

Flexglo™ F16E RGBW Light (Silicone)



Certification Mark

Test Standard/Directive	UL2108 Class 2	CE-EMC
Certificate Serial Number	20180801-E360029	SZEM1712012372LMV
Report Reference	E360029-20130322	SZEM171201237201

Ambient Working Temperature ≤15W/m -40 ~ 45°C / -40 ~ 113°F	Ambient Installation Temperature ≥ -40°C / -40°F	Storage Temperature -40 ~ 60°C / -40 ~ 140°F
Max. Mounting Surface Temperature 85°C / 185°F	Constant Voltage DC24V	

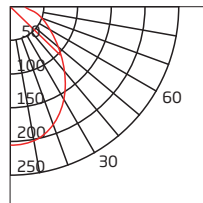
specified in the non-working state of light.



C-SFR-F16E-VB



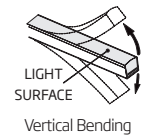
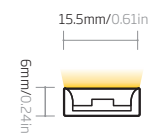
C-SFR-F16E-VB-24CV-RGBW(27K)-TT-60-15W-100



UNIT: cd
-C90/270

Min. Bending Diameter
50mm/1.97in

Min. Cutting Length
100mm/3.94in
6LEDs



Bending-extreme
810 times

Tensile-instantaneous
>60 kg.f

Twist-extreme
5049 times

AVERAGE BEAM ANGLE (50%) : 92.2°

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 IP67.

Feature

Flexglo™ F16E RGBW Light (Silicone), is a color changing product with qua-chip SMD5050 RGBW LEDs as light source, an ideal product for project where premium LED is required. RGBW color changing is achievable via a 4 channel PWM controller or any compatible DMX-512 controller, and 2700K, 4000K and 6500K in white color are optional.

Thanks to the excellent weatherproof and UV-resistant performance of silicone material, it features a wide ambient working temperature range of -40-45 °C, especially suitable for harsh environment application. Combined with the adoption of the DryWire™ technology, the IP67 Injection-moulded Connector is engineered for outdoor use, owing to its elegant appearance and strong adhesiveness acquired by the liquid silicone injection workmanship. 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.

Item Code

C	SFR	F16E	VB	24CV	RGBW (27K)	TT	60	15W	100
Company	Material	Product Series	Bending Direction	Voltage & Circuit Type	Color	Base & Lighting Surface	LEDs Qty/m	Power/m	Min. Cutting Length (mm)
Clear	SFR= Silicone Flex Ribbon	F16E=RGBW	VB= Vertical Bending	DC24V & Constant Voltage	RGBW(27K) =RGB & 2700K RGBW(30K) =RGB & 3000K RGBW(40K) =RGB & 4000K RGBW(65K) =RGB & 6500K	TT= Transparence & Transparence	60	15W	100

Electrical Parameter

Category	C-SFR-F16E-VB
Voltage (V)	24
Current (mA/m)	625.0
Power (W/m)	15
Circuit Type	CV
LED Type	5050
LEDs Qty/m	60
LEDs Qty/unit	6
Unit/m	10
Min. Cutting Length (mm)	100
Min. Cutting Length (in)	3.94

Optical Parameter

Item Code	Finished Product					LED	
	Color	Wavelength /CCT	CCT Tolerance	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F16E-VB-24CV-RGBW(27K)-TT-60-15W-100	Red	618-624nm	N/A	105lm	32lm	<3nm	N/A
	Green	522-530nm	N/A	280lm	85lm	<3nm	N/A
	Blue	468-474nm	N/A	55lm	17lm	<3nm	N/A
	White	2725±85K	<5SDCM	280lm	85lm	<2.3SDCM	82~87
C-SFR-F16E-VB-24CV-RGBW(30K)-TT-60-15W-100	Red	618-624nm	N/A	105lm	32lm	<3nm	N/A
	Green	522-530nm	N/A	280lm	85lm	<3nm	N/A
	Blue	468-474nm	N/A	55lm	17lm	<3nm	N/A
	White	3045±140K	<5SDCM	280lm	85lm	<2.3SDCM	82~87
C-SFR-F16E-VB-24CV-RGBW(40K)-TT-60-15W-100	Red	618-624nm	N/A	105lm	32lm	<3nm	N/A
	Green	522-530nm	N/A	280lm	85lm	<3nm	N/A
	Blue	468-474nm	N/A	55lm	17lm	<3nm	N/A
	White	3985±150K	<5SDCM	280lm	85lm	<2.3SDCM	82~87
C-SFR-F16E-VB-24CV-RGBW(65K)-TT-60-15W-100	Red	618-624nm	N/A	105lm	32lm	<3nm	N/A
	Green	522-530nm	N/A	280lm	85lm	<3nm	N/A
	Blue	468-474nm	N/A	55lm	17lm	<3nm	N/A
	White	6532±340K	<5SDCM	280lm	85lm	<2.3SDCM	82~87

Note:

1. CCT Tolerance refers to target CCT and tolerance (ANSI C78.377).
2. Color Tolerance refers to CLEAR standard for LED.

Max. Running Length

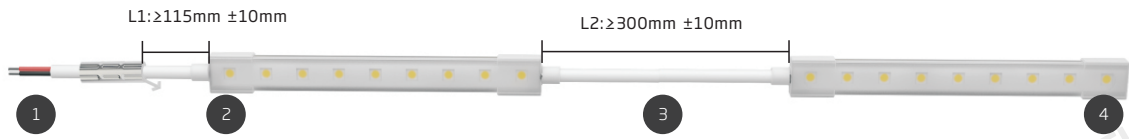
Input: DC24V

Type	Silicone Injection-moulded Connector	
IP Rating	IP67	
Item Code	Single-end Feed	Double-end Feed
C-SFR-F16E-15W-Static full loading	8m	16m
C-SFR-F16E-15W-Dynamic operating	12m	24m

Note:

1. Above conclusion is based on voltage drop testing result of the light with 0.3m cable only.
2. The maximum running length is based on the light in static full loading status exceptionally stated dynamic operating.
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.

Connector Type



1	2	3	4
<p>Male & Female Connector (Optional)</p>	<p>Silicone Injection-moulded Front Connector</p>	<p>Silicone Injection-moulded Middle Connector</p>	<p>Silicone Injection-moulded End Cap</p>
<div data-bbox="199 667 395 862"> <p>Male Connector</p> </div> <div data-bbox="199 1008 395 1202"> <p>Female Connector</p> </div>	<div data-bbox="539 667 735 862"> <p>End</p> </div> <div data-bbox="539 1008 735 1202"> <p>Side-L</p> </div> <div data-bbox="539 1355 735 1550"> <p>Side-R</p> </div> <div data-bbox="539 1697 735 1892"> <p>Bottom</p> </div>	<div data-bbox="874 667 1070 862"> <p>Silicone Injection-moulded Jumper Maximum 8 Jumpers in 20m Maximum 4 Jumpers in 10m</p> </div> <div data-bbox="874 1008 1070 1202"> <p>Silicone Injection-moulded T-feed Maximum 8 T-feeds in 20m Maximum 4 T-feeds in 10m</p> </div>	<div data-bbox="1209 667 1406 862"> <p>End cap</p> </div>

Anti-wicking Ferrule

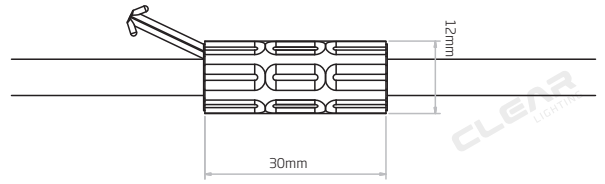


The anti-wicking ferrule is located at 115mm (± 10 mm tolerance) from the connector on the cable.

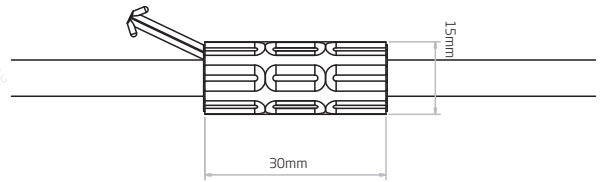
For protection against water ingress from inside of cable wire and hence damage the light.

Note:

1. Unless otherwise stated, the tolerance is ± 0.5 mm.
2. The removal of anti-wicking ferrule will void the warranty if any water ingress caused by it.



F16B  18AWG*2



F16D/S  18AWG*3

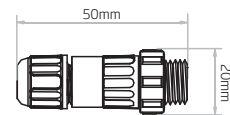
F16A  22AWG*3
20AWG*1

F16E  22AWG*4
20AWG*1

Male & Female Connector



For plug and play cable junction, IP67



Note:

Unless otherwise stated, the tolerance is ± 2 mm.

Aluminum Profile

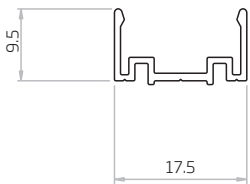


It uses high-quality 6063 aluminum with thin-wall, light-weight design to fit tightly the light body. It is deformation and rust resistant, and cost-effective.

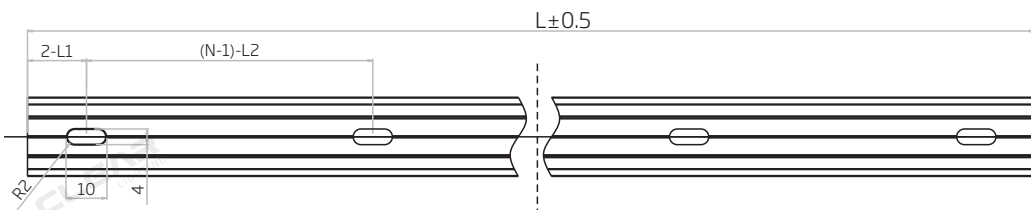
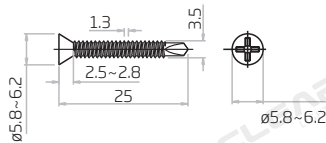
Please refer to the applicable installation ways.

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Mounting profile	2	Clamping force	CLEAR-defined

Dimension: mm



Tolerance(AL): $\pm 0.3\text{mm}$



Note:

- 2-L1 refers to two of symmetric L1 in each piece of profile.
 - (N-1)-L2 refers to (N minus one) of symmetric L2 in each piece of profile.
- "N" hereby stands for its corresponding "Hole Number" in the below table

Item Code	Standard Length	L1	L2	Slotted Hole	Hole Number
F16-A/PL-35MM-AL	35mm/1.38in	17.5mm/0.69in	/	4*10mm/0.16*0.39in	1
F16-A/PL-500MM-AL	500mm/19.68in	50mm/1.97in	200mm/7.87in	4*10mm/0.16*0.39in	3
F16-A/PL-1000MM-AL	1000mm/39.37in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	5
F16-A/PL-2000MM-AL	2000mm/78.74in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	10