CIP LIGHTING

A division of Charlotte International Partners Inc.
1740 First Baxter Crossing, Fort Mill SC 29708 USA
1-803-396-1439   info@ciplighting.com

C-FR-F21B
UL2388
(AC120V)

Introduction-PVC

C-FR-F21B, AC120V input, is a member of the Artist of Light series with smooth domed profile that allows various monochromatic lighting solutions and produces superior homogenized illumination along its elongated running length.

Built-in protection circuit design which means each two LEDs as a unit is protected, one unit failure has no effect on other units working and the whole light can keep constant lighting. It's the brightest UL 120V neon flex light.
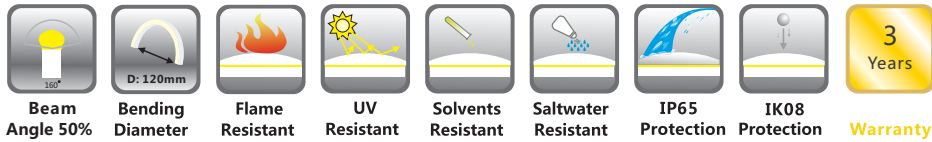
C-FR-F21B high voltage version is UL and RoHS compliant. Moreover, it has passed environmental resistance, optical, mechanical and electrical tests in our lab under the support of advanced experimental equipments and technology to ensure it meets the requirements of harsh environments. Also it has passed relevant tests of third party inspection authority.

Fully encapsulated in the flexible PVC chamber by utilizing consummate extrusion technology, and pre-installed with injection-molded connector and waterproof male & female connectors for absolute safety, easy for installation and applicable for indoor and outdoor various circumstances.
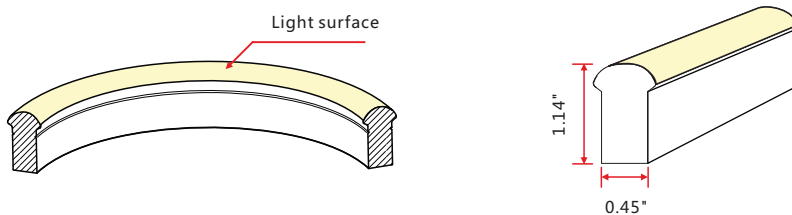
Applications:
1. Outdoor or Indoor Contour/Border Lighting
2. Architectural Outline/Decorative Lighting
3. Cove/Accent Lighting
4. Facade/Floor Lighting
5. Signage/Stage Lighting

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1. Specifications & Parameters

Beam Angle 50%	Bending Diameter	Flame Resistant	UV Resistant	Solvents Resistant	Saltwater Resistant	IP65 Protection	IK08 Protection	3 Years Warranty

1.1 Dimensions of Light

Light surface

1.14"

0.45"

Note: Unless otherwise stated, the tolerance of the light is ±0.01".

1.2 Technical Parameters

Code: C-FR-F21B-HB-AC120V-UL2388-30K

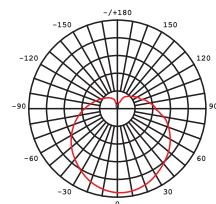| Technical Parameters	
Article No.	C-FR-F21B-AC120
Color	Red/Amber/Warm White/White/Green/Blue
Working Voltage	AC 120V
Rated Power/m	6W
LED Qty/m	84LEDs
LED Distance	0.47"
Min. Cutting Unit	42LEDs(1unit)
Min. Cutting Length	19.7"(1unit)
Continuous Length	131.2'
Weight/m	149.4g
Storage Temperature	-20~60℃
Ambient Working Temperature	-20~35℃
Ambient Installation Temperature	5~35℃
IP Rating	Dry/ Damp/ Wet

1.3 Optical Parameters

Candle Power Distribution

Illuminance Characteristics

| Photometric Data					
Article No.	C-FR-F21B-AC120				
LED Type	SMD				
Beam Angle 50%	160°				
Color	Wavelength	Lumen/ft	Color	CCT	Lumen/ft
Red	618-624nm	>90lm	2200K	2238±102K	>230lm
Green	522-528nm	>250lm	2700K	2725±145K	>230lm
Blue	468-474nm	>38lm	3000K	3045±175K	>250lm
Amber	588-594nm	>90lm	3500K	3465±245K	>250lm
			4000K	3985±275K	>250lm
			5700K	5669±355K	>250lm
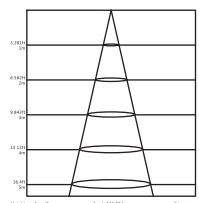
2. Functions & Features

2.1 Product Features

1. High quality and high brightness SMD LED chip.
2. Protection Circuit: Each Two LEDs Protected.
3. Variety of monochromatic lights for option including Red, Green, Blue, Amber and White light.
4. UV & flame resistant construction(PVC).
5. Domed profile for large beam angle(160°).
6. High color consistency&smooth illumination with no light dots.
7. Flexible with 4.72in minimum bending diameter.
8. Use location: dry, damp, wet.
9. The product IP rate is ultimately in line with properly applied IP rated connectors.
10. Continuous length up to 131.2ft by powering one end.
11. Environmentally friendly & energy efficient.
12. Automated production, high reliability & long warranty.
13. 5 years life span.

2.2 Minimum Bend Diameter
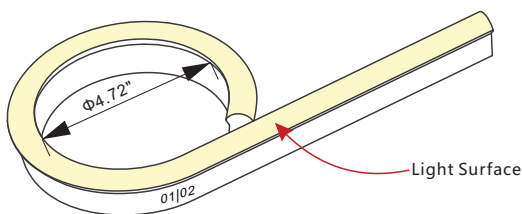
The light can only be bent laterally
(opposite bend along to light surface).
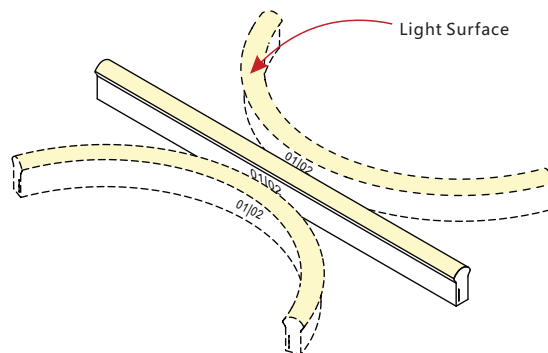
Do not bend smaller than allowed minimum bend diameter.

3. Types of Connector

3.1 Extension Part C-FR-F21B-AC120-EX

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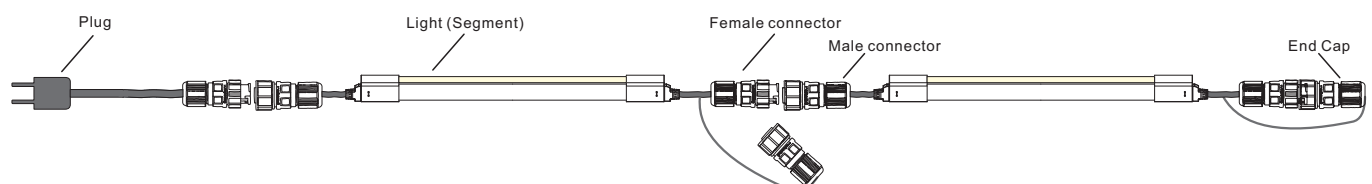
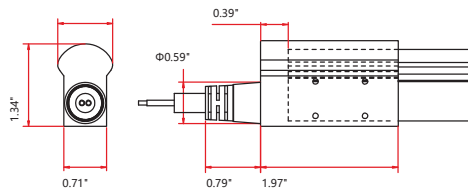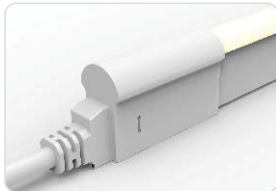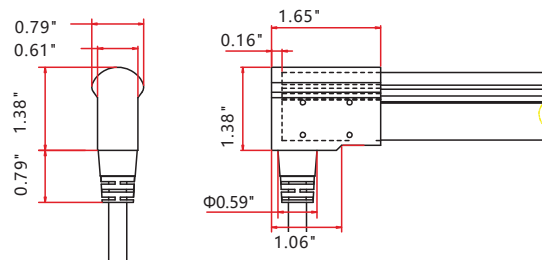Note: Unless otherwise stated, the tolerance of the connector is ±0.02".

Power cord

1. 4.59ft power cord with 5A backup fused plug. This plug only fit in indoor outlet or with weatherproof cover outlet.

2. The power cord is installed with female connector to connect with Extension Light.

Extension

1. With injeciton-moulded connectors on both ends, it can be used for light extension.

2. Mutiple units can be electrically interconnected using pre-installed male connector in one end and female connector in another end for long running length (maximum 65.6ft). If no need to extend, install the attached end cap to the female connector.

Injection-moulded Front Connector (top end)

0.39"
Φ0.59"
1.34"
0.71"
0.79"
1.97"

Female Connector

Male Connector
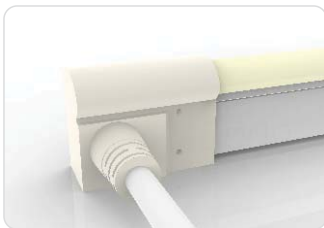
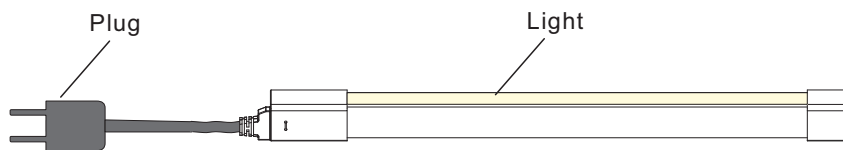Note: Unless otherwise stated, the tolerance of the connector is ±0.5mm.

Dual Injection-moulded Front Connector (bottom)

0.79"
0.61"
1.38"
0.79"
1.65"
0.16"
1.38"
Φ0.59"
1.06"

Dual Injection-moulded Front Connector (side)

0.79"
Φ0.59"
1.38"
0.79"
0.79"
1.65"
0.16"
1.06"
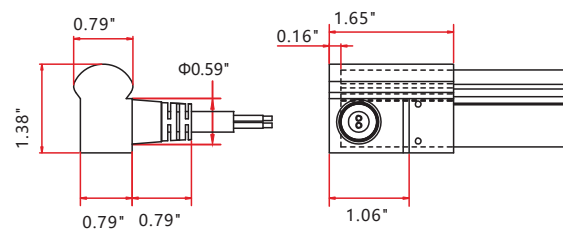
3.2 Plug & Terminal C-FR-F21B-AC120

Plug   Light

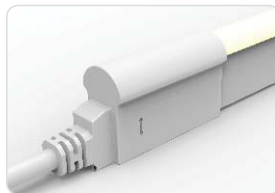Note: Unless otherwise stated, the tolerance of the connector is ±0.02".

Plug & terminal

1. Factory installed injection-molded conectors (IP65), applicable for dry or wet environments.

2. 4.59ft power cord with 5A backup fused plug. This plug only fit in indoor outlet or with weatherproof cover outlet.
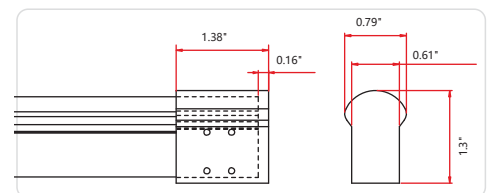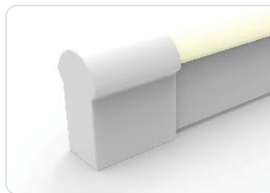
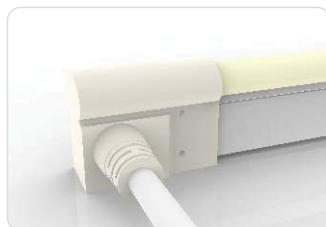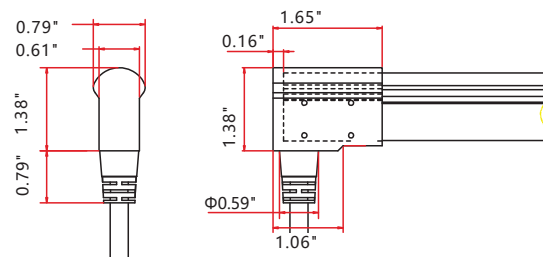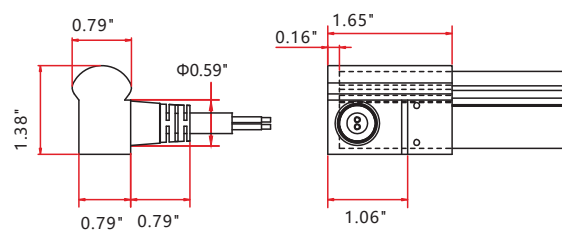Plug   Injection-moulded Front   Injection-moulded
                    Connector (top end)   End Cap

1.38"   0.79"
        0.16"   0.61"

                                1.3"

Note: Unless otherwise stated, the tolerance of the connector is ±0.5mm.

Dual Injection-moulded Front Connector (bottom)

0.79"
0.61"
1.38"
0.79"
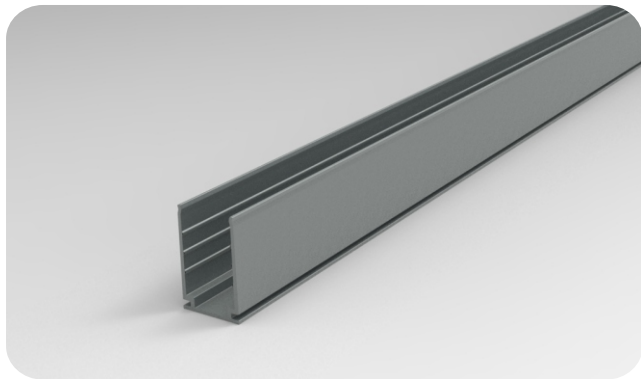
1.65"
0.16"
1.38"
Φ0.59"
1.06"

Dual Injection-moulded Front Connector (side)

0.79"
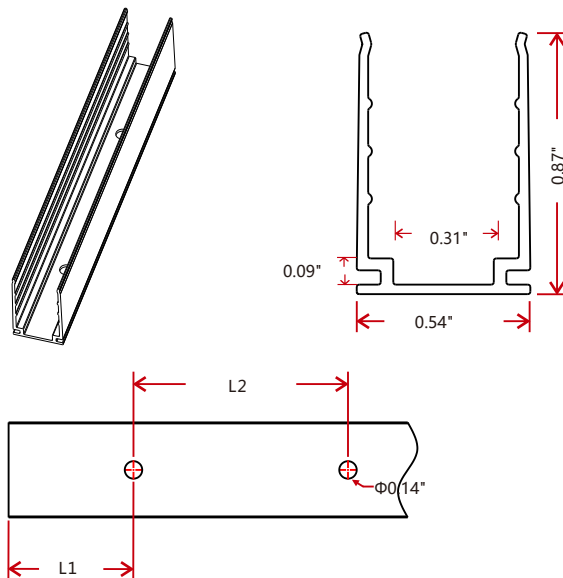Φ0.59"
1.38"
0.79" 0.79"

1.65"
0.16"
1.06"

4. Mounting Profile

4.1 Standard Aluminum Profile

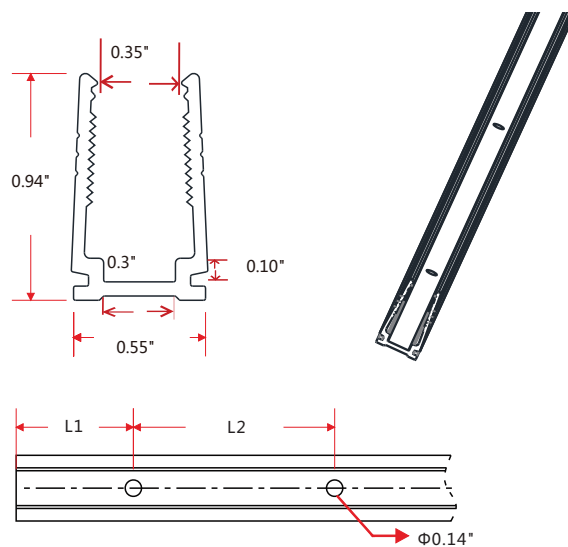Note: Unless otherwise stated, the tolerance of the profile is ±0.02".

Installation Way

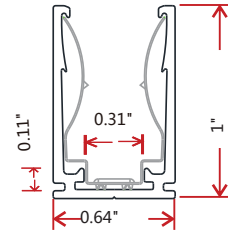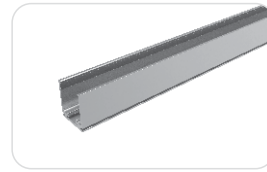| Model	W*H(in)	Standard Length (L:in)	L1 (in)	L2 (in)	Screw Hole (Φ:in)	Hole Number
F15-A/PL	13.8*22	1.38	0.69	/	Φ0.14	1
		19.68	1.97	7.87	Φ0.14	3
		39.37	3.94	7.87	Φ0.14	5
		78.74	3.94	7.87	Φ0.14	10

4.2 Plastic Profile

Note: Unless otherwise stated, the tolerance of the profile is ±0.02".
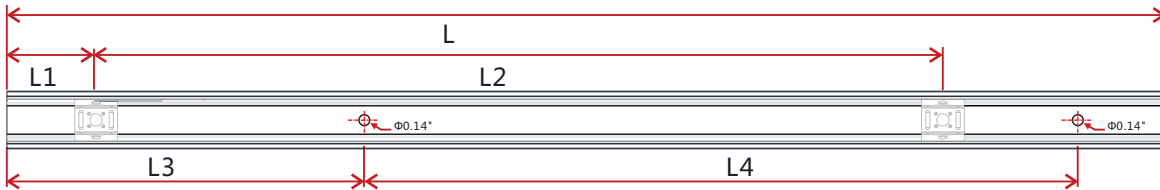
Installation Way

| Model	W*H(in)	Standard Length (L:in)	L1 (in)	L2 (in)	Screw Hole (Φ:in)	Hole Number	For Product
F21-P/PL	0.55*0.94	19.68	1.97	7.87	Φ0.14	3	F11, F15, F21
		39.37	3.94	7.87	Φ0.14	5	F11, F15, F21
		78.74	3.94	7.87	Φ0.14	10	F11, F15, F21

4.3 Spring Clip Aluminum Profile

0.11" 0.31" 1" 0.64"

Note: Unless otherwise stated, the tolerance of the profile is ±0.02".

Installation Way

L
L1 L2
Φ0.14" Φ0.14"
L3 L4

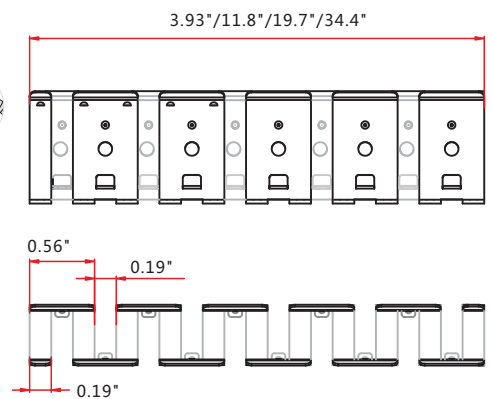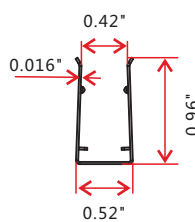| Model	W*H(in)	Standard Length(in)	L1(in)	L2(in)	L3(in)	L4(in)	Hole Screw(in)	Hole Number	Clip Number
F21-SCA/PL	0.64*1	1.38	0.67	/	0.19	0.99	Φ0.14	2	1
		19.69	0.99	8.86	1.97	7.87	Φ0.14	3	3
		39.37	0.99	9.35	3.94	7.87	Φ0.14	5	5
		78.74	0.99	9.6	3.94	7.87	Φ0.14	10	9

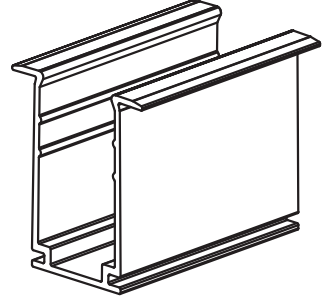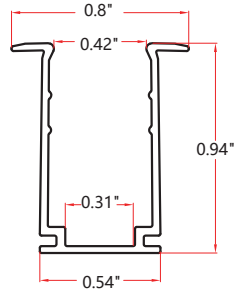## 4.4 Bendable Stainless Steel Profile

Installation Way

3.93"/11.8"/19.7"/34.4"

0.42"
0.016"
0.96"
0.52"

0.56"
0.19"
0.19"
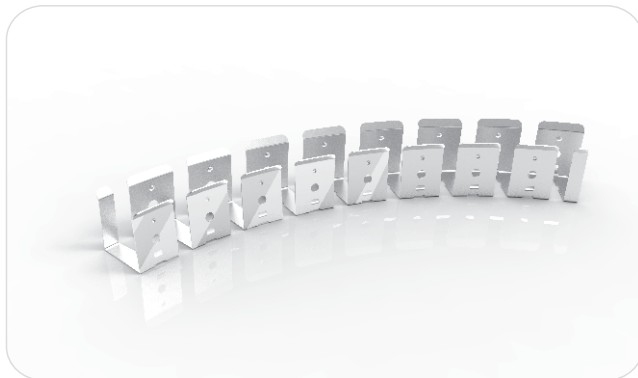
Model: F21-CS/PL

Note: Unless otherwise stated, the tolerance of the profile is ±0.02".

4.5 Recessed Mounting Profile

0.8"
0.42"
0.94"
0.31"
0.54"

Note: Unless otherwise stated, the tolerance of the profile is ±0.5mm.

Installation Way

L1   L2

Φ0.14mm
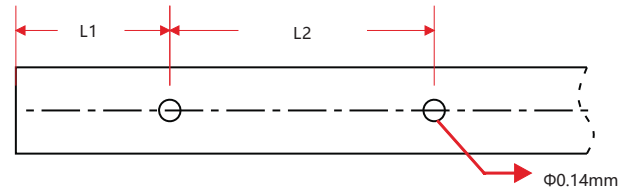
Model	W*H(in)	Standard Length (in)	L1 (in)	L2 (in)	Screw Hole (in)	Hole Number
F15-RMA/PL	0.8*0.94	1.38	0.2	0.98	Φ0.14	2
		19.69	1.97	7.87	Φ0.14	3
		39.37	3.94	7.87	Φ0.14	5
		78.74	3.94	7.87	Φ0.14	10