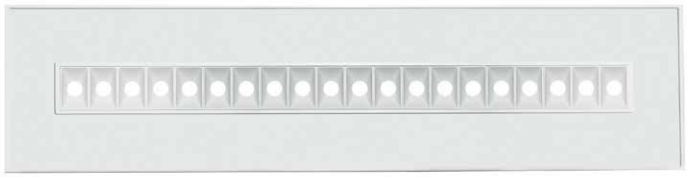
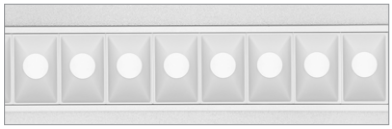
circadia DUO²

EAGLE LIGHTING





Innovative Optical Chamber Design

Inner and outer Tuneable White (2 channels) DUO2 Independent of each other

LED IP40 TUNEABLE IES FILE REVIT FILE

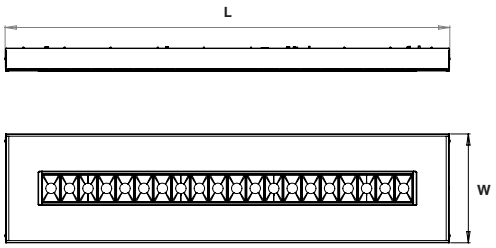
Key Family Details

Optical System:	Hybrid white optical chambers and diffuser
Mounting Type:	Exposed T-Bar
Colour Consistency Initial:	3 SDCM
Finish Options:	Standard white. Other finish options via customisation
System Warranty:	5 years
CCT:	2700-6500K
CRI (Ra):	90+ (95 typical)
R9:	70+ (74 typical)
COI Compliant:	Only within the 3500-4000K range
Melanopic Ratio	0.75
Circadian Stimulus CS [%] (*)	14
Circadian Light Cla [lux] (*)	103

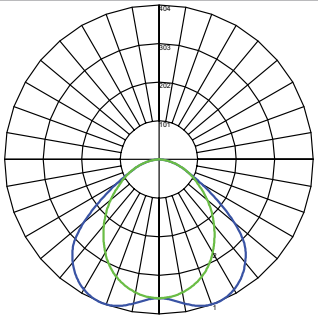
(*): CS and Cla values are calculated for 150lux photopic corneal illumination and provided as a guide only.

Mechanical Drawing

Physical Parameters	Luminaire Dimensions			Aperture Size		Cutout Size		Weight
Code	L [mm]	W [mm]	H [mm]	D [mm]	E [mm]	Acout [mm]	Bcout [mm]	[kg]
EL-CIR-1119 ... -1122	1194	293	60					6.8
EL-CIR-1123 ... -1124	1494	293	60					8.5
EL-ACC-430-000	Circadia Restraining Kit Incl 4x Gripple, 2x 2m Wire							

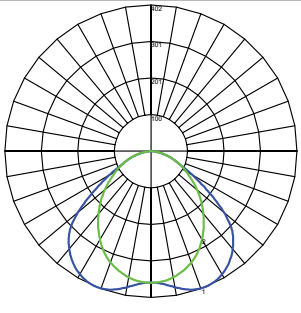


Polar Curve 1200x300 940



Maximum Candela = 404cd/klm
Located At Horizontal Angle = 90, Vertical Angle = 21.5

Polar Curve 1500x300 940



Maximum Candela = 402cd/klm
Located At Horizontal Angle = 90, Vertical Angle = 21.5

Application

Circadia is a new premium office luminaire family designed for workplace wellness, productivity and sustainability.

With its dual light component design consisting of a diffuse element and a central array of optical chambers, Circadia provides premium quality, low-glare illumination for the modern workplace.

Delivering a sense of comfort, wellbeing and harmony for occupants with minimal energy consumption, Circadia is the product of choice for asset owners looking to achieve or enhance the WELL, Green Star, NABERS or other sustainability performance rating of their buildings.

The Tuneable White functionality of the DUO variants helps obtaining additional points in WELL V2 under Feature L08 Occupant Control of Lighting Environments.

Design

The DUO2 range offers dual independently controlled Tuneable White light source components (both Ra>=90 across the tuning range).

Made from advanced microstructured film that offers controlled batwing light distribution, Circadia's diffuse element allows for wider spacing with fewer luminaires required in the lighting array, making it a cost-effective solution for new fitouts and retrofit projects alike.

Diffuse aperture also provides a pleasant transition between ceiling and light source.

The product exceeds BCA 2019/J6 requirements via optimised beam distribution.

Optics

White optical chambers with internal diffusers form the primary, task lighting component whilst an independent light source is used to create the diffuse peripheral component.

Control

The optical chambers and the peripheral diffuse component are both Tuneable White, each with its own independent control.

A very wide selection of control and user interface options, based on DALI DT8 and/or CASAMBI wireless, is available.

Circadian Lighting

The combination of LED chips with the right spectral distribution and an optimum beam distribution achieves ideal vertical illuminance levels with high Circadian Stimulus (CS) and Circadian Lighting (Cla) values. Tuneable White functionality provides additional Visual-Biological-Emotional benefits.

Lifetime

Constant Light Output (CLO) feature comes as standard across the range and ensures no lumen depreciation for the lifetime of the product.

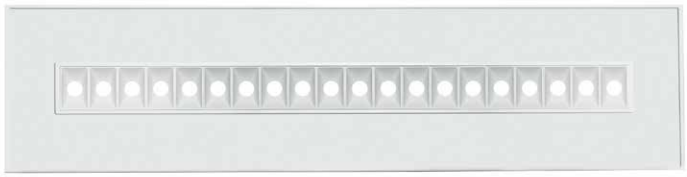
Light Quality

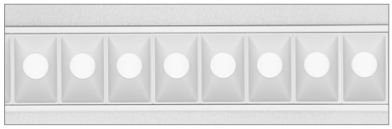
CRI90+ (95 typ.) as standard with R9>70 (74 typ.), initial colour consistency better than 3 SDCM as measured separately for cool and warm components.

N.B. COI compliance is only achieved within the 3500-4000K tuning range. This product should not be used as a COI compliant fitting.

circadia DUO²

EAGLE LIGHTING





Innovative Optical Chamber Design

Inner and outer Tuneable White (2 channels) DUO2 Independent of each other

320 Lux Target Illuminance

Code	Power Initial CLO [W]	Final Power CLO [W]	Systems Lumens [lm]	Luminaire Lumens [lm]	Efficacy Initial [lm/W]	Nominal Size [mmxmm]	Spacing (h=2.7m) [m x m]	Final W/m2 CLO	Calculated UGR max	LLMF L100B50 [hrs]
										LM80 duration: 12,000hrs
EL-CIR-1119-264	22	27	2,850	2,155	98	1200 x 300	2.4m x 2.4m	4.69	19	72,000
EL-CIR-1120-264	24	30	3,200	2,408	99	1200 x 300	2.4m x 2.7m	4.63	19	72,000
EL-CIR-1121-264	26	32	3,450	2,603	99	1200 x 300	2.4m x 3.0m	4.44	19	72,000
EL-CIR-1123-264	27	32	3,550	2,687	101	1500 x 300	3.0m x 2.5m	4.27	19	72,000
EL-CIR-1124-264	32	39	4,200	3,268	104	1500 x 300	3.0m x 3.0m	4.33	19	72,000
EL-ACC-430-000	Circadia Restraining Kit Incl 4x Gripple, 2x 2m Wire									

400 Lux Target Illuminance

Code	Power Initial CLO [W]	Final Power CLO [W]	Systems Lumens [lm]	Luminaire Lumens [lm]	Efficacy Initial [lm/W]	Nominal Size [mmxmm]	Spacing (h=2.7m) [m x m]	Final W/m2 CLO	Calculated UGR max	LLMF L100B50 [hrs]
										LM80 duration: 12,000hrs
EL-CIR-1122-264	32	39	4,250	3,208	102	1200 x 300	2.4m x 3.0m	5.42	19	72,000
EL-ACC-430-000	Circadia Restraining Kit Incl 4x Gripple, 2x 2m Wire									

Design Parameters: LLF=0.80 (Nominal), Room Reflectances (C/W/F): 0.70/0.50/0.20, Ceiling height=2.7m, Eh @0.72m AFFL.

N.B. All optical data shown above is valid for the versions with white chambers.

Surface Mount Kits

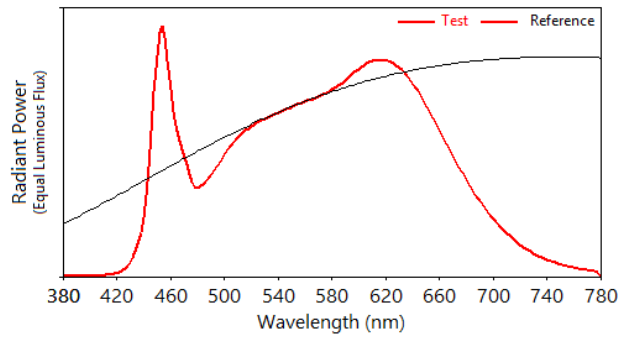
Code	Length [mm]	Width [mm]	Height [mm]	Standard Finish [**]
EL-ACC-897-000	1200	300	80	White
EL-ACC-898-000	1500	300	80	White
[**]: Other finish options available via customisation				

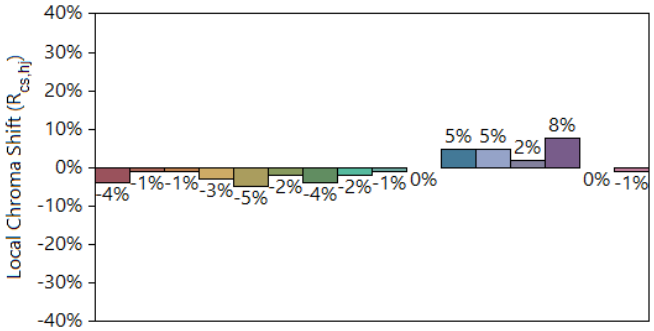
Wiring options	Suffix
Tuneable White DUO2 Dual (DALI Type 8)	-264
Tuneable White DUO2 Dual (Wireless - Casambi)	-294

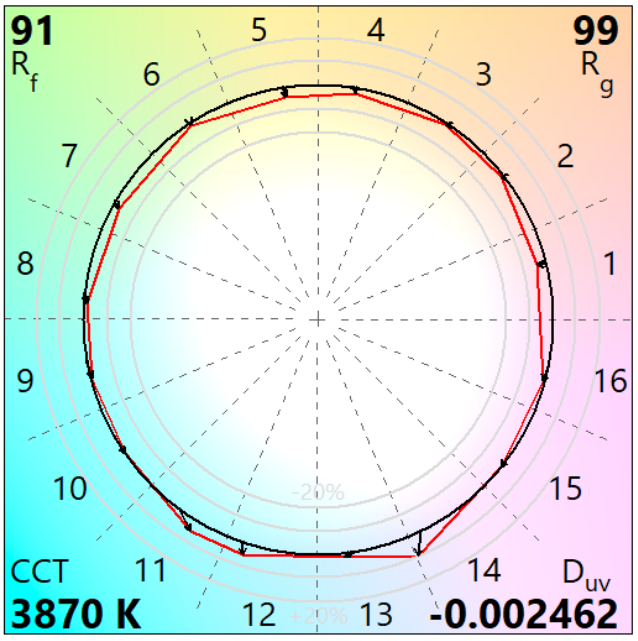
circadia DUO²

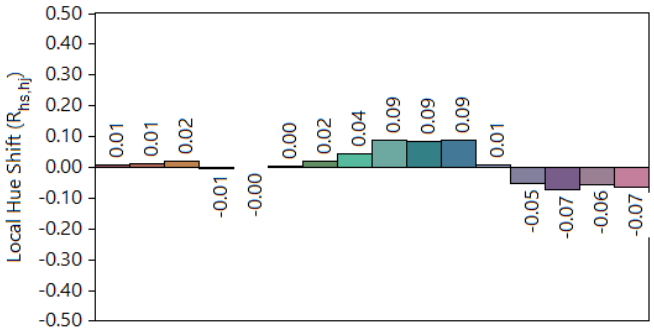
EAGLE LIGHTING

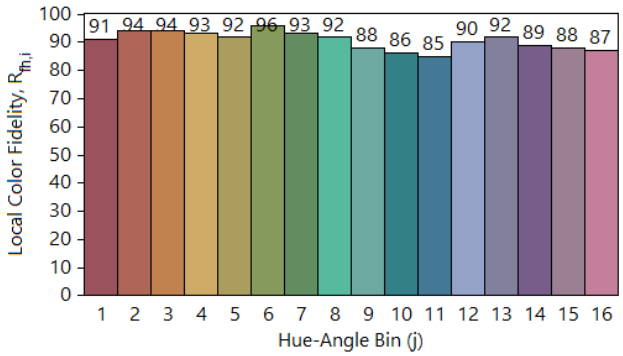
EL-CIR-1119-254 - 22W 2850LM 940 1200x300

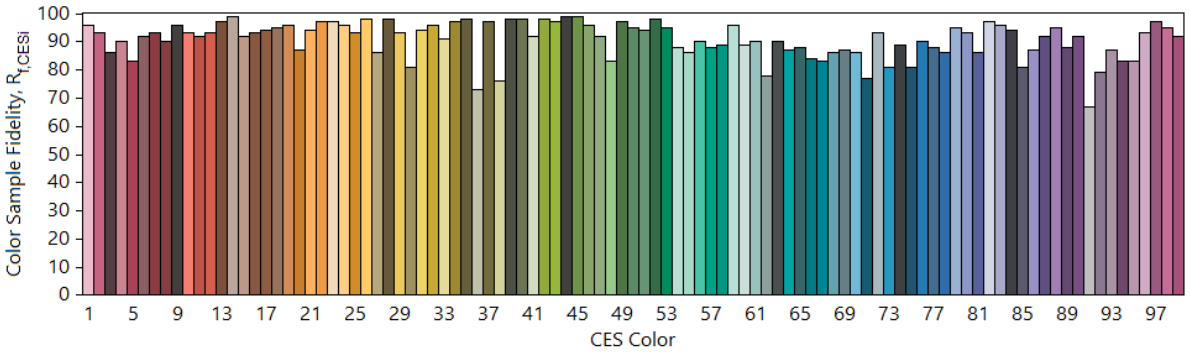












Notes: EL-CIR-1119-254 CIRCADIA ET 22W 2850LM 927-965 1200X300 DUO1 DALI CLO, representative of Circadia DUOx White variants.

x	0.384470
y	0.373954
u'	0.228902
v'	0.500943

CIE 13.3-1995

(CRI)

R_a 95

R_9 75

Colors are for visual orientation purposes only.