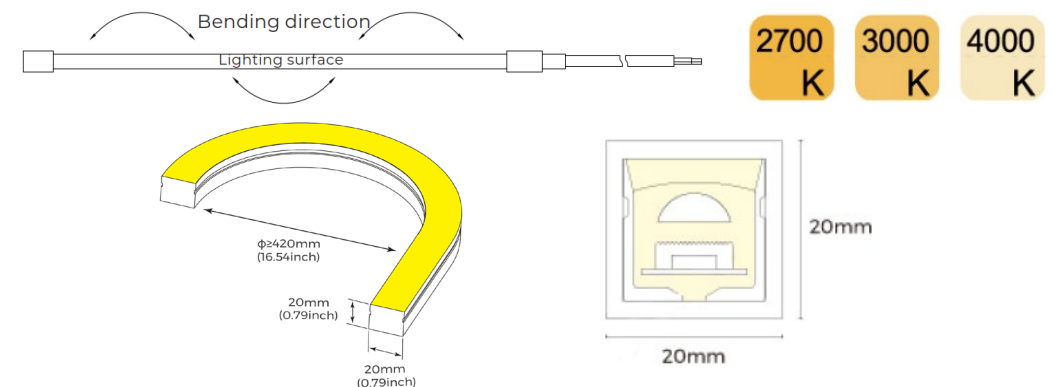


## IP68 Side Bend Neon

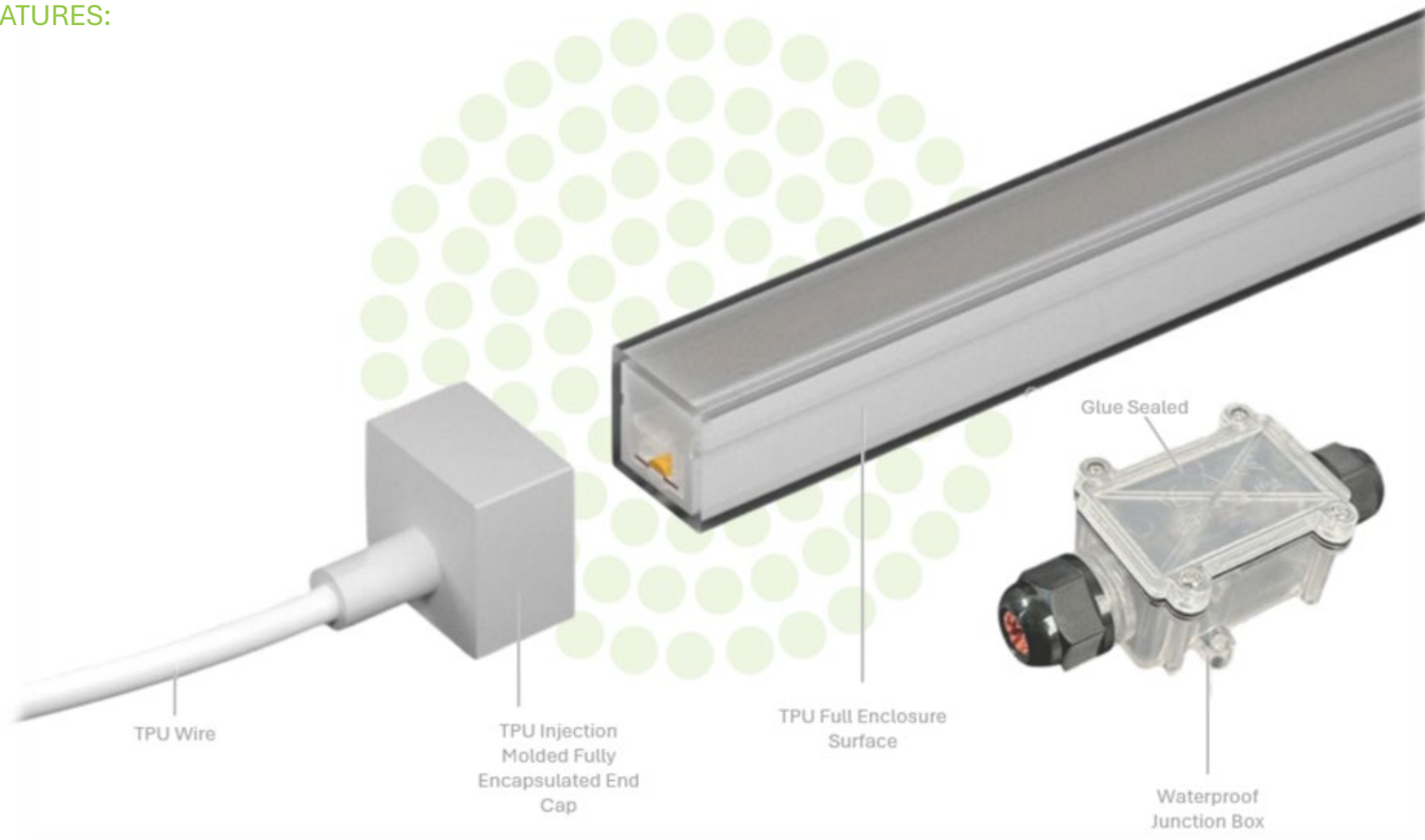
Experience unparalleled lighting performance with our IP68 Side Bend, designed for the most demanding underwater environments. This series stands out with its IP68 protection rating, ensuring complete dust, dirt, and sand resistance, alongside full submersion capabilities in water. Available in lengths up to 5 meters, provides flexibility in installation and design for a variety of settings

### FEATURES AND BENEFITS:

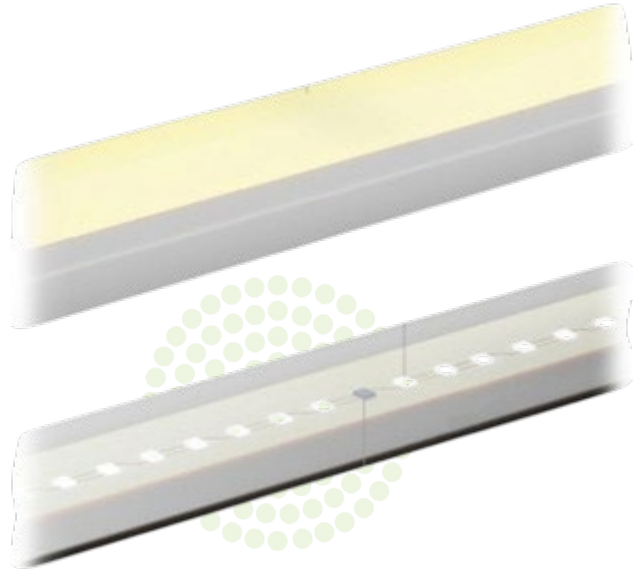
- **IP68 Protection Rating:** The highest level of waterproofing available, making it perfect for pools and marine environments.
- **Customizable Length:** Available in maximum lengths of 5 meters but can be customized to any length up to 5 meters to meet specific project requirements.
- **3-Meter Water Depth Application:** Optimally engineered to function flawlessly up to three meters underwater, enhancing versatility in installation and use.
- **Chlorine and Salt Resistance:** Offers resistance to salt, acid, alkali, chlorine in swimming pools, and UV light, suitable for challenging environmental conditions.
- **Ultra-High Structural Strength:** Features a robust design with anti-twist and high-tensile resistance, capable of withstanding significant physical stress, ensuring long-lasting performance.
- **Special Dura Chips Design:** Engineered to prevent failure of the entire unit in case of single chip damage, maintaining uniform light output and reliability.
- **Innovative Design:** The LED strip is built to resist twisting and bending, equipped with a built-in intense PC line and backbone, which has been tested under extreme conditions to guarantee a trouble-free installation.
- **Wide Temperature Range:** Operates efficiently within a temperature range of -20°C to 50°C, suitable for a variety of climatic conditions.
- **Warranty:** Backed by a 5-year warranty or a working life of 60,000 hours, whichever comes first.



PERFORMANCE FEATURES:

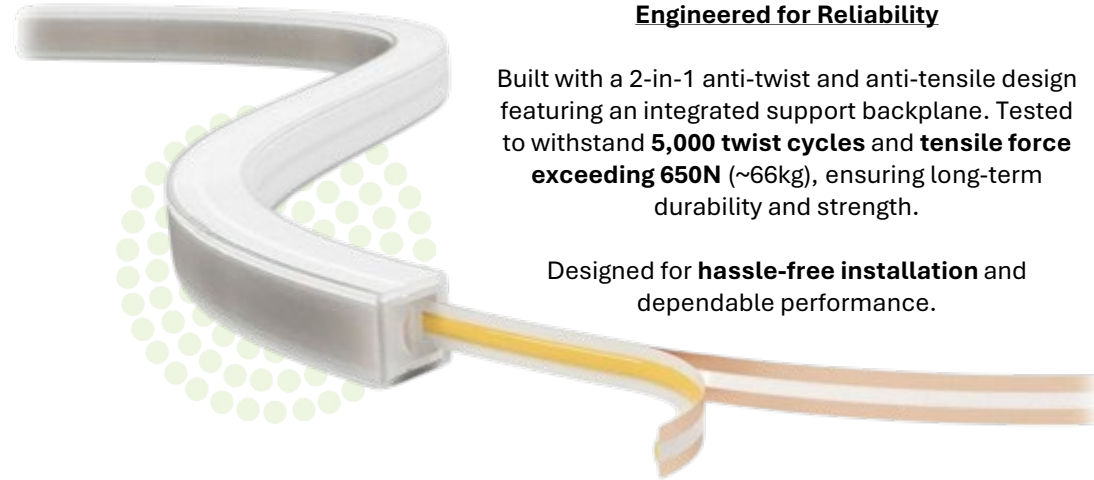


## PERFORMANCE FEATURES:



### Special Parallel LED Chip Design

The IP68 Neon features a cutting-edge design that minimizes the impact of individual LED failures. Each strip incorporates a parallel configuration of the smallest lighting units, ensuring that a single chip failure does not affect the overall illumination.



### Engineered for Reliability

Built with a 2-in-1 anti-twist and anti-tensile design featuring an integrated support backplane. Tested to withstand **5,000 twist cycles** and **tensile force exceeding 650N** (~66kg), ensuring long-term durability and strength.

Designed for **hassle-free installation** and dependable performance.

### Tough Enough for Pools. Ready for the Ocean

Made from high-performance T-Type TPU, our IP68 Neon is built to resist the elements. Withstanding **chlorine up to 10ppm** and **salt concentrations up to 4%**, it easily handles the harshest environments — from **chlorinated pools** (typically 1–3ppm), to **saltwater systems** (0.25–0.35%), and even **ocean exposure** (around 3.5% salt). Whether it's poolside, submerged, or installed along the coast, this strip is made to last.




## DATASHEET:

Azoogi Product Code	Input Voltage DC (V)	Max. Power per Meter (W/m)	Colour Temperature	Lumen (lm/m)	CRI	LEDs per Meter	Beam Angle	Width (mm)	Height (mm)	Max Length*	Cutting Increment	IP Rating	Operating Temperature	Warranty
<b>STR161</b>	24V	10W/m	2700 K	510lm/m	Ra>90	320leds/m	120°	20mm	20mm	5,000mm	50mm	IP68	-20°C to +50°C	5 years
<b>STR162</b>	24V	10W/m	3000 K	560lm/m	Ra>90	320leds/m	120°	20mm	20mm	5,000mm	50mm	IP68	-20°C to +50°C	5 years
<b>STR163</b>	24V	10W/m	4000 K	610lm/m	Ra>90	320leds/m	120°	20mm	20mm	5,000mm	50mm	IP68	-20°C to +50°C	5 years


\*Customizable up to 5 meter lengths maximum

## INSTALLATION OPTIONS:

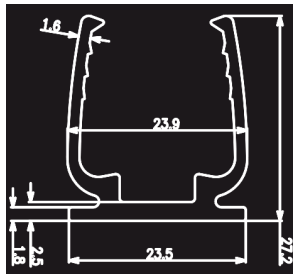
Flat mounting clips



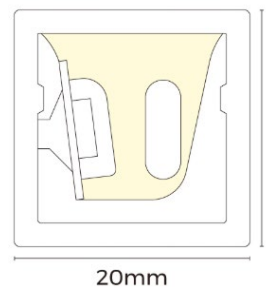
Flat mounting aluminium groove



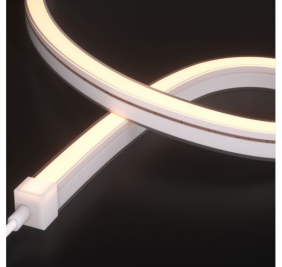
Dimensions



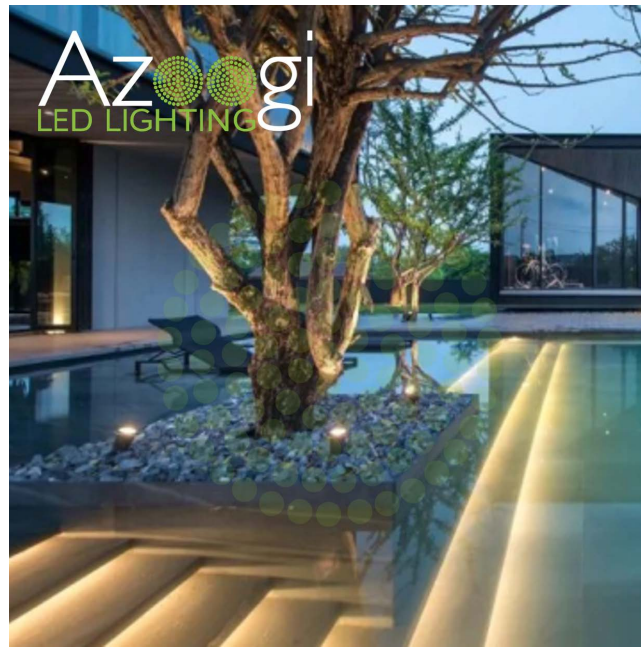
Flat mounting aluminium groove	L = 950mm With screws
Flat mounting clip	L = 30mm With screws



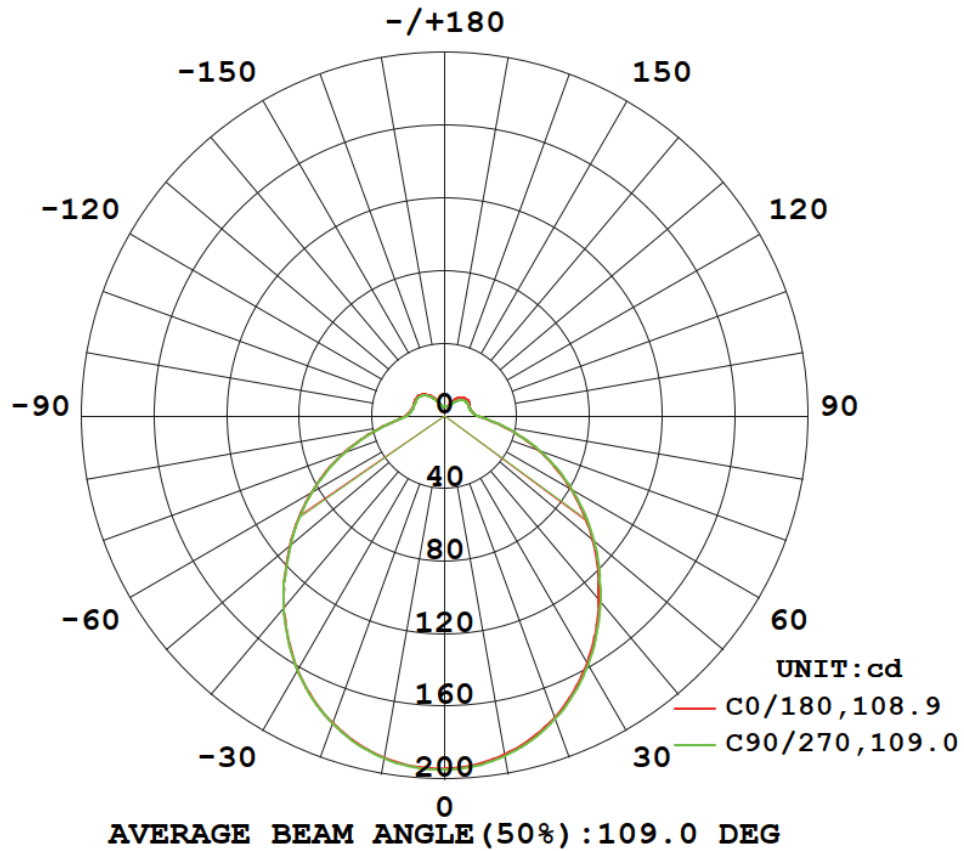
20mm



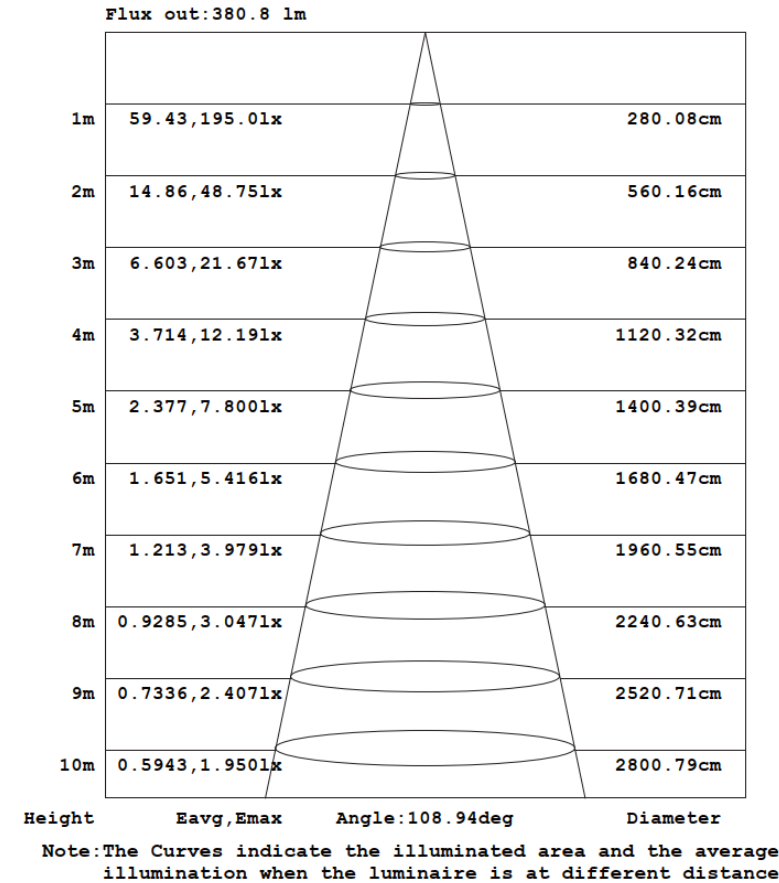
PROJECT PHOTOS:



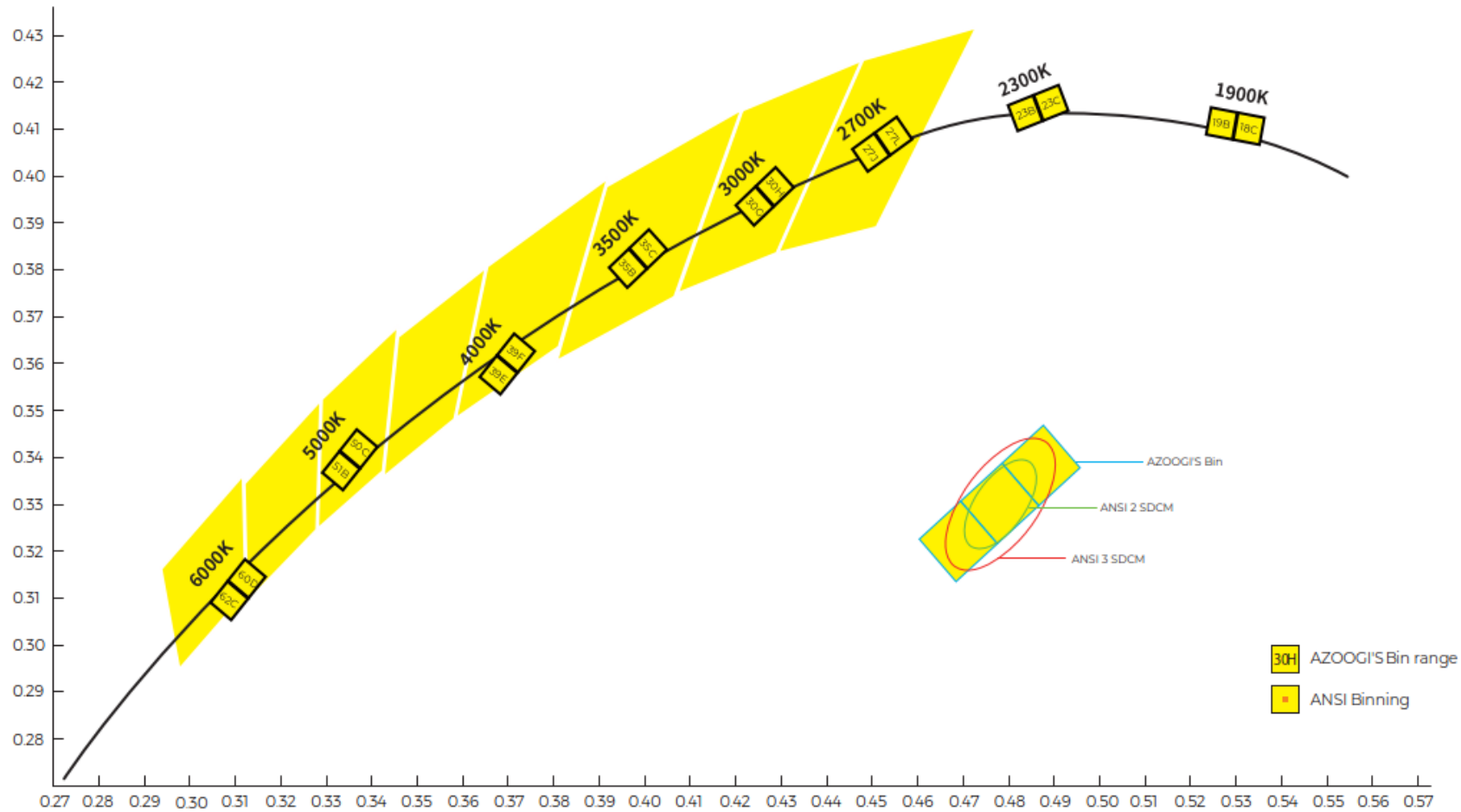
## LUMINOUS INTENSITY DISTRIBUTION CURVE:



## ILLUMINANCE AT A DISTANCE:

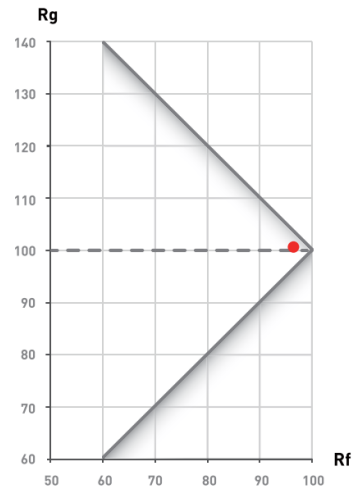
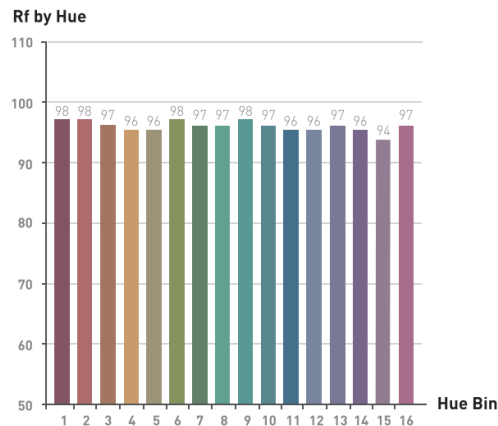
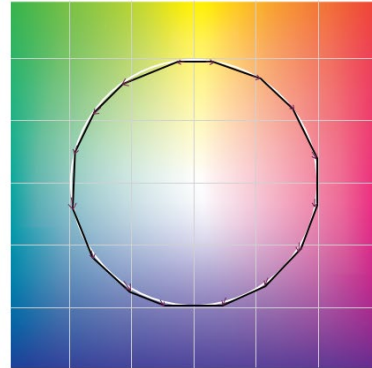
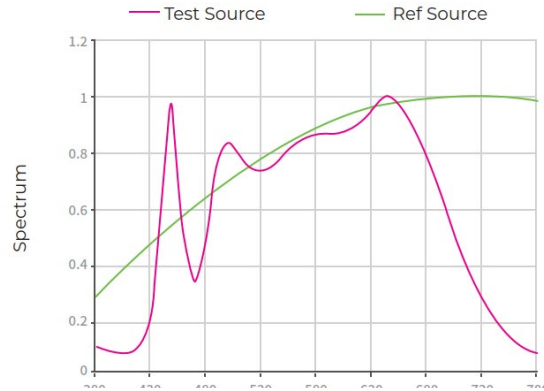


## MACADAM ELLIPSES:

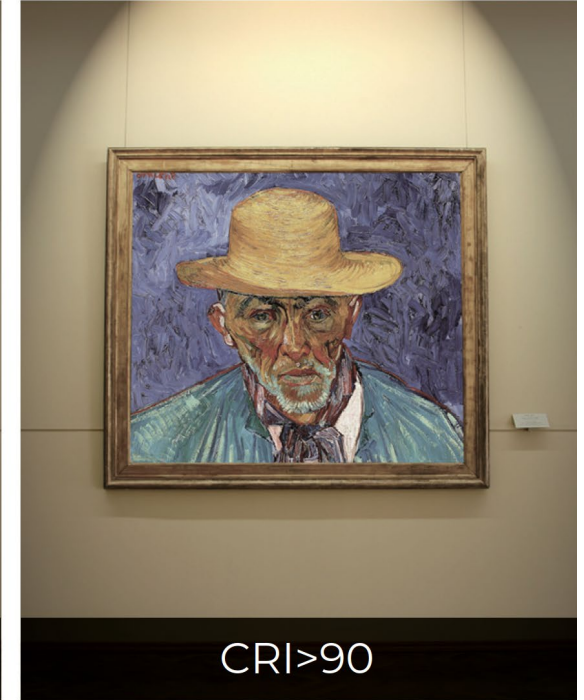
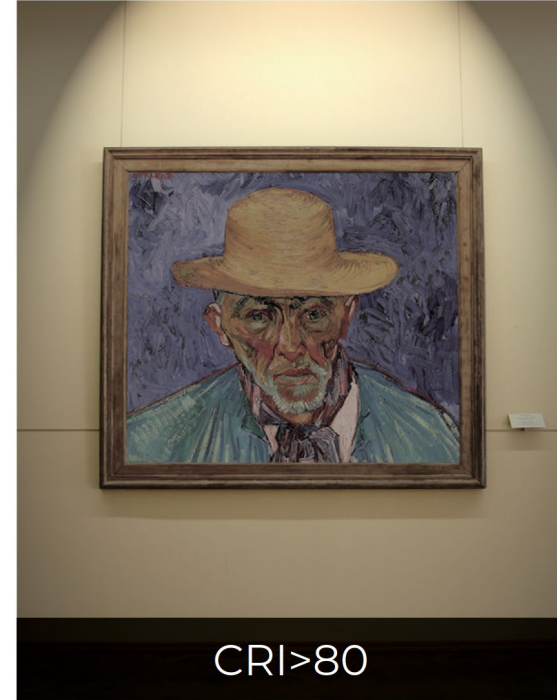


Complied with international ANSI standards, Azoogi divides every CCT into 2 or 3 bins, at 2-step McAdam ellipse at least, to ensure customers get the same colour of light even for different orders.

## 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.

## PRECAUTIONS FOR NEON LED STRIP INSTALLATION:

### Power Supply and Handling:

- ✓ **Use an Isolated Power Supply:** Ensure it's specifically designed to handle LED loads, with a ripple below 5% to ensure stable operation.
- ✓ **Reserve Power Capacity:** Maintain at least 20% power reserve to avoid overloading and ensure sufficient voltage.

### Installation and Maintenance:

- ✓ **Avoid Direct Handling of Live Wires:** To prevent electric shock, do not touch the AC power terminals when powered.
- ✓ **Proper Wiring:** Ensure correct polarity in connections to prevent potential damage.
- ✓ **Avoid Excessive Bending:** Do not bend the strips at a radius smaller than 60mm to prevent damage.
- ✓ **Installation Environment:** Install only in conditions similar across all strips to prevent color inconsistencies.

### Environmental Exposure:

- ✓ **Avoid Chemical Exposure:** Do not use acidic or alkaline substances for installation or maintenance.
- ✓ **Waterproof Connections:** Use IP68-rated junction boxes for all connections to ensure complete water and dust resistance.

### Usage Limitations:

- ✓ **Length Compliance:** Ensure the total length of the LED strip setup does not exceed manufacturer's recommended lengths to prevent overheating and voltage drop.

### Material Handling:

- ✓ **Avoid Prolonged Exposure to Sunlight:** UV exposure can affect material integrity and color consistency over time.
- ✓ **Soldering Restrictions:** Limit soldering to specified points to maintain strip integrity and prevent damage.

### Safety Measures:

- ✓ **Eye Protection:** Avoid looking directly at the LEDs when illuminated to prevent eye strain.
- ✓ **Professional Installation Recommended:** For optimal safety and functionality, installation by certified professionals is advised.

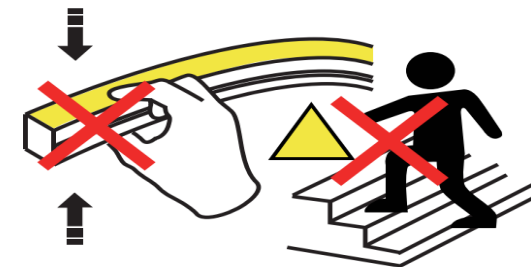
By adhering to these guidelines, you can ensure safe usage, optimal performance, and the longevity of your IP68-rated LED strips in various applications, including challenging environmental conditions.



No stretching



No distortion



No trampling