



# **SAUNA LED FLEX** LINEAR LIGHT

Silicone

Ambient Working Temperature Мах. 110°C

Ambient Relative Humidity Max. 100%

Lumen Output Max. 450

<sup>\* 3</sup> years warranty for max. 95°C and 1 year warranty for max. 110°C.

Available Silicone Products	F22   F15   F21
IP Rating	IP67
Rated Power	≤6W/m
Applicable to	High temperature and humidity environments such as Dry Sauna, Wet Sauna, Steam Room, SPA, etc.

















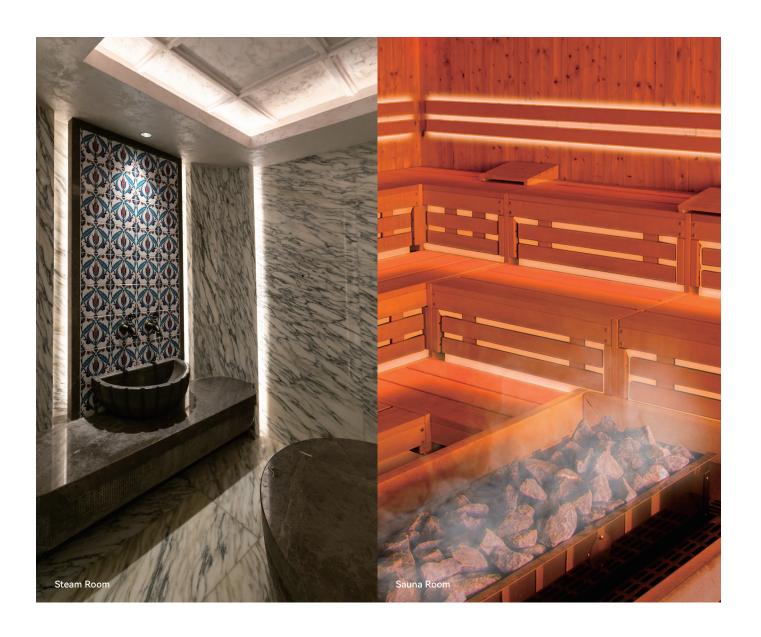












#### ★ Safe & Reliable

Adopt built-in constant current design to control temperature rise, no need extra protection shade against high temperature.

- ★ Versatile Installation Indirect or direct lighting, horizontal or vertical bending.
- ★ Ready & Convenient for Installation

Factory-assembled connector, integrated to the light body by machine.

- ★ Standard or Bespoke Lengths
  Max. 10m per piece and min. 55mm increment.
- ★ Ideal Lighting Continuity Even spliced by multiple pieces of LED flex.
- ★ Much Lower User & Maintenance Cost Compared with traditional sauna light fixtures prevailing in light efficiency, lifespan, and accommodation.



### Monochrome

W 6.1			Finished Pro	oduct			LED	
Item Code	CCT CCT Toleran		Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F22B-VB-24CC-22K-0M-108-80-6 W-55.6	2200K	2265±85K	<6SDCM	80	330lm	101lm	<2.3SDCM	82~87
C-SFR-F22B-VB-24CC-27K-0M-108-80-6 W-55.6	<u>2700</u> K	2765±135K	<6SDCM	80	350lm	107lm	<2.3SDCM	82~87
C-SFR-F22B-VB-24CC-30K-0M-108-80-6 W-55.6	<u>3000</u> 3000K	3075±150K	<6SDCM	80	350lm	107lm	<2.3SDCM	82~87
C-SFR-F22B-VB-24CC-35K-0M-108-80-6 W-55.6	<u> </u>	3485±175K	<6SDCM	80	350lm	107lm	<2.3SDCM	82~87
C-SFR-F22B-VB-24CC-40K-0M-108-80-6 W-55.6	4000K	3985±245K	<6SDCM	80	350lm	107lm	<2.3SDCM	82~87
C-SFR-F22B-VB-24CC-57K-0M-108-80-6 W-55.6	5700K	5685±355K	<6SDCM	80	350lm	107lm	<2.3SDCM	82~87
C-SFR-F22B-HB-24CC-22K-0M-108-80-6 W-55.6	<u>2200</u> K	2265±85K	<6SDCM	80	230lm	70lm	<2.3SDCM	82~87
C-SFR-F22B-HB-24CC-27K-0M-108-80-6 W-55.6	2700K	2765±135K	<6SDCM	80	260lm	79lm	<2.3SDCM	82~87
C-SFR-F22B-HB-24CC-30K-0M-108-80-6 W-55.6	<u>3000</u> K	3075±150K	<6SDCM	80	260lm	79lm	<2.3SDCM	82~87
C-SFR-F22B-HB-24CC-35K-0M-108-80-6 W-55.6	<u> </u>	3485±175K	<6SDCM	80	260lm	79lm	<2.3SDCM	82~87
C-SFR-F22B-HB-24CC-40K-0M-108-80-6 W-55.6	4000K	3985±245K	<6SDCM	80	260lm	79lm	<2.3SDCM	82~87
C-SFR-F22B-HB-24CC-57K-0M-108-80-6 W-55.6	5700K	5685±355K	<6SDCM	80	260lm	79lm	<2.3SDCM	82~87

llen Cede		Finished Product							LED	
Item Code	CCT	CCT Tolerance	Color Tolerance	CRI	R9	Lumen/m	Lumen/ft	Colo Tolera	•	CRI
C-SFR-F15B-HB-24CC-22K-OM -72-80-6W-83.3	2200K	2265±85K	<6SDCM	80		200lm	61lm	<2.3SI	OCM	82~87
C-SFR-F15B-HB-24CC-27K-0M -72-80-6W-83.3	2700K	2765±135K	<6SDCM	80		210lm	64lm	<2.35	OCM	82~87
C-SFR-F15B-HB-24CC-30K-0M -72-80-6W-83.3	_ 3000К	3075±150K	<6SDCM	80		210lm	64lm	<2.35	)CM	82~87
C-SFR-F15B-HB-24CC-35K-OM-72-80-6W-83.3	_ 3500К	3485±175K	<6SDCM	80		210lm	64lm	<2.35[	)CM	82~87
C-SFR-F15B-HB-24CC-40K-0M -72-80-6W-83.3	<b>4000</b> K	3985±245K	<6SDCM	80		210lm	64lm	<2.3SI	)CM	82~87
C-SFR-F15B-HB-24CC-57K-0M -72-80-6W-83.3	<u> </u>	5685±355K	<6SDCM	80		210lm	64lm	<2.35	)CM	82~87

lhour Code			LED						
Item Code	ССТ	CCT Tolerance	Color Tolerance	CRI	R9	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F21B-HB-24CC-22K-0M-72-80-6W-83.3	2200K	2265±85K	<6SDCM	80		230lm	70lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-27K-0M-72-80-6W-83.3	2700K	2765±135K	<6SDCM	80		280lm	85lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-30K-0M-72-80-6W-83.3	_ 3000К	3075±150K	<6SDCM	80		280lm	85lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-35K-0M-72-80-6W-83.3	3500K	3485±175K	<6SDCM	80		280lm	85lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-40K-0M-72-80-6W-83.3	4000K	3985±245K	<6SDCM	80		280lm	85lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-57K-0M-72-80-6W-83.3	5700K	5685±355K	<6SDCM	80		280lm	85lm	<2.3SDCM	82~87

### Monochrome

ltem code		Finished		LED	
item code	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
C-SFR-F22B-VB-24CC-R-0M-108-6W-83.3	Red	618-624nm	190lm	58lm	≺3nm
C-SFR-F22B-VB-24CC-G-0M-108-6W-55.6	Green	522-530nm	390lm	119lm	≺3nm
C-SFR-F22B-VB-24CC-B-0M-108-6W-55.6	Blue	468-474nm	75lm	23lm	≺3nm
C-SFR-F22B-VB-24CC-A-0M-108-6W-83.3	Amber	588-594nm	190lm	58lm	≺3nm
C-SFR-F22B-HB-24CC-R-0M-108-6W-83.3	Red	618-624nm	140lm	43lm	≺3nm
C-SFR-F22B-HB-24CC-G-0M-108-6W-55.6	Green	522-530nm	300lm	91lm	≺3nm
C-SFR-F22B-HB-24CC-B-0M-108-6W-55.6	Blue	468-474nm	55lm	17lm	≺3nm
C-SFR-F22B-HB-24CC-A-0M-108-6W-83.3	Amber	588-594nm	140lm	43lm	<3nm

ltem code		Finished		LED	
item code	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
C-SFR-F15B-HB-24CC-R-0M-72-6W-125	Red	618-624nm	105lm	32lm	<3nm
C-SFR-F15B-HB-24CC-G-OM-72-6W-83.3	Green	522-530nm	200lm	61lm	<3nm
C-SFR-F15B-HB-24CC-B-0M-72-6W-83.3	Blue	468-474nm	40lm	12lm	<3nm
C-SFR-F15B-HB-24CC-A-OM-72-6W-125	Amber	588-594nm	110lm	34lm	<3nm

ltem code		Finished		LED	
itenicode	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
C-SFR-F21B-HB-24CC-R-OM-72-6W-125	Red	618-624nm	130lm	40lm	<3nm
C-SFR-F21B-HB-24CC-G-OM-72-6W-83.3	Green	522-530nm	280lm	85lm	<3nm
C-SFR-F21B-HB-24CC-B-OM-72-6W-83.3	Blue	468-474nm	55lm	17lm	<3nm
C-SFR-F21B-HB-24CC-A-OM-72-6W-125	Amber	588-594nm	150lm	46lm	<3nm

### Dynamic White

ltem code		Finishe	LED		
item code	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
C-SFR-F22D-VB-24CC-2200-5700K-0M-144-6W-83.3		2238±66K	110lm	34lm	N/A
C-SFR-F22D-HB-24CC-2200-5700K-0M-144-6W-83.3		5669±305K	135lm	41lm	N/A

		Finished	d Product		LED
ltem code	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
		2238±66K	70lm	21lm	≺∃nm
C-SFR-F15D-HB-24CC-2200-5700K-0M-144-6W-83.3	2200K~5700K	5669±305K	85lm	26lm	<3nm

Item code		Finished	i Product		LED
	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
C-SFR-F21D-HB-24CC-2200-5700K-0M-144-6W-83.3		2238±66K	85lm	26lm	<3nm
C-3FR-FZ1D-FID-24CC-2200-3/00K-0I*I-144-0W-03.3		5669±305K	105lm	32Im	<3nm



		Finished	Product		LED
ltem code	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
	Red	618-624nm	35lm	11lm	<3nm
C-SFR-F22A-VB-24CV-RGB-0M-252-4.5W-125	Green	522-530nm	100lm	30lm	<3nm
C-SFR-F22A-VB-24CV-RUB-UM-252-4.5W-125 -	Blue	458-464nm	15lm	5lm	<3nm
	R+G+B	R+G+B	150lm	46lm	/
	Red	618-624nm	25lm	8lm	<3nm
C-SFR-F22A-HB-24CV-RGB-0M-252-4.5W-125	Green	522-530nm	90lm	27lm	<3nm
L-3FK-F22A-FID-24LV-KUD-UM-232-4.3W-123 -	Blue	458-464nm	12lm	4lm	<3nm
	R+G+B	R+G+B	127lm	39lm	/

ltem code		Finished		LED	
	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
	Red	618-624nm	15lm	5lm	<3nm
C-SFR-F15A-HB-24CV-RGB-0M-180-3.6W-100	Green	522-530nm	35lm	11lm	<3nm
	Blue	458-464nm	7lm	2lm	≺3nm
	R+G+B	R+G+B	47lm	14lm	<2.3SDCM

ltem code		Finished I	Product		LED
item code	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
	Red	618-624nm	15lm	5lm	<3nm
C-SFR-F21A-HB-24CV-RGB-OM-180-3.6W-100	Green	522-530nm	45lm	14lm	≺3nm
- C-SPK-FZIA-NB-Z4LV-KUB-UM-1800-3.0W-100	Blue	458-464nm	10lm	3lm	≺3nm
	R+G+B	R+G+B	70lm	21lm	<2.3SDCM



		Finished I	Product		LED
ltem code	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
	Red	618-624nm	35lm	11lm	<3nm
	Green	522-530nm	100lm	30lm	<3nm
C-SFR-F22E-VB-24CV-RGBW(22K)-OM-336-6W-83.3	Blue	458-464nm	15lm	5lm	<3nm
_	2200K	2238±102K	65lm	20lm	<2.3SDCM
	Red	618-624nm	35lm	11lm	<3nm
	Green	522-530nm	100lm	30lm	<3nm
C-SFR-F22E-VB-24CV-RGBW(27K)-0M-336-6W-83.3 <del>-</del>	Blue	458-464nm	15lm	5lm	<3nm
_	2700K	2725±145K	65lm	20lm	<2.3SDCM
	Red	618-624nm	35lm	11lm	<3nm
_	Green	522-530nm	100lm	30lm	<3nm
C-SFR-F22E-VB-24CV-RGBW(30K)-0M-336-6W-83. <del>3</del>	Blue	458-464nm	15lm	5lm	<3nm
-	3000K	3045±175K	65lm	20lm	<2.3SDCM
	Red	618-624nm	35lm	11lm	<3nm
-	Green	522-530nm	100lm	30lm	<3nm
C-SFR-F22E-VB-24CV-RGBW(35K)-OM-336-6W-83. <del>3</del>	Blue	458-464nm	15lm	5lm	<3nm
-	3500K	3465±245K	65lm	20lm	<2.3SDCM
	Red	618-624nm	35lm	11lm	 <3nm
-	Green	522-530nm	100lm	30lm	<3nm
C-SFR-F22E-VB-24CV-RGBW(40K)-0M-336-6W-83. <del>3</del>	Blue	458-464nm	15lm	5lm	<3nm
-	4000K	3985±275K	65lm	20lm	<2.3SDCM
	Red	618-624nm	25lm	8lm	<3nm
-	Green	522-530nm	90lm	27lm	<3nm
C-SFR-F22E-HB-24CV-RGBW(22K)-OM-336-6W-83. <del>3</del>	Blue	458-464nm	12lm	4lm	<3nm
-	2200K	2238±102K	50lm	15lm	<2.3SDCM
	Red	618-624nm	25lm	8lm	 <3nm
-	Green	522-530nm	90lm	27lm	<3nm
C-SFR-F22E-HB-24CV-RGBW(27K)-OM-336-6W-83. <del>3</del>	Blue	458-464nm	12lm	4lm	<3nm
-	2700K	2725±145K	50lm	15lm	<2.3SDCM
	Red	618-624nm	25lm	8lm	 <3nm
-	Green	522-530nm	90lm	27lm	<3nm
C-SFR-F22E-HB-24CV-RGBW(30K)-0M-336-6W-83. <del>3</del>	Blue	458-464nm	12lm	4lm	<3nm
-	3000K	3045±175K	50lm	15lm	<2.3SDCM
	Red	618-624nm	25lm	8lm	<3nm
-	Green	522-530nm	90lm	27lm	<3nm
C-SFR-F22E-HB-24CV-RGBW(35K)-0M-336-6W-83. <del>3</del>	Blue	458-464nm	12lm	4lm	<3nm
-	3500K	3465±245K	50lm	15lm	<2.3SDCM
	Red	618-624nm	25lm	8lm	<3nm
-	Green	522-530nm	90lm	27lm	<3nm
C-SFR-F22E-HB-24CV-RGBW(40K)-0M-336-6W-83. <del>3</del>	Blue	458-464nm	12lm	4lm	 <3nm
-	4000K	 3985±275K	50lm	15lm	<2.3SDCM



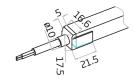
		Finished	Product		LED
ltem code	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
	Red	618-624nm	15lm	5lm	N/A
C-SFR-F15E-HB-24CV-RGBW(27K)-0M-240-5W-100	Green	522-530nm	35lm	11lm	N/A
C-31 K-1 13L-11B-24CV-NGBW(27K)-011-240-3W-100	Blue	458-464nm	7lm	2lm	N/A
	2700K	2725±145K	40lm	12lm	N/A
	Red	618-624nm	15lm	5lm	N/A
C-SFR-F15E-HB-24CV-RGBW(30K)-0M-240-5W-100	Green	522-530nm	35lm	11lm	N/A
C-3FK-F13E-FB-24CV-RUDW(30K)-UM-24U-3W-10U	Blue	458-464nm	7lm	2lm	N/A
	3000K	3045±175K	40lm	12lm	N/A
	Red	618-624nm	15lm	5lm	N/A
C-SFR-F15E-HB-24CV-RGBW(40K)-0M-240-5W-100	Green	522-530nm	35lm	11lm	N/A
C-3FK-F13E-F10-24CV-RUBW(4UK)-UM-24U-3W-1UU	Blue	458-464nm	7lm	2lm	N/A
	4000K	3985±275K	40lm	12lm	N/A

		Finished	Product		LED
ltem code	Color	Wavelength	Lumen/m	Lumen/ft	Color Tolerance
	Red	618-624nm	15lm	5lm	<3nm
C-SFR-F21E-HB-24CV-RGBW(27K)-0M-240-5W-100	Green	522-530nm	45lm	14lm	<3nm
C-31 K-1 Z1E-11B-24CV-RGBW(Z7K)-011-240-3W-100	Blue	458-464nm	10lm	3lm	<3nm
	2700K	2725±145K	45lm	14lm	N/A
	Red	618-624nm	15lm	5lm	<3nm
C-SFR-F21E-HB-24CV-RGBW(30K)-0M-240-5W-100	Green	522-530nm	45lm	14lm	<3nm
e six reletible lev rabw(son) of relia sw loo	Blue	458-464nm	10lm	3lm	<3nm
	3000K	3045±175K	45lm	14lm	N/A
	Red	618-624nm	15lm	5lm	<3nm
C-SFR-F21E-HB-24CV-RGBW(40K)-0M-240-5W-100	Green	522-530nm	45lm	14lm	<3nm
C-2FK-F21E-HB-24CV-RUBW(40K)-0M-240-5W-10	Blue	458-464nm	10lm	3lm	<3nm
	4000K	3985±275K	45lm	14lm	N/A

### Silicone Injection-moulded Connector (mm)

## Vertical Bending Horizontal Bending 01End 02End 01End 02End



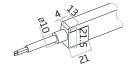




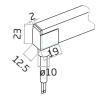






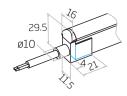


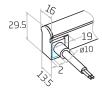


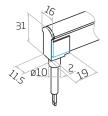


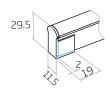






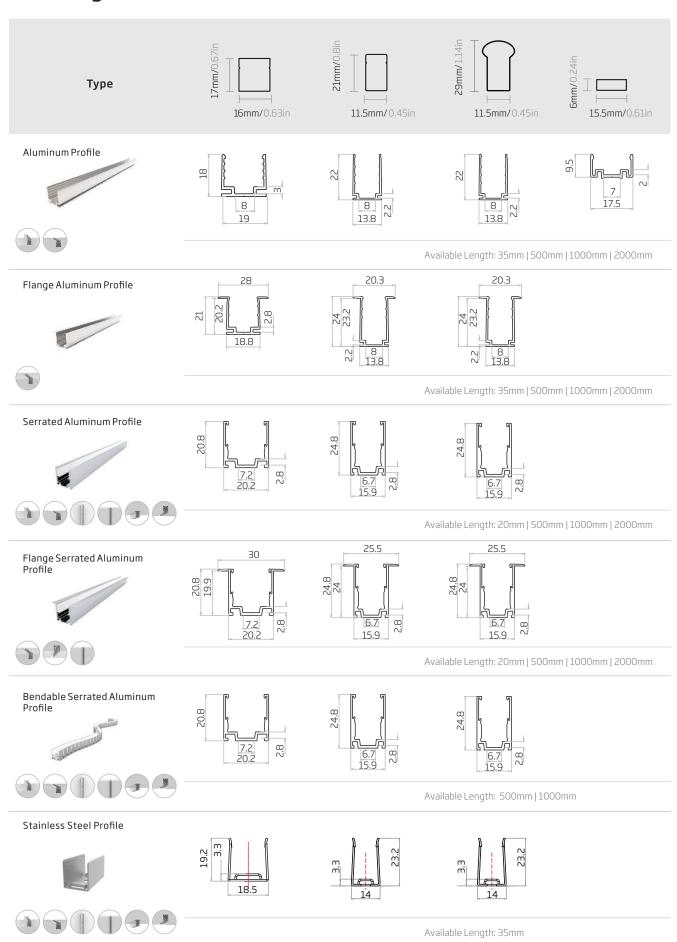






1.Unless otherwise stated, the tolerance of the connector is ±0.5mm; 2.To avoid damage from the excessive force on cable joint, please keep at least 60mm of cable ahead in the natural state.

### **Mounting Profile**



#### Note:

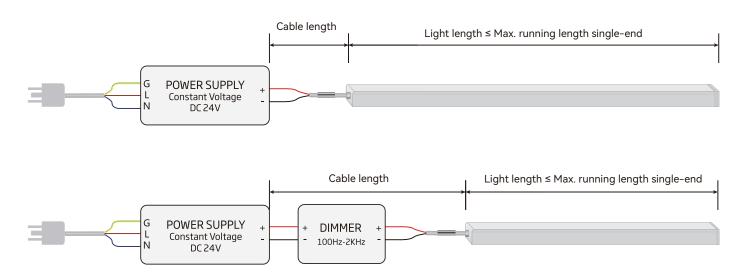
- 1. Unless otherwise stated, the tolerance of the mounting profile is  $\pm 0.2$ mm;
- 2. It's not recommended to install the light repeatedly, otherwise the light inside might be damaged.

## ThermG of F22B Wiring Diagram

- 1. Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- 2. This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;
- 3. Dimming frequency ranges from 100Hz to 2000Hz, and 500Hz is recommended.
- 4. Types of standard plugs are optional if power cord is purchased from CLEAR.



### Single-end Feed



### Light Length 🔽

The length of the longest single light in parallel connection or sum of lights in series connection.

### Cable Length 🗵

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

### How to Minimize Voltage Drop 🔽

- 1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.
- 2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".

### Max. Cable Length (Silicone)

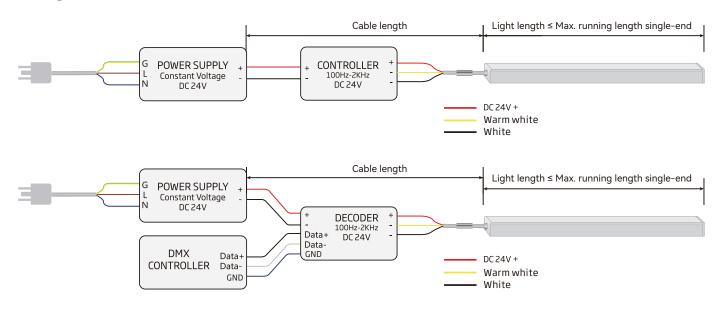
C-SFR-	C-SFR-F22B-CC												
Light Length		0.32mm² 22AWG		0.52mm² 20AWG		0.81mm² 18AWG		mm² WG	2.07mm² 14AWG				
(m)	m	ft	m	ft	m	ft	m	ft	m	ft			
1	76.11	249.70	123.68	405.77	192.65	632.06	313.95	1030.03	492.34	1615.28			
2	42.28	138.72	61.84	202.88	96.33	316.03	156.98	515.02	246.17	807.64			
3	27.77	91.10	40.61	133.24	63.26	207.54	103.09	338.22	161.66	530.39			
4	20.67	67.82	30.23	99.19	47.09	154.50	76.74	251.79	120.35	394.85			
5	16.61	54.50	24.29	79.70	37.84	124.16	61.67	202.33	96.71	317.29			
6	13.88	45.55	20.31	66.62	31.63	103.77	51.54	169.11	80.83	265.19			
7	11.93	39.13	17.44	57.22	27.17	89.14	44.28	145.26	69.43	227.80			
8	10.39	34.10	15.20	49.87	23.68	77.68	38.59	126.60	60.51	198.53			
9	9.26	30.37	13.54	44.41	21.09	69.18	34.36	112.74	53.89	176.80			
10	8.34	27.37	12.20	40.03	19.01	62.36	30.97	101.62	48.57	159.35			

## ThermG of F22D Wiring Diagram

- 1. Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- 2. A compatible controller is required to achieve various light changing effects;
- 3. The rated power of controller/decoder shall be higher than the actual power consumption of light; its frequency range shall be 100~2000Hz, and 500Hz is recommended;
- 4. This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;
- 5. Types of standard plugs are optional if power cord is purchased from CLEAR.



### Single-end Feed



### Light Length 🔽

The length of the longest single light in parallel connection or sum of lights in series connection.

### Cable Length 🗵

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

### How to Minimize Voltage Drop 🔽

- 1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.
- 2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".
- 3. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

# Max. Cable Length (Silicone) Input: DC24V

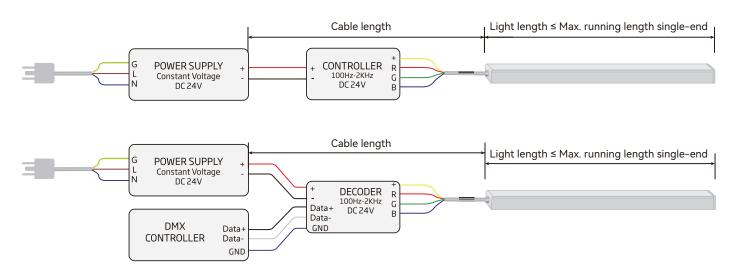
C-SFR-F22D-CC												
Light Length	0.32mm <sup>2</sup> 22AWG		0.52mm² 20AWG		0.81mm² 18AWG		1.32mm² 16AWG		2.07mm² 14AWG			
(m)	m	ft	m	ft	m	ft	m	ft	m	ft		
1	110.51	362.57	179.58	589.18	279.73	917.76	455.86	1495.61	714.87	2345.38		
2	55.81	183.12	90.70	297.56	141.28	463.51	230.23	755.36	361.05	1184.54		
3	39.48	129.53	64.16	210.49	99.94	327.88	162.86	534.32	255.39	837.90		
4	28.20	92.52	45.83	150.35	71.38	234.20	116.33	381.65	182.42	598.50		
5	24.53	80.47	39.86	130.76	62.08	203.69	101.17	331.93	158.66	520.53		
6	18.87	61.90	30.66	100.59	47.76	156.68	77.83	255.33	122.04	400.41		
7	16.22	53.20	26.35	86.45	41.05	134.66	66.89	219.45	104.89	344.14		
8	13.51	44.33	21.96	72.04	34.20	112.22	55.74	182.88	87.41	286.78		
9	11.45	37.55	18.60	61.03	28.97	95.06	47.22	154.91	74.05	242.93		
10	10.41	34.14	16.91	55.48	26.34	86.42	42.92	140.83	67.31	220.85		

## ThermG of F22A Wiring Diagram

- 1. Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- 2. A compatible controller is required to achieve various light changing effects;
- 3. The rated power of controller/decoder shall be higher than the actual power consumption of light; its frequency range shall be 100~2000Hz, and 500Hz is recommended;
- 4. This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;
- 5. Types of standard plugs are optional if power cord is purchased from CLEAR.



### Single-end Feed



Light Length 🔟

Cable Length 🗵

The length of the longest single light in parallel connection or sum of lights in series connection.

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

### How to Minimize Voltage Drop and Signal Transmission Attenuation

- 1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.
- 2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".
- 3. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

### Max. Cable Length

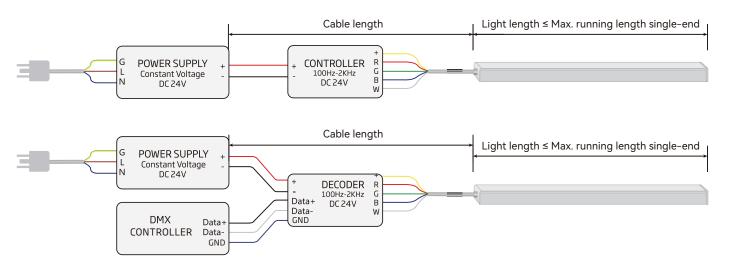
C-SFR-	-F22A-	-CV								
Light Length	0.32mm² 22AWG		0.52mm <sup>2</sup> 20AWG		0.81mm² 18AWG		1.32mm² 16AWG		2.07mm² 14AWG	
(m)	m	ft	m	ft	m	ft	m	ft	m	ft
1	125.58	412.01	204.07	669.52	317.88	1042.91	518.02	1699.55	812.35	2665.21
2	62.79	206.01	102.03	334.76	158.94	521.45	259.01	849.78	406.18	1332.60
3	44.42	145.72	72.18	236.80	112.43	368.86	183.22	601.10	287.32	942.64
4	31.73	104.09	51.55	169.14	80.31	263.47	130.87	429.36	205.23	673.32
5	25.47	83.56	41.39	135.79	64.47	211.52	105.06	344.70	164.76	540.55
6	21.23	69.64	34.49	113.16	53.73	176.27	87.55	287.25	137.30	450.46
7	18.24	59.85	29.64	97.26	46.18	151.50	75.25	246.88	118.01	387.16
8	15.20	49.88	24.70	81.05	38.48	126.25	62.71	205.74	98.34	322.63
9	13.46	44.17	21.88	71.77	34.08	111.80	55.53	182.20	87.09	285.72
10	11.71	38.41	19.02	62.41	29.63	97.22	48.29	158.43	75.73	248.45

## ThermG of F22E Wiring Diagram

- 1. Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- 2. A compatible controller is required to achieve various light changing effects;
- 3. The rated power of controller/decoder shall be higher than the actual power consumption of light; its frequency range shall be 100~2000Hz, and 500Hz is recommended:
- 4. Full loading in RGBW is not recommended to avoid the overheating of light.
- 5. This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;
- 6. Types of standard plugs are optional if power cord is purchased from CLEAR.



### Single-end Feed



Light Length 🔽

Cable Length 🗵

The length of the longest single light in parallel connection or sum of lights in series connection.

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

### How to Minimize Voltage Drop and Signal Transmission Attenuation 🗵

- 1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.
- 2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".
- 3. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

### Max. Cable Length

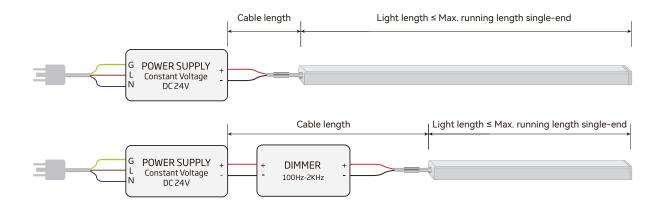
C-SFR-	-F22E-	-CV								
Light Length	0.32mm <sup>2</sup> 22AWG		0.52mm <sup>2</sup> 20AWG		0.81mm² 18AWG		1.32 16A	mm² WG	2.07mm² 14AWG	
(m)	m	ft	m	ft	m	ft	m	ft	m	ft
1	94.53	310.13	153.61	503.96	239.27	785.01	389.92	1279.28	611.47	2006.14
2	47.98	157.43	77.97	255.82	121.46	398.48	197.93	649.38	310.39	1018.35
3	32.15	105.48	52.24	171.40	81.38	266.98	132.61	435.09	207.96	682.29
4	23.81	78.13	38.70	126.96	60.28	197.77	98.23	322.29	154.05	505.40
5	19.22	63.05	31.23	102.46	48.64	159.60	79.27	260.08	124.31	407.86
6	15.25	50.04	24.78	81.31	38.61	126.66	62.92	206.41	98.66	323.69
7	13.24	43.45	21.52	70.61	33.53	109.99	54.63	179.25	85.68	281.09
8	11.04	36.21	17.94	58.84	27.94	91.66	45.53	149.37	71.40	234.25
9			15.24	49.99	23.73	77.87	38.68	126.90	60.66	199.00
10			13.85	45.45	21.58	70.79	35.16	115.36	55.14	180.91

## ThermG of F15B Wiring Diagram

- 1. Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- 2. This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;
- 3. Dimming frequency ranges from 100Hz to 2000Hz, and 500Hz is recommended.
- 4. Types of standard plugs are optional if power cord is purchased from CLEAR.



### Single-end Feed



### Light Length

The length of the longest single light in parallel connection or sum of lights in series connection.

### Cable Length 🔽

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

### How to Minimize Voltage Drop

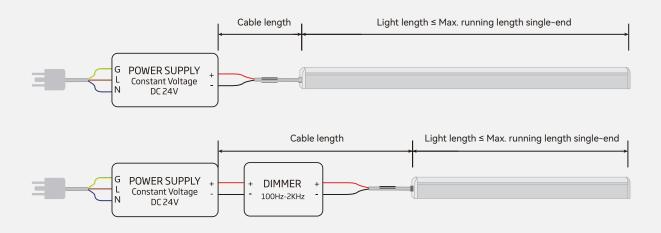
- 1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.
- 2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".

## ThermG G F21B Wiring Diagram

- 1. Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- 2. This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;
- 3. Dimming frequency ranges from 100Hz to 2000Hz, and 500Hz is recommended.
- 4. Types of standard plugs are optional if power cord is purchased from CLEAR.



### Single-end Feed



### Light Length 🔽

The length of the longest single light in parallel connection or sum of lights in series connection.

### Cable Length 🔽

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

### How to Minimize Voltage Drop 🔽

- 1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.
- 2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".

### Max. Cable Length

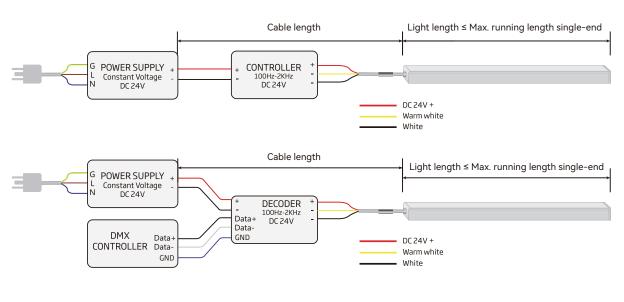
C-SFR-	-F15B\	F21B								
Light Length		0.32mm² 22AWG		0.52mm² 20AWG		0.81mm² 18AWG		mm² WG	2.07mm² 14AWG	
(m)	m	ft	m	ft	m	ft	m	ft	m	ft
1	76.11	249.70	123.68	405.77	192.65	632.06	313.95	1030.03	492.34	1615.28
2	38.05	124.85	61.84	202.88	96.33	316.03	156.98	515.02	246.17	807.64
3	24.99	81.99	40.61	133.24	63.26	207.54	103.09	338.22	161.66	530.39
4	18.60	61.04	30.23	99.19	47.09	154.50	76.74	251.79	120.35	394.85
5	14.95	49.05	24.29	79.70	37.84	124.16	61.67	202.33	96.71	317.29
6	12.50	41.00	20.31	66.62	31.63	103.77	51.54	169.11	80.83	265.19
7	10.73	35.21	17.44	57.22	27.17	89.14	44.28	145.26	69.43	227.80
8	9.35	30.69	15.20	49.87	23.68	77.68	38.59	126.60	60.51	198.53
9	8.33	27.33	13.54	44.41	21.09	69.18	34.36	112.74	53.89	176.80
10	7.51	24.63	12.20	40.03	19.01	62.36	30.97	101.62	48.57	159.35

## ThermG of F15D Wiring Diagram

- 1. Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- 2. A compatible controller is required to achieve various light changing effects;
- 3. The rated power of controller/decoder shall be higher than the actual power consumption of light; its frequency range shall be 100~2000Hz, and 500Hz is recommended;
- 4. This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;
- 5. Types of standard plugs are optional if power cord is purchased from CLEAR.



### Single-end Feed



### Light Length

The length of the longest single light in parallel connection or sum of lights in series connection.

### Cable Length 🔽

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

### How to Minimize Voltage Drop and Signal Transmission Attenuation

Ways to minimize voltage drop and signal transmission attenuation,

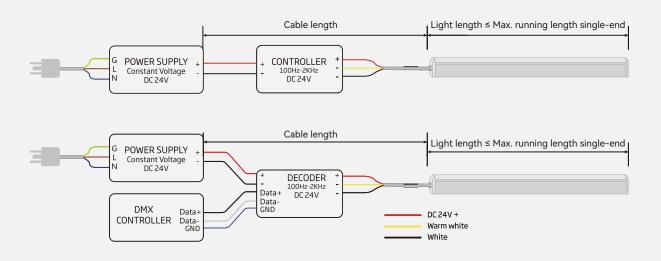
- 1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.
- 2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".
- 3.. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

## ThermG of F21D Wiring Diagram

- 1. Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- 2. A compatible controller is required to achieve various light changing effects;
- 3. The rated power of controller/decoder shall be higher than the actual power consumption of light; its frequency range shall be 100~2000Hz, and 500Hz is recommended;
- 4. This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;
- 5. Types of standard plugs are optional if power cord is purchased from CLEAR.



### Single-end Feed



### Light Length 🗵

The length of the longest single light in parallel connection or sum of lights in series connection.

### Cable Length 🗵

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

### How to Minimize Voltage Drop and Signal Transmission Attenuation 🔟

- 1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.
- 2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".
- 3.. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

### Max. Cable Length

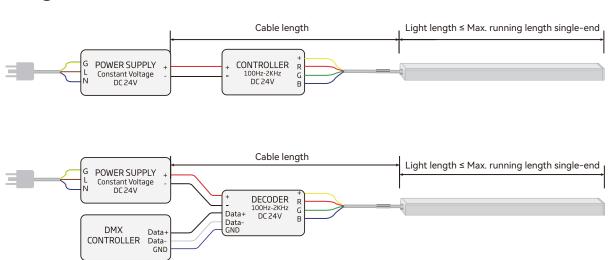
C-SFR-	-F15D\	\F21D								
Light Length	0.32mm² 22AWG		0.52mm² 20AWG		0.81mm² 18AWG		1.32mm² 16AWG		2.07mm² 14AWG	
(m)	m	ft	m	ft	m	ft	m	ft	m	ft
1	111.63	366.23	181.40	595.13	282.56	927.03	460.47	1510.71	722.09	2369.07
2	55.81	183.12	90.70	297.56	141.28	463.51	230.23	755.36	361.05	1184.54
3	37.22	122.13	60.49	198.46	94.23	309.14	153.55	503.78	240.80	790.02
4	28.20	92.52	45.83	150.35	71.38	234.20	116.33	381.65	182.42	598.50
5	22.64	74.28	36.79	120.70	57.31	188.02	93.39	306.40	146.45	480.49
6	18.87	61.90	30.66	100.59	47.76	156.68	77.83	255.33	122.04	400.41
7	15.40	50.54	25.03	82.13	38.99	127.93	63.54	208.48	99.65	326.93
8	13.51	44.33	21.96	72.04	34.20	112.22	55.74	182.88	87.41	286.78
9	11.45	37.55	18.60	61.03	28.97	95.06	47.22	154.91	74.05	242.93
10	10.41	34.14	16.91	55.48	26.34	86.42	42.92	140.83	67.31	220.85

## ThermG of F15A Wiring Diagram

- 1. Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- 2. A compatible controller is required to achieve various light changing effects;
- 3. The rated power of controller/decoder shall be higher than the actual power consumption of light; its frequency range shall be 100~2000Hz, and 500Hz is recommended;
- 4. This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;
- 5. Types of standard plugs are optional if power cord is purchased from CLEAR.



### Single-end Feed



### Light Length | J

The length of the longest single light in parallel connection or sum of lights in series connection.

### Cable Length 🔽

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

### How to Minimize Voltage Drop and Signal Transmission Attenuation

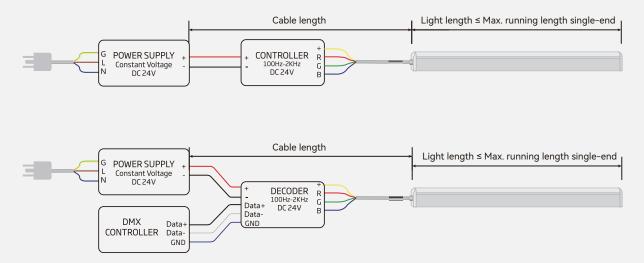
- 1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.
- 2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".
- 3. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

## ThermG of F21A Wiring Diagram

- 1. Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- 2. A compatible controller is required to achieve various light changing effects;
- 3. The rated power of controller/decoder shall be higher than the actual power consumption of light; its frequency range shall be 100~2000Hz, and 500Hz is recommended;
- 4. This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;
- 5. Types of standard plugs are optional if power cord is purchased from CLEAR.



### Single-end Feed



### Light Length 🔽

The length of the longest single light in parallel connection or sum of lights in series connection.

### Cable Length 🔽

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

### How to Minimize Voltage Drop and Signal Transmission Attenuation

- 1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.
- 2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".
- 3. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

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### Max. Cable Length

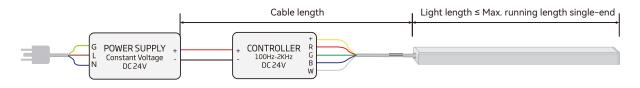
C-SFR-	-F15A&	&F21A								
Light Length	ength 22AWG		0.52mm² 20AWG		0.81 18A	mm² WG	1.32mm² 16AWG		2.07mm <sup>2</sup> 14AWG	
(m)	m	ft	m	ft	m	ft	m	ft	m	ft
1	137.00	449.47	222.62	730.39	346.78	1137.72	565.12	1854.06	886.21	2907.50
2	68.50	224.73	111.31	365.19	173.39	568.86	282.56	927.03	443.10	1453.75
3	43.11	141.44	70.05	229.84	109.12	358.01	177.83	583.43	278.87	914.92
4	32.09	105.29	52.15	171.10	81.24	266.52	132.38	434.33	207.60	681.11
5	25.79	84.61	41.91	137.49	65.28	214.17	106.38	349.02	166.82	547.32
6	21.56	70.72	35.03	114.92	54.56	179.01	88.91	291.71	139.43	457.46
7	17.71	58.10	28.78	94.42	44.83	147.08	73.05	239.68	114.56	375.86
8	15.43	50.64	25.08	82.29	39.07	128.18	63.67	208.88	99.84	327.57
9	13.12	43.05	21.32	69.95	33.21	108.96	54.12	177.57	84.87	278.45
10	11.83	38.80	19.22	63.05	29.93	98.21	48.78	160.05	76.50	250.98

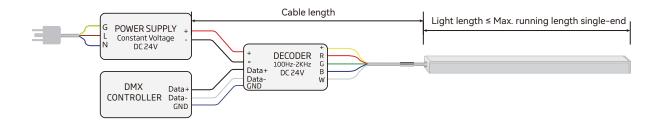
## ThermG of F15E Wiring Diagram

- 1. Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- 2. A compatible controller is required to achieve various light changing effects;
- 3. The rated power of controller/decoder shall be higher than the actual power consumption of light; its frequency range shall be 100~2000Hz, and 500Hz is recommended;
- 4. Full loading in RGBW is not recommended to avoid the overheating of light.5. This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;
- 5. Types of standard plugs are optional if power cord is purchased from CLEAR.



### Single-end Feed





### Light Length 🗵

The length of the longest single light in parallel connection or sum of lights in series connection.

### Cable Length 🔽

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

### How to Minimize Voltage Drop and Signal Transmission Attenuation

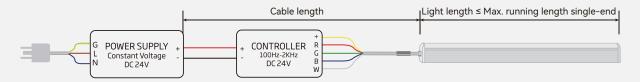
- 1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.
- 2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".
- 3. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

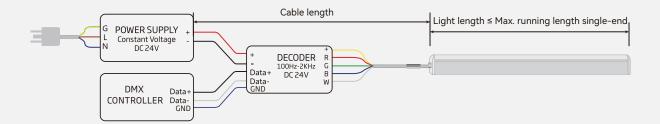
## ThermG of F21E Wiring Diagram

- 1. Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy;
- 2. A compatible controller is required to achieve various light changing effects;
- 3. The rated power of controller/decoder shall be higher than the actual power consumption of light; its frequency range shall be 100~2000Hz, and 500Hz is recommended;
- 4. Full loading in RGBW is not recommended to avoid the overheating of light.5. This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;
- 5. Types of standard plugs are optional if power cord is purchased from CLEAR.



### Single-end Feed





### Light Length

The length of the longest single light in parallel connection or sum of lights in series connection.

### Cable Length 🔽

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

### How to Minimize Voltage Drop and Signal Transmission Attenuation

- 1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.
- 2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".
- 3. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

# Max. Cable Length Input: DC24V

C-SFR-	-F15E\	F21E								
Light Length	0.32mm² 22AWG		0.52mm² 20AWG		0.81 18A	mm² WG	1.32 16A		2.07mm² 14AWG	
(m)	m	ft	m	ft	m	ft	m	ft	m	ft
1	94.53	310.13	153.61	503.96	239.27	785.01	389.92	1279.28	611.47	2006.14
2	47.98	157.43	77.97	255.82	121.46	398.48	197.93	649.38	310.39	1018.35
3	31.67	103.91	51.47	168.86	80.17	263.03	130.65	428.64	204.88	672.18
4	23.81	78.13	38.70	126.96	60.28	197.77	98.23	322.29	154.05	505.40
5	18.30	60.05	29.74	97.58	46.33	152.00	75.50	247.70	118.39	388.43
6	15.25	50.04	24.78	81.31	38.61	126.66	62.92	206.41	98.66	323.69
7	12.69	41.64	20.63	67.67	32.13	105.41	52.36	171.78	82.11	269.38
8	11.04	36.21	17.94	58.84	27.94	91.66	45.53	149.37	71.40	234.25
9			15.24	49.99	23.73	77.87	38.68	126.90	60.66	199.00
10			13.85	45.45	21.58	70.79	35.16	115.36	55.14	180.91