

EVO-S

Full Spectrum LED



5
YEAR
WARRANTY

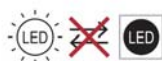


Operation and Maintenance Tips

- * Turn power off before inspection, installation or removal
- * Lamps should be kept free from contamination.
- * The luminaire is not suitable for emergency lighting
- * All install and uninstall shall be done by a certified electrician
- * Do not operate luminaire with damaged parts
- * Exceeding maximum ratings for operating temperature and input voltage will reduce expected life time or destroy the product.

Energy Class

This product contains a light source in the energy efficiency class: **F** **A** **G**



Features

- * Z-spring installation and standard recessed installation
- * IP 54 rated, suitable for both indoor and outdoor applications
- * Reduced blue light intensity at shorter wavelengths
- * Close spectral match to the light emitted by the sun
- * Compatible with both leading edge & trailing edge dimmers
- * Flicker free, CRI up to Ra98
- * Complied with IEC/EN62471 photobiological safety standard

Electrical and Photometric Characteristics

LED module power	6W
Input voltage of LED module	36VDC
IP rating	IP54
Nominal flux	540lm @ 3000K
CRI	Ra 98
SDCM	3 steps
Beam angle	45°
L90 Lifetime at Ta: 25°C	50,000 hrs
L80 Lifetime at Ta: 25°C	100,000 hrs
Switching cycles	> 100,000 times
Safety class of LED module	Class III
Energy class of LED module	F
Power with driver	7.5W
Nominal Voltage	220-240Vac 50/60Hz
Input current	38mA
Inrush current	< 2A
Power Factor	0.9
Working temperature range	-20°C ...+40°C
Percent flicker	< 2%
PstLM	< 1
SVM	< 0.4
Dimmable	Yes
IP rating of driver	IP20

* Exceeding maximum ratings for operating temperature and input voltage will reduce expected life time or destroy the product.

Specifications

EAN Code	Module Wattage*	Size mm (DxH)	CCT (Kelvin)*	Flux (Lm) *	CRI (Ra)*	Beam angle*	Energy Class	SDCM	Anti-corrosion Warranty (year)
EVO S Indendørs/ Udendørs Hvid									
5703050501002	6W	90x45	2700K	520	98	45°	F	3	10
5703050502009	6W	90x45	3000K	550	98	45°	F	3	10
EVO S Børstet Alu									
5703045003009	6W	90x45	2700K	520	98	45°	F	3	5
5703045004006	6W	90x45	3000K	550	98	45°	F	3	5
EVO S Indendørs/ Udendørs Sort									
5703050503006	6W	90x45	2700K	520	98	45°	F	3	10
5703050504003	6W	90x45	3000K	550	98	45°	F	3	10

* Due to the special conditions of the manufacturing processes of LED, the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product which could differ from the typical value. A max 10% tolerance is deemed to be acceptable in any case.
* System power consumption 7.5W, 38D version also available upon request.

Maximum loading of automatic circuit breakers

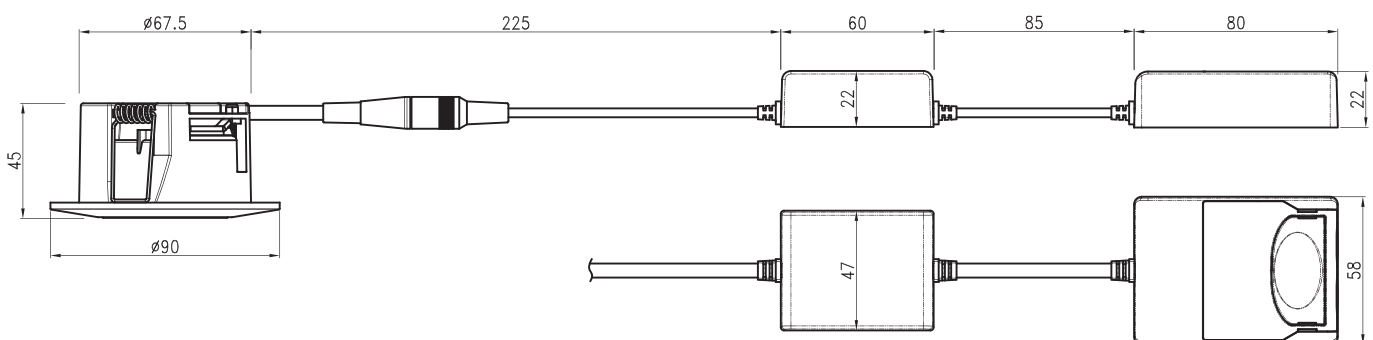
Breaker type	C10	C13	C16	C20	B10	B13	B16	B20	Inrush current	Inrush time
EVO-S	120	160	200	240	60	80	100	120	I _{max} 2A	150µs

Dimension Diagram

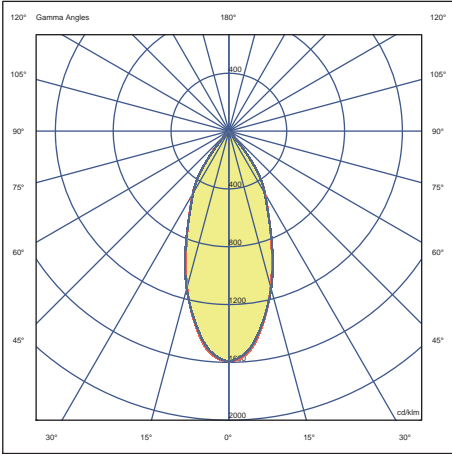
Item	Outer Diameter (mm)	In-ceiling Height (mm)	Cut-hole (mm)
LED Module	90	40	68-83

Item	Length (mm)	Width (mm)	Height (mm)
Connector box	80	58	22

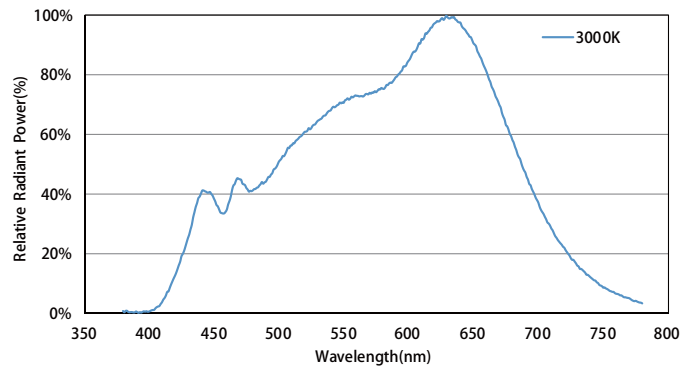
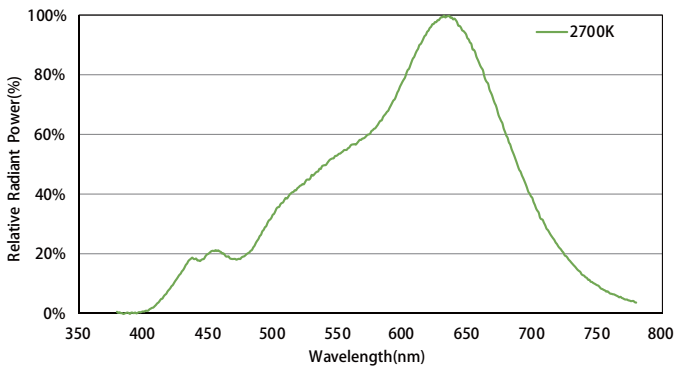
Item	Length (mm)	Width (mm)	Height (mm)
Driver box	60	47	22



Distribution of luminous intensity



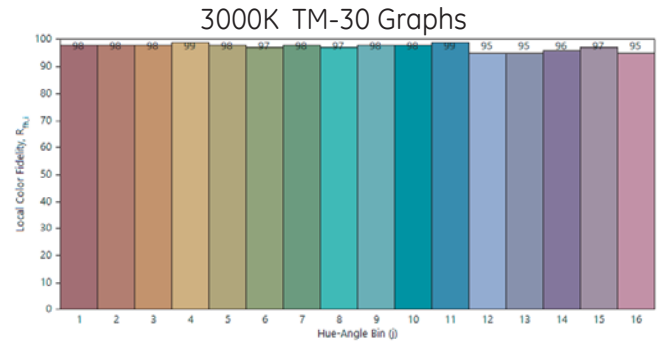
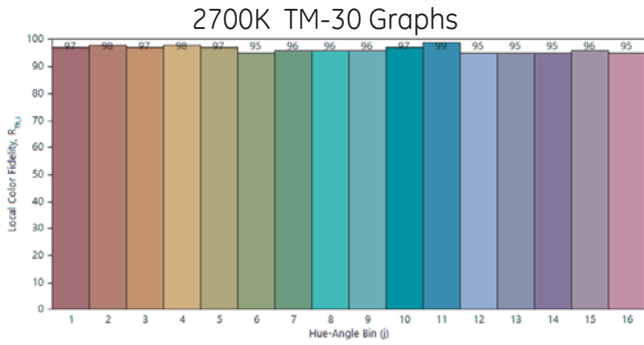
Spectrum Distribution



Typical color rendering index chart

Nominal CCT ¹	R _f	R _g	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
2700K	95	103	97	99	94	94	97	98	97	98	99	97	91	98	98	95	98
3000K	95	104	98	99	93	94	97	98	96	96	97	96	92	95	98	95	97

TM-30 Values



Comparison to Natural Light

CCT	MR Value*			CAF Value*		
	EVO-S	Natural Light	Difference	EVO-S	Natural Light	Difference
2700K	0.52	0.52	0	0.34	0.35	-0.01
3000K	0.6	0.6	0	0.42	0.43	-0.01

*Circadian Action Factor(CAF), which is the ratio of the biological efficacy of radiation due to the excitation of intrinsically.

*Melanopic Ratio (MR) is the ratio of the spectral distribution of a light source under the melanopic curve to that under the photopic curve. Lower MRs enable melatonin secretion: help relaxation, higher MRs suppress melatonin secretion: energize.

The circadian metrics of the EVO-S down lights are very similar to that of natural light, with differences within the tolerance of measurement error. This is yet another indication of how closely EVO-S mimics natural light sources, both in visual and non-visual responses, and is an ideal solution for human centric lighting applications.