

14.4 W High Power LED Strips

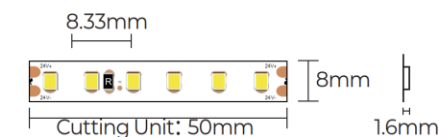
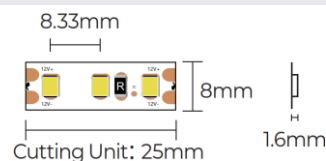
The 14.4W LED strip is a powerful and versatile lighting solution, available in both 12V and 24V options to cater to demanding applications. It provides vibrant illumination with a CRI 90 for superior color rendering and a 120° beam angle for smooth and uniform light distribution. With our in-house assembly capabilities, we offer customizable strip lengths to meet your specific project needs, delivering exceptional flexibility and precision for any lighting design.

FEATURES AND BENEFITS:

- ✓ High CRI 90
- ✓ Wide 120° Beam Angle
- ✓ Available in Constant Voltage 12V DC or 24V DC
- ✓ 120 LEDs per meter for smooth and seamless illumination.
- ✓ 3M back tape for effortless installation
- ✓ Indoor and Outdoor Options (IP20 and IP65 nano)
- ✓ Long Lifespan, rated for 36,000 hours (L70)
- ✓ 5-year warranty

APPLICATION:

- ❖ Commercial lighting
- ❖ Architectural lighting
- ❖ Task lighting
- ❖ Cove and accent lighting
- ❖ Outdoor decorative lighting
- ❖ Custom lighting designs



NANO-COATING TECHNOLOGY: ADVANCED PROTECTION FOR LED STRIPS:

Nano-coating technology provides an innovative solution for enhancing LED strip performance and durability. This advanced protection method ensures resistance to moisture, dust, and dirt, making it an excellent choice for indoor and sheltered outdoor applications. Unlike traditional extrusion-filled solutions, Nano-coated strips are lightweight, flexible, and deliver consistent performance with minimal impact on brightness.

Key Advantages of Nano-Coating (NA):

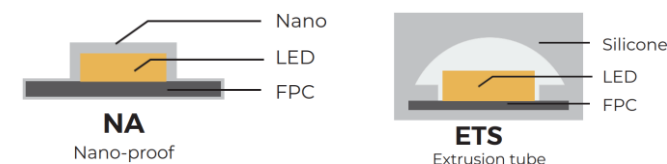
- ✓ **High Lumen Output:** With a 98% lumen output rate, Nano-coated strips offer superior brightness retention compared to extrusion-filled alternatives, ensuring vibrant and efficient illumination.
- ✓ **Compact and Slim Design:** The compact size (8mm x 1.6mm) makes Nano-coated strips ideal for installations in tight profiles, such as PR001 and PR002, where extrusion-filled options cannot fit.
- ✓ **Moisture and Dust Protection (IP65):** Nano-coating creates a seamless protective layer, safeguarding the strip from water splashes, dust, and dirt without adding bulk or weight.

Why Choose Nano-Coated Strips?

Nano-coated strips are the perfect balance of performance, durability, and design flexibility. They provide adequate ingress protection for most indoor and sheltered outdoor applications while maintaining a sleek, minimalist profile. With a nearly unaltered lumen output rate and compatibility with compact installations, they outperform traditional extrusion-filled strips in both efficiency and versatility.

Important Installation Note:

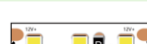
If the strip is cut, ensure both ends are sealed with silicone glue to maintain its IP65 rating. For optimal protection and heat dissipation, always install Nano-coated LED strips within a profile. Nano-coating represents the next generation of LED strip technology, delivering unmatched protection, flexibility, and performance for all your lighting needs.



IP Process	Description	Size	Lumen Output Rate
NO (IP20)	No proof	8mm x 1.5mm	100%
NA (IP65)	Nano-proof	8mm x 1.6mm	98%
ETS (IP65)	Extrusion tube	10mm x 4.8mm	88%



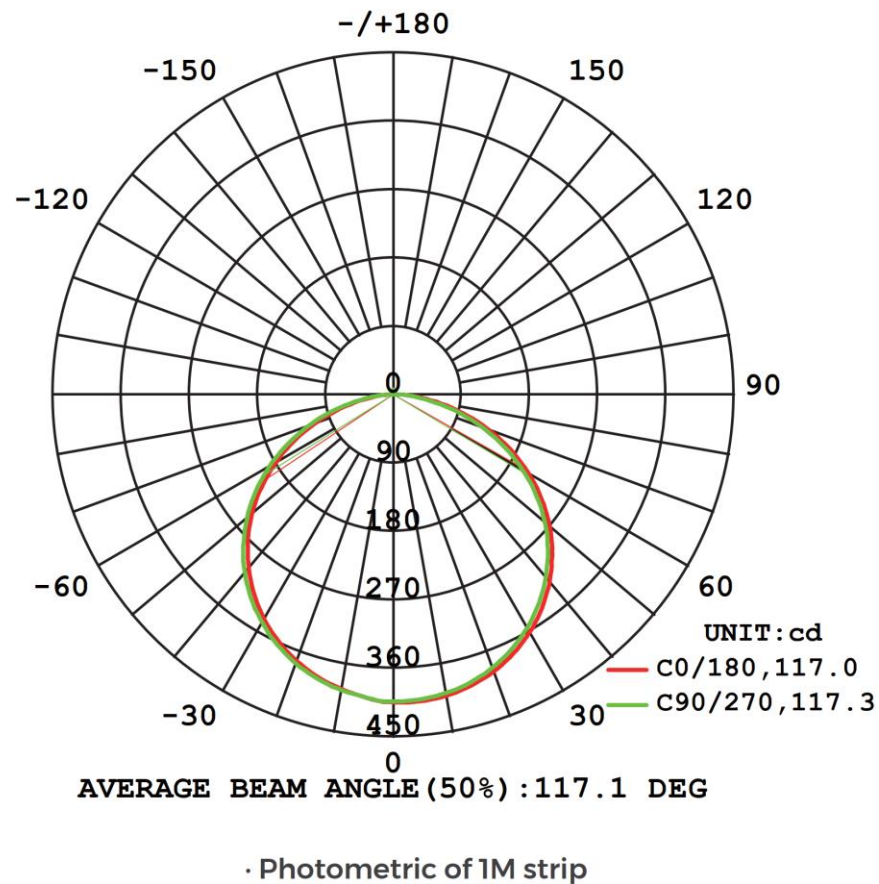
DATASHEET (12V):

Azoogi Product Code	Input Voltage DC (V)	Max. Power per Meter (W/m)	Colour Temperature	Lumen (lm/m)	CRI	LEDs per Meter	FPC Width (mm)	Beam Angle	Diagram	Cutting Increment	IP Rating	Operating Temperature	Warranty
STR035	12V	14.4W/m	2700 K	1200lm/m	Ra>90	120leds/m	8mm	120°		25mm	IP20	-20°C to +40°C	5 years
STR037	12V	14.4W/m	3000 K	1270lm/m	Ra>90	120leds/m	8mm	120°		25mm	IP20	-20°C to +40°C	5 years
STR039	12V	14.4W/m	4000 K	1320lm/m	Ra>90	120leds/m	8mm	120°		25mm	IP20	-20°C to +40°C	5 years
STR041	12V	14.4W/m	6000 K	1270lm/m	Ra>90	120leds/m	8mm	120°		25mm	IP20	-20°C to +40°C	5 years
STR043	12V	14.4W/m	2700 K	1176lm/m	Ra>90	120leds/m	8mm	120°		25mm	IP65 (NA)	-20°C to +40°C	5 years
STR045	12V	14.4W/m	3000 K	1245lm/m	Ra>90	120leds/m	8mm	120°		25mm	IP65 (NA)	-20°C to +40°C	5 years
STR047	12V	14.4W/m	4000 K	1294lm/m	Ra>90	120leds/m	8mm	120°		25mm	IP65 (NA)	-20°C to +40°C	5 years
STR049	12V	14.4W/m	6000 K	1245lm/m	Ra>90	120leds/m	8mm	120°		25mm	IP65 (NA)	-20°C to +40°C	5 years

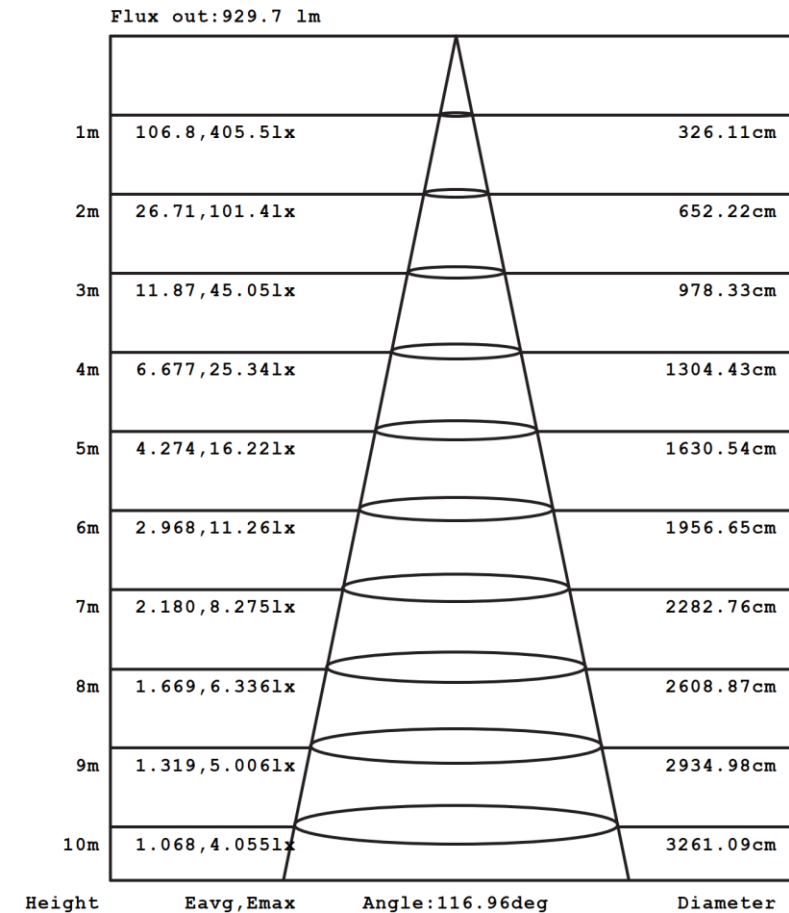
DATASHEET (24V):

Azoogi Product Code	Input Voltage DC (V)	Max. Power per Meter (W/m)	Colour Temperature	Lumen (lm/m)	CRI	LEDs per Meter	FPC Width (mm)	Beam Angle	Diagram	Cutting Increment	IP Rating	Operating Temperature	Warranty
STR036	24V	14.4W/m		1200lm/m	Ra>90	120leds/m	8mm	120°		50mm	IP20	-20°C to +40°C	5 years
STR038	24V	14.4W/m		1270lm/m	Ra>90	120leds/m	8mm	120°		50mm	IP20	-20°C to +40°C	5 years
STR040	24V	14.4W/m		1320lm/m	Ra>90	120leds/m	8mm	120°		50mm	IP20	-20°C to +40°C	5 years
STR042	24V	14.4W/m		1270lm/m	Ra>90	120leds/m	8mm	120°		50mm	IP20	-20°C to +40°C	5 years
STR044	24V	14.4W/m		1176lm/m	Ra>90	120leds/m	8mm	120°		50mm	IP65 (NA)	-20°C to +40°C	5 years
STR046	24V	14.4W/m		1245lm/m	Ra>90	120leds/m	8mm	120°		50mm	IP65 (NA)	-20°C to +40°C	5 years
STR048	24V	14.4W/m		1294lm/m	Ra>90	120leds/m	8mm	120°		50mm	IP65 (NA)	-20°C to +40°C	5 years
STR050	24V	14.4W/m		1245lm/m	Ra>90	120leds/m	8mm	120°		50mm	IP65 (NA)	-20°C to +40°C	5 years

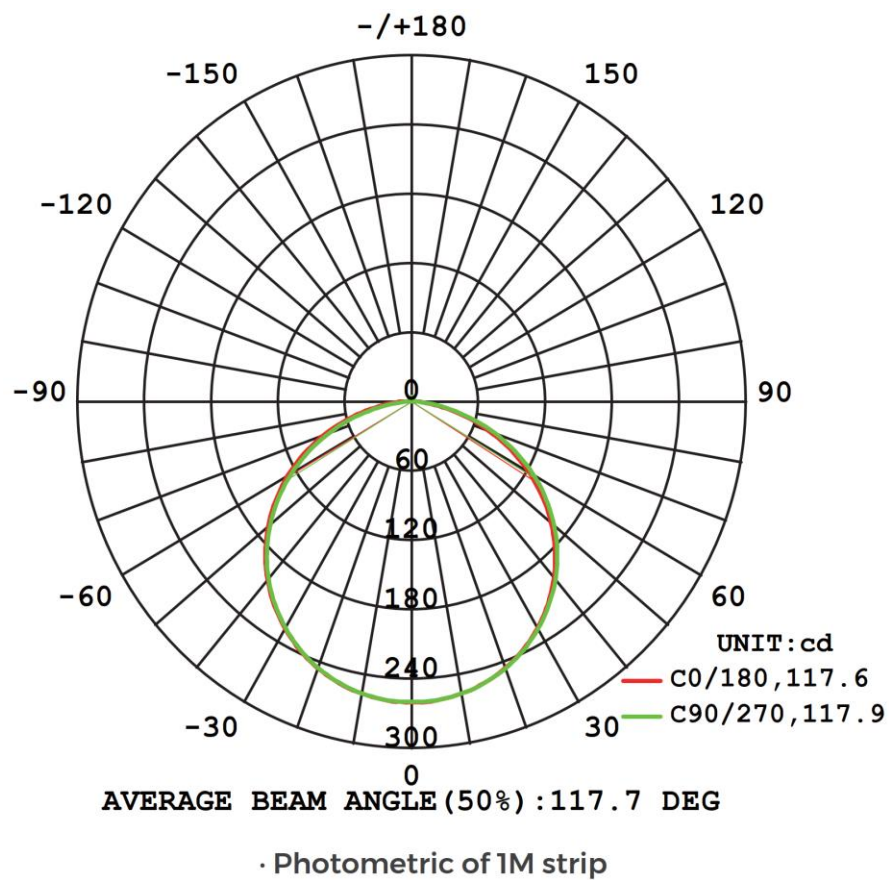
LUMINOUS INTENSITY DISTRIBUTION CURVE (12V):



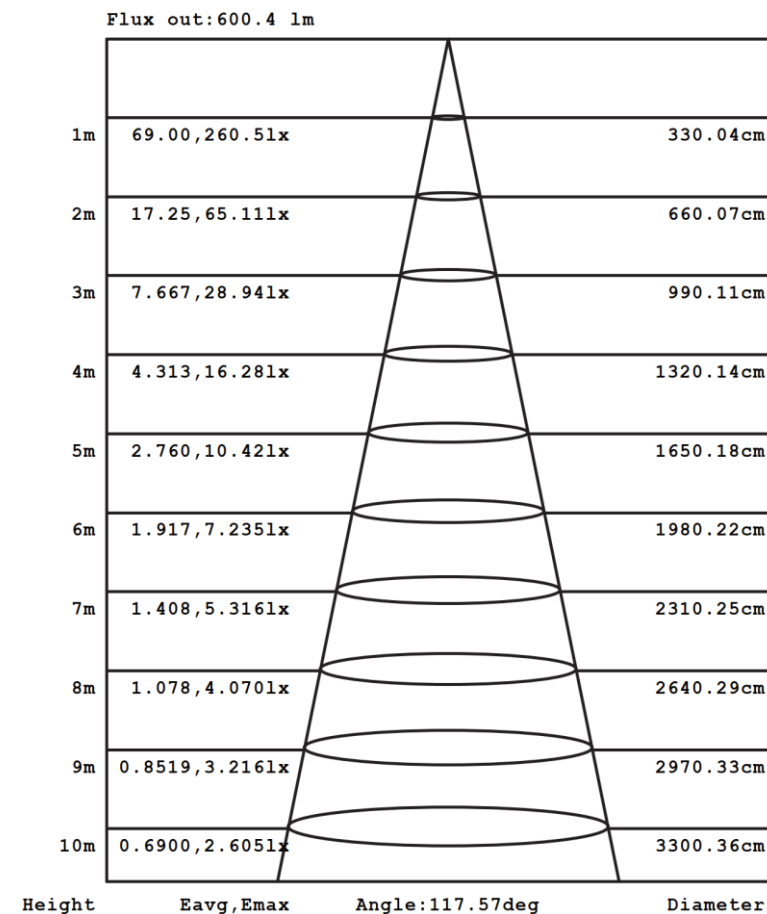
ILLUMINANCE AT A DISTANCE (12V):



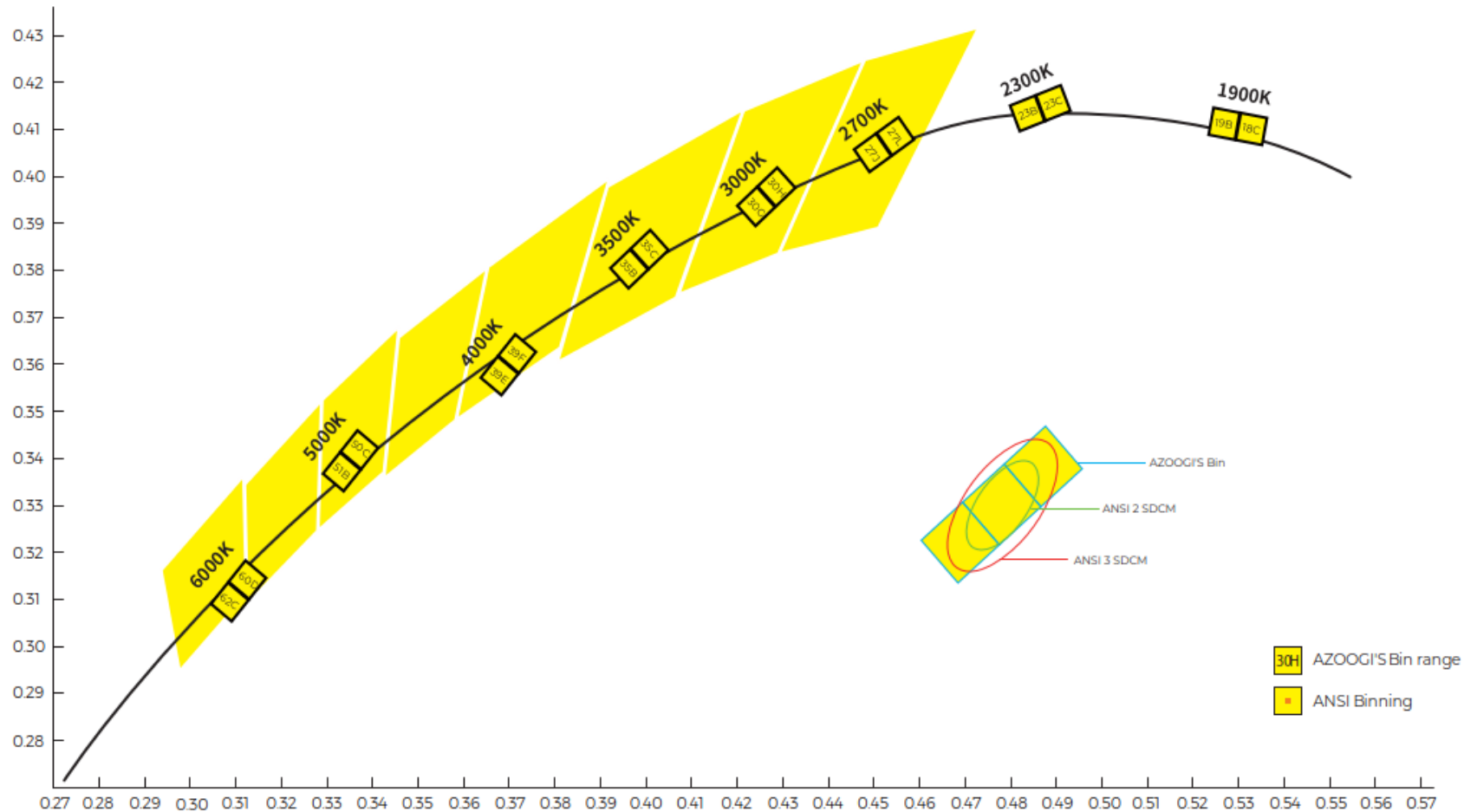
LUMINOUS INTENSITY DISTRIBUTION CURVE (24V):



ILLUMINANCE AT A DISTANCE (24V):

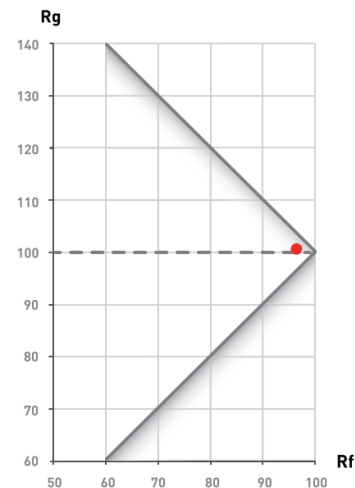
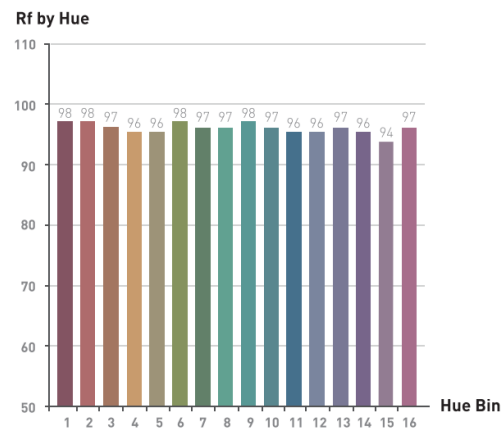
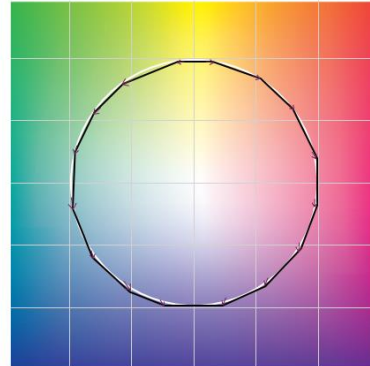


MACADAM ELLIPSES:

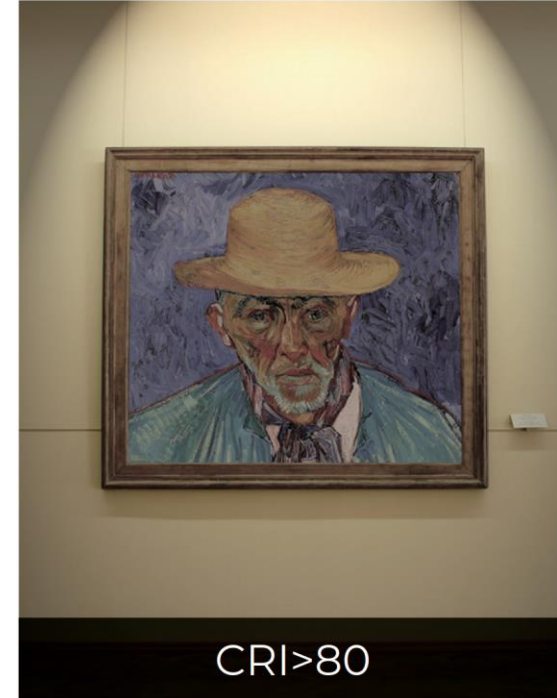


Complied with international ANSI standards, Azoogi divides every CCT into 2 or 3 bins, at 2-step MacAdam ellipse at least, to ensure customers get the same colour of light even for different orders.

TEST OF FULL SPECTRUM (FS) LED:

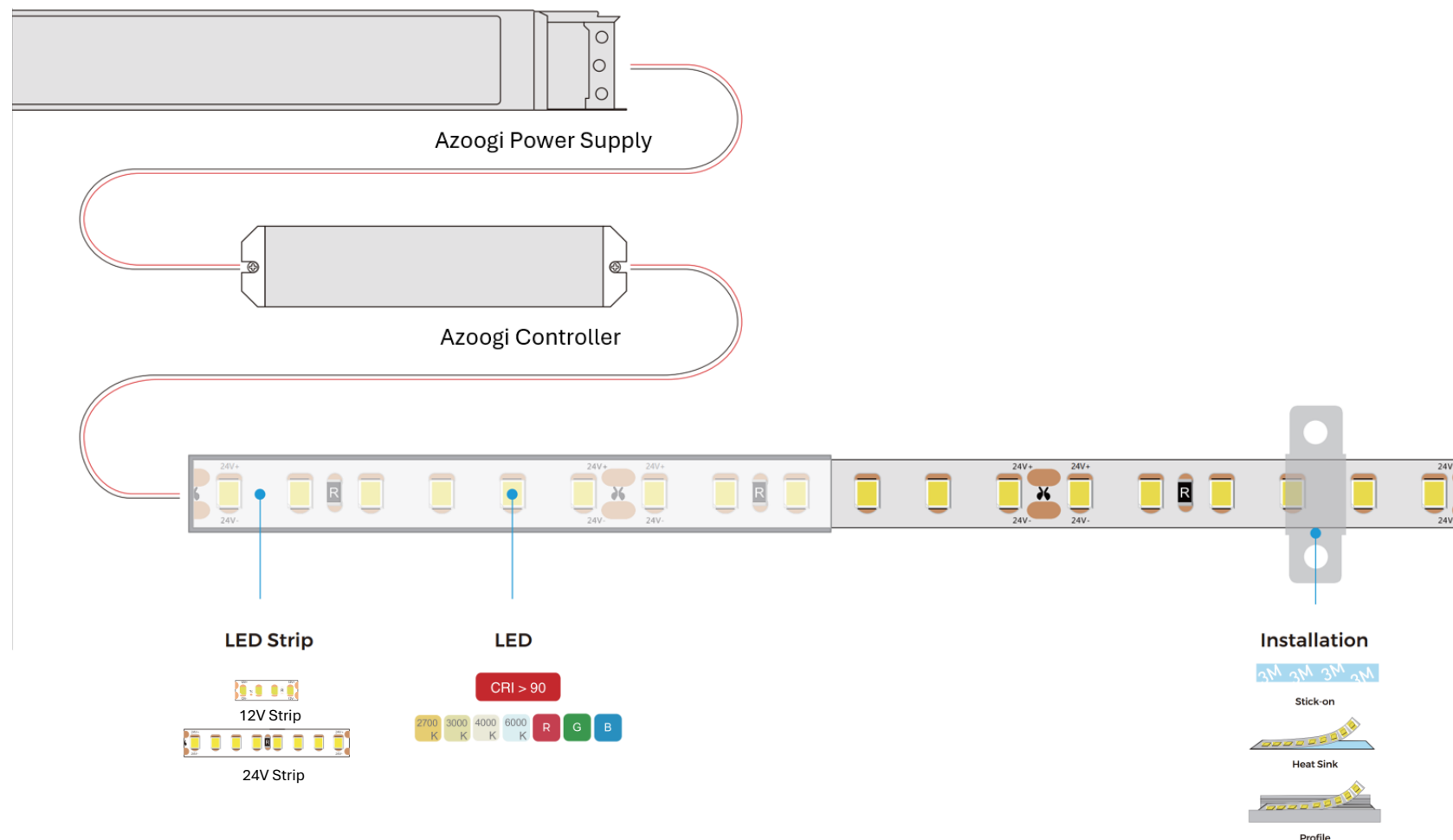


COLOR RENDITION (CRI):



All our LED strips are manufactured with a **CRI>90**, ensuring superior color rendering for vibrant, true-to-life illumination. This high CRI rating enhances the richness and accuracy of colors, making them ideal for applications where color precision is essential, such as artwork displays, retail spaces, and interior designs. With our CRI>90 LED strips, you can bring out the finest details and create visually stunning environments.

INSTALLATION:



Step 1: Preparing for Installation

- **Check the Voltage:** Confirm whether your LED strip is 12V or 24V and ensure the power supply matches the strip's requirements.
- **Plan the Layout:** Measure the area and determine where the LED strip will be installed. Ensure the strip length matches your design.
- **Ensure Clean Surfaces:** Clean the installation surface to remove dust or grease for optimal adhesion.

Step 2: Power Supply and Controller Connection

- **Connect the Power Supply:** Plug the Azoogi power supply into the mains and connect the output terminals to the LED strip or controller.
- **Add Controller (Optional):** If using a controller for dimming or color control, connect it between the power supply and the LED strip and follow the wiring diagram for proper connections.

Step 3: Installing the LED Strip

- **Cut to Size (if necessary):** Use marked cutting increments (50mm or 100mm) to trim the strip to your required length and ensure the cut does not damage the circuitry.
- **Adhere the Strip:** Peel off the backing from the 3M adhesive tape on the strip and carefully stick the strip to the clean surface, ensuring it is aligned properly.
- **Use Profiles or Heat Sinks (Recommended for longevity):** Place the LED strip onto the heat sink or inside the aluminum profile to enhance heat dissipation and provide a professional finish.

Step 4: Connecting the LED Strip

- **Connect to Power:** Attach the LED strip terminals to the output from the power supply or controller, ensuring polarity (+/-) is correct.
- **Secure Connections:** Use proper connectors to avoid loose wiring and test the connection by powering on the strip.

Step 5: Testing and Adjustments

- **Power On:** Turn on the power supply and test the LED strip for proper illumination.
- **Adjust Settings (if applicable):** Use the controller to adjust brightness or color as needed.

Important Installation Notes:

- ❖ Do not install the strip on rough or uneven surfaces without proper profiles.
- ❖ Avoid bending the strip at sharp angles to prevent damage to the LEDs or circuits.
- ❖ Ensure adequate ventilation or use a heat sink for installations in enclosed spaces to avoid overheating.
- ❖ For outdoor or damp areas, ensure IP65-rated strips are used and connections are waterproofed.