



# YJ-SX-RB-2835-24V

LED Flexible Ribbon

## Applications

- High-end architectural/residential lighting
- Photographic/broadcast lighting
- DIY lighting projects



## Features

- Flexible for sophisticated color combination
- High lumen output
- High-quality components and premium packaged 2835 LEDs
- 5000mm (length) × 10mm (width)
- Improved adhesive backing for easy installation

[About Yujileds®](#)

Rev Version: 2.0

F3200003.00

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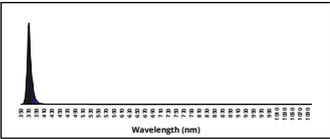
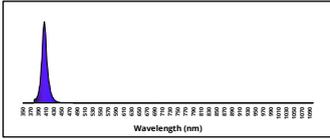
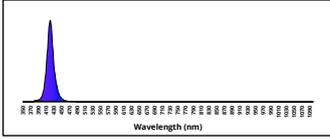
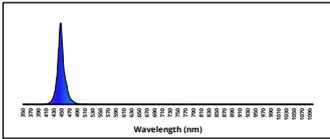
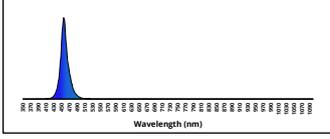
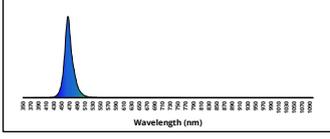
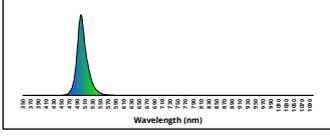
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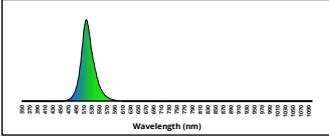
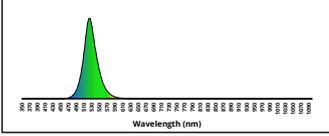
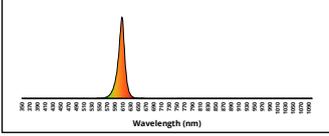
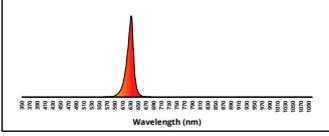
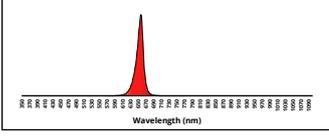
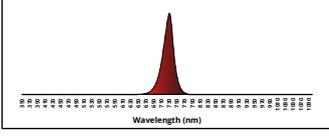
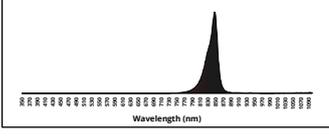
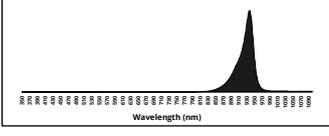
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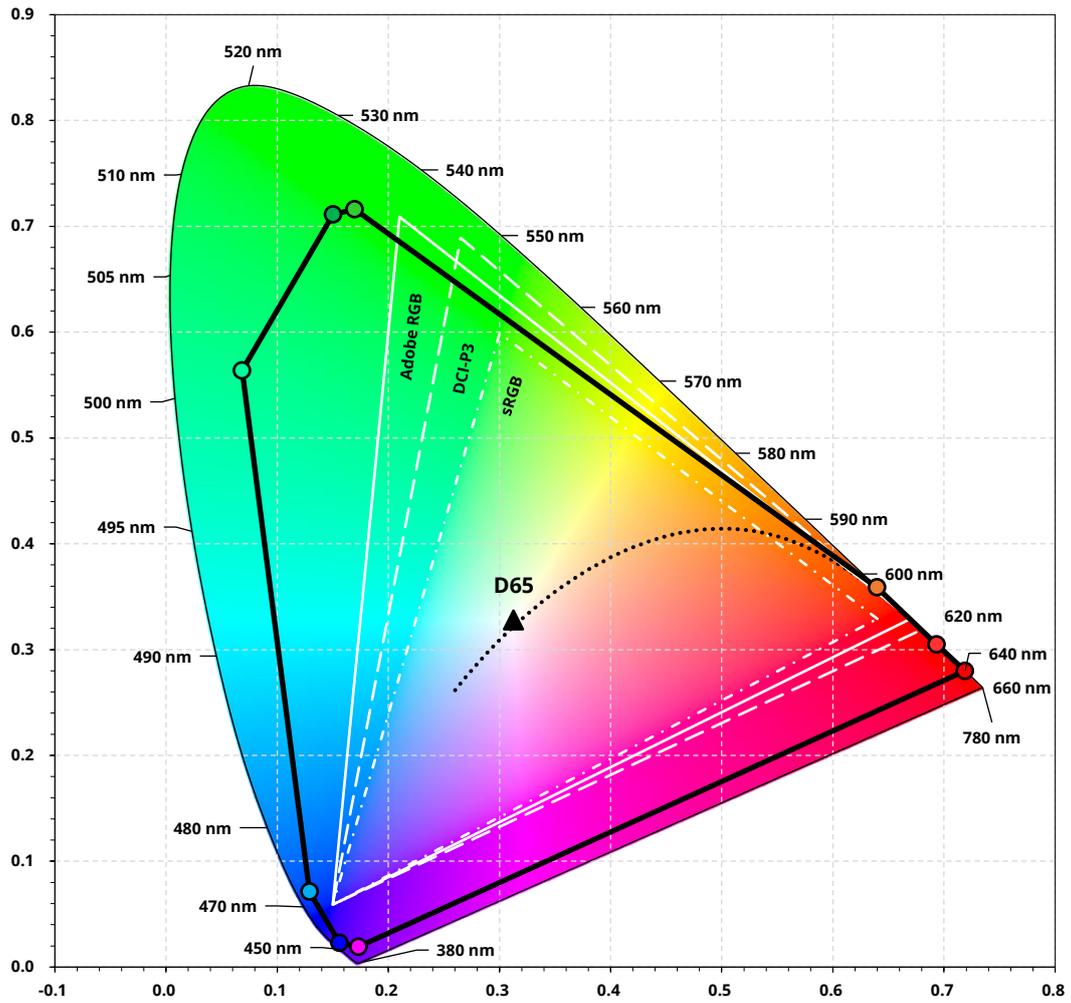
## General description

The Yujileds® monochromatic LED offers flexible definitions for different and single wavelengths. Starting from UV, and ending to IR, the monochromatic series can cover the full wavelength of 370nm – 940nm. Within the visual range, the monochromatic series aims to provide consistent and saturated chromaticities for full-color gamut, for non-visual range, the SX2835 offers both UV and IR options for specific lighting applications.

The options of the wavelengths/spectra and the overall color gamut in the CIE 1931 can be described as follow:

COLOR	WAVELENGTH	SPECTRUM
UV 	370nm	
Violet - 1 	400nm	
Violet - 2 	420nm	
Blue - 1 	450nm	
Blue - 2 	460nm	
Cyan - 1 	470nm	
Cyan - 2 	500nm	

Green - 1		520nm	
Green - 2		530nm	
Amber		610nm	
Red-1		630nm	
Red-2		660nm	
IR-1		730nm	
IR-2		850nm	
IR-3		940nm	



## Ordering information

PART NUMBER	PRODUCT CODE	Voltage (DC)	CCT
YJ-SX-RB-2835-24V-01V	F3200003.01	24V	Violet
YJ-SX-RB-2835-24V-01B	F3200003.02	24V	Blue
YJ-SX-RB-2835-24V-01G	F3200003.03	24V	Green
YJ-SX-RB-2835-24V-01R	F3200003.04	24V	Red
YJ-SX-RB-2835-24V-XXX	F3200003.XX	24V	Custom

## Characteristic

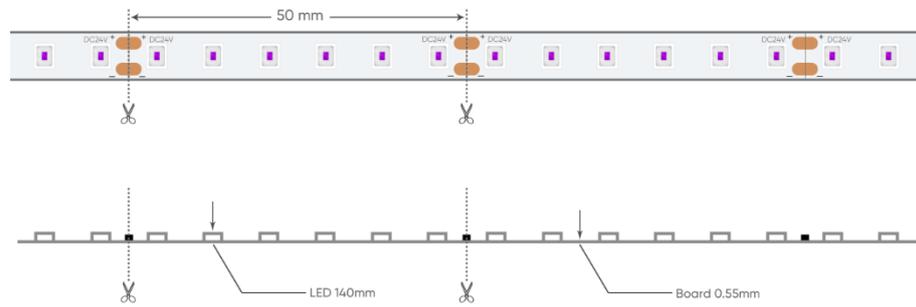
Electrical-optical characteristics ( $T_A = 25^\circ\text{C}$ , 24V DC)

PARAMETER	SYMBOL	VALUE			UNIT
		MIN.	TYP.	MAX.	
<b>Power</b>	<b>per meter</b>	-	18	-	W
<b>Luminous flux<sup>1</sup></b>	$\Phi_{\text{Violet}}$	-	30	-	lm
	$\Phi_{\text{Blue}}$	-	310	-	
	$\Phi_{\text{Green}}$	-	2100	-	
	$\Phi_{\text{Red}}$	-	950	-	
<b>Dominant wavelength</b>	$\lambda_{\text{D-Violet}}$	-	431	-	nm
	$\lambda_{\text{D-Blue}}$	450	-	460	
	$\lambda_{\text{D-Green}}$	515	-	535	
	$\lambda_{\text{D-Red}}$	619	-	625	
<b>Peak wavelength</b>	$\lambda_{\text{P-Violet}}$	400	-	415	nm
	$\lambda_{\text{P-Blue}}$	-	453	-	
	$\lambda_{\text{P-Green}}$	-	520	-	
<b>View angle</b>	$2\theta_{1/2}$	-	120	-	Deg

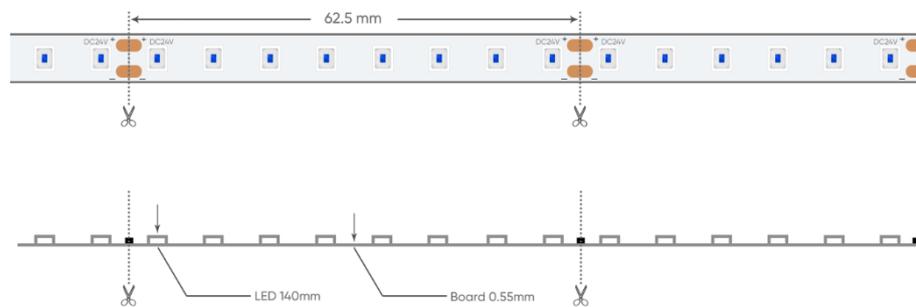
1. Tested by integrating sphere with one-meter cut.

## Dimensions

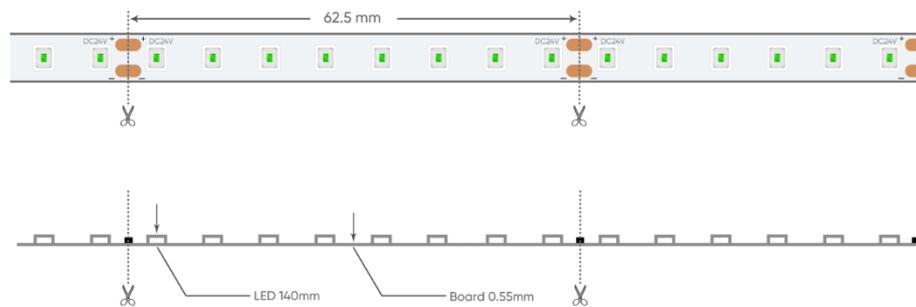
### Violet



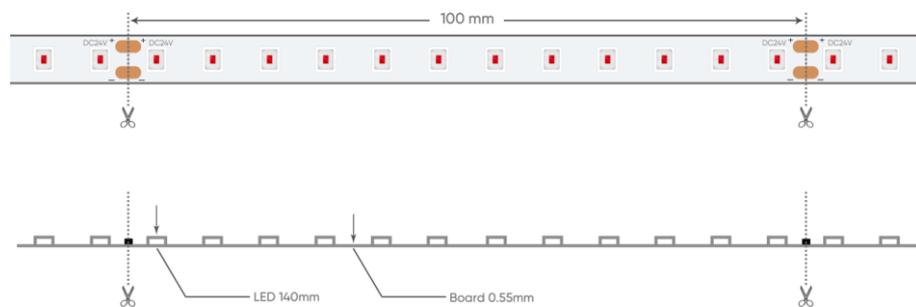
### Blue



### Green



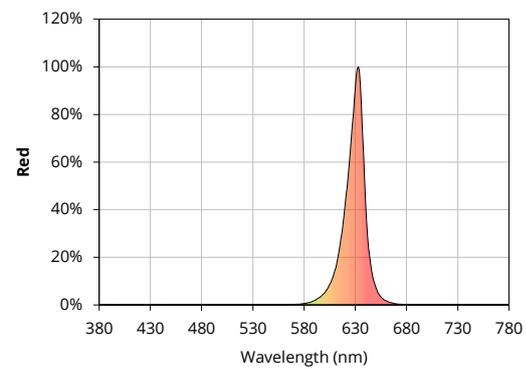
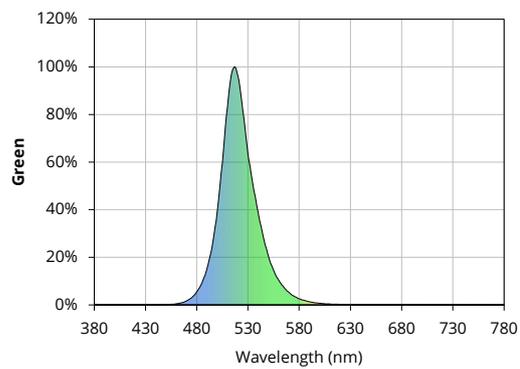
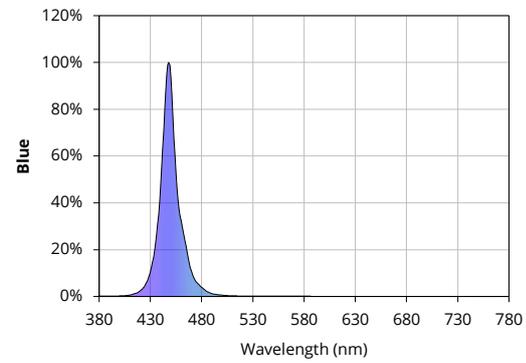
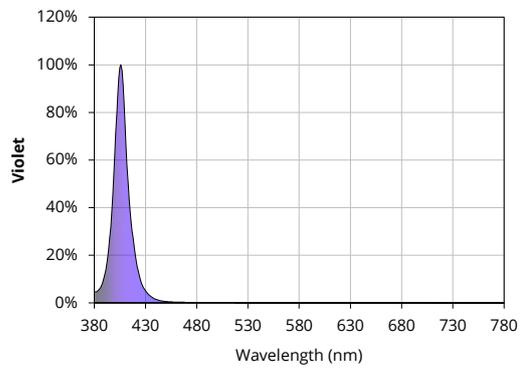
### Red



## Characteristic graph

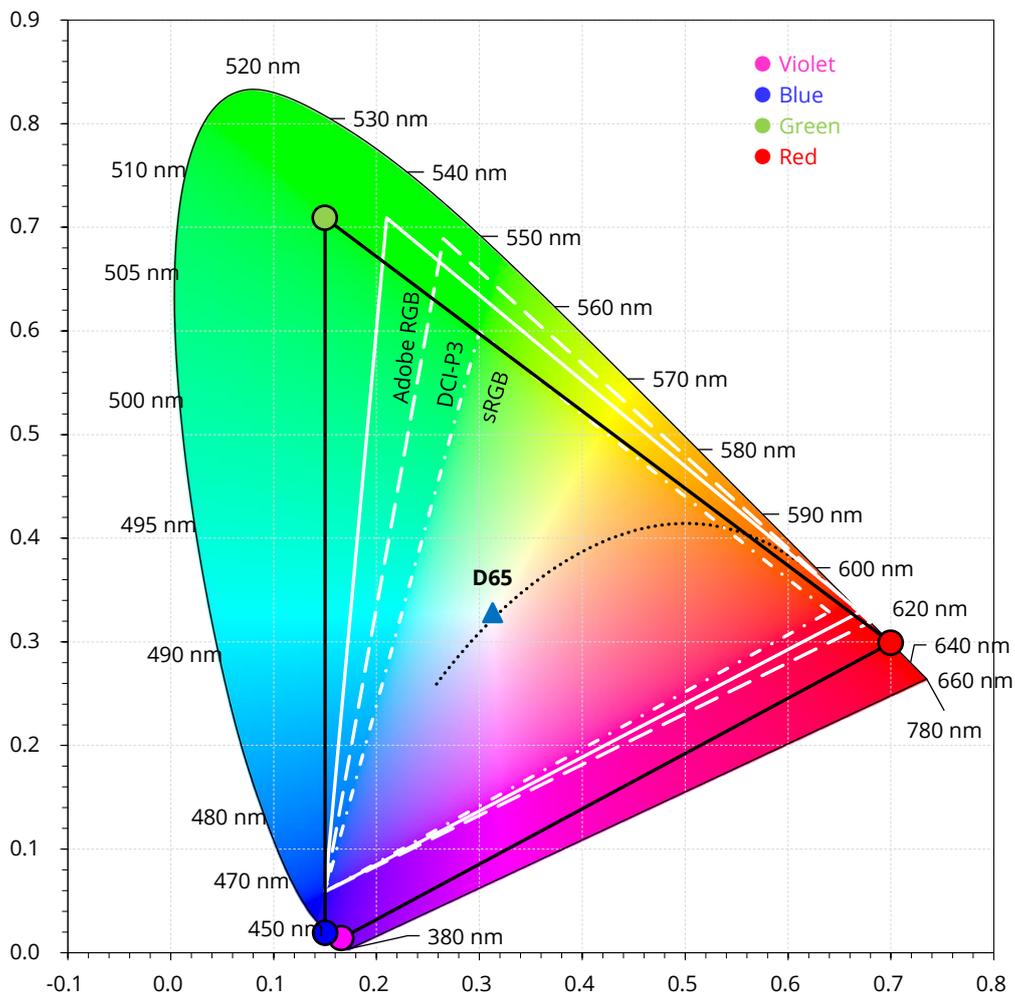
Typical spectral power distribution (normalized)

All characteristic curves are for reference only and not guaranteed.



## Characteristic graph

Chromaticity Coordinate in CIE 1931 2° Chromaticity Diagram



## Additional notes

### Selecting power supply

The wattage / amperage requirement is directly proportional to the length of LED flexible strip installed. Calculate the power requirement by multiplying the total length in meters by the maximum wattage or amperage per meter. For additional power supply stability, we recommend specifying 25% additional power capacity above the requirement. For example, a 5 meter length would require 5 meters x 18W / meter = 90W; for power supply stability, we would recommend a power supply that is capable of supplying at least 112.5W (90W + 25% \* 90W).

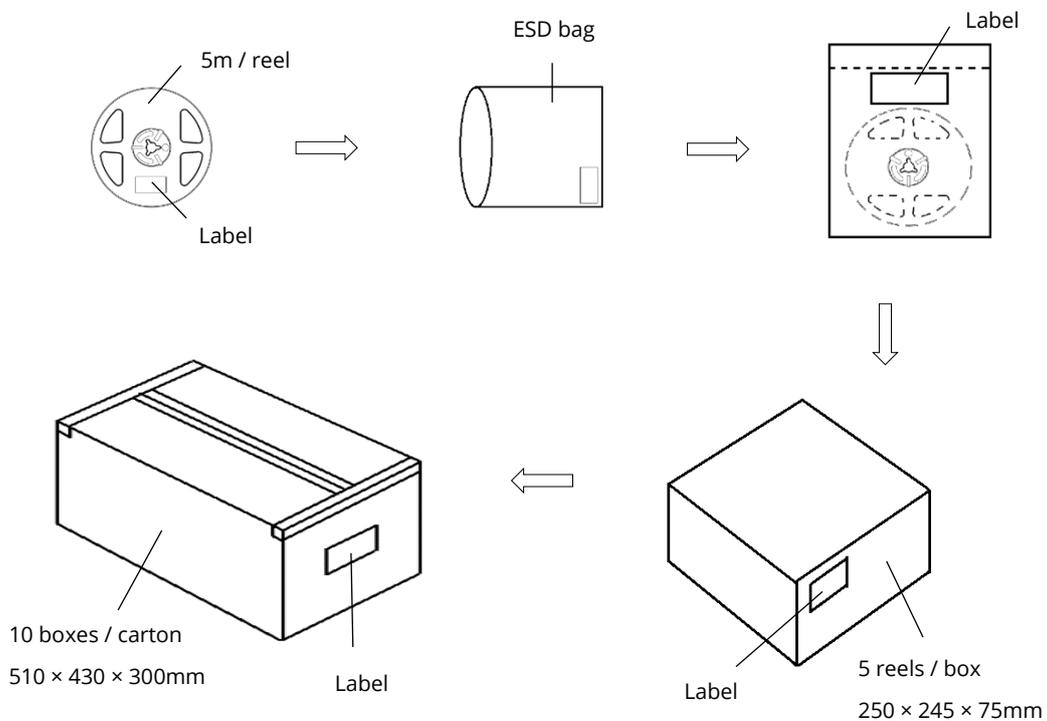
### Dimming

Our LED flex strips are compatible with 1-10V and PWM dimming systems.

### Heat management

Heatsinking is not necessary if product is used in standard indoor environments where ambient temperatures do not exceed 50°C. Our testing at Ta = 25°C shows LED solder point temperatures stabilizing at 50-60°C. Maximum allowed LED solder point temperature is 105°C.

## Box packaging



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- Each inner box contains up to 5 reels (total maximum length is 25m). Box package size: 250 mm × 245 mm × 75 mm.
  - Each outer package contains 10 inner boxes. Box size: 510 mm × 430 mm × 300 mm.
  - Outer package is sealed with protective bubble wrap and foam. (Part numbers, lot numbers, quantity should appear on the label on the moisture-proof bag, part numbers).
  - This packaging merely intended as a reference for standard quantity orders only – please note that actual packaging can differ depending on the order circumstances.

## About Yujileds



**Our story** - Start from the superior stable red LED phosphor.

We started to make LED phosphor materials in 2006. White LEDs were still in very early stage, the industry focused on improving device brightness and efficiency via yellow phosphor very much. No one cared about the light quality. Based on this situation, we took a different approach and focused on red phosphor technology, which is the most important phosphor recipe for high CRI and/or low CCT LEDs, and it made Yuji become a JV partner with Mitsubishi Chemical from 2012.

Today, we are well known for our comprehensive research and full line-up production of LED phosphor from ultra-violet to near-infrared, and we are proud to commit to providing superior stable and efficient phosphors to the worldwide markets.

**Our technology** - Focus on LED spectrum innovation.

The industrial structure of both phosphor and LED gives us a unique view to develop our spectrum recipes. Compared to the general LED manufacturers, we have comprehensive information in evaluating the feasibility for both technical and commercial aspects. LED spectrum technology is not only about the quality of white LEDs, but also for different applications which have specialized requirements in lighting.

Yuji is one of the few companies that provide the service of designing or customizing a specific spectrum for clients, our confidence comes from the years of accumulation in focusing on the spectrum technologies and the control of LED phosphor and LED die supply-chain with thousands of successful cases in the past years. Innovating LED technologies and giving them commercial values are our eternal driving forces.

**Our product** - Yujileds®, stands for high-performance LED.

The trademark of Yujileds® is the identification of the LED products developed and manufactured by Yuji. We put our understanding of the LED technologies and the standard of our quality control into every LED we make. Regardless of any product series, we pay attention to expressing the high-performance feature and achieving the product value for clients and never compromise in pursuing the true performance.

Furthermore, we also care about every detail of any documentation we prepare for the product because we understand the importance to transmit accurate information to clients. It is even more critical for clients to obtain

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the truth to decide the solution, rather than just a nominal high-performance.

**Our client** - Outstanding game players in different fields.

Clients are our proudest achievements, now over 200 of our clients are the best game players in their fields in more than 33 countries. We regard the clients' successes as our biggest accomplishments and appreciate their contribution in different fields, clients use our LEDs not just for simple lighting, but to design the lighting for plants, cameras, sensors, health, circadian rhythm, animals, and other industries that we have never imagined that our technologies can be utilized, that makes our work so meaningful.

**Our service** - Professional supporting team.

There is a group of people in Yuji passionate about creating maximum value for our clients. We have accumulated experience in different projects. Currently, the company gathers more than 30 experts from various fields of semiconductor, chemistry, optics, photoelectricity, circuitry, materials and color science.

Our sales team is well trained in deep LED technologies and has skilled global communication experience. Not just for sales, our team is more like a specialized consultancy to help every client succeed in different projects, and we do not only provide professional business service, but also support in the supply chain, logistics, marketing and technical discussions.

**Contact us** - We look forward to providing our efficient service for you.

**LED website:** [www.yujiintl.com](http://www.yujiintl.com)

Find Yujileds® high-performance LEDs, read our insights into a variety of advanced technologies and applications.

Contact: [info@yujigroup.com](mailto:info@yujigroup.com)

**LED lighting website:** [www.yujilighting.com](http://www.yujilighting.com)

Find our state-of-art LED lamps and luminaires designed for improving the lighting experience with the vision of illuminating the future.

Contact: [lighting@yujigroup.com](mailto:lighting@yujigroup.com)

**Online shop:** [store.yujiintl.com](http://store.yujiintl.com)

Shop your favorite Yuji Lighting product with rapid and professional service.

Contact: [webstore@yujigroup.com](mailto:webstore@yujigroup.com)