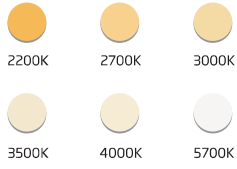


Flexglo™ F10B Monochrome - White Light (Silicone)



Certification Mark	UL	CE	8
Test Standard/Directive	UL2108 Class 2	CE-EMC	IS 10322
Certificate Serial Number	20180801-E360029	SZEM1712012372LMV	R-41128376
Report Reference	E360029-20130322	SZEM171201237201	NO.20190425001

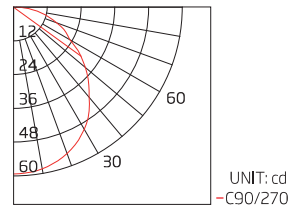


Ambient Working Temperature ≤4.5W/m -40 ~ 65°C /-40~131°F	Ambient Installation Temperature ≥ -40°C /-40°F	Storage Temperature -40 ~ 60°C /-40~140°F
Max. Mounting Surface Temperature 85°C /185°F <i>specified in the non-working state of light.</i>	Constant Voltage DC24V, DC12V	

C-SFR-F10B-HB

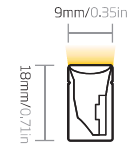


C-SFR-F10B-HB-24CV-30K-
WM-72-80-4.5W-83.3

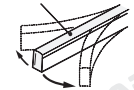


Min. Bending Diameter
90mm/3.54in

Min. Cutting Length
83.3mm/3.28in, 6LEDs



LIGHT SURFACE



Horizontal Bending

Bending-extreme
1870 times

Tensile-instantaneous
>40kg.f

Twist-extreme
4025times

AVERAGE BEAM ANGLE (50%) : 108.8°

Warning: Extreme Destructive Tests in Laboratory only, and it's forbidden to operate in practice.

Note:

- The illuminated light length shall be an integral multiple of min. cutting length.
- The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please make sure connector is properly assembled before installation. The highest IP rating we can achieve is IP68.

Item Code

C	SFR	F10B	HB	24CV	30K	WM	72	80	4.5W	83.3
Company	Material	Product Series	Bending Direction	Voltage & Circuit Type	Color	Base & Lighting Surface	LEDs Qty/m	CRI	Power/m	Min. Cutting Length (mm)
Clear	SFR= Silicone Flex Ribbon	F10 B= Monochrome	HB= Horizontal Bending	DC24V & Constant Voltage DC12V & Constant Voltage	22K=2200K 27K=2700K 30K=3000K 35K=3500K 40K=4000K 57K=5700K 27K=2700K 30K=3000K 35K=3500K 40K=4000K 30K=3000K	WM= White & Milky	72	80 90 95	4.5W	83.3 (DC24V) 41.7 (DC12V)

Feature

Flexglo™ F10B Monochrome - White Light (Silicone) is an item designed for architectural market with rated power 4.5W/m. Its CRI value can reach 95Ra and maximum luminous flux is up to 130lm/m. Thanks to the excellent weatherproof and UV-resistant performance of silicone material, it features a wide ambient working temperature range of -40~55 °C, especially suitable for harsh environment application.

Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology,

*The IP68 Injection-moulded Connector is engineered for outdoor use, owing to its elegant appearance and strong adhesiveness acquired by the liquid silicone injection workmanship.

*The IP67 Field Assembly Connector, which is underpinned by the Insulfit™ technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech™ such as the PinBoost™ technology enhancing physical reliability of light engine, the TwinFlex™ technology improving the conductivity and optimizing heat dissipation performance, the C-Mask™ technology making the light body self-cleaning and anti-UV and enabling consistent illumination.

Electrical Parameter

Category	C-SFR-F10B-HB	C-SFR-F10B-HB
Voltage (V)	24	12
Current (mA/m)	187.5	375
Power (W/m)	4.5	4.5
Circuit Type	CV	CV
LED Type	2835	2835
LEDs Qty/m	72	72
LEDs Qty/unit	6	3
Unit/m	12	24
Min. Cutting Length (mm)	83.3	41.7
Min. Cutting Length (in)	3.28	1.64

Optical Parameter

CRI 80

Item Code	Finished Product						LED	
	CCT	CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F10B-HB-24CV-22K-WM-72-80-4.5W-83.3	2200K	2238±102K	<5SDCM	80	110lm	34lm	<2.3SDCM	82~87
C-SFR-F10B-HB-24CV-27K-WM-72-80-4.5W-83.3	2700K	2725±145K	<5SDCM	80	130lm	40lm	<2.3SDCM	82~87
C-SFR-F10B-HB-24CV-30K-WM-72-80-4.5W-83.3	3000K	3045±175K	<5SDCM	80	130lm	40lm	<2.3SDCM	82~87
C-SFR-F10B-HB-24CV-35K-WM-72-80-4.5W-83.3	3500K	3465±245K	<5SDCM	80	130lm	40lm	<2.3SDCM	82~87
C-SFR-F10B-HB-24CV-40K-WM-72-80-4.5W-83.3	4000K	3985±275K	<5SDCM	80	130lm	40lm	<2.3SDCM	82~87
C-SFR-F10B-HB-24CV-57K-WM-72-80-4.5W-83.3	5700K	5669±355K	<5SDCM	80	130lm	40lm	<2.3SDCM	82~87
C-SFR-F10B-HB-12CV-22K-WM-72-80-4.5W-41.7	2200K	2238±66K	<5SDCM	80	110lm	34lm	<2.3SDCM	82~87
C-SFR-F10B-HB-12CV-27K-WM-72-80-4.5W-41.7	2700K	2725±85K	<5SDCM	80	130lm	40lm	<2.3SDCM	82~87
C-SFR-F10B-HB-12CV-30K-WM-72-80-4.5W-41.7	3000K	3045±105K	<5SDCM	80	130lm	40lm	<2.3SDCM	82~87
C-SFR-F10B-HB-12CV-35K-WM-72-80-4.5W-41.7	3500K	3465±245K	<5SDCM	80	130lm	40lm	<2.3SDCM	82~87
C-SFR-F10B-HB-12CV-40K-WM-72-80-4.5W-41.7	4000K	3985±150K	<5SDCM	80	130lm	40lm	<2.3SDCM	82~87
C-SFR-F10B-HB-12CV-57K-WM-72-80-4.5W-41.7	5700K	5669±305K	<5SDCM	80	130lm	40lm	<2.3SDCM	82~87

CRI 95

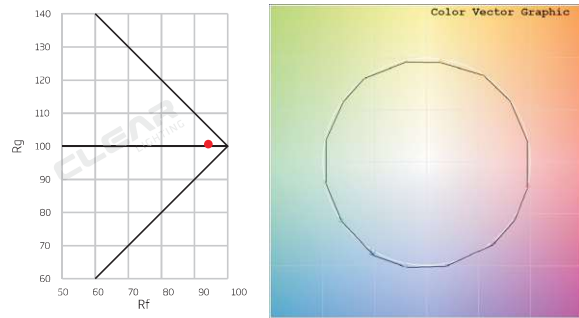
Item Code	Finished Product						LED		
	CCT	CCT Tolerance	Color Tolerance	CRI	R9	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F10B-HB-24CV-30K-WM-72-95-4.5W-83.3	3000K	3045±175K	<5SDCM	95	80~99	90lm	27lm	<2.3SDCM	96~99
C-SFR-F10B-HB-12CV-30K-WM-72-95-4.5W-41.7	3000K	3045±105K	<5SDCM	95	80~99	90lm	27lm	<2.3SDCM	96~99

Item Code	Finished Product							LED	
	CCT	CCT Tolerance	Color Tolerance	CRI	R9	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F10B-HB-24CV-27K-WM-72-90-4.5W-83.3	2700K	2725±145K	<5SDCM	90	35~80	105lm	32lm	<2.3SDCM	91~97
C-SFR-F10B-HB-24CV-30K-WM-72-90-4.5W-83.3	3000K	3045±175K	<5SDCM	90	35~80	105lm	32lm	<2.3SDCM	91~97
C-SFR-F10B-HB-24CV-35K-WM-72-90-4.5W-83.3	3500K	3465±245K	<5SDCM	90	35~80	105lm	32lm	<2.3SDCM	91~97
C-SFR-F10B-HB-24CV-40K-WM-72-90-4.5W-83.3	4000K	3985±275K	<5SDCM	90	35~80	105lm	32lm	<2.3SDCM	91~97
C-SFR-F10B-HB-12CV-27K-WM-72-90-4.5W-41.7	2700K	2725±85K	<5SDCM	90	35~80	105lm	32lm	<2.3SDCM	91~97
C-SFR-F10B-HB-12CV-30K-WM-72-90-4.5W-41.7	3000K	3045±105K	<5SDCM	90	35~80	105lm	32lm	<2.3SDCM	91~97
C-SFR-F10B-HB-12CV-35K-WM-72-90-4.5W-41.7	3500K	3465±245K	<5SDCM	90	35~80	105lm	32lm	<2.3SDCM	91~97
C-SFR-F10B-HB-12CV-40K-WM-72-90-4.5W-41.7	4000K	3985±150K	<5SDCM	90	35~80	105lm	32lm	<2.3SDCM	91~97

Note:

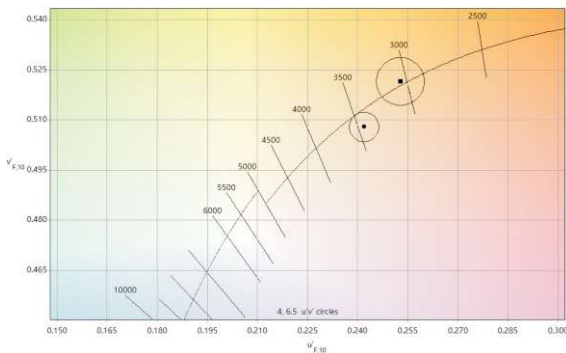
1. CCT Tolerance refers to target CCT and tolerance (ANSI C78.377).
2. Color Tolerance refers to CLEAR standard for the different batch of finished product and LED, and it's < 3SDCM for same batches of finished product.

TM-30



IES TM-30-15 is a new system of several related measures and graphics that can be used together to effectively evaluate and communicate a light source's color rendering properties. The development of the method involved synthesizing multiple related research efforts and combining ideas into a single, cohesive system of objective information that can be used to aid decision-making processes, such as finding the preferred light source for a given application or evaluating the tradeoffs between efficacy and color rendering.

Measure	Abbreviation	Description
Fidelity Index	Rf	Analogous to CIE Ra (CRI), Characterizes the average color shift of the 99 CES to characterize the overall level of similarity between the test source and reference illuminant. Values range from 0 to 100.
Gamut Index	Rg	Compares the area enclosed by the average chromaticity coordinates in each of 16 hue bins to characterize the average saturation level of the test source compared to the reference illuminant. A neutral score is 100, with values greater than 100 indicating an increase in saturation and values less than 100 indicating a decrease in saturation. The range in values grows as fidelity decreases.



Color Matching

Color temperature value stated on all CLEAR's documents refers to finished products. LED's color temperature would be shifted by the light diffuser made of PVC or silicone material. CLEAR calibrates color temperature and color coordinate of tailor-made LEDs with proprietary color-matching algorithms to produce a precise color temperature and color coordinate close to black body locus for finished products. All LEDs would be strictly tested and tightly controlled to ensure finished products can meet ANSI standard.

Max. Running Length

Type	Swivel Connector		Snap Connector		Socket Connector		Silicone Injection-moulded Connector	
IP Rating	IP20		IP67		IP67		IP68	
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed
DC24V C-SFR-F10B-4.5W	15m/49.2ft	30m/98.4ft	30m/98.4ft	60m/196.8ft	30m/98.4ft	60m/196.8ft	30m/98.4ft	60m/196.8ft
DC12V C-SFR-F10B-4.5W	7.5m/24.6ft	15m/49.2ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft	15m/49.2ft	30m/98.4ft
Dimension of Connector	PageF10 032		PageF10 035		PageF10 038		Page10 047	
Max.Packing Length					PageF10 080			

Note:

1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.
2. The maximum running length is based on the light in static full loading status.
3. Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector
4. The delivery length might be subject to the maximum packing length.