

AL Series Specification

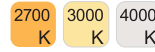
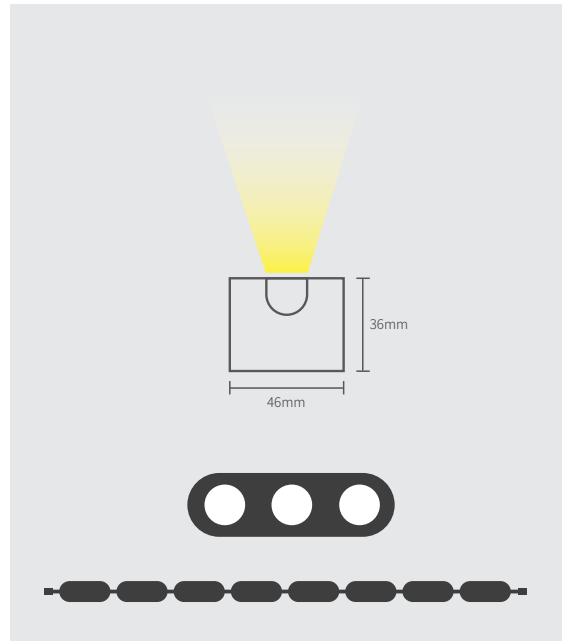
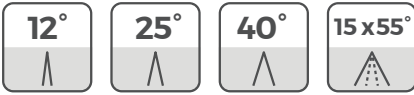
ALS3646



【Features】

- **Light source:** Outdoor-grade wall-washing LED chips
- **Structural Features:** Modular rigid linear fixture, Structural waterproofing and high-efficiency thermal management for outdoor stability
- **Material & Craftsmanship:** Extruded aluminum alloy housing + Professional PC optical lens
- **IP:** IP67
- **Applications:** Architectural facades, public venues, luxury villas, commercial landscapes
- **Wall-washing distance:** 8-10m
- **Length recommendation:** For cascaded length 4 meters or less, use this product (4 sections of 1m each, connected via terminals).
- **Operating temperature:** W:Ta:-20~50°C
- **Storage temperature:** W:Ta:0°C~60°C
- **Warranty :** 3 years warranty or working life =36000H,whichever comes first

Angle



【Basic Parameters】

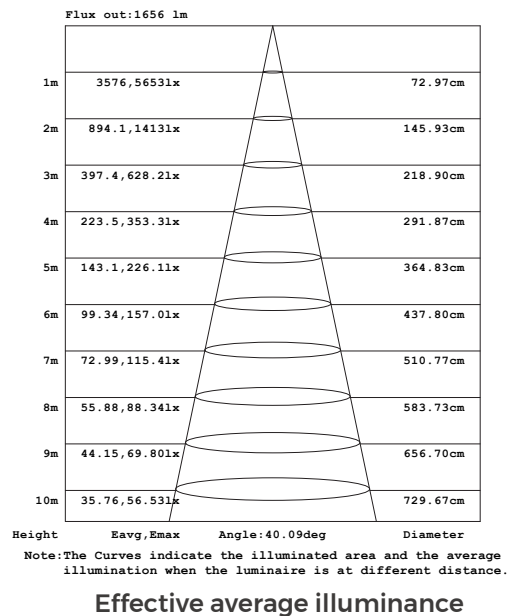
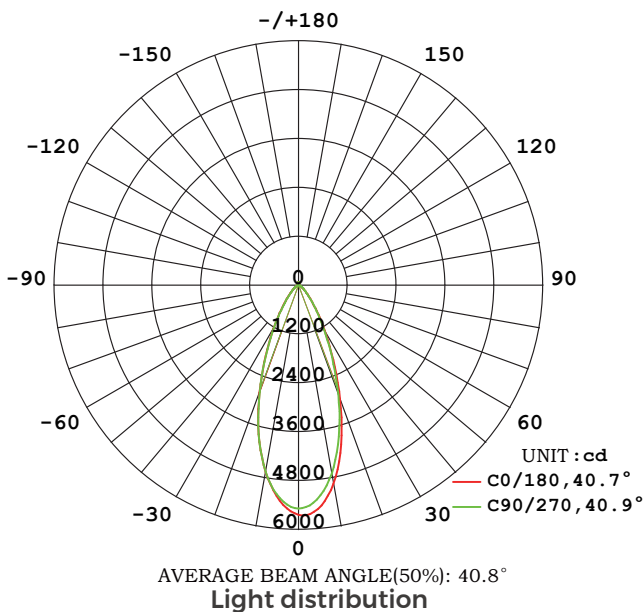
White - 24V

Model	CCT/Color	CRI	voltage (V)	Typ. Power (w/m)	Max. Power (w/m)	Pixel	Lumin@40° (LM/m)	Length	Remark
ALS3646-9XX24 CSW025CC0100-XX	2700K	>90	24	56 (17W/ft)	64.4 (19.5W/ft)	/	2981 (909 LM/ft)	1000mm (3.28ft)	Angle 12° 25° 40° 15x55°
	3000K						3158 (962 LM/ft)		
	4000K						3508 (1069 LM/ft)		

Note:

1. The above data is the testing result of 1M standard product;
2. The lumens of output data can be vary up to ±15%;
3. The above parameters are all typical values.
4. The range of operating voltage is DC24V.

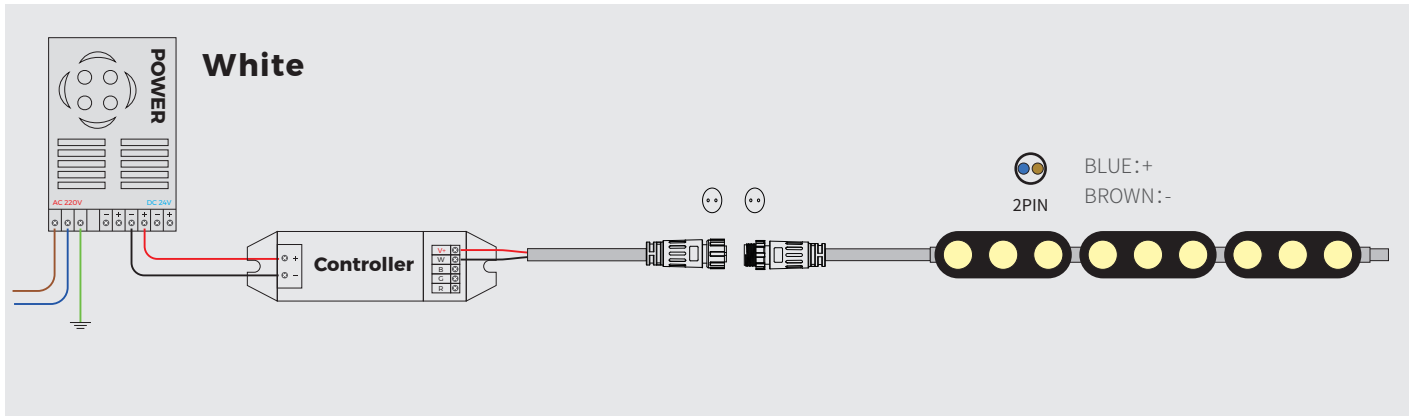
【Light Distribution】



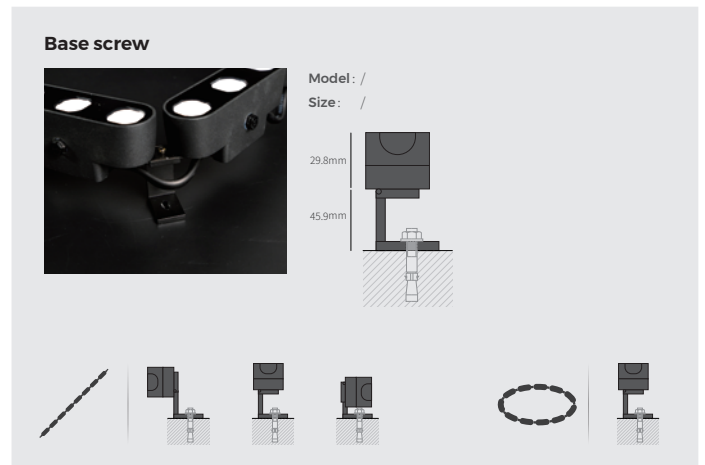
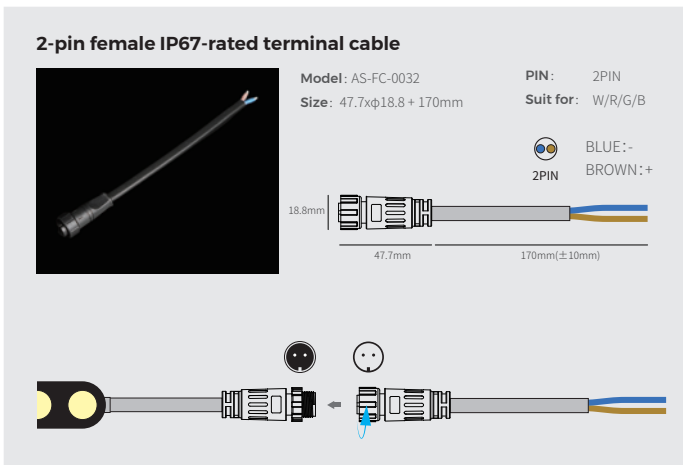
Note: The above data is based on 24V monochrome 4000K color temperature @ 40°.

If you need other models of IES files, please download the corresponding models from the IES database.

【Product Wiring Information】



【Product Accessories Information】



【产品包装信息】



Category	Model	Size	Product QTY/Box	Product QTY/Carton	Product N.W.(Kg)	Carton N.W.(Kg)	Carton G.W.(Kg)	Carton Size(m)
LENS	ALS3646 - 24V	L10000*36*46mm	1M	10M	3.5	35	36.5	0.56*0.56*0.125

【Product Quality and Service】

Product Quality Assurance Statement

To protect your rights and interests, and enhance product experience and service quality, we hereby formulate the following Product Quality Assurance Statement. This statement applies to all light strip and neon light strip products manufactured by COLORS Optoelectronics.

I. Quality Assurance Commitment

COLORS Optoelectronics solemnly commits that for products that meet the following quality assurance conditions and are within the warranty period, we will provide a "replacement with new products" service, i.e., replace products with the following faults:

Functional faults:

1.1 The light source fails to work normally (failure to light up due to poor materials or craftsmanship).

Appearance faults:

2.1 Severe appearance problems of the product itself in an unpacked but unused state.

II. Exclusions from Quality Assurance Scope

The following situations are not covered by the quality assurance:

Light color coordinate drift, luminous flux attenuation, changes in product appearance and color caused by long-term continuous use.

Faults caused by incorrect use, installation or modification by the user.

Products used in mines, special equipment and other special lighting fields without full communication with our company.

III. Supplementary Clauses for Quality Assurance Services

Products applying for quality assurance services shall be installed and used normally, and their configuration status shall be consistent with that at the time of delivery.

Users shall follow the installation instructions, product specifications and other information provided by COLORS Optoelectronics to ensure that the products are used reasonably in matching temperature environments and application environments.

The quality-assured products of COLORS Optoelectronics are only applicable to general lighting and decorative lighting application fields.

COLORS Optoelectronics only undertakes the "replacement with new products" service that meets the conditions, and does not bear related logistics, labor and other costs or other direct and indirect costs.

COLORS Optoelectronics ensures that the replaced new products meet or exceed the performance and specifications of the original products, and reserves the right of final interpretation.

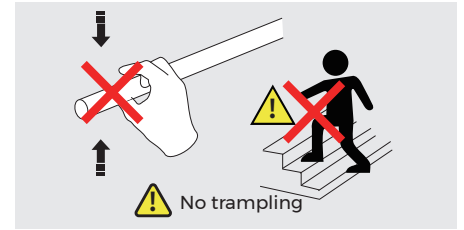
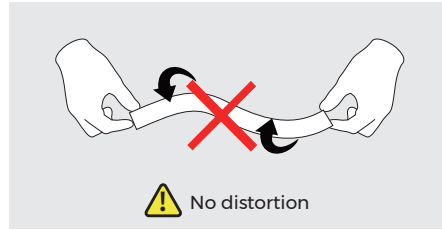
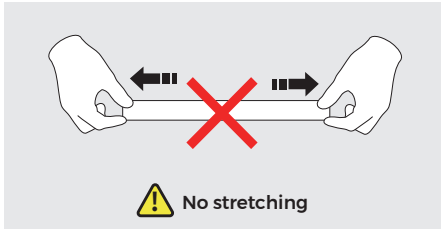
For quality assurance in other agreed usage scenarios, it shall be subject to the contract agreement with the company.

Please keep this statement properly for reference when needed for quality assurance services. If you have any questions, please feel free to contact us. Thank you for your support and trust!

【Reliability test】

test item	Classification	Reference	Test method or condition
Safety test	Mechanical strength	IEC 60598-1; IEC 60598-2-21	The hammer spring Impact energy 0.7J
	IP	IEC 60598-1; IEC 60598-2-21	IP65
	Winding Test	IEC 60598-1; IEC 60598-2-21	φ150mm cylinder, 60N pull, winding 10 times at (-25°C ±2°C), and 10 times after(-15°C ±2°C, 16h).
	Cold Bend Test	IEC 60598-1; IEC 60598-2-21	wound on mandrel, low-temperature (-15°C ±2°C, 16h), around the mandrel for two turns
	Cold Impact test	IEC 60598-1; IEC 60598-2-21	Low-temperature (-15°C ±5°C, 16h), hammer falls from a height of 100mm.
	Insulation Resistance	IEC 60598-1; IEC 60598-2-21	≤ 2MΩ
	Electrical strength	IEC 60598-1; IEC 60598-2-21	500V
Mechanical reliability testing	Bending test	Colors	Each 200mm, bending up and down 100 times
	Bending test	Colors	Each 200mm, bending left and right 100 times
	Torsion test	Colors	Twist clockwise 5 times and then release, repeat 200 times
	Disassembly and assembly test	Colors	Repeat disassembly and assembly, 10 times
Environment Reliability testing	High temperature storing test	IEC 60068-2-2	80°C, 168h
	Low temperature storing test	IEC 60068-2-1	-40°C, 168h
	High temperature and Humidity impact	IEC 60068-2-78	60°C, 85%RH
	Salt Spray test	IEC 60068-2-11	5% salt solution concentration, 24h
	IK	IEC 62262	5 times of impact on each exposed surface
	Lifetime aging test	Colors	35°C, 6000h
	switch test	Colors	10s On, 10s Off, 10000 times

【Precautions】



1. Safe Electricity Usage

1. Non-professionals are prohibited from installing or disassembling light strips.
2. Ensure the driver's voltage matches the product to avoid overload or short circuit.
3. For outdoor use, select a wiring system with a waterproof rating (such as IP67 or higher) to prevent electric leakage.
4. Use isolated power supplies to drive LED light strips, with the ripple of constant voltage sources being less than 5%. Do not use resistor-capacitor voltage reduction, non-isolated, or similar types of power supplies to drive LED light strips.
5. In practical applications, the power supply should retain a 20% margin (it is recommended to use only 80% of the power) to ensure sufficient voltage for driving the product.
6. Handle with care. Do not touch the AC power terminal when the power is on to prevent electric shock.
7. Pay attention to the positive and negative poles of the power cord; do not reverse the connection. Check that the voltage of the power supply matches the product to avoid product damage.

2. Installation Environment

8. IP67 protected products are not suitable for the bottom of swimming pools. For underwater use, please use special underwater products.
9. Avoid high-temperature environments (e.g., near heating systems, fire sources) and areas with corrosive gases/liquids.

3. Installation Precautions

10. Use dedicated profiles or clips for fixation to avoid bending or pulling the wires.
11. Ensure firm contact during wiring to prevent faults caused by loose connections.
12. During installation, avoid scratching, twisting, or irregularly bending the product, as this may cause irreparable damage.
13. To ensure the lifespan and reliability of the light strip, do not bend hard linear wall washers.
14. If the actual application length exceeds the specified usable length, it may cause the light strip to overheat, have uneven brightness, etc.
15. It is strictly prohibited to use any acidic or alkaline adhesives (including but not limited to glass glue) to fix the product.
16. Products of different sizes and specifications may have slight color deviations under the same color temperature due to structural differences. Please confirm this before use.
17. When installing and using IP67 protected products, if they are cut or processed by the user, their waterproof rating will be downgraded.
18. During construction and installation, it is strictly prohibited to use adhesives such as 502/705 that are prone to chemical reactions with silicone. It is recommended to use silicone sealant for bonding.

4. Usage and Maintenance

19. Disconnect the power supply when not in use for a long time to extend the service life.
20. To avoid eye damage, try to avoid staring at the light-emitting surface of the lit light strip for a long time.
21. When installing and using the product, it is recommended to keep the entire product in the same environmental conditions to prevent inconsistent color changes on the product surface caused by differences in exposure levels and environmental conditions.

5. Environmental Protection Disposal

22. In case of inconsistent color changes on the surface of the product, discarded light strips must be recycled in accordance with electronic waste regulations and must not be discarded at will.

6. Other Declarations

23. When using dimmers such as Triac with dimming power supplies during product installation and use, it is essential to conduct compatibility tests between the product, dimmer, and dimming power supply to ensure full adaptation. If you encounter any problems during this process, please feel free to contact COLORS for professional technical support.



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