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abet focus

Z5 Zoom



0215

Variable lens technology for individual tasks



Focus α 9°
Brilliant Spot focusses attention on the essential



Accent lighting $14^\circ < \alpha < 25^\circ$
Narrow beam to direction of the gaze to the object



Accent lighting $24^\circ < \alpha < 40^\circ$
Objects and pictures are purposefully highlighted



Ambient lighting $35^\circ < \alpha < 60^\circ$
Absolutely uniform illumination, UGR < 19

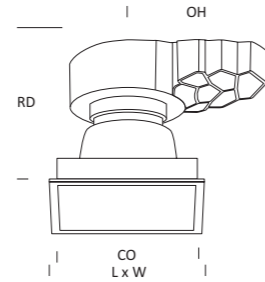


new 9°

Individual and focusable

The centrepiece of the enhanced photometric system is the variable focusing unit. Comparable to a camera lens, the unit is infinitely variable to achieve various beam spread angles, even retrospectively. In this way, illumination of objects and surfaces can be designed individually and with maximum precision.





Precise Lens Technology

System photometric data

LED	α°	Llm	Llm/W max	RD mm	kg	Article number
CRI > 90						
Q10, CO 120 x 120 mm, L x W 127 x 127 mm, OH 115 mm						
18 W	24-40	400-850	42	150	0.9	AF2101002-33-30
18 W	35-60	500-790	40	150	0.9	AF2101003-33-30
25 W	24-40	580-1230	44	150	0.9	AF2101005-33-30
25 W	35-60	720-1160	41	150	0.9	AF2101006-33-30
38 W	24-40	770-1620	39	200	0.9	AF2101008-33-30
38 W	35-60	980-1570	37	200	0.9	AF2101009-33-30
50 W	24-40	1000-2120	39	200	0.9	AF2101011-33-30
50 W	35-60	1260-2020	37	200	0.9	AF2101012-33-30

Q15, CO 170 x 170 mm, L x W 177 x 177 mm, OH 115 mm

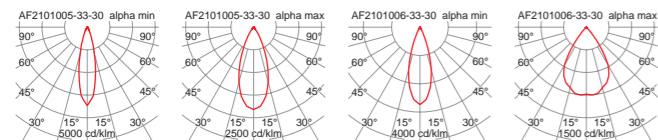
18 W	24-40	400-850	42	150	1.1	AF2101102-33-30
18 W	35-60	500-790	40	150	1.1	AF2101103-33-30
25 W	24-40	580-1230	44	150	1.1	AF2101105-33-30
25 W	35-60	720-1160	41	150	1.1	AF2101106-33-30
38 W	24-40	770-1620	39	200	1.1	AF2101108-33-30
38 W	35-60	980-1570	37	200	1.1	AF2101109-33-30
50 W	24-40	1000-2120	39	200	1.1	AF2101111-33-30
50 W	35-60	1260-2020	37	200	1.1	AF2101112-33-30

Use index -30 (3000K) or -40 (4000K), photometric data in the "products" on www.wila.com

LED gear boxes	Article number		without loop-in function		with loop-in function	
	standard	DALI	standard	DALI	standard	DALI
18 W	83761	83761-DD	83761-DV	83761-DD-DV		
25 W	83762	83762-DD	83762-DV	83762-DD-DV		
38 W	83766	83766-DD	83766-DV	83766-DD-DV		
50 W	83767	83767-DD	83767-DV	83767-DD-DV		

Concrete mounting boxes	Article number
Q10, 18/25 W	88084Q10
Q10, 38/50 W	88088Q10
Q15, 18/25 W	88084Q15
Q15, 38/50 W	88088Q15

Details on operation and assembly on page 14.



AF2101005-33-30 alpha min			AF2101005-33-30 alpha max			AF2101006-33-30 alpha min			AF2101006-33-30 alpha max		
H [m]	ϕ [m]	E [lx]	H [m]	ϕ [m]	E [lx]	H [m]	ϕ [m]	E [lx]	H [m]	ϕ [m]	E [lx]
0.5	0.41	6285	0.5	0.36	6705	0.5	0.42	6059	0.5	0.44	2931
1.0	0.49	1571	1.0	0.72	1676	1.0	0.58	1515	1.0	1.28	733
1.5	0.64	698	1.5	1.08	745	1.5	0.88	673	1.5	1.93	326
2.0	0.85	393	2.0	1.44	419	2.0	1.17	379	2.0	2.57	183
2.5	1.06	251	2.5	1.80	268	2.5	1.46	242	2.5	3.21	117

Lighting technology

Lens system with variable half-peak divergence angle α
 Colour Rendering Index CRI > 90
 Luminaire luminous flux 400-2120 Llm
 UGR < 19
 Colour temperature 3000, 4000K
 50,000 h lifetime (L70)
 Mirror reflector made of aluminium, high polished

Luminaire housing

Heat sink made of die-cast aluminium
 Cover frame white, RAL 9016

Operating and assembly technology

LED gear box to be ordered separately
 Mounting for ceiling thicknesses 1-25 mm

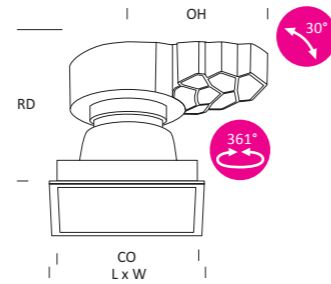


2013 **reddot design award winner 2013**



Chain System

Because of the modular chain frame, luminaires can be mounted individually or arranged in groups. This feature makes the combination of lighting with other building functions in just one visible housing possible, e.g. loudspeakers, video cameras or air conditioning elements. This results in lower installation and maintenance costs and in a structured, tidy ceiling appearance.



Precise Lens Technology

System photometric data						
LED	α°	Llm	Llm/W max	RD mm	kg	Article number

CRI > 90						
Q10, CO 120 x 120 mm, L x W 127 x 127 mm, OH 115 mm						
18 W	9	980	49	200	1.0	AF2103020-33-30
18 W	14-25	290-610	31	200	1.0	AF2103001-33-30
18 W	24-40	400-760	38	200	1.0	AF2103002-33-30
25 W	24-40	590-1110	40	200	1.0	AF2103005-33-30
38 W	24-40	770-1470	35	200	1.0	AF2103008-33-30
50 W	24-40	990-1990	36	200	1.0	AF2103011-33-30

Use index -30 (3000K) or -40 (4000K), photometric data in the "products" on www.wila.com

LED gear box	Article number		without loop-in function		with loop-in function	
	standard	DALI	standard	DALI	standard	DALI
18 W	83761	83761-DD	83761-DV	83761-DD-DV		
25 W	83762	83762-DD	83762-DV	83762-DD-DV		
38 W	83766	83766-DD	83766-DV	83766-DD-DV		
50 W	83767	83767-DD	83767-DV	83767-DD-DV		

Concrete mounting boxes	Article number
Q10, 18/25 W	88084Q10
Q10, 38/50 W	88088Q10

Lighting technology

Lens system with variable half-peak divergence angle α
 Luminaire body 361° rotatable and 30° tiltable
 Colour Rendering Index CRI > 90
 Luminaire luminous flux 290-1990 Llm
 UGR < 19
 Colour temperature 3000, 4000K
 50,000 h lifetime (L70)
 Mirror reflector made of aluminium, high polished

Luminaire housing

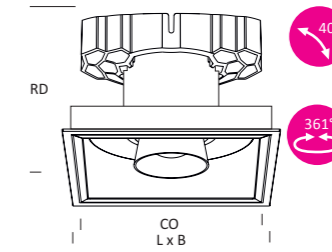
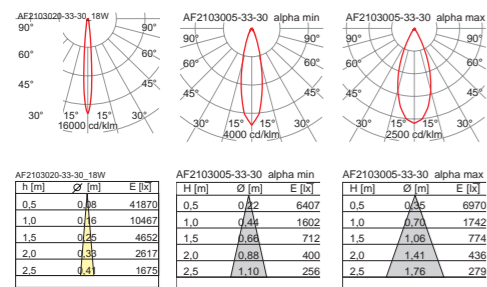
Heat sink made of die-cast aluminium
 Cover frame white, RAL 9016

Operating and assembly technology

LED gear box to be ordered separately
 Mounting for ceiling thicknesses 1-25 mm



Details on operation and assembly on page 14.



Precise Lens Technology

System photometric data						
LED	α°	Llm	Llm/W max	RD mm	kg	Article number

CRI > 90						
Q15, CO 170 x 170 mm, L x W 177 x 177 mm						
18 W	9	980	49	180	1.3	AF2104120-31-30
18 W	14-25	300-640	32	160	1.3	AF2104101-31-30
18 W	24-40	410-790	40	160	1.3	AF2104102-31-30
25 W	24-40	610-1150	41	160	1.3	AF2104105-31-30
38 W	24-40	790-1530	36	160	1.3	AF2104108-31-30
50 W	24-40	1020-2070	38	160	1.3	AF2104111-31-30

Use index -30 (3000K) or -40 (4000K), photometric data in the "products" on www.wila.com

LED gear box	Article number		without loop-in function		with loop-in function	
	standard	DALI	standard	DALI	standard	DALI
18 W	83761	83761-DD	83761-DV	83761-DD-DV		
25 W	83762	83762-DD	83762-DV	83762-DD-DV		
38 W	83766	83766-DD	83766-DV	83766-DD-DV		
50 W	83767	83767-DD	83767-DV	83767-DD-DV		

Concrete mounting boxes	Article number
Q15, 18/25 W	88084Q15
Q15, 38/50 W	88088Q15

Lighting technology

Lens system with variable half-peak divergence angle α
 Luminaire body 361° rotatable and 40° tiltable
 Colour Rendering Index CRI > 90
 Luminaire luminous flux 300-2070 Llm
 UGR < 19
 Colour temperature 3000, 4000K
 50,000 h lifetime (L70)
 Mirror reflector made of aluminium, high polished

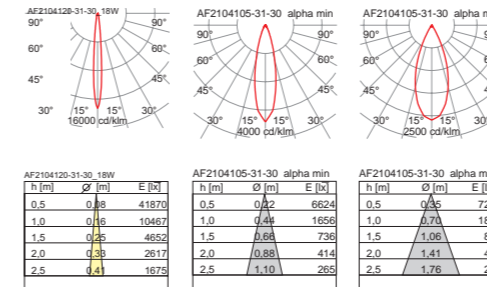
Luminaire housing

Heat sink made of die-cast aluminium
 Cover frame white, RAL 9016

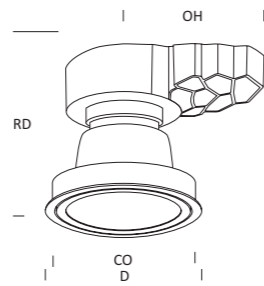
Operating and assembly technology

LED gear box to be ordered separately
 Mounting for ceiling thicknesses 1-25 mm

Details on operation and assembly on page 14.



Colour version black on request



Precise Lens Technology

System photometric data

LED	α°	Llm	Llm/W max	RD mm	kg	Article number
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CRI > 90

R10, CO 120 mm, D 127 mm, OH 115 mm

18 W	24-40	400-830	42	150	0.9	AF1101002-33-30
18 W	35-60	500-800	40	150	0.9	AF1101003-33-30
25 W	24-40	580-1190	45	150	0.9	AF1101005-33-30
25 W	35-60	730-1160	41	150	0.9	AF1101006-33-30
38 W	24-40	740-1530	36	200	0.9	AF1101008-33-30
38 W	35-60	950-1510	36	200	0.9	AF1101009-33-30
50 W	24-40	1010-2120	39	200	0.9	AF1101011-33-30
50 W	35-60	1240-1980	36	200	0.9	AF1101012-33-30

R15, CO 165 mm, D 172 mm, OH 115 mm

18 W	24-40	400-830	42	150	1.1	AF1101102-33-30
18 W	35-60	500-800	40	150	1.1	AF1101103-33-30
25 W	24-40	580-1190	45	150	1.1	AF1101105-33-30
25 W	35-60	730-1160	41	150	1.1	AF1101106-33-30
38 W	24-40	740-1530	36	200	1.1	AF1101108-33-30
38 W	35-60	950-1510	36	200	1.1	AF1101109-33-30
50 W	24-40	1010-2120	39	200	1.1	AF1101111-33-30
50 W	35-60	1240-1980	36	200	1.1	AF1101112-33-30

Use index -30 (3000K) or -40 (4000K), photometric data in the "products" on www.wila.com

Lighting technology

Lens system with variable half-peak divergence angle α

Colour Rendering Index CRI > 90

Luminaire luminous flux 400-2120 Llm

UGR < 19

Colour temperature 3000, 4000K

50,000 h lifetime (L70)

Mirror reflector made of aluminium, high polished

Luminaire housing

Heat sink made of die-cast aluminium

Cover ring white, RAL 9016

Operating and assembly technology

LED gear box to be ordered separately

Mounting for ceiling thicknesses 1-25 mm

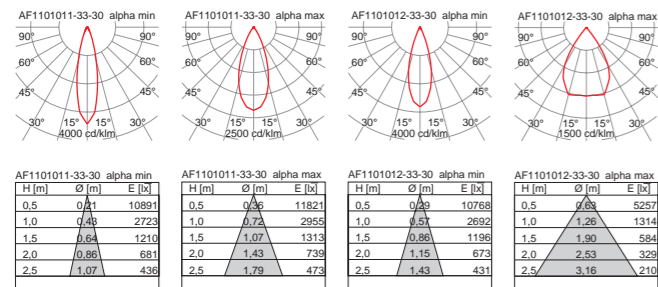


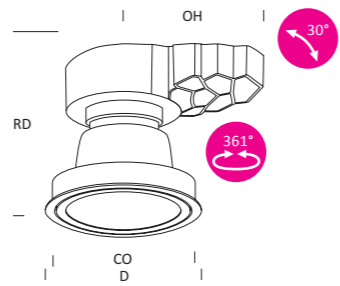
red dot design award winner 2013

LED gear box	Article number		Article number	
	without loop-in function standard	DALI	with loop-in function standard	DALI
18 W	83761	83761-DD	83761-DV	83761-DD-DV
25 W	83762	83762-DD	83762-DV	83762-DD-DV
38 W	83766	83766-DD	83766-DV	83766-DD-DV
50 W	83767	83767-DD	83767-DV	83767-DD-DV

Concrete mounting boxes	Article number
R10, 18/25 W	88084R10
R10, 38/50 W	88089R10
R15, 18/25 W	88084R15
R15, 38/50 W	88089R15

Details on operation and assembly on page 14.





Precise Lens Technology

System photometric data						
LED	α°	Llm	Llm/W max	RD mm	kg	Article number
CRI > 90						
R10, CO 120 mm, D 127 mm, OH 115 mm						

New	18 W	9	980	49	200	1.0	AF1103020-33-30
	18 W	14-25	350-760	38	200	1.0	AF1103001-33-30
	18 W	24-40	490-970	48	200	1.0	AF1103002-33-30
	25 W	24-40	560-1130	40	200	1.0	AF1103005-33-30
	38 W	24-40	780-1580	38	200	1.0	AF1103008-33-30
	50 W	24-40	1010-2030	37	200	1.0	AF1103011-33-30

Use index -30 for 3000K or -40 for 4000K, photometric data in the "products" on www.wila.com

LED gear boxes	Article number		without loop-in function		with loop-in function	
	standard	DALI	standard	DALI	standard	DALI
18 W	83761	83761-DD	83761-DV	83761-DD-DV		
25 W	83762	83762-DD	83762-DV	83762-DD-DV		
38 W	83766	83766-DD	83766-DV	83766-DD-DV		
50 W	83767	83767-DD	83767-DV	83767-DD-DV		

Concrete mounting boxes	Article number
R10, 18/25 W	88084R10
R10, 38/50 W	88089R10

Lighting technology

Lens system with variable half-peak divergence angle α
 Luminaire body 361° rotatable and 30° tiltable
 Colour Rendering Index CRI > 90
 Luminaire luminous flux 350-2030 Llm
 UGR < 19
 Colour temperature 3000, 4000K
 50,000 h lifetime (L70)
 Mirror reflector made of aluminium, high polished

Luminaire housing

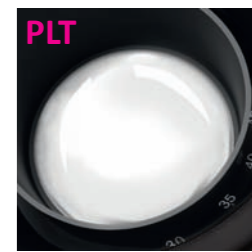
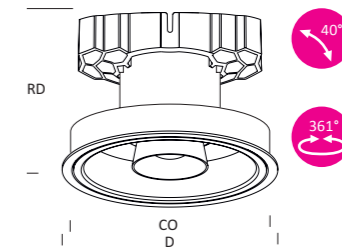
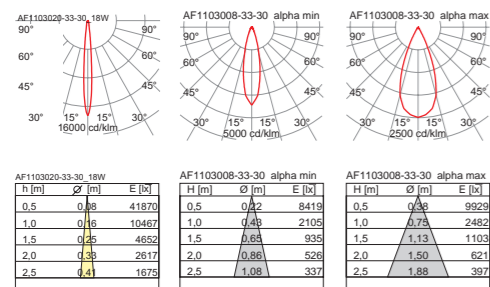
Heat sink made of die-cast aluminium
 Cover ring white, RAL 9016

Operating and assembly technology

LED gear box to be ordered separately
 Mounting for ceiling thicknesses 1-25 mm



Details on operation and assembly on page 14.



Precise Lens Technology

System photometric data						
LED	α°	Llm	Llm/W max	RD mm	kg	Article number
CRI > 90						
R15, CO 165 mm, D 172 mm						

New	18 W	9	980	49	180	1.3	AF1104120-31-30
	18 W	14-25	360-790	40	160	1.3	AF1104101-31-30
	18 W	24-40	500-1000	50	160	1.3	AF1104102-31-30
	25 W	24-40	580-1170	42	160	1.3	AF1104105-31-30
	38 W	24-40	800-1640	39	160	1.3	AF1104108-31-30
	50 W	24-40	1040-2100	38	160	1.3	AF1104111-31-30

Use index -30 for 3000K or -40 for 4000K, photometric data in the "products" on www.wila.com

LED gear boxes	Article number		without loop-in function		with loop-in function	
	standard	DALI	standard	DALI	standard	DALI
18 W	83761	83761-DD	83761-DV	83761-DD-DV		
25 W	83762	83762-DD	83762-DV	83762-DD-DV		
38 W	83766	83766-DD	83766-DV	83766-DD-DV		
50 W	83767	83767-DD	83767-DV	83767-DD-DV		

Concrete mounting boxes	Article number
R15, 18/25 W	88084R15
R15, 38/50 W	88089R15

Lighting technology

Lens system with variable half-peak divergence angle α
 Luminaire body 361° rotatable and 40° tiltable
 Colour Rendering Index CRI > 90
 Luminaire luminous flux 360-2100 Llm
 UGR < 19
 Colour temperature 3000, 4000K
 50,000 h lifetime (L70)
 Mirror reflector made of aluminium, high polished

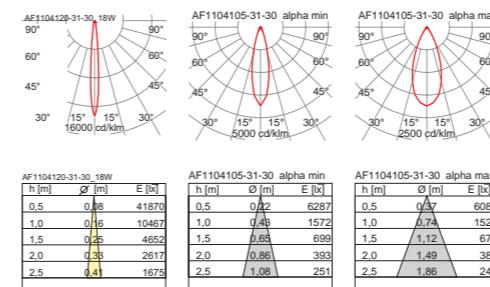
Luminaire housing

Heat sink made of die-cast aluminium
 Cover ring white, RAL 9016

Operating and assembly technology

LED gear box to be ordered separately
 Mounting for ceiling thicknesses 1-25 mm

Details on operation and assembly on page 14.



Colour version black on request

Accessories

LED gear boxes

All LED luminaires shown in this brochure are sold without gear boxes to provide you with the highest degree of flexibility. Two product lines with distinct characteristics are available. The colour coded LED gear boxes are coordinated with the corresponding luminaire to reduce errors during electrical installation. The electrical connection occurs via a plug connector that is protected against polarity reversal.

Premium version with loop-in function

WILA LED gear boxes, standard or DALI dimmable. High quality version with gear box housing with loop-in function.

Standard version without loop-in function

Cost effective alternative if loop-in function is not required, standard or DALI dimmable.

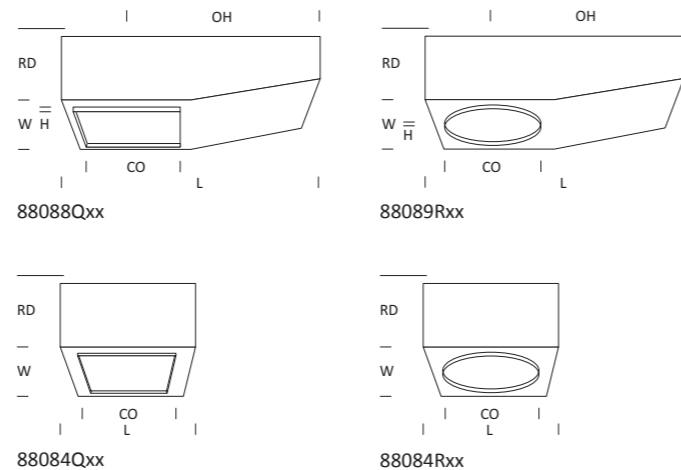
LED gear boxes	Article number			
	without loop-in function		with loop-in function	
	standard	DALI	standard	DALI
abet focus				
CRI 90, 18 W	83761	83761-DD	83761-DV	83761-DD-DV
CRI 90, 25 W	83762	83762-DD	83762-DV	83762-DD-DV
CRI 90, 38 W	83766	83766-DD	83766-DV	83766-DD-DV
CRI 90, 50 W	83767	83767-DD	83767-DV	83767-DD-DV



Concrete mounting boxes

Concrete mounting boxes allow the uninterrupted use of Downlights even in exposed concrete and plastered ceilings. Thus the ceiling appearance remains clean, and alternative surface mounted luminaires are not required. The two part metal housing holds its shape and is designed for better heat transfer; it also allows accurate positioning and fast installation while meeting all legally required fire prevention regulations.

Concrete mounting boxes							
	CO	RD	D	L x W	OH	H	Article number
abet focus, square							
Q10, 18/25 W	120	175	-	335 x 335	-	18	88084Q10
Q10, 38/50 W	120	200	-	594 x 335	215	18	88088Q10
Q15, 18/25 W	170	175	-	335 x 335	-	18	88084Q15
Q15, 38/50 W	170	200	-	594 x 335	215	18	88088Q15
abet focus, round							
R10, 18/25 W	120	175	-	335 x 335	-	18	88084R10
R10, 38/50 W	120	200	-	594 x 335	215	18	88089R10
R15, 18/25 W	165	175	-	335 x 335	-	18	88084R15
R15, 38/50 W	165	200	-	594 x 335	215	18	88089R15



Definitions

Catalogue information

Many luminaires are protected by comprehensive design registrations, patents and trademark protections. We reserve the right to change material, design and programme without notice. Statements are not warranted characteristics. Pictures and drawings are for illustrative purposes only. Our terms and conditions of sale and delivery apply.

Luminaire luminous flux Llm

The luminaire luminous flux (Llm) defines the usable light of the luminaire and is the decisive value in lighting design. As opposed to the lamp luminous flux (lm), the luminaire luminous flux (Llm) accounts for losses due to the design of the luminaire. WILA defines only the Llm value for all LED lamps. This value can be found both in data sheets and in the relevant ldt file.

System efficiency Llm/W

System efficiency defines the ratio of luminaire light flux (Llm) to power input (W). Efficiency losses due to gear boxes have already been taken into account by WILA in the Llm/W value.

System photometric data

For a qualified comparison between LED luminaires and luminaires with compact fluorescent lamps, it is important to ensure first that the products to be compared share approximately the same photometric data. Sample calculation:

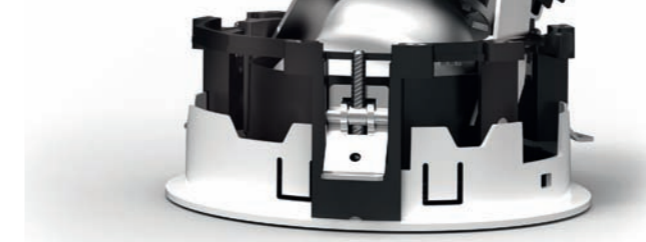
LED luminous flux 2000 lm (100%) – system losses (light output ratio) = luminaire luminous flux 1720 Llm

LED efficiency 2000 lm : 29 W = 69 lm/W

System efficiency 1720 Llm : 31 W (29 W LED module + 2 W driver) = 55 Llm/W

Heat sink

LED module
2000 lm / 69 lm/W



Luminaire luminous flux 1720 Llm
System efficiency 55 Llm/W

Half-peak divergence angle α

For accent lighting, the half-peak divergence angle α is given rather than the beam spread angle. The half-peak divergence angle is defined as the angle of the rotationally symmetrical luminous intensity distribution at which the luminous intensity equals half of its maximum value. The half-peak divergence angle is given as a full angle.

Beam spread characteristic

super spot < 10°
spot 10° - 20°
flood 21° - 45°
wide flood 46° - 55°
very wide flood > 55°

UGR

The UGR method takes into account the layout of the luminaires in the room and evaluates the glare produced by the entire lighting system for a specific observer's position. WILA provides UGR values where the observer's position is parallel to the longitudinal axis of the luminaire and the lamp/luminaire axis is parallel to the longer side of the room. The UGR method is implemented on the basis of simple tables. A low UGR value indicates that glare is negligible or non-existent.

Suitability examples UGR values:

< 16 for drafting rooms,
< 19 for offices and control rooms,
< 22 for precision industrial tasks
< 25 for light industrial tasks and
< 28 for heavy industrial tasks.

F marking

All WILA luminaires are suitable for use in or on ceilings of normal flammability and have so far been labelled with the F marking. With the publication of the EN 60598 standard, date of issue 09/2009, this marking is no longer applicable. After the end of the transitional phase on 12.04.2012, all luminaires without labelling are suitable for use in or on a ceiling of normal flammability. Luminaires that do not fulfil the thermal requirements are marked with a new pictogram.

Luminous intensity distribution

In order to give a clearer overview, the luminous intensity distribution curves have been divided into groups. Shown are the planes from 0° to 180° (red line) and from 90° to 270° (blue line). The 0° plane is on the right.

Beam chart

For accent luminaires beam charts are shown. The angle of the spread out beam corresponds to the half-peak divergence angle of the luminous intensity. Diameter and mean illuminance E_m [lx] can be read from the chart for each corresponding height.

Index

-DV = Loop-in/Loop-out
-DD = dimmable, DALI
-DD-DV = DALI dimmable with loop-in/loop-out function

Abbreviations/Dimensions

OH = overhang, maximum expansion of luminaire from the centre of reflector
W, W1 = width information
D = diameter
CO = ceiling, wall or recessed floor cut-out
CO W = width of ceiling or wall cut-out for recessed luminaires
CO L = length of ceiling or wall cut-out for recessed luminaires
RD = required installation depth for recessed luminaires under consideration of F conditions
H, H1 = height information
K = colour temperature in Kelvin
L, L1 = length information
Q = reflector size, square
R = reflector size, round
Ra = colour rendering index
W = electrical power
 α = half-peak divergence angle
 γ = beam spread angle

Information about maintenance

The illuminance for a room/property must satisfy the published values according to DIN 12464-1 over the entire period of usage; this corresponds to the maintenance value. The electrical planner is responsible for determining the maintenance factor dependent upon the lighting system and the spatial conditions used and ensuring this with a maintenance schedule. Further details about maintenance can be found in the "Knowledge" section on our website www.wila.com