DIALux

Greenhills Court

DIALux

Preliminary remarks

Notes on planning:

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

Content

Product data sheets

Site 1

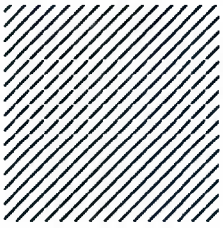
Luminaire list

Φ_{total}	P_{total}	Luminous efficacy
100290 lm	1126.6 W	89.0 lm/W

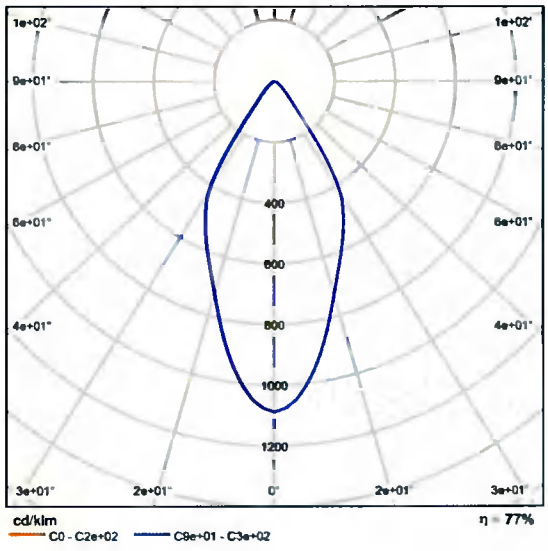
pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
10	LEDSC4	15-9835-Z5-CL	Basic Aluminium ø260mm	14.4 W	1181 lm	82.3 lm/W
6	iGuzzini illuminazione S.p.A	BL29_LM12	iRoll 65 (small-big): Outdoor wall-mounted luminaire - warm white LED - with integrated electronic ballast Vin=120-277V ac - Wide Flood optic - 35W 5000lm - 3000K	41.2 W	3850 lm	93.5 lm/W
12	iGuzzini illuminazione S.p.A	BW77_LB78	iWay: Bollard D=170mm H=610mm Warm White Led with electronic ballast and symmetrical optic - 21W 1750lm - 3000K	24.5 W	840 lm	34.3 lm/W
8	iGuzzini illuminazione S.p.A	E013_C20R	Twilight: Joburg - Pole-mounted system for urban and residential parks and gardens - 30.2W 3560lm - 3000K	30.2 W	3560 lm	117.9 lm/W
6	iGuzzini illuminazione S.p.A	EC53_A67W	Wow: Pole-mounted system – ST1.2 optic - Warm White - Dali - ø46-60-76mm - 33.3W 4470lm - 3000K	33.3 W	4470 lm	134.2 lm/W

Product data sheet

iGuzzini illuminazione S.p.A iRoll 65 (small-big): Outdoor wall-mounted luminaire - warm white LED - with integrated electronic ballast Vin=120-277V ac - Wide Flood optic - 35W 5000lm - 3000K



Article No.	BL29_LM12
P	41.2 W
Φ_{Lamp}	5000 lm
$\Phi_{Luminaire}$	3850 lm
η	77.01 %
Luminous efficacy	93.5 lm/W
CCT	3000 K
CRI	80



Polar LDC

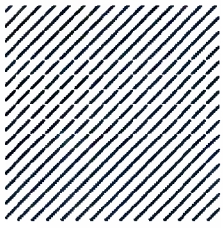
Glare evaluation according to UGR

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	19.6	20.6	20.0	20.8	21.0	19.8	20.6	20.0	20.8	21.0
	3H	19.7	20.4	19.9	20.6	20.9	19.7	20.4	19.9	20.6	20.9
	4H	19.6	20.3	19.9	20.5	20.8	19.6	20.3	19.9	20.5	20.8
	6H	19.5	20.2	19.8	20.4	20.7	19.5	20.2	19.8	20.4	20.7
	8H	19.5	20.1	19.8	20.4	20.7	19.5	20.1	19.8	20.4	20.7
	12H	19.4	20.0	19.8	20.3	20.6	19.4	20.0	19.8	20.3	20.6
4H	2H	19.6	20.3	19.9	20.5	20.8	19.6	20.3	19.9	20.5	20.8
	3H	19.5	20.1	19.8	20.4	20.7	19.5	20.1	19.8	20.4	20.7
	4H	19.4	20.0	19.8	20.3	20.6	19.4	20.0	19.8	20.3	20.6
	6H	19.3	19.8	19.7	20.2	20.6	19.3	19.8	19.7	20.2	20.6
	8H	19.3	19.7	19.7	20.1	20.5	19.3	19.7	19.7	20.1	20.5
	12H	19.3	19.6	19.7	20.0	20.5	19.3	19.6	19.7	20.0	20.5
8H	4H	19.3	19.7	19.7	20.1	20.5	19.3	19.7	19.7	20.1	20.5
	8H	19.2	19.6	19.7	20.0	20.4	19.2	19.6	19.7	20.0	20.4
	8H	19.2	19.5	19.7	19.9	20.4	19.2	19.5	19.7	19.9	20.4
	12H	19.1	19.4	19.6	19.8	20.3	19.1	19.4	19.6	19.8	20.3
12H	4H	19.3	19.6	19.7	20.0	20.5	19.3	19.6	19.7	20.0	20.5
	6H	19.2	19.5	19.7	19.9	20.4	19.2	19.5	19.7	19.9	20.4
	8H	19.1	19.4	19.6	19.8	20.3	19.1	19.4	19.6	19.8	20.3
Variation of the observer position for the luminaire distances S											
S = 1.0H		+5.1 / -6.7					+5.1 / -6.7				
S = 1.5H		+7.9 / -9.3					+7.9 / -9.3				
S = 2.0H		+9.8 / -11.6					+9.8 / -11.6				
Standard table		BK00					BK00				
Correction Summand		0.3					0.3				
Corrected glare indices referring to 5000lm Total luminous flux											

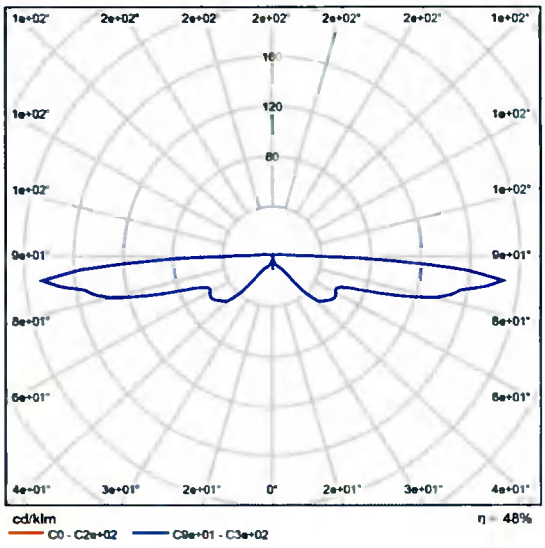
UGR diagram (SHR: 0.25)

Product data sheet

iGuzzini illuminazione S.p.A iWay: Bollard D=170mm H=610mm Warm White Led with electronic ballast and symmetrical optic - 21W 1750lm - 3000K



Article No.	BW77_LB78
P	24.5 W
Φ_{Lamp}	1750 lm
$\Phi_{Luminaire}$	840 lm
η	48.00 %
Luminous efficacy	34.3 lm/W
CCT	3000 K
CRI	80



Polar LDC

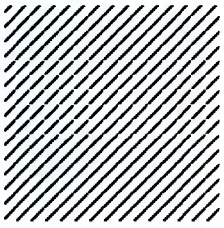
Glare evaluation according to UGR

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	17.1	19.0	17.5	19.4	19.9	17.1	19.0	17.5	19.4	19.9
	3H	21.3	23.1	21.7	23.5	24.0	21.3	23.1	21.7	23.5	24.0
	4H	24.8	26.6	25.3	27.0	27.5	24.8	26.6	25.3	27.0	27.5
	6H	28.2	29.8	28.6	30.3	30.8	28.2	29.8	28.6	30.3	30.8
	8H	29.7	31.4	30.2	31.9	32.4	29.7	31.4	30.2	31.9	32.4
	12H	31.2	32.8	31.7	33.3	33.8	31.2	32.8	31.7	33.3	33.8
4H	2H	18.3	20.0	18.8	20.5	21.0	18.3	20.0	18.8	20.5	21.0
	3H	23.0	24.8	23.5	25.1	25.6	23.0	24.8	23.5	25.1	25.6
	4H	26.6	28.1	27.1	28.6	29.1	26.6	28.1	27.1	28.6	29.1
	6H	29.9	31.3	30.5	31.9	32.4	29.9	31.3	30.5	31.9	32.4
	8H	31.6	32.9	32.1	33.4	34.0	31.6	32.9	32.1	33.4	34.0
	12H	33.1	34.3	33.6	34.9	35.5	33.1	34.3	33.6	34.9	35.5
8H	4H	27.8	29.2	28.4	29.7	30.3	27.8	29.2	28.4	29.7	30.3
	6H	31.3	32.5	31.8	33.0	33.7	31.3	32.5	31.8	33.0	33.7
	8H	33.0	34.1	33.6	34.7	35.4	33.0	34.1	33.6	34.7	35.4
	12H	34.7	35.7	35.3	36.3	37.0	34.7	35.7	35.3	36.3	37.0
12H	4H	28.2	29.5	28.8	30.0	30.7	28.2	29.5	28.8	30.0	30.7
	8H	31.7	32.8	32.3	33.4	34.1	31.7	32.8	32.3	33.4	34.1
	8H	33.6	34.6	34.2	35.2	35.9	33.6	34.6	34.2	35.2	35.9
Variation of the observer position for the luminaire distances S											
S = 1.0H		+0.1 / -0.1					+0.1 / -0.1				
S = 1.5H		+0.3 / -0.3					+0.3 / -0.3				
S = 2.0H		+0.4 / -0.5					+0.4 / -0.5				
Standard table		--					--				
Correction Summand		--					--				
Corrected glare indices referring to 2e+03lm Total luminous flux											

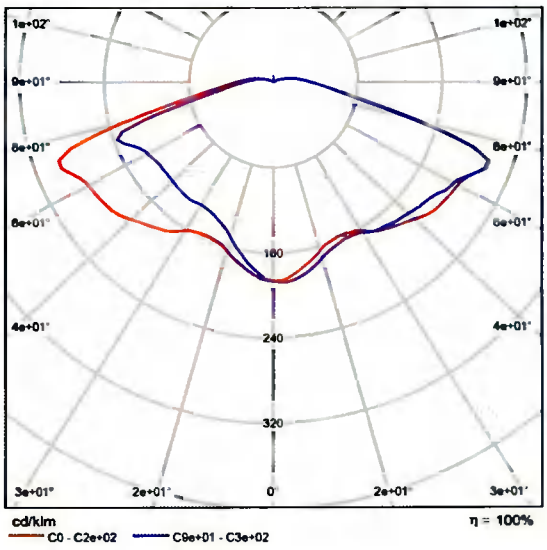
UGR diagram (SHR: 0.25)

Product data sheet

iGuzzini illuminazione S.p.A Twilight: Joburg - Pole-mounted system for urban and residential parks and gardens - 30.2W 3560lm - 3000K



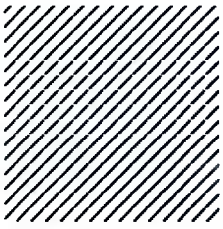
Article No.	E013_C20R
P	30.2 W
Φ_{Lamp}	3560 lm
$\Phi_{Luminaire}$	3560 lm
η	100.00 %
Luminous efficacy	117.9 lm/W
CCT	3000 K
CRI	80



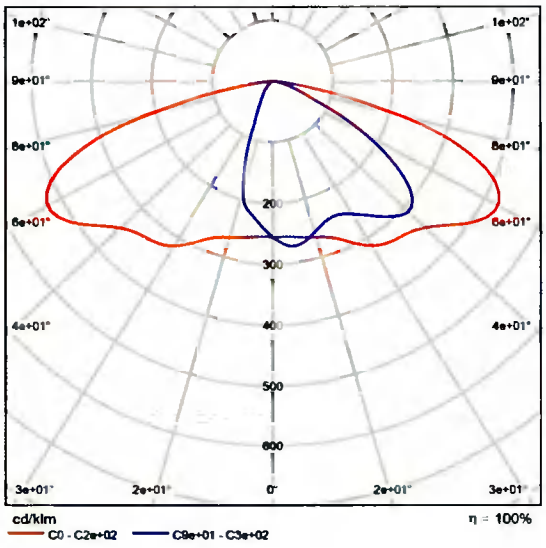
Polar LDC

Product data sheet

iGuzzini illuminazione S.p.A Wow: Pole-mounted system – ST1.2 optic - Warm White - Dali - ø46-60-76mm - 33.3W 4470lm - 3000K



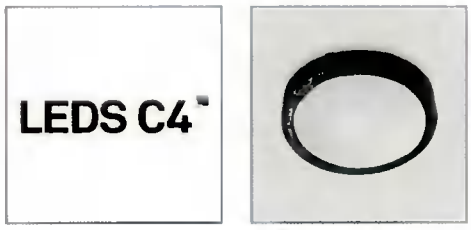
Article No.	EC53_A67W
P	33.3 W
Φ_{Lamp}	4470 lm
$\Phi_{Luminaire}$	4470 lm
η	100.00 %
Luminous efficacy	134.2 lm/W
CCT	3000 K
CRI	60



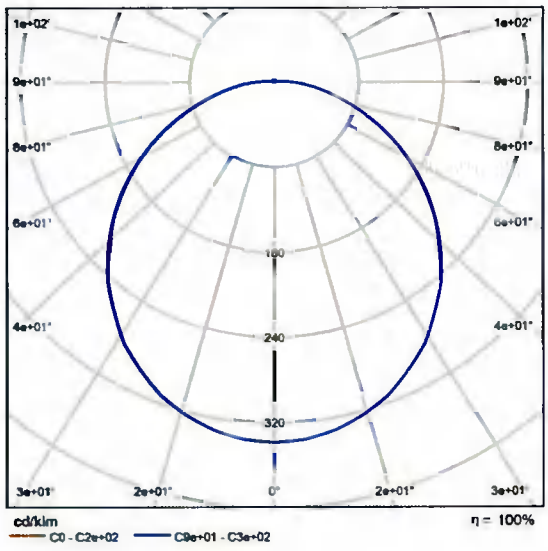
Polar LDC

Product data sheet

LEDSC4 Basic Aluminium ø260mm



Article No.	15-9835-Z5-CL
P	14.4 W
Φ_{Lamp}	1182 lm
$\Phi_{Luminaire}$	1181 lm
η	99.89 %
Luminous efficacy	82.3 lm/W
CCT	3000 K
CRI	80



Polar LDC

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	19.6	21.0	20.0	21.3	21.5	19.6	21.0	20.0	21.3	21.6
	3H	21.1	22.4	21.5	22.7	23.0	21.1	22.4	21.5	22.7	23.0
	4H	21.7	22.9	22.1	23.2	23.6	21.8	22.9	22.1	23.2	23.6
	6H	22.2	23.3	22.6	23.7	24.0	22.3	23.4	22.6	23.7	24.0
	8H	22.4	23.5	22.8	23.8	24.2	22.5	23.5	22.8	23.9	24.2
	12H	22.6	23.6	23.0	24.0	24.3	22.6	23.6	23.0	24.0	24.4
4H	2H	20.3	21.4	20.6	21.7	22.1	20.3	21.4	20.8	21.8	22.1
	3H	21.9	22.9	22.3	23.3	23.7	22.0	23.0	22.4	23.3	23.7
	4H	22.7	23.6	23.1	24.0	24.4	22.7	23.6	23.1	24.0	24.4
	6H	23.3	24.1	23.8	24.5	25.0	23.3	24.1	23.8	24.5	25.0
	8H	23.6	24.3	24.0	24.7	25.2	23.6	24.3	24.1	24.8	25.2
	12H	23.8	24.5	24.3	24.9	25.4	23.8	24.5	24.3	24.9	25.4
8H	4H	23.0	23.7	23.4	24.1	24.6	23.0	23.7	23.4	24.1	24.6
	6H	23.7	24.4	24.2	24.8	25.3	23.8	24.4	24.3	24.8	25.3
	8H	24.1	24.6	24.6	25.1	25.7	24.1	24.7	24.6	25.2	25.7
	12H	24.4	24.9	25.0	25.4	26.0	24.5	24.9	25.0	25.4	26.0
12H	4H	23.0	23.7	23.5	24.1	24.6	23.0	23.7	23.5	24.1	24.6
	6H	23.8	24.4	24.3	24.8	25.4	23.8	24.4	24.3	24.9	25.4
	8H	24.2	24.7	24.7	25.2	25.7	24.2	24.7	24.8	25.2	25.8
Variation of the observer position for the luminaire distances S											
S = 1.0H		+0.1 / -0.1					+0.1 / -0.1				
S = 1.3H		+0.2 / -0.3					+0.2 / -0.3				
S = 2.0H		+0.4 / -0.6					+0.4 / -0.6				
Standard table		BK06					BK06				
Correction Summand		7.0					7.1				
Corrected glare indices referring to 1182lm Total luminous flux											

UGR diagram (SHR: 0.25)

LEDS C4
Basic Aluminium ø260mm
15-9835-Z5-CLV1

Plafon de uso exterior para iluminar frontalmente.
Material estructura: Aluminio, Policarbonato + ABS. Acabado estructura: Gris urbano. Material difusor: Policarbonato. Acabado difusor: Opal. Protección contra los rayos ultravioleta. Garantía: 2 Años.

Peso neto del producto (Kg): 0.9
Anchura o diámetro del producto (mm): 260
Salida del producto (mm): 90

Clase 1. Prueba hilo incandescente: 850. IP: IP65. IK: IK10. LED. Nº de portalámparas o Leds: 39. Marca del LED: SUNPU. Potencia máxima de la fuente de luz: 14.5W. Temperatura de color: 3000K. Índice de reproducción cromática: 80. Steps Mac Adam: 3. Diámetro máximo de la bombilla que admite la luminaria: 50.000h L80B20. UGR: 19.5. Riesgo fotobiológico: RG0. Flujo real (lm): 1182. Flujo nominal (lm): 1340. Lm/W reales: 68. Rango de voltaje/frecuencia: 100-240/50-60Hz. Voltaje: 3. Equipo incluido: Si,

DIALux

Product data sheet

LEDSC4 Basic Aluminium ø260mm

electrónico. Equipo multivoltaje incluido. Potencia total: 17.4. Factor de potencia: 0.90. Equipo regulable incluido: ON-OFF.

Site 1

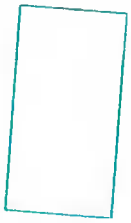
Luminaire list

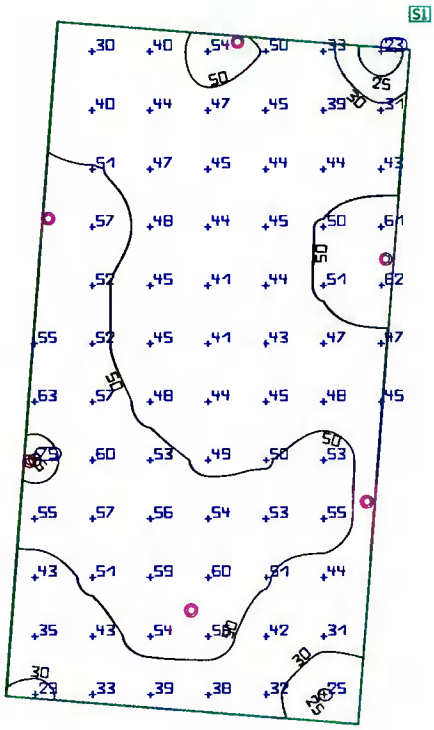
Φ_{total}	P_{total}	Luminous efficacy
100290 lm	1126.6 W	89.0 lm/W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
10	LEDSC4	15-9835-Z5-CL	Basic Aluminium ø260mm	14.4 W	1181 lm	82.3 lm/W
6	iGuzzini illuminazione S.p.A	BL29_LM12	iRoll 65 (small-big): Outdoor wall-mounted luminaire - warm white LED - with integrated electronic ballast Vin=120-277V ac - Wide Flood optic - 35W 5000lm - 3000K	41.2 W	3850 lm	93.5 lm/W
12	iGuzzini illuminazione S.p.A	BW77_LB78	iWay: Bollard D=170mm H=610mm Warm White Led with electronic ballast and symmetrical optic - 21W 1750lm - 3000K	24.5 W	840 lm	34.3 lm/W
8	iGuzzini illuminazione S.p.A	E013_C20R	Twilight: Joburg - Pole-mounted system for urban and residential parks and gardens - 30.2W 3560lm - 3000K	30.2 W	3560 lm	117.9 lm/W
6	iGuzzini illuminazione S.p.A	EC53_A67W	Wow: Pole-mounted system – ST1.2 optic - Warm White - Dali - ø46-60-76mm - 33.3W 4470lm - 3000K	33.3 W	4470 lm	134.2 lm/W

Site 1

Courtyard open space



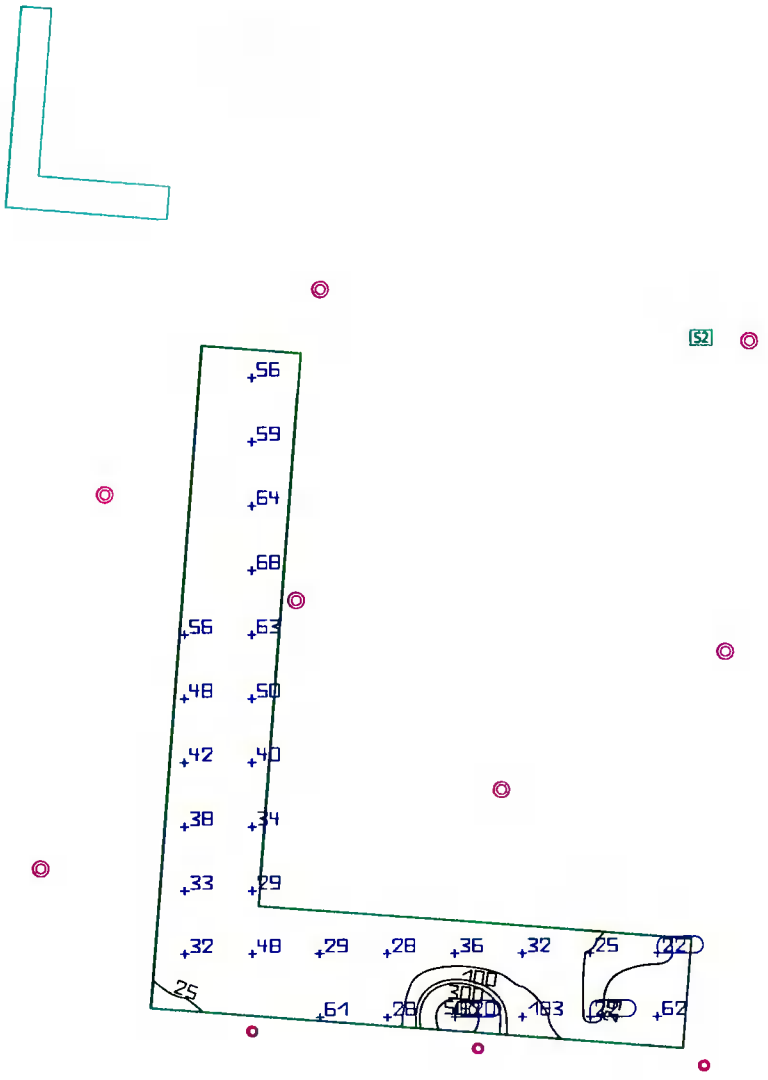


Properties	Ē	E_{min}	E_{max}	g_1	g_2	Index
Courtyard open space Perpendicular illuminance Height: 0.000 m	46.9 lx	22.8 lx	75.5 lx	0.49	0.30	S1

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

Site 1

Courtyard stairs and ramp

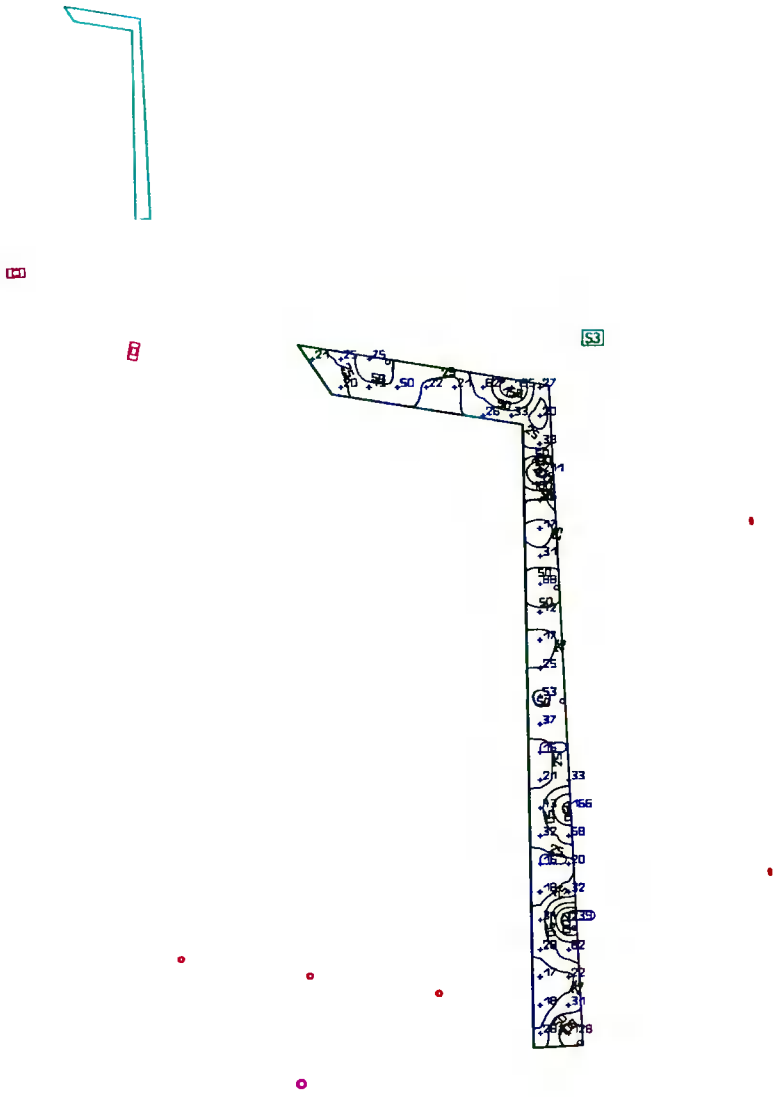


Properties	Ē	E_{min}	E_{max}	g_1	g_2	Index
Courtyard stairs and ramp Perpendicular illuminance Height: 0.000 m	68.2 lx	21.8 lx	620 lx	0.32	0.035	S2

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

Site 1

Bollard pathway

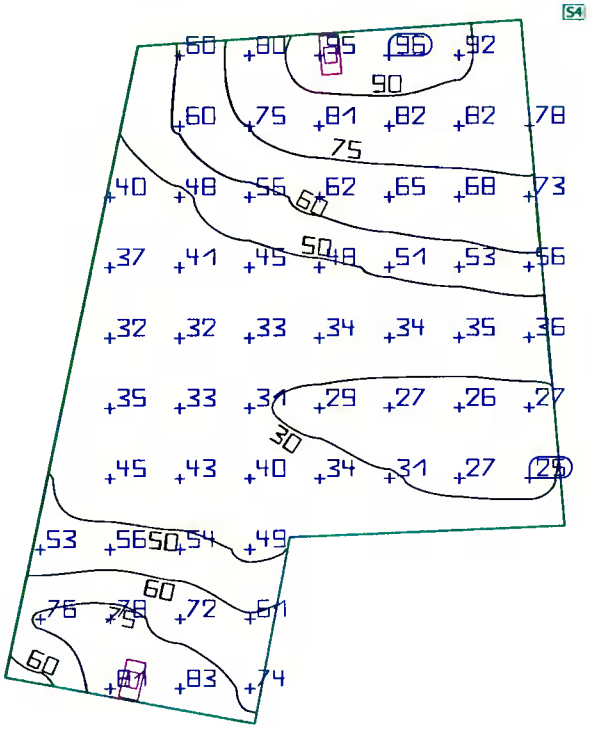


Properties	Ē	E_{min}	E_{max}	g_1	g_2	Index
Bollard pathway Perpendicular illuminance Height: 0.000 m	50.2 lx	15.6 lx	239 lx	0.31	0.065	S3

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

Site 1

Site Entrance North

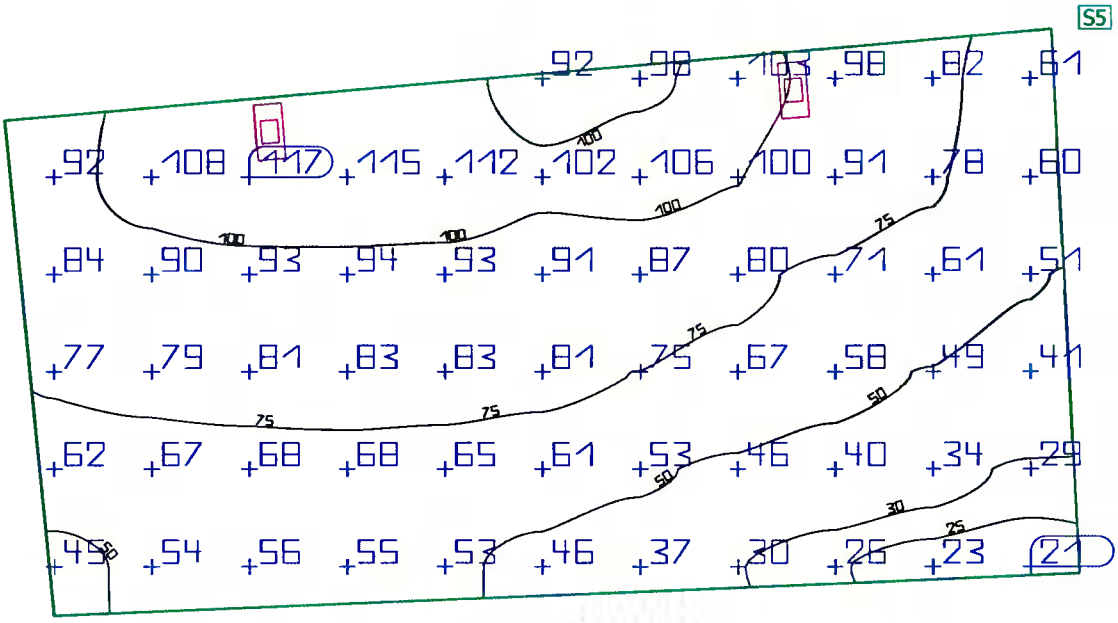


Properties	Ē	E_{min}	E_{max}	g_1	g_2	Index
Site Entrance North Perpendicular illuminance Height: 0.000 m	53.5 lx	25.0 lx	96.1 lx	0.47	0.26	S4

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

Site 1

Courtyard open space North

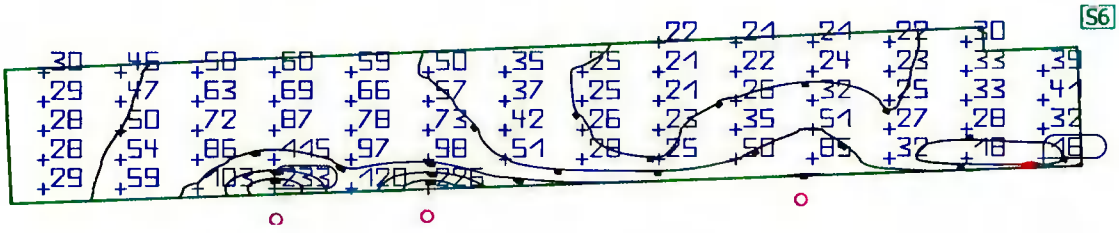


Properties	Ē	E_{min}	E_{max}	g_1	g_2	Index
Courtyard open space North Perpendicular illuminance Height: 0.000 m	70.9 lx	21.3 lx	117 lx	0.30	0.18	S5

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

Site 1

F-4 Entry

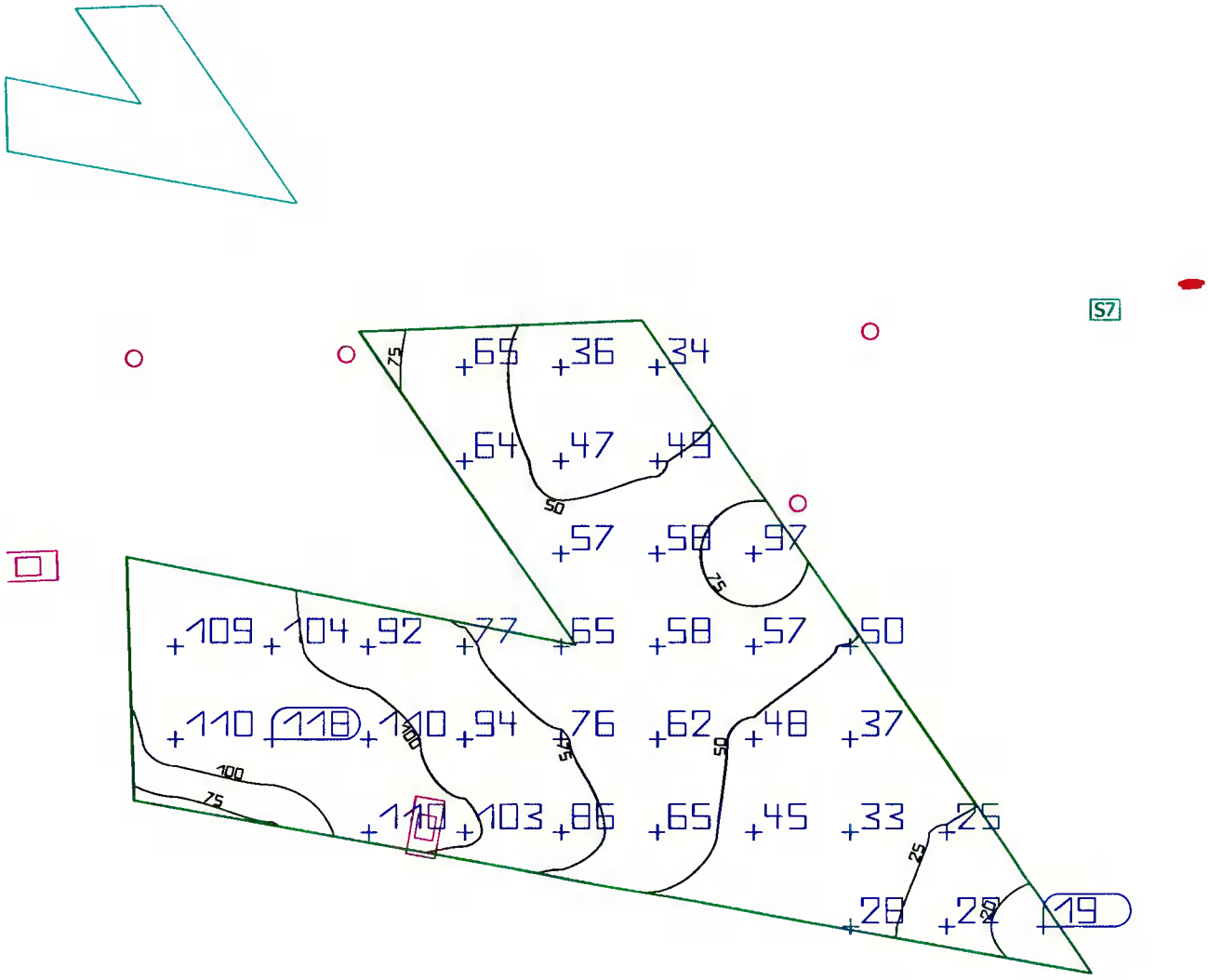


Properties	Ē	E_{min}	E_{max}	g_1	g_2	Index
F-4 Entry Perpendicular illuminance Height: 0.000 m	50.9 lx	15.8 lx	233 lx	0.31	0.068	S6

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

Site 1

Generator pathway

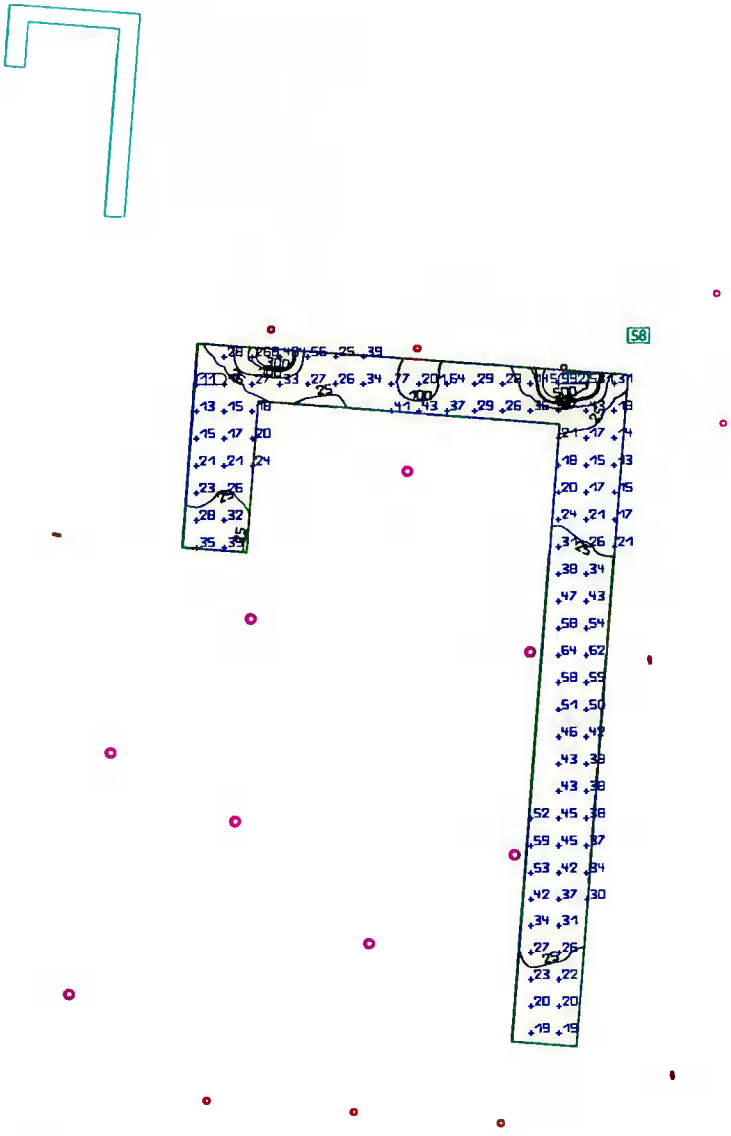


Properties	Ē	E_{min}	E_{max}	g_1	g_2	Index
Generator pathway Perpendicular illuminance Height: 0.000 m	66.1 lx	18.8 lx	118 lx	0.28	0.16	S7

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

Site 1

Courtyard Path

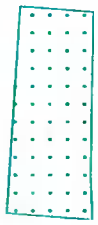


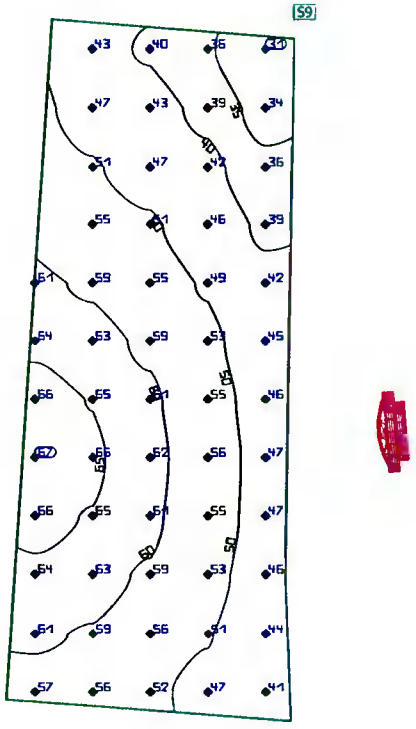
Properties	Ē	E_{min}	E_{max}	g_1	g_2	Index
Courtyard Path Perpendicular illuminance Height: 0.000 m	57.2 lx	11.3 lx	992 lx	0.20	0.011	S8

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

Site 1

F-2 entry stairs



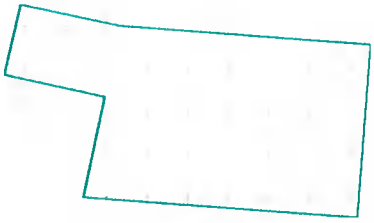


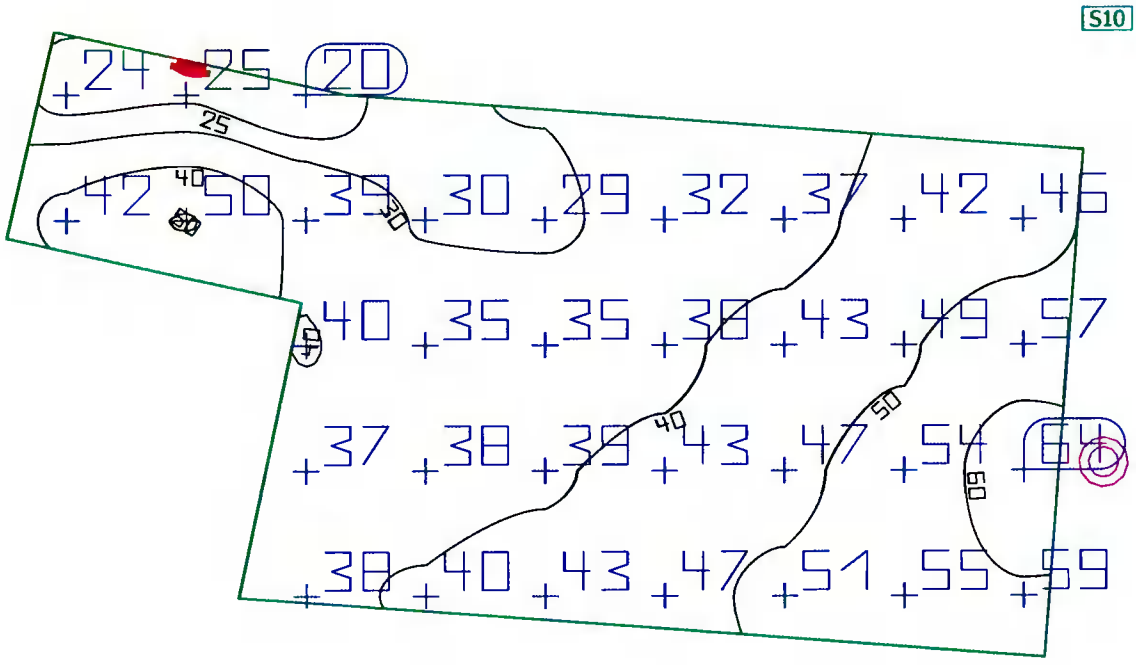
Properties	Ē	E_{min}	E_{max}	g_1	g_2	Index
F-2 entry stairs Perpendicular illuminance Height: 0.000 m	52.2 lx	31.4 lx	67.1 lx	0.60	0.47	S9

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

Site 1

Block B Entrance



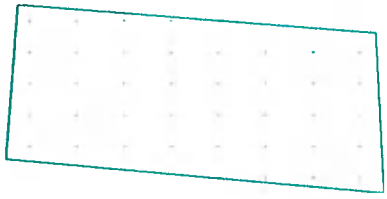


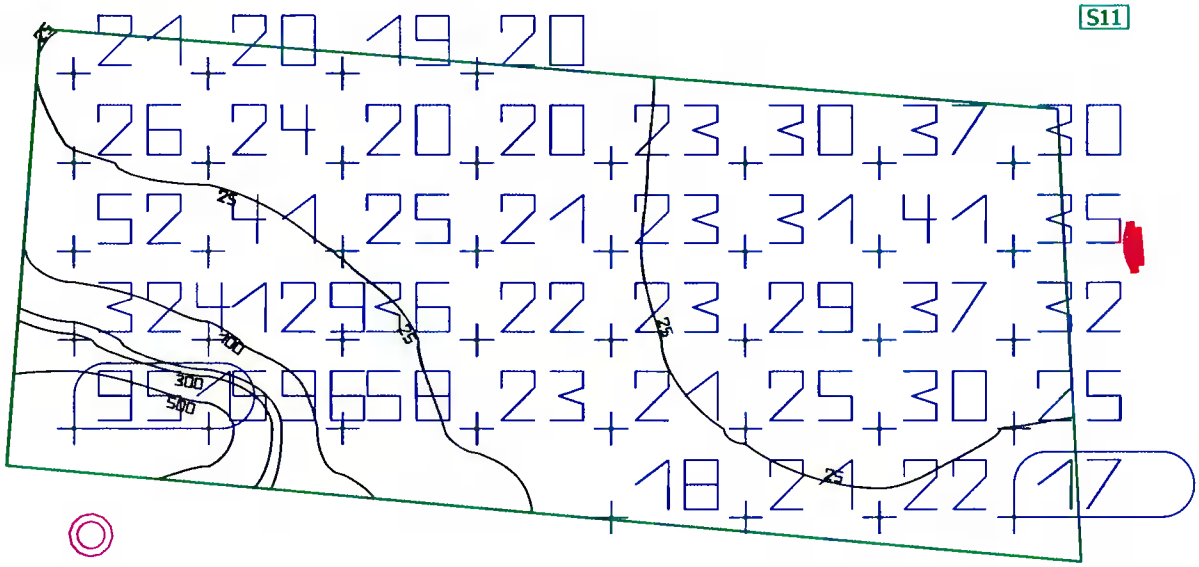
Properties	Ē	E_{min}	E_{max}	g_1	g_2	Index
Block B Entrance Perpendicular illuminance Height: 0.000 m	41.6 lx	20.1 lx	64.1 lx	0.48	0.31	S10

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

Site 1

Block A





Properties	Ē	E_{min}	E_{max}	g_1	g_2	Index
Block A Perpendicular illuminance Height: 0.000 m	75.0 lx	17.5 lx	951 lx	0.23	0.018	S11

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

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 color temperature) Body temperature of a thermal radiator that serves to describe its light color. Unit: Kelvin [K]. The lesser the numerical value the redder; the greater the numerical value the bluer the light color. The color temperature of gas-discharge lamps and semi-conductors are termed "correlated color temperature" in contrast to the color temperature of thermal radiators. Allocation of the light colors to the color temperature ranges acc. to EN 12464-1: Light color - color 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).
CRI	(Engl. color rendering index) Designation for the color rendering index of a luminaire or a lamp acc. to DIN 6169: 1976 or CIE 13.3: 1995. The general color 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 colors (see DIN 6169 or CIE 1974) to a reference light source.

D

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: %

Glossary

Daylight quotient effective area	A calculation surface within which the daylight quotient is calculated.

E

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: %

G

g1	Often also Uo (Engl. overall uniformity) Designates the overall uniformity of the illuminance on a surface. It is the quotient from Emin to Ē and is required, for instance, in standards for illumination of workstations.
g2	Actually it designates the "non-uniformity" of the illuminance on a surface. It is the quotient of Emin to Emax 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 Eh.
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.

Glossary

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 Ev.

L

LENI	(Engl. lighting energy numeric indicator) Lighting energy numeric indicator acc. to EN 15193 Unit: kWh/m² year
Light loss factor	See MF
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 meter Abbreviation: cd/m² 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).

Glossary

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

M

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

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 color of the surface.

Glossary

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.

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 that is not taken into account for the calculation.
Workplane	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.