

Entry / ECO

Standard / STD

Professional / PRO

ODM & OEM

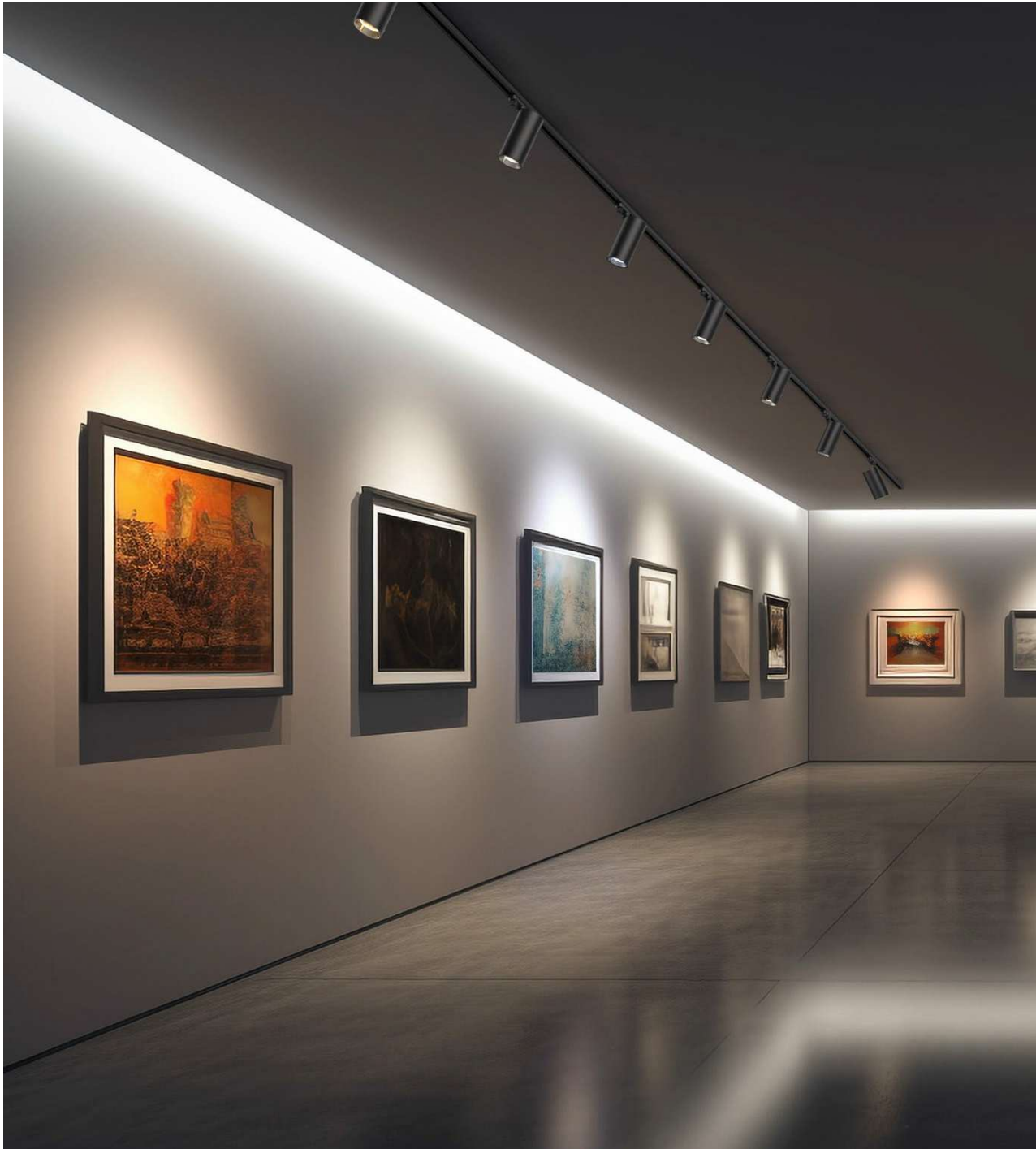
Intelligent / INT

**PRO**  
Specifications

LED Track Light  
TL135 Series



 **RL Europe**  
Your partner in LED



## Introduction

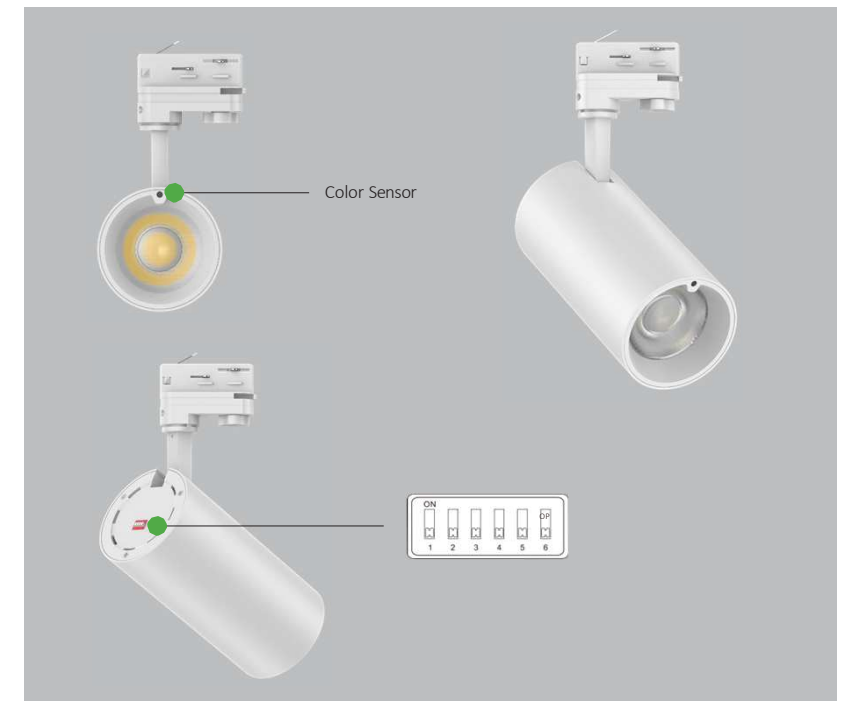
This is a full spectrum track light with color sensor and color auto changeable function. It adopts CRI95 full spectrum led which can restore the true color of the illuminated object and get closest to natural light under the light, the best color. Besides, with the sensing detector, the lamp can sense color automatically along surroundings color change, which is a great combination for modern technical and commercial lighting.

## Features

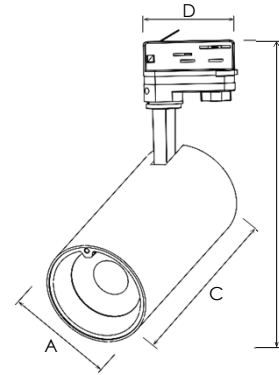
- Restore the true color of object with CRI95 RGB full
- Sensing detector with 20degree angle and 3m detection range
- Color sense automatically along the illuminated objects to reach high fidelity effect
- Can set different sensing time for color sense, from 5 seconds to 2 hours
- Anti-glare design, UGR<19
- Internal flicker free driver

## Application Areas

It's widely used in museum, clothing store, boutique, Car 4S shop etc.







## Technical Data Sheet

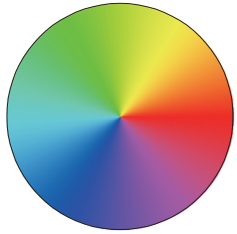
Code		TL135-100-33W	
Dimension(mm)		Ø100*294	
Cutout (mm)		-	
Watt(W)		33W	
Rated Input Voltage		AC100-240V	
Input Voltage		AC90-264V	
LED Module Input		-	
Light Source		COB	
SDCM		-	
CCT(K)		3000K	
CCT Selection DIP Switch		-	
Luminous Flux (lm) ±5% CRI95	1-CCT	Non-DIM	1850
		DIM	-
	3-CCT	Non-DIM	-
		DIM	-
CRI		95	
Beam Angle (°)		38°	
UGR		<19	
LED Driver		Driver built-in	
Dimming Option		NO	
Sensor		Color Sensor	
Emergency Kits		NO	
Electrical Class		Class I	
Ingress Protection(IP Rating)		IP20	
Impact Resistance(IK Rating)		IK03	
Product Finishing		Black RAL9005 / White RAL9016	
Optics Material		PC	
Housing Material		Aluminium	
Lifetime (hr)		50,000h	
Glow wire test (°C)		750°C	
Operating Temp.(°C)		-20°C~40°C	
Storage Temp.(°C)		-20°C~65°C	
Installation		Track	

## Measurement

Code	Dimension(mm)				Size (mm)	Product Weight (Kg)		Package Weight (Kg)		Carton Size (cm)	Qty/CTN	20GP (pcs)	40HQ (pcs)
	A	B	C	D		N.W/PC	G.W/PC	N.W/PC	G.W/PC				
TL135-100-33W	Ø100	294	203	84	Ø100*294	1.24	1.55	7.44	9.98	38*36*30.5	6	3780	8928

## Driver Datasheet (Non-dimmable)

Total load wattage		33W
Output	Rated output current	830mA
	Output Voltage range	DC28-38V
	Line Regulation	±5%
	Setup Rise Time	≤0.5S
	Flickering Index	<1%
Input	Rated Input Voltage	AC100-240V
	Input Voltage	AC90-264V
	Frequency	50/60HZ
	Rated Input Current	0.37A
	Input Current	0.41A
	Power Factor	0.9
	THD	<20% @230V
	Efficiency	≥85%
Protection	No load wattage	-
	Short circuit protection	PASS
	Over voltage protection	PASS
Safety & EMC	Over temperature protection	PASS
	Withstand voltage	I/P-O/P:3.75KVac, <5mA 60S
	Isolation Resistance	I/P-O/P: 500VDC, ≥4M Ω
	Surge	IEC/EN61000-4-5 (P≥25w L-N:1KV)
	EMC Emission	EN55015, EN61000-3-2
EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547	



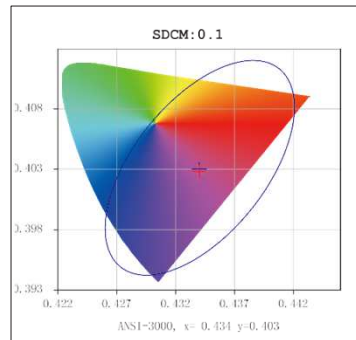
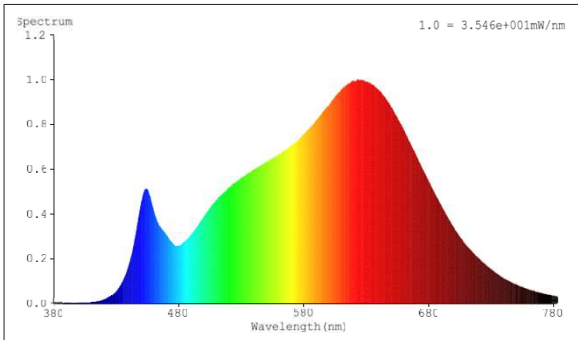
## Color Sensor

### Color perception and high-fidelity light distribution system

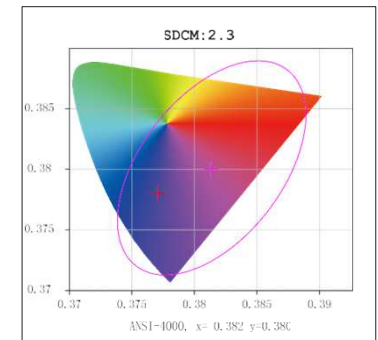
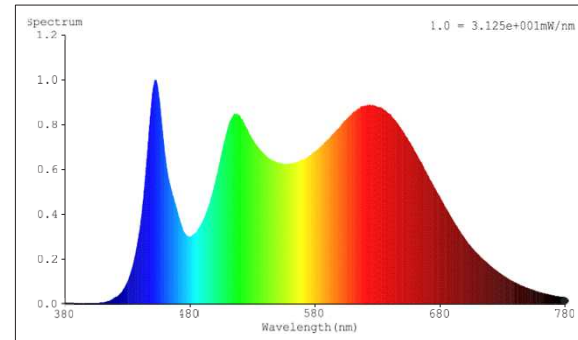
The color sensor automatically detects and identifies the color of the product, then utilizes the control board inside the lamp to optimize the light distribution color scheme and ensures that the product achieves optimal color reproduction and saturation.



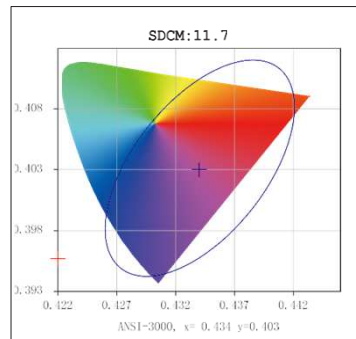
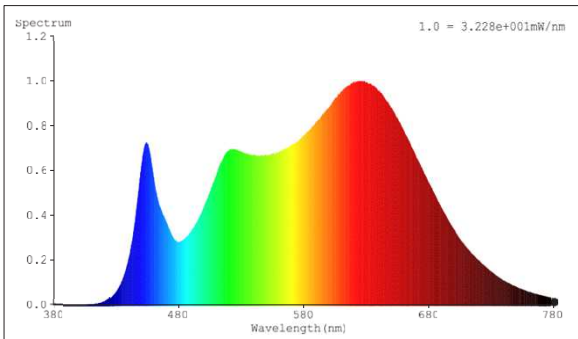
## Spectrum against Grey



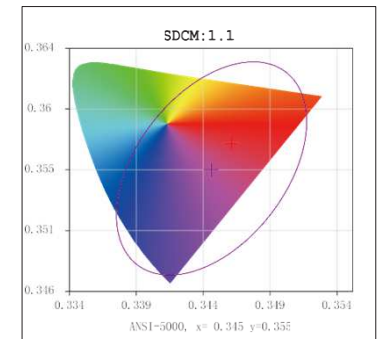
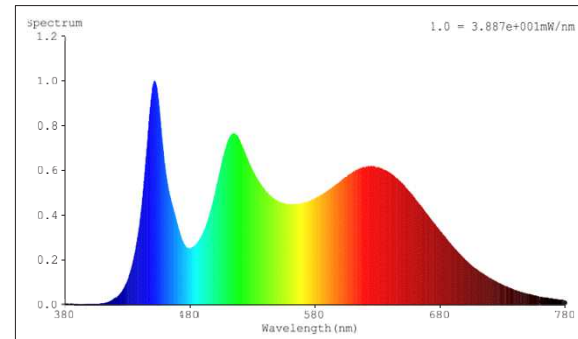
## Spectrum against Yellow



## Spectrum against Red

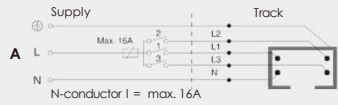


## Spectrum against Green

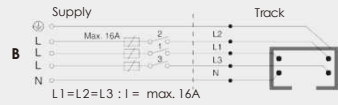


## Wiring Diagram

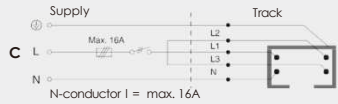
### 4-wires, 3-circuit



1-phase, 3-circuit,  
230V AC,  
16A, 3.7kVA



3-phase, 3-circuit,  
230/400V AC,  
16A, 3x3.7kVA



3-phase, 3-circuit,  
230/400V AC,  
16A, 11.1kVA

## Installation Procedure

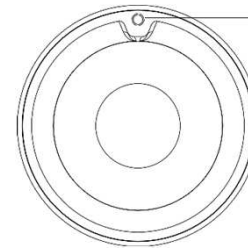
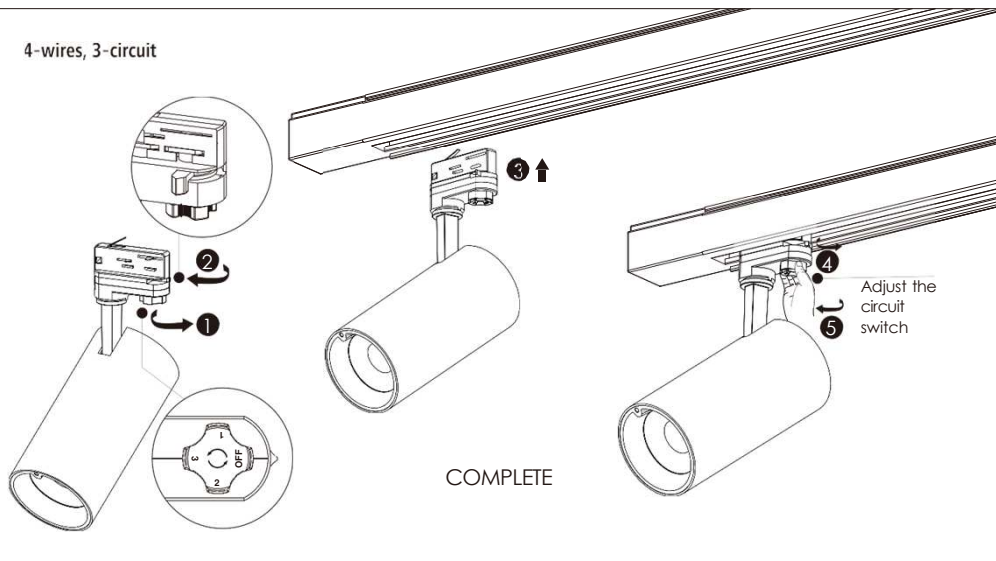
### WARNING

1. Switch off power supply before installation / maintenance.
2. Switch on only after complete installation and examination of the circuit.
3. Professional electrician for installation and maintenance only.



## Standard Installation

### 4-wires, 3-circuit

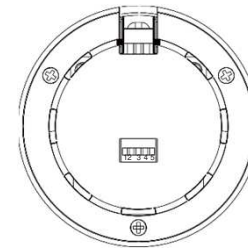
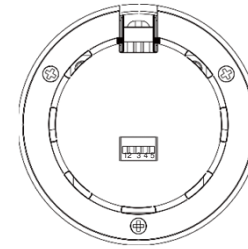


## Color Sensor

Switch 1 OFF: Close automatic color change function  
Switch 1 ON: Start automatic color change function

1	2	3	4	5	
ON	OFF	ON	OFF	OFF	5S
ON	OFF	OFF	ON	OFF	30S
ON	OFF	OFF	OFF	ON	1min
ON	OFF	ON	ON	OFF	5min
ON	OFF	ON	OFF	ON	15min
ON	OFF	OFF	ON	ON	30min
ON	OFF	ON	ON	ON	1h
ON	OFF	OFF	OFF	OFF	2h

Switch 1 ON+2 ON: Turn on the power for color change test: If under a stable environment, the lamp will change color according to the illuminated objects after 30 seconds, and the lamp will lock this color always until user re-power on. If under unstable environment, the lamp will not do color change until the environment become stable for 30 seconds.  
Switch 1 ON+2 OFF: Stop color change test function, adjust 3/4/5 button to set different time for color change detection, lamp will do color change after the setting time. Refer to the right setting table.



No	Phenomenon	Inspection method	Reason
1	Unable to sense object color after the setting time	Adjusting the DIP switch (Back of lamp) to automatic color sensor status (1on +2 off) and set the time (3on/ 4off/ 5off)	The detected environment is not stable and keeps changing. (For example, the set time is 5s, and the sensor detects environment after 5s. During this period, the environment is dynamic, then its color sensor function unable to work normally. Detect after 5S again...continue to cycle until the environment is stable)
2	Unable to color sense new objects after environment changed	Adjusting the DIP switch (Back of lamp) to automatic color sensor status (1on +2 off) and set the time (3on/ 4off/ 5off)	Lamp detectable environment CCT range is 2700K-5100K. Under a stable environment (within 2700K-5100K range), lamp works normally with color sensor function with the set time. If the environment CCT is lower than 2700K or over 5100K, color sensor function unable to work normally.

## How to check if color sensor function workable or not?

Before power on, switch button 1 and 3 to ON only (This is color sensor mode for auto testing in 5 seconds). There has an initialization time of 10 seconds when power on, the lighting color will be close to red color and 3000K within 10seconds. Under color sensor status, after power on, the lamp will change to surroundings light color after 5 seconds if surroundings is stable.



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Your partner in LED

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