

3 step MacAdam Ellipse Initial	2 step MacAdam Ellipse Initial	L70/B50 50.000h
Ra 80	Ra 90	Ra 97



Interior
spot lights
downlight series

LIGHT SOURCE BY


Product description

KARIN Standard series

KARIN Standard Series support the seventh generation of the Bridgelux V Series that is a cost-effective light engine.

KARIN Standard Series is the best for commercial and residential lighting applications where cost and quality are essential.

Comes In 2700K, 3000K, 3500K, 4000K, 5000K, 5700 and 6500K CCT and in flux led lumens from 1982 to 2750 lumens delivering CRI(Ra) of 80 and 90 and high R values across all 15 CIE color samples.

The MacAdam steps can be 2 or 3 up to 4000K, and 4 steps for 5000K, 5700K and 6500K.

KARIN Decor series

KARIN Decor Series is a exceptional light source for demanding applications. When a pure white with rich colors over the entire visual spectrum is needed, Decor Series is the perfect choice. KARIN Decor Series comes in 2700K and 3000K CCT and with flux from 1809 to 1926 led lumens delivering CRI(Ra) of 97 and high R values across all 15 CIE color samples. The MacAdam steps are 2 for both CCTs.

Features

- Supports the 7th generation V Series COBs of Bridgelux
- Optionally supports the Decor Series of Bridgelux V Series
- LED power 17W
- LED lumens from 1809lm up to 2750lm
- CCT from 2700K up to 6500K
- CRI Ra 80, 90 and 97
- UGR : <20.4
- Three beam angles
- Available with non dimming driver or with phase cut driver
- Wide angle Pan & Tilt rotation
- Easy selection among one of the 3 phases of the track
- Two colours
- Easy installation in track system
- Fast relocation within the track system with a single move
- Comply with DC central emergency systems (only for Non-Dimmable models)

Areas of application

- Foyers
- Lobbies
- Receptions
- Retail shops
- Halls
- Museums
- Offices
- Conference rooms
- Galleries

Specifications

Light source	LED COB by BRIDGELUX			
Luminaire lumens	See Photometric Data			
Led Power consumption	CRI80, CRI90 : 16,5W			
	CRI97 : 16,7W			
Luminaire power consumption	CRI80, CRI90 : 18,5W			
	CRI97 : 18,8W			
LED current	16,5W & 16,7W : 500mA			
LED Lumens		16,5W & 16,7W		
	CRI	80	90	97
	2700K	2379	1982	1809
	3000K	2489	2056	1926
	3500K	2552	2130	
	4000K	2576	2205	
	5000K	2654	2260	
	5700K	2700		
	6500K	2750		
LED Efficacy (LPW)		16,5W & 16,7W		
	CRI	80	90	97
	2700K	144	120	108
	3000K	151	125	115
	3500K	155	129	
	4000K	156	134	
	5000K	161	137	
	5700K	164		
	6500K	167		
Luminaire Efficacy (LPW)	See Photometric Data			
Color Temperature (CCT)	CRI80 : 2700K, 3000K, 3500K, 4000K 5000K, 5700K, 6500K			
	CRI90 : 2700K, 3000K, 3500K, 4000K 5000K			
	CRI97 : 2700K, 3000K			
Color Rendering Index (Ra-8)	CRI80, CRI90, CRI97			
Gamut Area Index (GAI_{BB})	CRI80 : GAI _{BB} : 95 / R _r : 85 / R _g : 94			
IES TM-30 (R_r) (R_g)	CRI90 : GAI _{BB} : 102 / R _r : 90 / R _g : 99			
	CRI97 : GAI _{BB} : 106 / R _r : 94 / R _g : 100			
Initial color consistency	CRI80 : 3 SDCM (2 SDCM upon request)			
	CRI90, CRI97 : 2 SDCM			
Lumen maintenance	L70/B50 at 50000 hours			
Product type	Downlight spot for track systems			
Ceiling type	Any type of ceiling			
Material	Spot: aluminum			
	Driver case: aluminum die-cast			
	Heatsink: aluminum die-cast			
	Reflector: polymer			
Color	White, Black			
Optics	High gloss reflector: 30°, 45°, 55°			
Cover	Clear (Tempered glass), Honeycomb (Metal)			
Light distribution	Rotationally symmetric			
Dimming	Phase Cut			
Power supply voltage	220-240VAC /50-60Hz			
Power factor	≥ 0,9			
Flicker ripple	See Driver operation			
Unified Glare Rating (UGR)	See Photometric Data			
Ambient temperature range	-10°C / +50°C			
Protection class	CLASS I			
Ingress Protection	IP40			
Mechanical impact	IK03			
Connection	3 Phase track adaptor			
Dimensions	See Dimensions & Weight			
Weight	See Dimensions & Weight			
Pan rotation (horizontal plane)	320°			
Tilt rotation (vertical plane)	145°			
Compliance	LVD directive, EMC directive, RoHS			
Remarks	CRI90 & CRI97 are available upon request			
Luminaire Energy Class		18,5W & 18,8W		
	CRI	80	90	97
	2700K	A+	A+	A
	3000K	A+	A+	A
	3500K	A+	A+	
	4000K	A+	A+	
	5000K	A+	A+	
	5700K	A++		
	6500K	A++		

- Notes.**
1. All above values are typical.
 2. Absolute range of luminous flux is ±10% of typical value.
 3. Specifications are subject to change without notice

Driver operation

Phase Cut Drivers

- Light regulation 0/2 - 100%.
- Compatible with Leading edge (Triac) and Trailing edge (IGBT) dimmers.

Non Dimmable Drivers

- Current Ripple <3%.
- High efficiency.

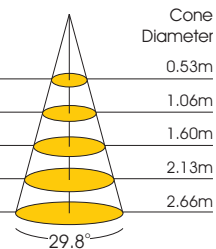
Photometric data

*Note: Use the coefficients, to calculate the Luminous flux, Efficacy and Illuminance for CRI90, CRI97.
All values below, correspond to CRI80.

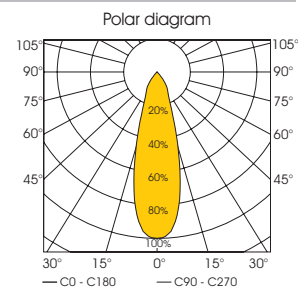
Power 18.5W	2700K	3000K	3500K	4000K	5000K	5700K	6500K
CRI90 Coeff.*	0.83	0.83	0.83	0.86	0.85		
CRI97 Coeff.*	0.76	0.77					

Luminaire lm	1952 lm	2042 lm	2093 lm	2113 lm	2177 lm	2215 lm	2256 lm
Efficacy (lm/W)	105	110	113	114	118	120	122
UGR : <16.7							

Illuminance	1m	5288 lx	5532 lx	5672 lx	5725 lx	5899 lx	6001 lx	6112 lx
	2m	1322 lx	1383 lx	1418 lx	1431 lx	1475 lx	1500 lx	1528 lx
	3m	588 lx	615 lx	630 lx	636 lx	655 lx	667 lx	679 lx
	4m	330 lx	346 lx	355 lx	358 lx	369 lx	375 lx	382 lx
	5m	212 lx	221 lx	227 lx	229 lx	236 lx	240 lx	244 lx



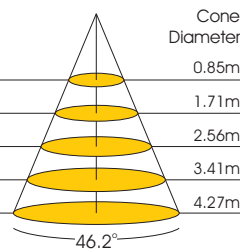
Reflector 30° (typ.) with clear cover



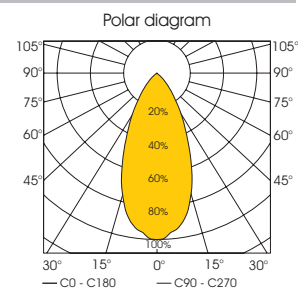
Power 18.5W	2700K	3000K	3500K	4000K	5000K	5700K	6500K
CRI90 Coeff.*	0.83	0.83	0.83	0.86	0.85		
CRI97 Coeff.*	0.76	0.77					

Luminaire lm	1725 lm	1805 lm	1850 lm	1868 lm	1924 lm	1958 lm	1994 lm
Efficacy (lm/W)	93	98	100	101	104	106	108
UGR : <19.1							

Illuminance	1m	2452 lx	2565 lx	2630 lx	2655 lx	2735 lx	2782 lx	2834 lx
	2m	613 lx	641 lx	657 lx	664 lx	684 lx	696 lx	708 lx
	3m	272 lx	285 lx	292 lx	295 lx	304 lx	309 lx	315 lx
	4m	153 lx	160 lx	164 lx	166 lx	171 lx	174 lx	177 lx
	5m	98 lx	103 lx	105 lx	106 lx	109 lx	111 lx	113 lx



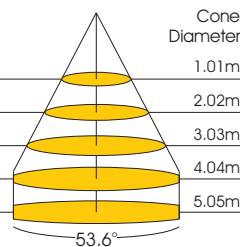
Reflector 45° (typ.) with clear cover



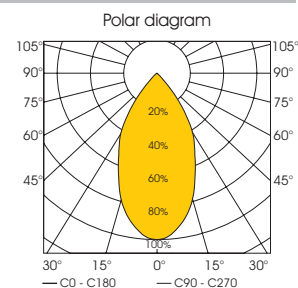
Power 18.5W	2700K	3000K	3500K	4000K	5000K	5700K	6500K
CRI90 Coeff.*	0.83	0.83	0.83	0.86	0.85		
CRI97 Coeff.*	0.76	0.77					

Luminaire lm	1978 lm	2070 lm	2122 lm	2142 lm	2207 lm	2245 lm	2287 lm
Efficacy (lm/W)	107	112	115	116	119	121	124
UGR : <20.4							

Illuminance	1m	2408 lx	2519 lx	2583 lx	2607 lx	2686 lx	2733 lx	2783 lx
	2m	602 lx	630 lx	646 lx	652 lx	671 lx	683 lx	696 lx
	3m	268 lx	280 lx	287 lx	290 lx	298 lx	304 lx	309 lx
	4m	150 lx	157 lx	161 lx	163 lx	168 lx	171 lx	174 lx
	5m	96 lx	101 lx	103 lx	104 lx	107 lx	109 lx	111 lx



Reflector 55° (typ.) with clear cover



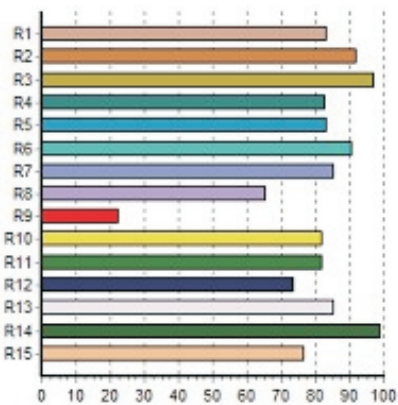
Color metric data

Standard models CRI 80

Typical values for 3000K

Color Rendering Index: CRI(Ra): 83 CRI(Re): 79

R values

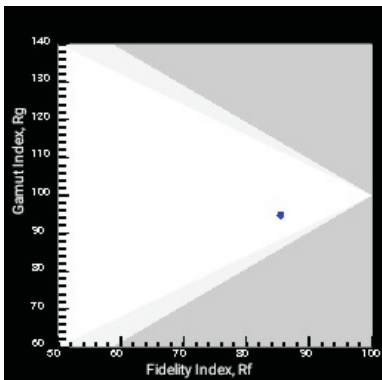


Gamut Area Index: GAI(BB8): 89 GAI(BB15): 95

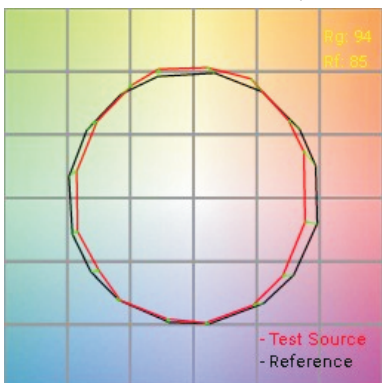
IES TM-30-15 Fidelity Index: Rf 85

IES TM-30-15 Gamut Index: Rg 94

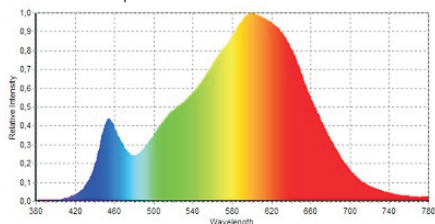
IES TM-30-15 Rf Rg Plot



IES TM-30-15 Color Vector Graphic



Spectral Power Distribution

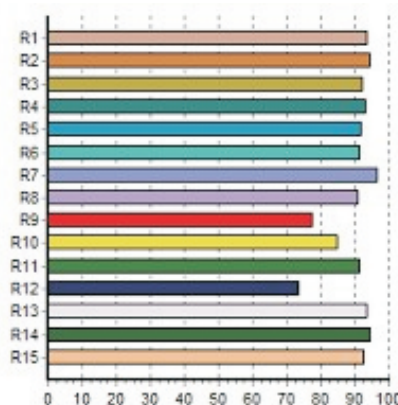


Standard models CRI 90

Typical values for 3000K

Color Rendering Index: CRI(Ra): 93 CRI(Re): 90

R values

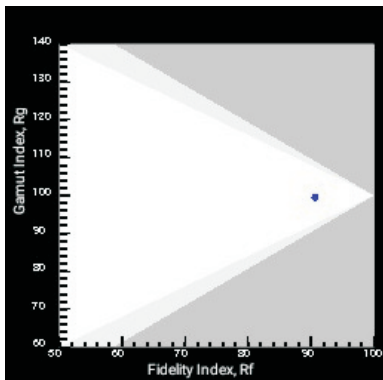


Gamut Area Index: GAI(BB8): 97 GAI(BB15): 102

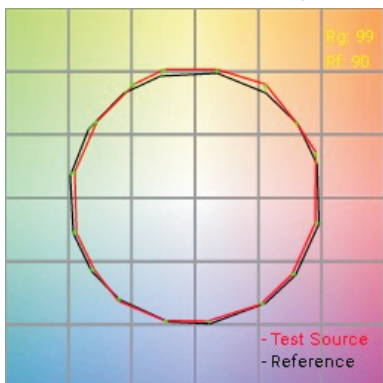
IES TM-30-15 Fidelity Index: Rf 90

IES TM-30-15 Gamut Index: Rg 99

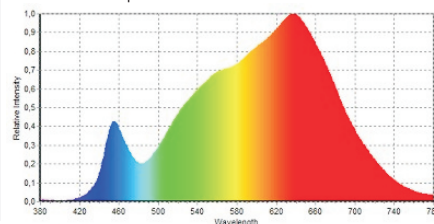
IES TM-30-15 Rf Rg Plot



IES TM-30-15 Color Vector Graphic



Spectral Power Distribution

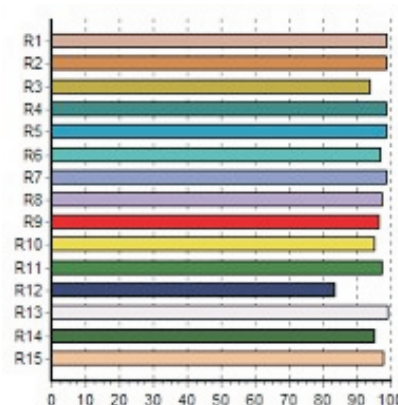


Decor models CRI 97

Typical values for 3000K

Color Rendering Index: CRI(Ra): 97 CRI(Re): 96

R values

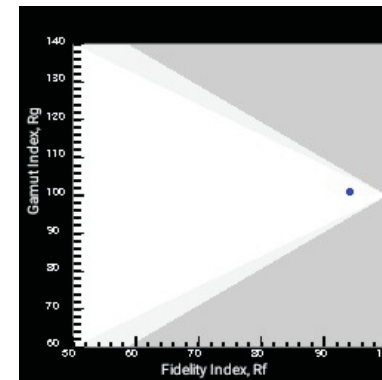


Gamut Area Index: GAI(BB8): 102 GAI(BB15): 106

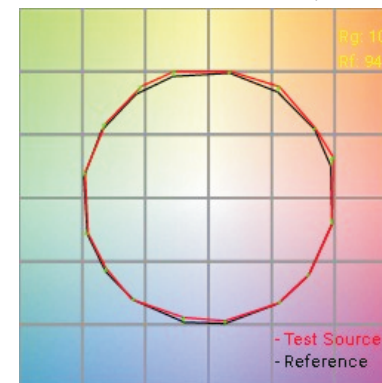
IES TM-30-15 Fidelity Index: Rf 94

IES TM-30-15 Gamut Index: Rg 100

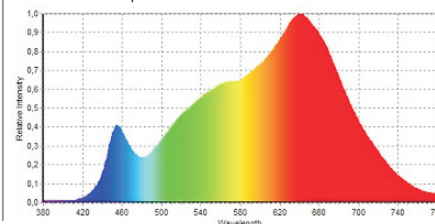
IES TM-30-15 Rf Rg Plot



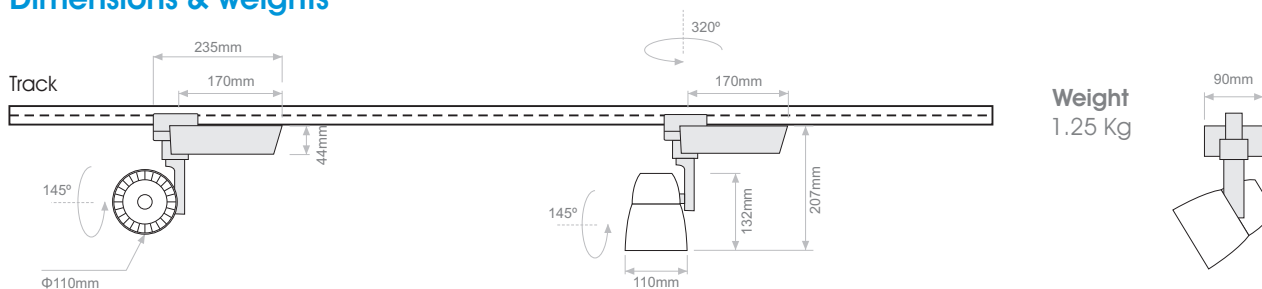
IES TM-30-15 Color Vector Graphic



Spectral Power Distribution



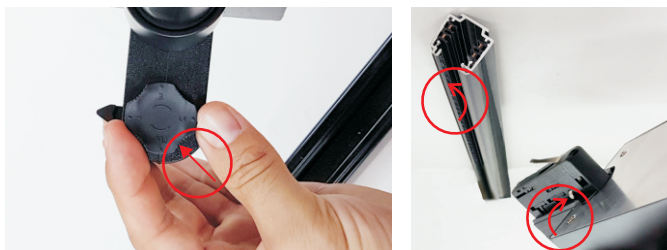
Dimensions & weights



Installation guide

1 Preparations

- Step 1**
Place the phase selection switch to "OFF" position.
- Step 2**
KARIN can only be placed to the track system with its left side connected to the left side of the track.



2 Connection

- Step 1**
Dock KARIN to the desired position in the track system.
- Step 2**
Secure KARIN from the back side by turning the safety switch clockwise.
- Step 3**
Secure KARIN from the front side by turning the safety switch clockwise.



3 Phase selection

- Step 1**
Select number 1, 2 or 3 by turning the selection switch for the phases 1, 2 and 3 accordingly.



Note: For undocking you must first place the phase selection switch to "OFF" position.

Electrical Installation

Maximum loading of automatic circuit breakers

Model power	18,5/18,8W
Circuit Braker	B10A / B16A
Non dimmable driver	31 / 50
Phase cut driver	31 / 50

Notes.

- Actual quantities may differ due to used circuit breaker types and installation environment.
- In PHASE-CUT models, when a Leading edge dimmer is used, the total power of luminares must not exceed the 1/5 of the dimmer power.

Ordering code information

Model (LED Power)	Colour Temperature	LED Lumen	Type	CRI	Beam Angle	Colour	Dimming Option	Accessories
KARIN 16.5W <i>(KARIN 16)</i>	(27B2379)	2700K - 2379lm	Adjustable (AD)	(80) 80				COVER (0x) Standard (2x) Honeycomb ↓ (XX) EXTRAS (x0) No Extras
	(30B2489)	3000K - 2489lm						
	(35B2552)*	3500K - 2552lm						
	(40B2576)	4000K - 2576lm						
	(50B2654)*	5000K - 2654lm						
	(57B2700)	5700K - 2700lm						
(65B2750)*	6500K - 2750lm							
KARIN 16.5W <i>(KARIN 16)</i>	(27B1982)	2700K - 1982lm	Adjustable	(90) 90		(WH) White (BL) Black	(ND) Non-Dimmable (PC) Phase Cut (Trailing Edge dimmer)	
	(30B2056)	3000K - 2056lm						
	(35B2130)*	3500K - 2130lm						
	(40B2205)	4000K - 2205lm						
	(50B2260)*	5000K - 2260lm						
KARIN 16.7W <i>(KARIN 16)</i>	(27B1809)	2700K - 1809lm	Adjustable	(97) 97				
	(30B1926)	3000K - 1926lm						

(*) Colour temperatures at 3500K, 5000K, and 6500K are available upon request.

Ordering Code Example:



Means: KARIN 16.5W, 3000K, 2056lm, Adjustable, CRI90, 55°, Black, dimming with Phase Cut control and Honeycomb accessory.



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