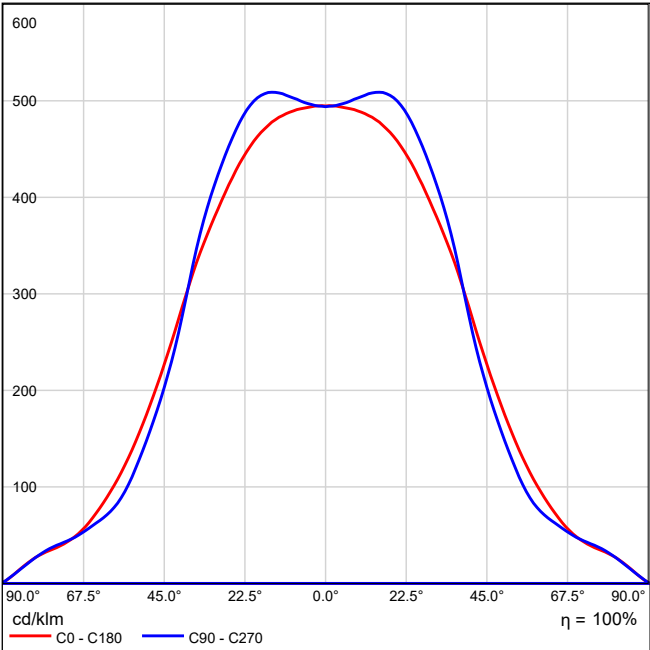
Colorimetric data
1x: CCT 4000 K, CRI 83

Luminous emittance 1 / Polar LDC

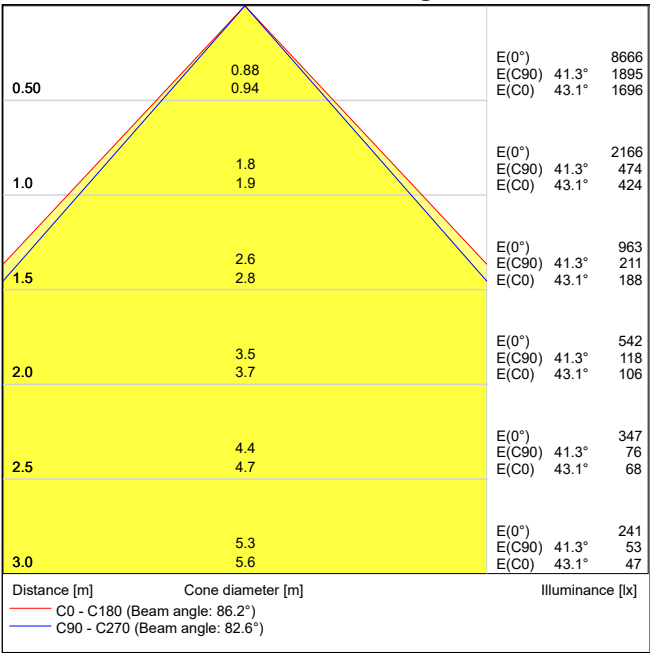


Site 1 / Building 2 / Storey 1 / DIALux Leaf Slim 35 W 4000 K Prismatic LFS 35 840 R0606 WU D10 H 1xLeaf Slim 35 W / DIALux - LFS 35 840 R0606 WU D10 H (1xLeaf Slim 35 W)

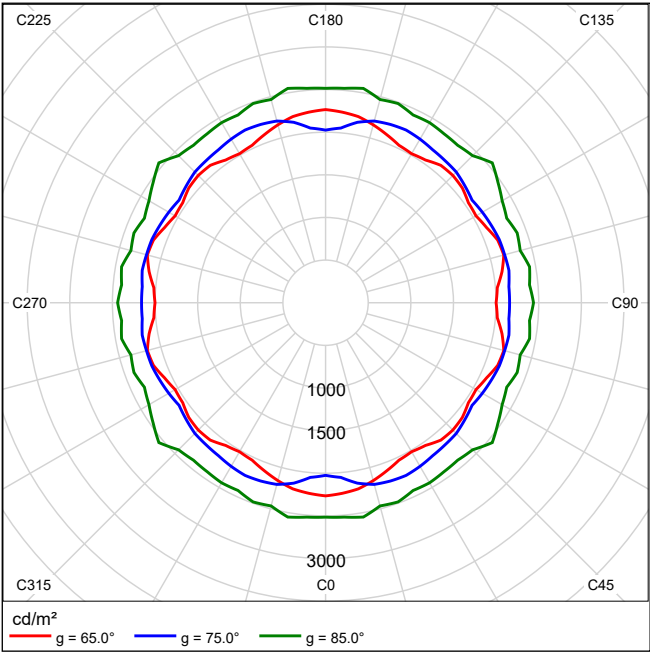
Luminous emittance 1 / Linear LDC



Luminous emittance 1 / Cone diagram



Luminous emittance 1 / Luminance diagram



Luminous emittance 1 / UGR diagram

Glare evaluation according to UGR												
ρ Ceiling		70	70	50	50	30	70	70	50	50	30	
ρ Walls		50	30	50	30	30	50	30	50	30	30	
ρ Floor		20	20	20	20	20	20	20	20	20	20	
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H	2H	15.4	16.5	15.7	16.7	17.0	15.3	16.4	15.6	16.6	16.8	
	3H	16.4	17.4	16.7	17.6	17.9	16.2	17.2	16.5	17.5	17.7	
	4H	16.9	17.8	17.2	18.1	18.4	16.8	17.7	17.1	18.0	18.2	
	6H	17.4	18.2	17.7	18.5	18.8	17.3	18.2	17.7	18.5	18.8	
	8H	17.6	18.4	18.0	18.7	19.1	17.6	18.4	17.9	18.7	19.0	
	12H	17.8	18.6	18.2	18.9	19.2	17.7	18.5	18.1	18.8	19.2	
4H	2H	15.8	16.7	16.1	17.0	17.2	15.6	16.6	16.0	16.8	17.1	
	3H	17.0	17.8	17.3	18.1	18.4	16.8	17.6	17.2	17.9	18.2	
	4H	17.7	18.4	18.0	18.7	19.1	17.5	18.2	17.9	18.6	18.9	
	6H	18.4	19.0	18.8	19.3	19.7	18.2	18.9	18.7	19.2	19.6	
	8H	18.7	19.2	19.1	19.6	20.0	18.6	19.1	19.0	19.5	19.9	
	12H	19.0	19.5	19.4	19.9	20.3	18.8	19.3	19.3	19.7	20.2	
8H	4H	17.9	18.5	18.4	18.9	19.3	17.8	18.4	18.3	18.8	19.2	
	6H	18.8	19.3	19.3	19.7	20.2	18.8	19.2	19.2	19.6	20.1	
	8H	19.3	19.7	19.7	20.1	20.6	19.2	19.6	19.7	20.0	20.5	
	12H	19.7	20.0	20.1	20.5	21.0	19.5	19.9	20.0	20.3	20.8	
12H	4H	18.0	18.5	18.4	18.9	19.3	17.9	18.4	18.3	18.8	19.2	
	6H	18.9	19.3	19.4	19.8	20.3	18.9	19.3	19.3	19.7	20.2	
	8H	19.4	19.8	19.9	20.2	20.7	19.3	19.7	19.8	20.1	20.6	
Variation of the observer position for the luminaire distances S												
S = 1.0H		+0.2 / -0.3					+0.3 / -0.3					
S = 1.5H		+0.5 / -0.6					+0.5 / -0.8					
S = 2.0H		+1.1 / -1.0					+1.0 / -1.1					
Standard table		BK05					BK05					
Correction Summand		1.5					1.4					
Corrected glare indices referring to 4380lm Total luminous flux												

The UGR values are calculated in acc. with CIE Publ. 117. Spacing-to-height ratio = 0.25

Site 1 / Building 2 / Storey 1 / DIALux Leaf Slim 39 W 4000 K Prismatic LFS 39 840 R0606 WU D10 H 1xLeaf Slim 39 W / DIALux - LFS 39 840 R0606 WU D10 H (1xLeaf Slim 39 W)

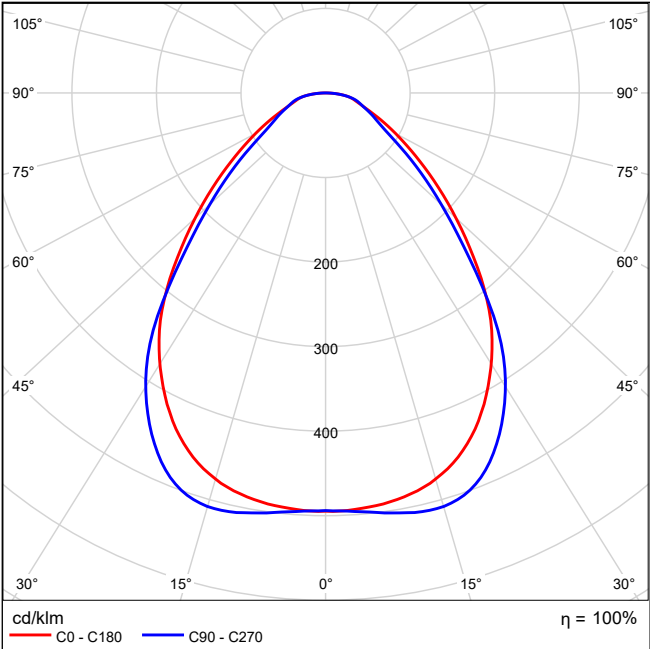
DIALux Leaf Slim 39 W 4000 K Prismatic LFS 39 840 R0606 WU D10 H 1xLeaf Slim 39 W



Light output ratio: 100%
Lamp luminous flux: 4921 lm
Luminaire luminous flux: 4921 lm
Power: 39.3 W
Luminous efficacy: 125.3 lm/W

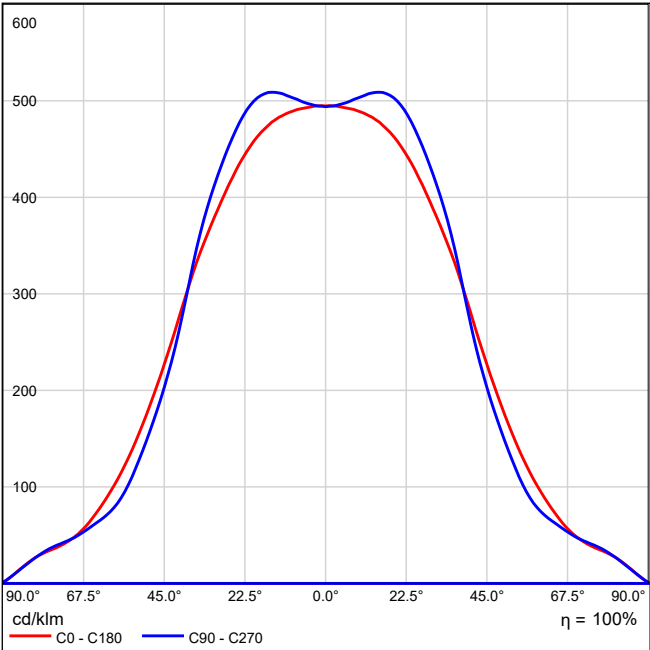
Colorimetric data
1x: CCT 4000 K, CRI 83

Luminous emittance 1 / Polar LDC

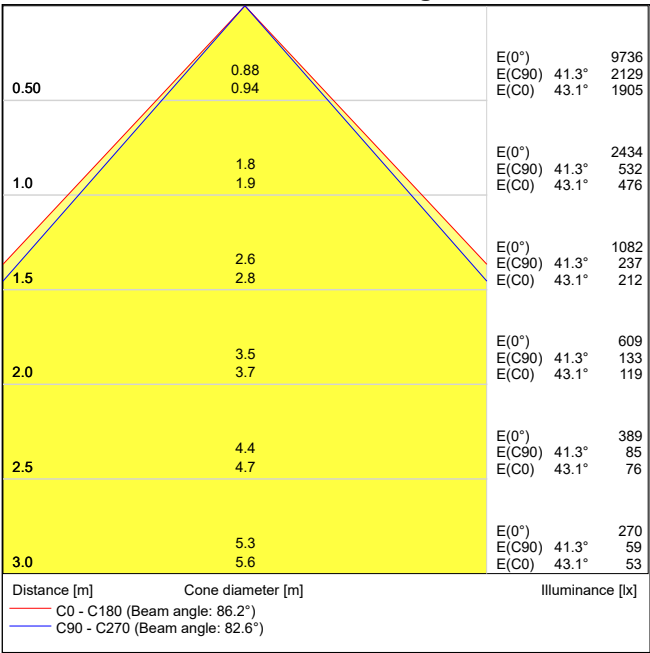


Site 1 / Building 2 / Storey 1 / DIALux Leaf Slim 39 W 4000 K Prismatic LFS 39 840 R0606 WU D10 H 1xLeaf Slim 39 W / DIALux - LFS 39 840 R0606 WU D10 H (1xLeaf Slim 39 W)

Luminous emittance 1 / Linear LDC

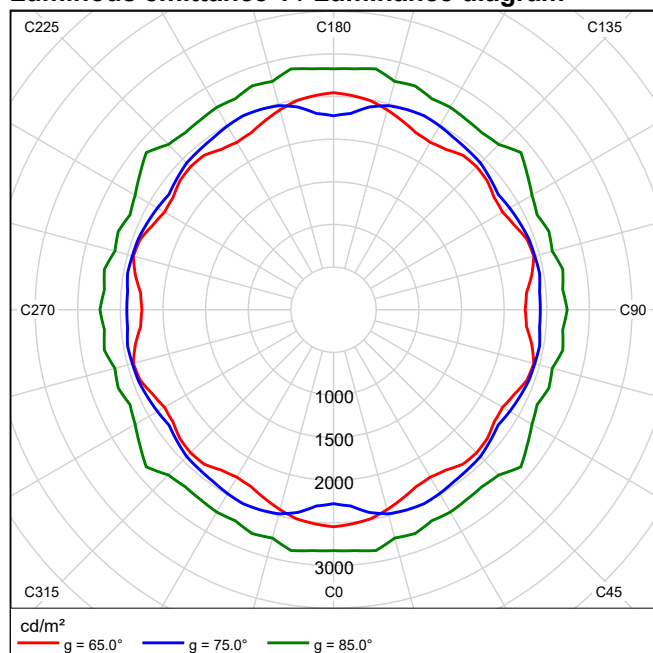


Luminous emittance 1 / Cone diagram



Site 1 / Building 2 / Storey 1 / DIALux Leaf Slim 39 W 4000 K Prismatic LFS 39 840 R0606 WU D10 H 1xLeaf Slim 39 W / DIALux - LFS 39 840 R0606 WU D10 H (1xLeaf Slim 39 W)

Luminous emittance 1 / Luminance diagram

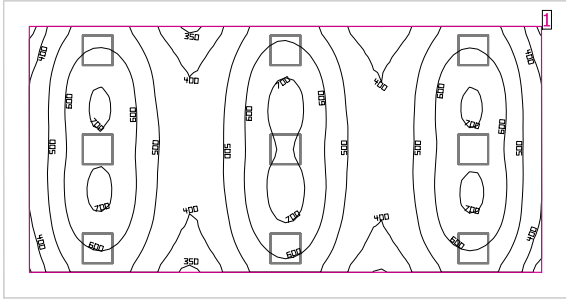


Luminous emittance 1 / UGR diagram

Glare evaluation according to UGR												
ρ Ceiling		70	70	50	50	30	70	70	50	50	30	
ρ Walls		50	30	50	30	30	50	30	50	30	30	
ρ Floor		20	20	20	20	20	20	20	20	20	20	
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H	2H	15.8	16.9	16.1	17.1	17.4	15.7	16.8	16.0	17.0	17.2	
	3H	16.8	17.8	17.1	18.0	18.3	16.6	17.6	16.9	17.9	18.1	
	4H	17.3	18.2	17.6	18.5	18.8	17.2	18.1	17.5	18.4	18.6	
	6H	17.8	18.6	18.1	18.9	19.2	17.7	18.6	18.1	18.9	19.2	
	8H	18.0	18.9	18.4	19.2	19.5	18.0	18.8	18.3	19.1	19.4	
	12H	18.2	19.0	18.6	19.3	19.7	18.1	18.9	18.5	19.3	19.6	
4H	2H	16.2	17.1	16.5	17.4	17.6	16.0	17.0	16.4	17.2	17.5	
	3H	17.4	18.2	17.7	18.5	18.8	17.2	18.0	17.6	18.3	18.6	
	4H	18.1	18.8	18.5	19.1	19.5	17.9	18.6	18.3	19.0	19.3	
	6H	18.8	19.4	19.2	19.7	20.1	18.7	19.3	19.1	19.6	20.0	
	8H	19.1	19.6	19.5	20.0	20.4	19.0	19.5	19.4	19.9	20.3	
	12H	19.4	19.9	19.8	20.3	20.7	19.2	19.7	19.7	20.1	20.6	
8H	4H	18.4	18.9	18.8	19.3	19.7	18.2	18.8	18.7	19.2	19.6	
	6H	19.2	19.7	19.7	20.1	20.6	19.2	19.6	19.6	20.0	20.5	
	8H	19.7	20.1	20.1	20.5	21.0	19.6	20.0	20.1	20.4	20.9	
	12H	20.1	20.4	20.5	20.9	21.4	19.9	20.3	20.4	20.8	21.3	
12H	4H	18.4	18.9	18.8	19.3	19.7	18.3	18.8	18.7	19.2	19.6	
	6H	19.3	19.7	19.8	20.2	20.7	19.3	19.7	19.7	20.1	20.6	
	8H	19.8	20.2	20.3	20.6	21.1	19.7	20.1	20.2	20.5	21.0	
Variation of the observer position for the luminaire distances S												
S = 1.0H		+0.2 / -0.3					+0.3 / -0.3					
S = 1.5H		+0.5 / -0.6					+0.5 / -0.8					
S = 2.0H		+1.1 / -1.0					+1.0 / -1.1					
Standard table		BK05					BK05					
Correction Summand		1.9					1.8					
Corrected glare indices referring to 4921lm Total luminous flux												

The UGR values are calculated in acc. with CIE Publ. 117. Spacing-to-height ratio = 0.25

Case 1 Meetings room



Clearance height: 3.000 m, Reflection factors: Ceiling 70.0%, Walls 50.0%, Floor 20.0%, Light loss factor: 0.90

Workplane

Surface	Result	Average (Target)	Min	Max	Min/average	Min/max
1 Workplane (Case 1 Meetings room)	Perpendicular illuminance (adaptive) [lx] Height: 0.800 m, Wall zone: 0.500 m	539 (≥ 500)	340	732	0.63	0.46

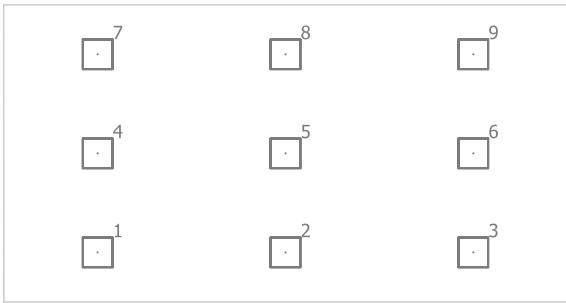
#	Luminaire	Φ(Luminaire) [lm]	Power [W]	Luminous efficacy [lm/W]
9	DIALux - Leaf Slim 35 W 4000 K Prismatic LFS 35 840 R0606 WU D10 H	4380	35.1	124.9
Total via all luminaires		39420	315.9	124.8

Lighting power density: 4.95 W/m² (Floor area of room 63.80 m²),
Lighting power density: 6.58 W/m² = 1.22 W/m²/100 lx (Area of working plane 48.00 m²)

Consumption: 870 kWh/a of maximum 2250 kWh/a

The energy consumption quantities do not take into account light scenes and their dimming levels.

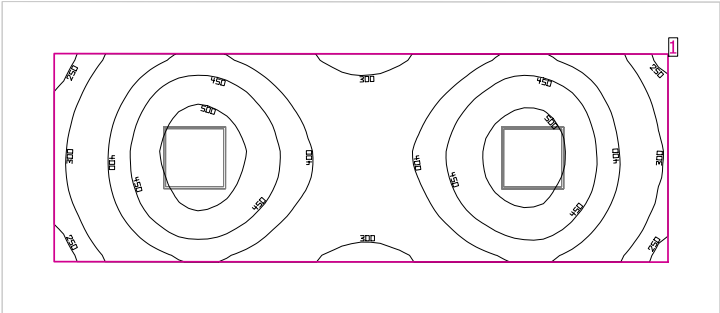
Case 1 Meetings room



DIALux Leaf Slim 35 W 4000 K Prismatic LFS 35 840 R0606 WU D10 H

No.	X [m]	Y [m]	Mounting height [m]	Light loss factor
1	0.547	9.430	3.000	0.90
2	4.215	9.430	3.000	0.90
3	7.883	9.430	3.000	0.90
4	0.547	11.363	3.000	0.90
5	4.215	11.363	3.000	0.90
6	7.883	11.363	3.000	0.90
7	0.547	13.296	3.000	0.90
8	4.215	13.296	3.000	0.90
9	7.883	13.296	3.000	0.90

Case 2 Office



Clearance height: 3.000 m, Reflection factors: Ceiling 70.0%, Walls 50.0%, Floor 20.0%, Light loss factor: 0.90

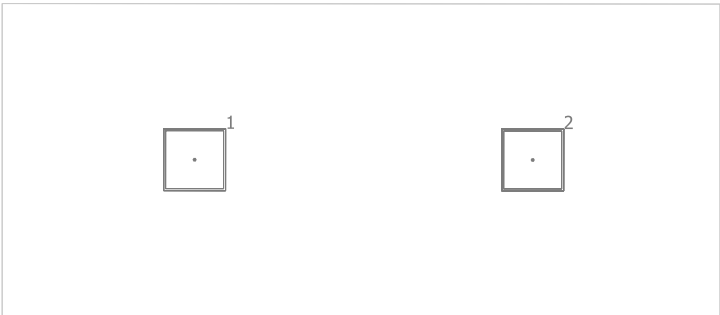
Workplane

Surface	Result	Average (Target)	Min	Max	Min/average	Min/max
1 Workplane (Case 2 Office)	Perpendicular illuminance (adaptive) [lx] Height: 0.800 m, Wall zone: 0.500 m	402 (≥ 400)	223	526	0.55	0.42

#	Luminaire	Φ(Luminaire) [lm]	Power [W]	Luminous efficacy [lm/W]
2	DIALux - Leaf Slim 39 W 4000 K Prismatic LFS 39 840 R0606 WU D10 H	4921	39.3	125.3
Total via all luminaires		9842	78.6	125.2

Lighting power density: 3.80 W/m² (Floor area of room 20.70 m²),
Lighting power density: 6.66 W/m² = 1.66 W/m²/100 lx (Area of working plane 11.80 m²)
Consumption: 220 kWh/a of maximum 750 kWh/a
The energy consumption quantities do not take into account light scenes and their dimming levels.

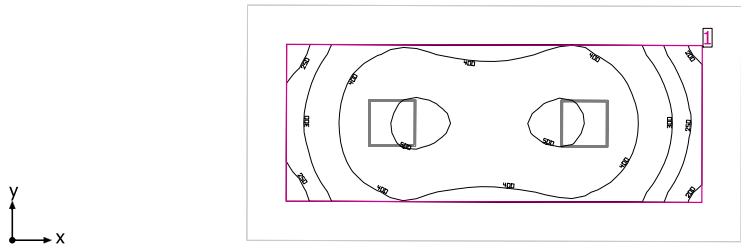
Case 2 Office



DIALux Leaf Slim 39 W 4000 K Prismatic LFS 39 840 R0606 WU D10 H

No.	X [m]	Y [m]	Mounting height [m]	Light loss factor
1	1.851	5.092	3.000	0.90
2	5.101	5.089	3.000	0.90

Case 3 Office



Clearance height: 3.000 m, Reflection factors: Ceiling 70.0%, Walls 50.0%, Floor 20.0%, Light loss factor: 0.90

Workplane

Surface	Result	Average (Target)	Min	Max	Min/average	Min/max
1 Workplane (Case 3 Office)	Perpendicular illuminance (adaptive) [lx] Height: 0.800 m, Wall zone: 0.500 m	402 (≥ 400)	192	510	0.48	0.38

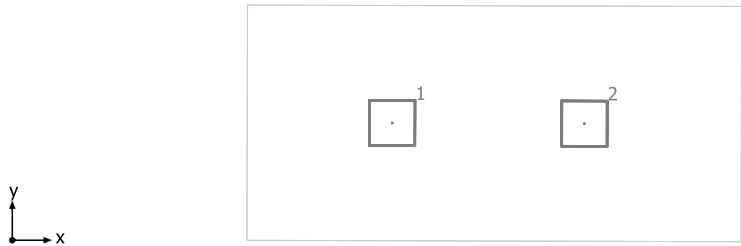
# Luminaire	Φ(Luminaire) [lm]	Power [W]	Luminous efficacy [lm/W]
2 DIALux - Leaf Slim 35 W 4000 K Prismatic LFS 35 840 R0606 WU D10 H	4380	35.1	124.9
Total via all luminaires	8760	70.2	124.8

Lighting power density: 3.71 W/m² (Floor area of room 18.90 m²),
Lighting power density: 6.62 W/m² = 1.65 W/m²/100 lx (Area of working plane 10.60 m²)

Consumption: 190 kWh/a of maximum 700 kWh/a

The energy consumption quantities do not take into account light scenes and their dimming levels.

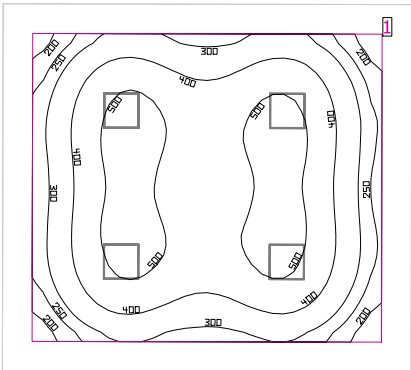
Case 3 Office



DIALux Leaf Slim 35 W 4000 K Prismatic LFS 35 840 R0606 WU D10 H

No.	X [m]	Y [m]	Mounting height [m]	Light loss factor
1	4.845	1.494	3.000	0.90
2	7.295	1.486	3.000	0.90

Case 4 Office



Clearance height: 3.000 m, Reflection factors: Ceiling 70.0%, Walls 50.0%, Floor 20.0%, Light loss factor: 0.90

Workplane

Surface	Result	Average (Target)	Min	Max	Min/average	Min/max
1 Workplane (Case 4 Office)	Perpendicular illuminance (adaptive) [lx] Height: 0.800 m, Wall zone: 0.500 m	404 (≥ 400)	155	536	0.38	0.29

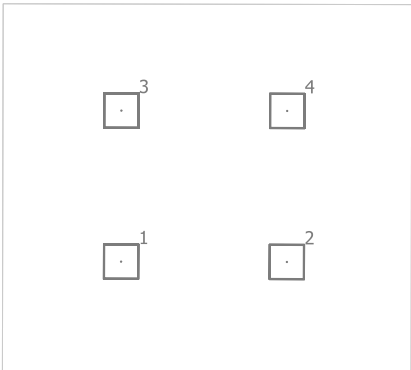
#	Luminaire	Φ(Luminaire) [lm]	Power [W]	Luminous efficacy [lm/W]
4	DIALux - Leaf Slim 35 W 4000 K Prismatic LFS 35 840 R0606 WU D10 H	4380	35.1	124.9
Total via all luminaires		17520	140.4	124.8

Lighting power density: 3.28 W/m² (Floor area of room 42.78 m²),
Lighting power density: 4.58 W/m² = 1.13 W/m²/100 lx (Area of working plane 30.68 m²)

Consumption: 390 kWh/a of maximum 1500 kWh/a

The energy consumption quantities do not take into account light scenes and their dimming levels.

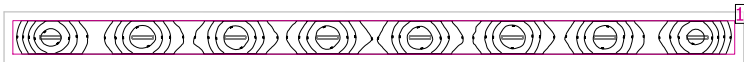
Case 4 Office



DIALux Leaf Slim 35 W 4000 K Prismatic LFS 35 840 R0606 WU D10 H

No.	X [m]	Y [m]	Mounting height [m]	Light loss factor
1	3.313	7.832	3.000	0.90
2	6.113	7.826	3.000	0.90
3	3.319	10.382	3.000	0.90
4	6.119	10.376	3.000	0.90

Case 5 Corridor



y_x

Clearance height: 3.000 m, Reflection factors: Ceiling 70.0%, Walls 50.0%, Floor 20.0%, Light loss factor: 0.90

Workplane

Surface	Result	Average (Target)	Min	Max	Min/average	Min/max
1 Workplane (Case 5 Corridor)	Perpendicular illuminance (adaptive) [lx] Height: 0.000 m, Wall zone: 0.500 m	208 (≥ 200)	130	272	0.63	0.48

# Luminaire	Φ(Luminaire) [lm]	Power [W]	Luminous efficacy [lm/W]
8 DIALux - FERN 38 W 4000K 1200mm FR 38 840 12RP D1N0	5200	38.1	136.5
Total via all luminaires	41600	304.8	136.5

Lighting power density: 2.50 W/m² (Floor area of room 121.80 m²),
Lighting power density: 3.91 W/m² = 1.88 W/m²/100 lx (Area of working plane 77.90 m²)
Consumption: 340 kWh/a of maximum 4300 kWh/a
The energy consumption quantities do not take into account light scenes and their dimming levels.

Case 5 Corridor



y
x

DIALux FERN 38 W 4000K 1200mm FR 38 840 12RP D1N0

No.	X [m]	Y [m]	Mounting height [m]	Light loss factor
1	31.448	5.588	3.000	0.90
2	26.198	5.589	3.000	0.90
3	20.948	5.589	3.000	0.90
4	15.698	5.590	3.000	0.90
5	-5.302	5.593	3.000	0.90
6	-0.052	5.592	3.000	0.90
7	5.198	5.591	3.000	0.90
8	10.448	5.591	3.000	0.90