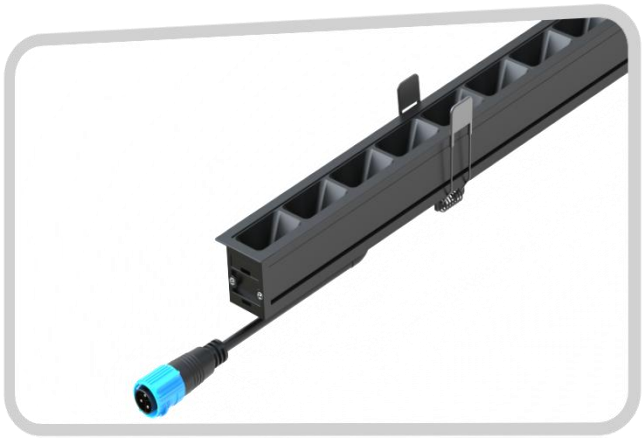
Linear Wall Washing & Grazing LED Lighting

Model No : CA12D31.11



DMX Zigbee 0/1-10V DALI Bluetooth APP control CASAMBI TRIAC DIM RoHS CE

Features:

- Flush-mounted design for seamless integration into the ceiling.
- Ultra-Low Glare Optics (UGR<16).
- All-Weather IP65 Protection.
- Creates a uniformly lit, low-glare environment.

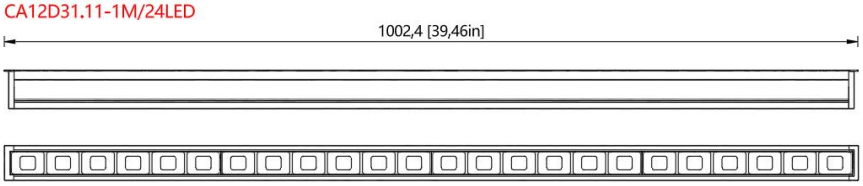
Normal/RAL series:9002/9006/9011
Custom Colour &Finish

Application:

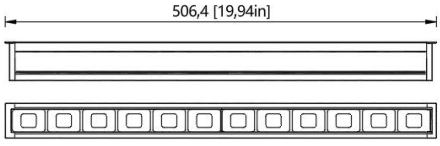
- It’ s widely used as a decorative lights, and use it as the lights;
- Stage decoration, festival, exhibition, wedding;
- Backlight of signage, channel letters lighting;
- Landscape layout lighting;

Dimensions:

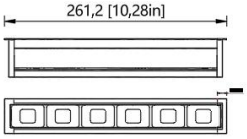
CA12D31.11-1M/24LED

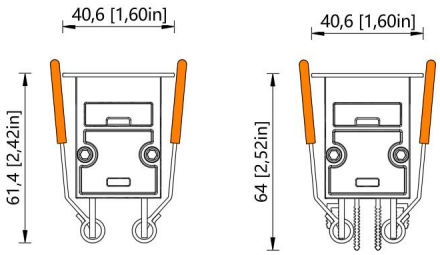


CA12D31.11-0.5M/12LED



CA12D31.11-0.25M/6LED





Physical

Housing Material	6063 AviationGrade Aluminum
Cover	Louver
End Cap Material	Die cast aluminium
Gasket Material	Silicone
Surface Finish	primer and electrostatically-applied, powder coat paint finish

Electrical and Control

Voltage	DC 24V / AC220V
Wattage	Max 48W/M
Control	0-10V / DMX / DALI /ON /OF
Inrush Current (Peak)	Meets NEMA-410 requirements (Based on voltage and control specifications, consult factory for details)

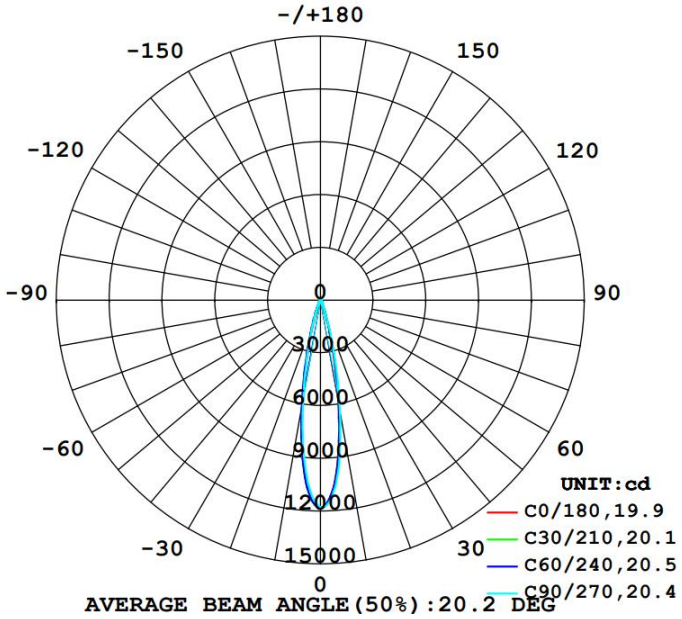
Environmental

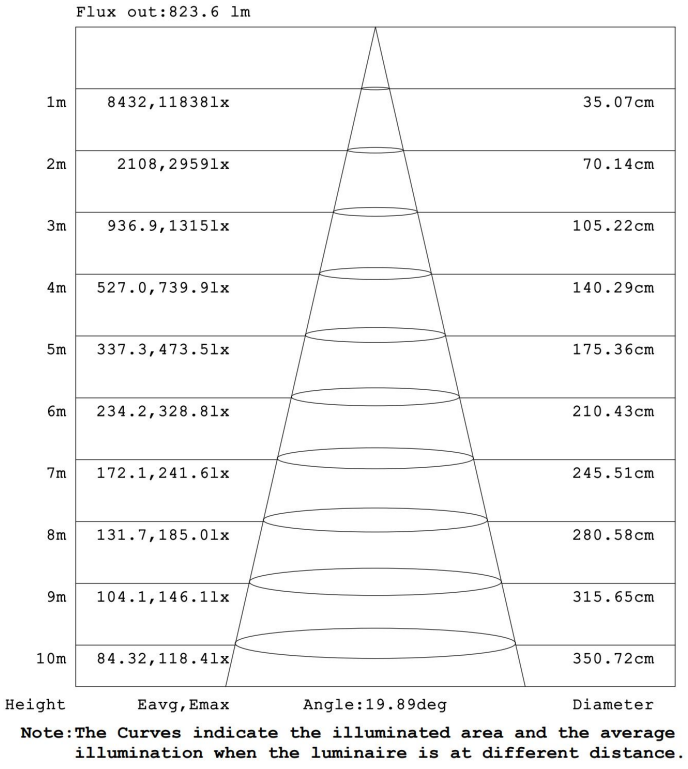
Storage Temperature	-40 °C to 85 °C
Start-up Temperature	-40 °C to 50 °C
Operating Temperature	For 32.8 W/m fixtures: -40 °C to 50 °C For 72.18 W/m fixtures, CE Certification: -40 °C to 40 °C
Ingress Protection Rating	IP40 IP65 （It can prevent the low-pressure jet water from invading from any direction, but it does not mean it can be soaked in water for a long time）.For details please consult the factory
Impact Resistance Rating	IK08（Consult factory for IK08 lens option）

Accessories (OrderSeparately)

Cables	Lumenfacade Leader Cable Lumenfacade Jumper Cable Lumenfacade T-Junction

Optional Beam Angles

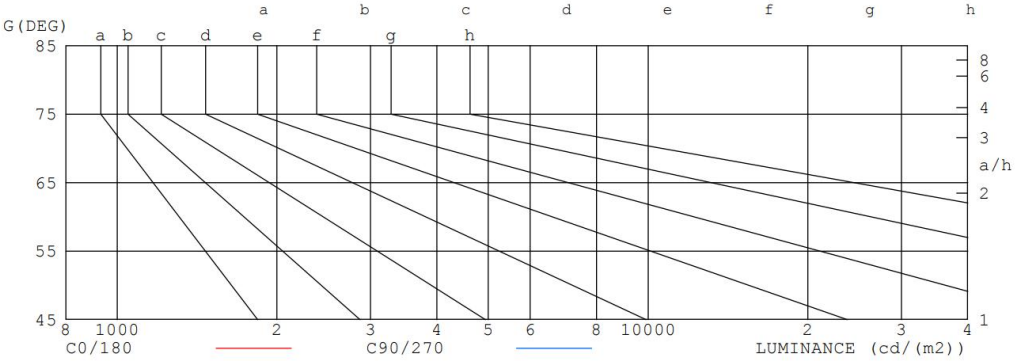




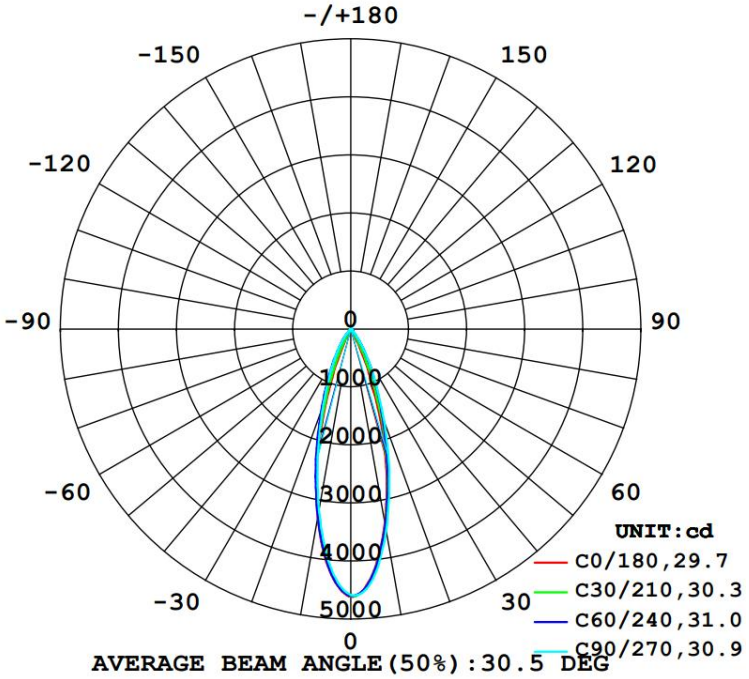
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1	1
80	1	2
75	1	2
70	1	1
65	1	1
60	1	1
55	2	2
50	4	15
45	5	44



AVERAGE BEAM ANGLE(50%):30.5 DEG

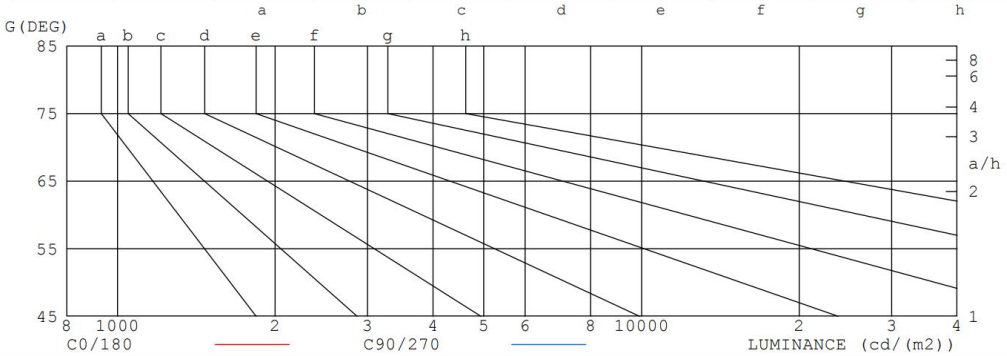
Flux out:707.5 lm

Height	Eavg,Emax	Angle:29.75deg	Diameter
1m	3136,4612lx		53.13cm
2m	784.1,1153lx		106.26cm
3m	348.5,512.4lx		159.39cm
4m	196.0,288.2lx		212.53cm
5m	125.5,184.5lx		265.66cm
6m	87.12,128.1lx		318.79cm
7m	64.01,94.12lx		371.92cm
8m	49.01,72.06lx		425.05cm
9m	38.72,56.93lx		478.18cm
10m	31.36,46.12lx		531.31cm

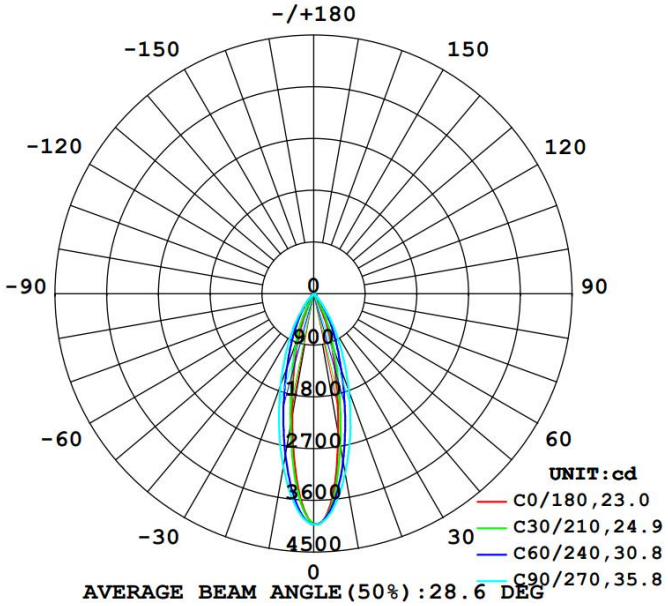
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	2	2
80	1	5
75	1	6
70	2	3
65	2	1
60	3	1
55	5	2
50	8	20
45	11	62



AVERAGE BEAM ANGLE(50%):28.6 DEG

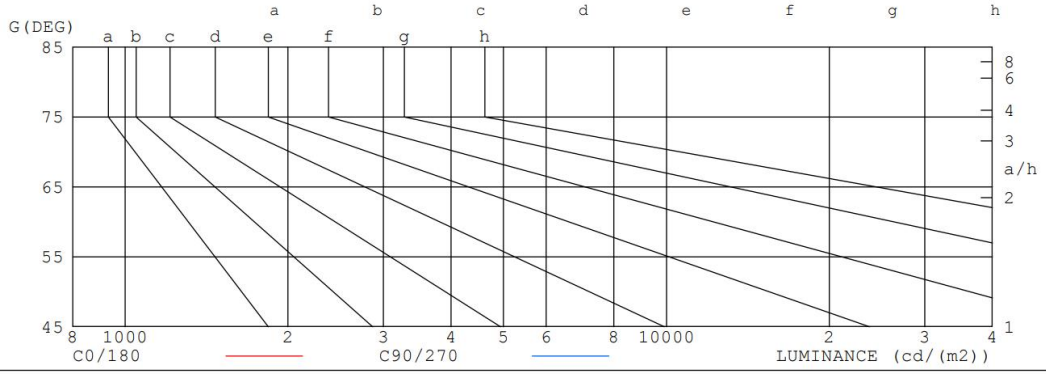
Flux out:418.8 lm

Height	Eavg,Emax	Angle:23.00deg	Diameter
1m	2951,40181x		40.70cm
2m	737.7,10051x		81.39cm
3m	327.9,446.51x		122.09cm
4m	184.4,251.11x		162.79cm
5m	118.0,160.71x		203.48cm
6m	81.96,111.61x		244.18cm
7m	60.22,82.011x		284.87cm
8m	46.10,62.791x		325.57cm
9m	36.43,49.611x		366.27cm
10m	29.51,40.181x		406.96cm

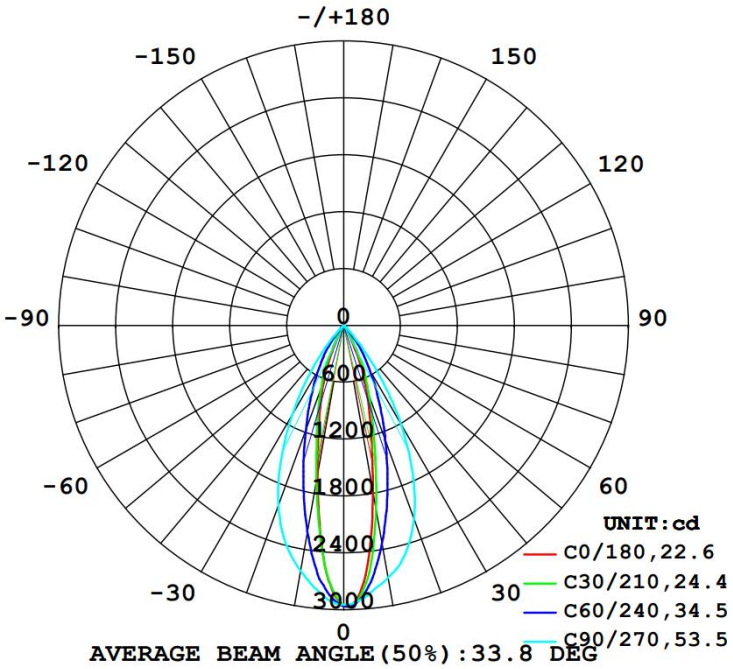
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1	5
80	1	5
75	1	2
70	1	1
65	2	1
60	3	1
55	4	2
50	7	17
45	10	91



AVERAGE BEAM ANGLE(50%):33.8 DEG

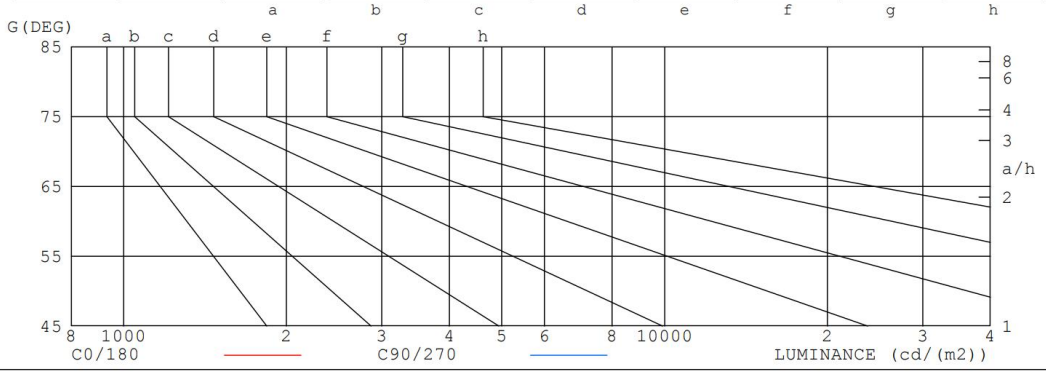
Flux out:300.8 lm

Height	Eavg,Emax	Angle:22.59deg	Diameter
1m	2313,2967lx		39.95cm
2m	578.2,741.7lx		79.90cm
3m	257.0,329.7lx		119.85cm
4m	144.6,185.4lx		159.81cm
5m	92.51,118.7lx		199.76cm
6m	64.25,82.41lx		239.71cm
7m	47.20,60.55lx		279.66cm
8m	36.14,46.36lx		319.61cm
9m	28.55,36.63lx		359.56cm
10m	23.13,29.67lx		399.52cm

Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

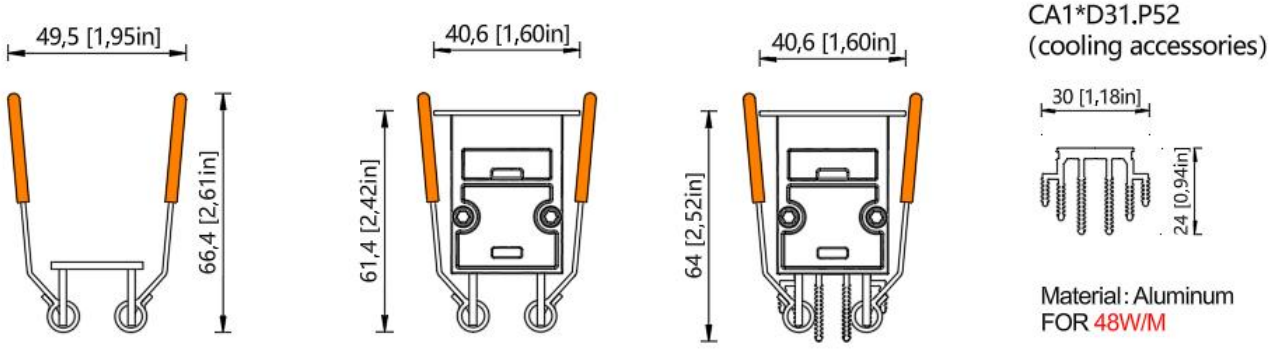
LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1	6
80	1	5
75	1	4
70	1	3
65	2	2
60	3	2
55	5	3
50	8	31
45	11	165

Embedded installation (plate buckle)

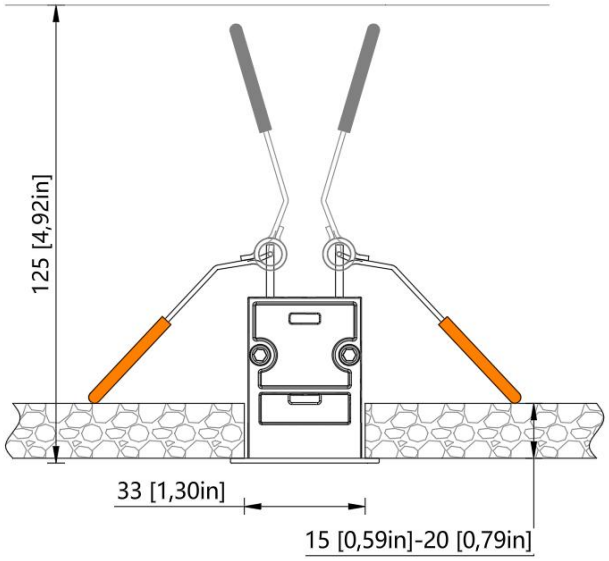


Characteristic analysis:

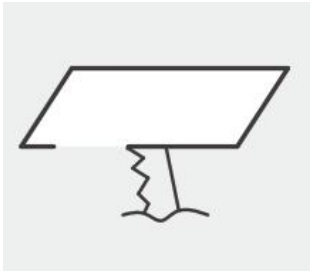
-Installation efficiency:
real "quick installation", which can be operated by a single person, without repeatedly screwing the screws at the installation site, especially suitable for large-scale and long-distance linear projects.
-Maintenance convenience:
When replacement or overhaul is needed, the lamp body can be easily removed by pressing or poking the buckle with a tool, so as to realize "quick disassembly" without damaging the base.
-Wall protection:
The mounting and dismounting of the lamp body does not involve repeatedly screwing the screws on the wall, which can prevent the mounting holes from slipping or being damaged due to repeated dismounting, and keep the base intact.
Good lateral stability: once clamped, the lamp body is not easy to shift in the horizontal direction.
-Aesthetics:
After installation, only the light bar itself is usually seen, and there are no exposed screws, which conforms to the simple aesthetics of modern architecture.

⚠ The conventional power is 24W/ m, and it can be 48W/M by adding accessories (P52 cooling accessories).

Installation method



⚠ Make sure that the buckle is fully unfolded and has sufficient grip strength.
The thickness of the installation laminate shall be controlled within 10mm-20mm.

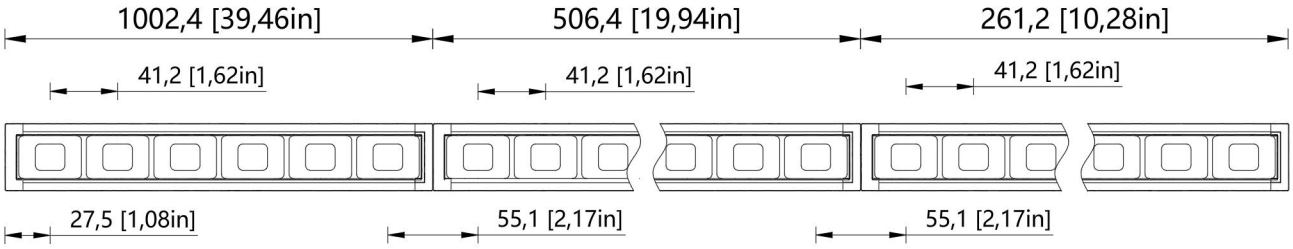


L:1002,4 [39,46in]
Square hole：996[39.21in]×33[1.30in]

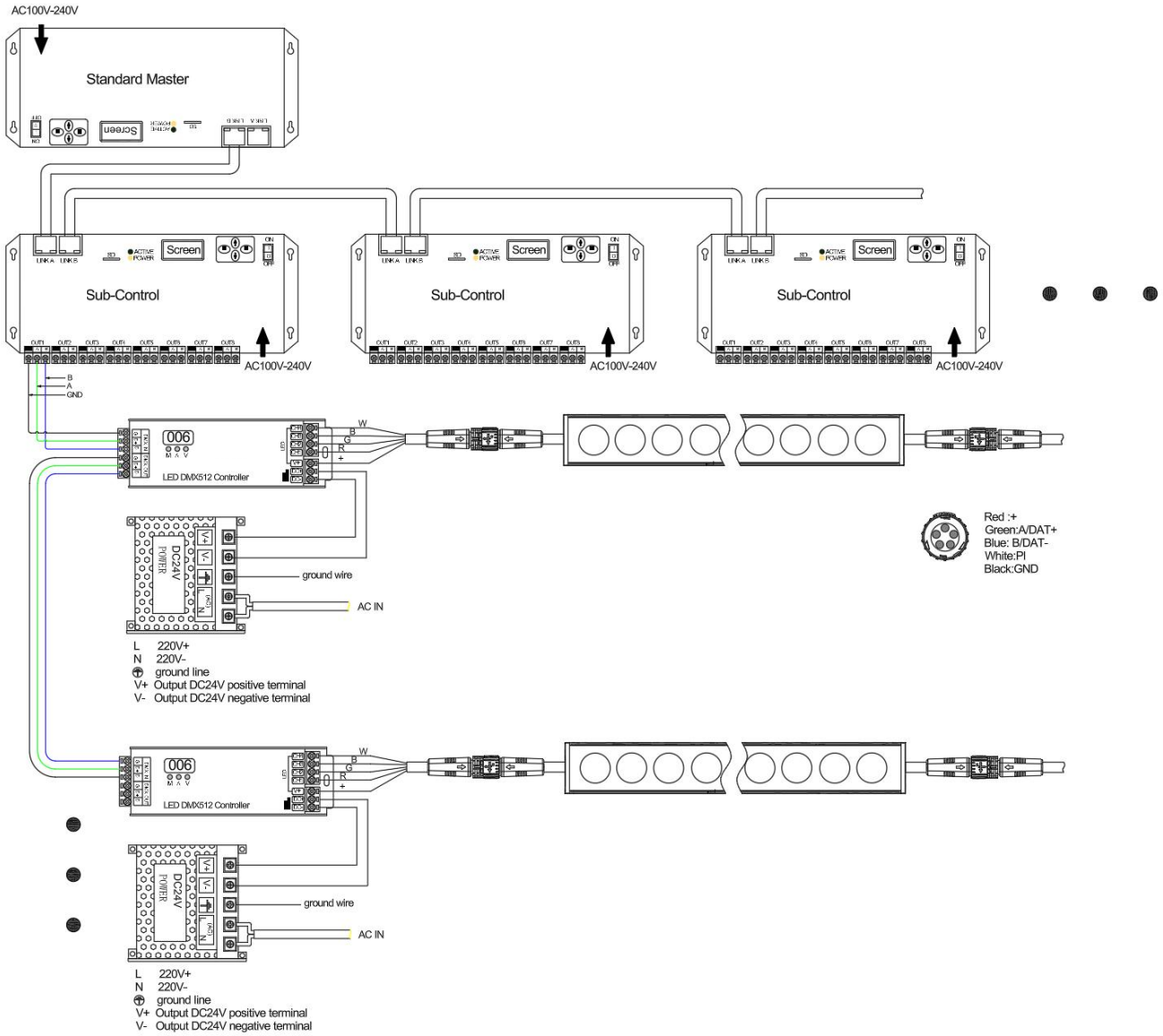
L:506,4 [19,94in]
Square hole：500[19.69in]×33[1.30in]

L:261,2 [10,28in]
Square hole：255[10.04in]×33[1.30in]

Product splicing schematic diagram



Description of DMX512 Lamp Power Supply/Controller Connection (Lamp External Decoder Scheme)



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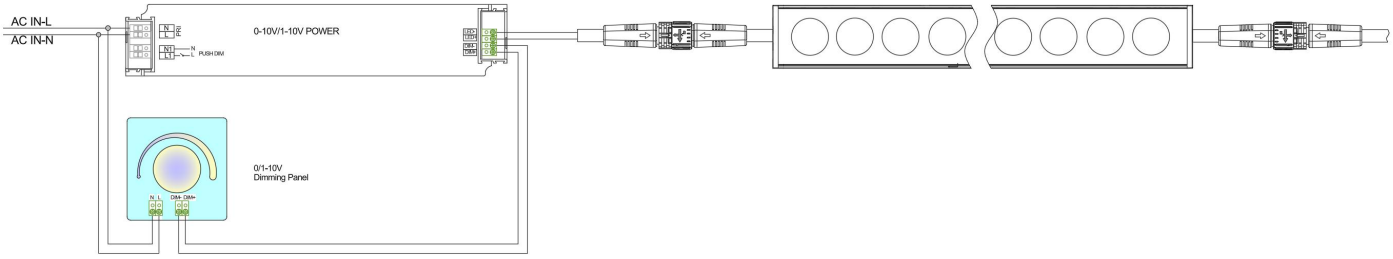
connected in series.

2. The decoder is connected with the driving power supply:
Read the instructions of the decoder and the driving power supply carefully, and confirm that the control protocol matches (PWM or 0-10V). Connect the control output (such as PWM+, PWM-) of the decoder to the dimming input (such as DIM+DIM-) of the driving power supply. The polarity must be correct.

3. The driving power supply is connected with the lamp:
Connect the DC output (V+, V-) of the driving power supply to the input terminal of the lamp. Attention should be paid to the voltage and polarity, the reverse connection will damage the LED.

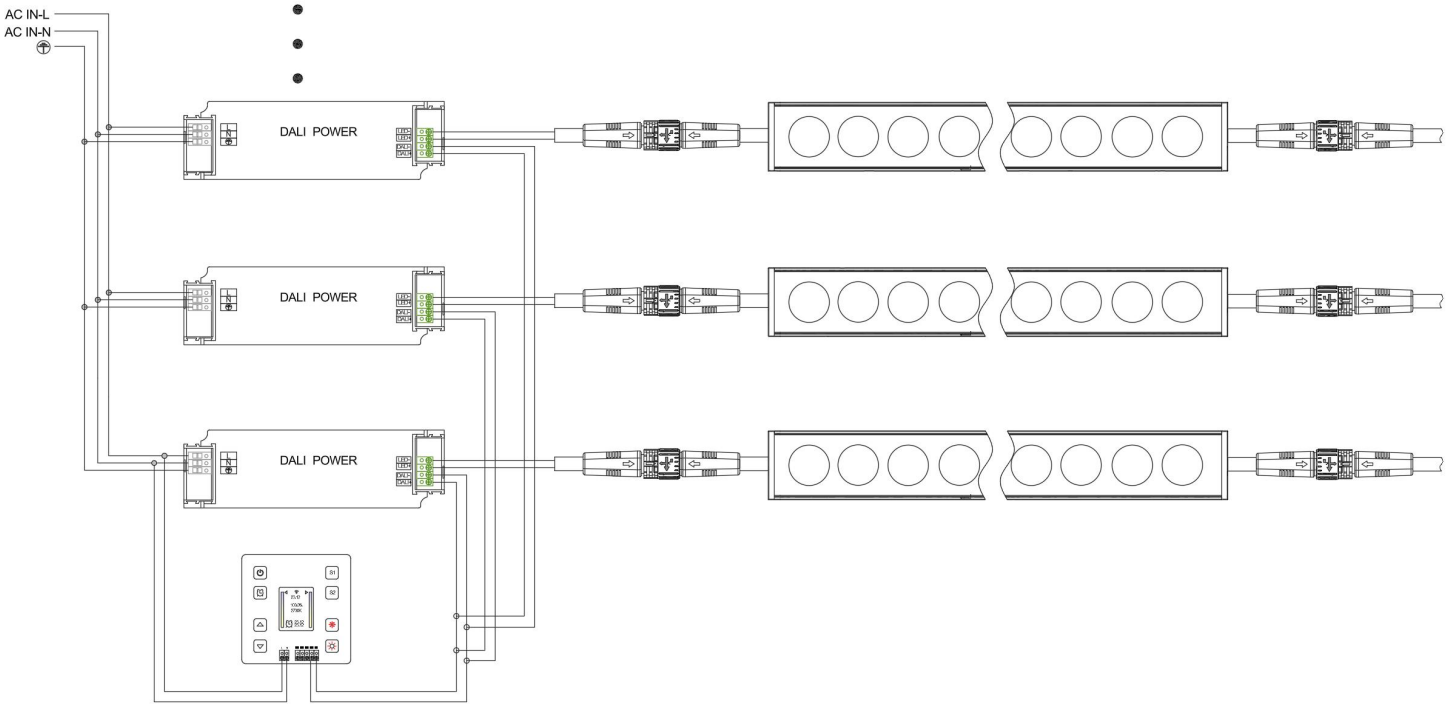
4. Power supply:
High-voltage part: Connect the input terminals (L, N, PE) of the driving power supply to the mains correctly. Make sure the grounding is good.
Weak current part: Provide the required working voltage (such as DC12V) for the decoder itself. Note that this power supply is isolated from the control signal.

0/1-10V Lamp Power Supply/Dimmer Connection Description



1. The signal line is separated from the power line
It is absolutely forbidden to arrange the dimming signal line (V+/-) and the AC power line (L/N) in the same conduit or trunking, nor to use the same set of multi-core cables. The electromagnetic interference of AC power supply will seriously interfere with the weak 0-10V DC signal, resulting in flickering, jitter or uneven dimming of lights.
Best practice: Using shielded twisted pair as dimming light and grounding the shielding layer at one end of the driver can effectively suppress interference.
2. Distinguish between 0-10V and 1-10V:
When buying drives and controllers, you need to confirm their specifications. They can be used together, but their behaviors are different:
1-10V controller +0-10V driver: When the dimming knob is adjusted to the lowest level, the voltage is 1V, and the lamp will not be completely turned off, and it will remain about 10% dim.
When the dimming knob is adjusted to the lowest voltage, the driver will judge that the signal is lost, and the lamp 0-10V controller +1-10V driver: may be completely turned off or flicker.
. When designing, if "off to off" is needed, 1-10V system should be selected.
3. Load capacity and wiring distance:
The output channel of each dimming controller has the maximum load capacity (for example, the minimum load current is 0.1mA and the maximum load current is 2mA). How many drivers can a controller take depends on whether the sum of the input currents of all drivers' DIM ports can exceed the controller capacity. The signal line should not be too long, and it is recommended not to exceed 50 meters. Too long will lead to line voltage drop, so that the actual voltage reaching the driver is lower than the output voltage of the controller, which will affect the dimming consistency.
4. Common ground problem
In some complex systems, if the DIM- terminal potentials of multiple drivers are inconsistent, it may cause interference. This problem can be avoided by ensuring that all signal loops use the dimming controller with isolation function well.
5. Power-on sequence:
The system should follow the correct power-on sequence: first turn on the main power supply, so that the driver and controller can get power, and then perform dimming operation. A sudden full voltage signal may impact the driver.
6. Compatibility and testing:
Different brands of drives and controllers may have subtle compatibility problems. Before the installation of large-scale projects, samples must be tested and inspected. Prove the smoothness, minimum brightness and flicker of dimming curve.

Wiring diagram of DALI digital lighting system



1. Laying bus: use twisted pair to connect DALI+ and DALI- terminals of all equipment (well connection).
2. Connect the power supply: Connect the only DALI system power supply to the bus.
3. Access control: connect the controller, panel and sensor to the bus.
4. Connect the driver with the load: connect the AC power supply (L,N) and DALI bus for each driver, and connect the lamps with its output.
5. Power-on debugging: Use DALI debugging software to allocate short url for each device, and group and set the scene.