



Color 

Features

1. Adopt high quality 5050 LED.
2. Adopt red, green, blue and white/orange four in one LED.
3. Flexible and cuttable every 3 or 6 LEDs.
4. Good stability and reliability performance
5. Input voltage: DC12V and DC24V

Application

Backlight, outline, indoor and outdoor lighting, recessed landscape lighting etc.

Installation

By 3M self adhesive tape



Optical & Electrical Parameters

Model No.	Light Color	Color Temperature/ Wavelength(K/nm)	Beam Angle	Typical Luminous Flux value(lm/m)	Ra	Efficacy (lm/W)	Voltage (V DC)	Power (W/m)
TN-F5050-60-12- RGBW-30K	W	2870-3220	120°	339	90+	79	12V	4.8
	R	620-625		421	--	--		14.4
	G	520-530						
	B	460-470						
	R+G+B+W	--						
TN-F5050-60-12- RGBW-35K	W	3220-3700	120°	342	90+	80	12V	4.8
	R	620-625		416	--	--		14.4
	G	520-530						
	B	460-470						
	R+G+B+W	--						
TN-F5050-60-12- RGBW-45K	W	4260-4740	120°	356	90+	84	12V	4.8
	R	620-625		428	--	--		14.4
	G	520-530						
	B	460-470						
	R+G+B+W	--						
TN-F5050-60-12- RGBW-65K	W	6060-7035	120°	336	90+	79	12V	4.8
	R	620-625		419	--	--		14.4
	G	520-530						
	B	460-470						
	R+G+B+W	--						



Optical & Electrical Parameters

Model No.	Light Color	Color Temperature/ Wavelength (K/nm)	Beam Angle	Typical Luminous Flux value(lm/m)	Ra	Efficacy (lm/W)	Voltage (V DC)	Power (W/m)
TN-F5050-60-24- RGBW-30K	W	2870-3220	120°	375	90+	78	24V	4.8
	R	620-625		464	--	--		14.4
	G	520-530						
	B	460-470						
	R+G+B+W	--						
TN-F5050-60-24- RGBW-35K	W	3220-3700	120°	374	90+	79	24V	4.8
	R	620-625		453	--	--		14.4
	G	520-530						
	B	460-470						
	R+G+B+W	--						
TN-F5050-60-24- RGBW-45K	W	4260-4740	120°	378	90+	80	24V	4.8
	R	620-625		460	--	--		14.4
	G	520-530						
	B	460-470						
	R+G+B+W	--						
TN-F5050-60-24- RGBW-65K	W	6060-7035	120°	379	90+	80	24V	4.8
	R	620-625		471	--	--		14.4
	G	520-530						
	B	460-470						
	R+G+B+W	--						

Other Parameters

Model No.	LED Quantity (pcs/m)	Standard Run Length(m)	Max Run Length(m)	Min Cuttable Length(mm)	Working Temperature	Storage Temperature
TN-F5050-60-12-RGBW	60	5	2.5	50	-20~+60°C	-20~+70°C
TN-F5050-60-24-RGBW			4.5	100		

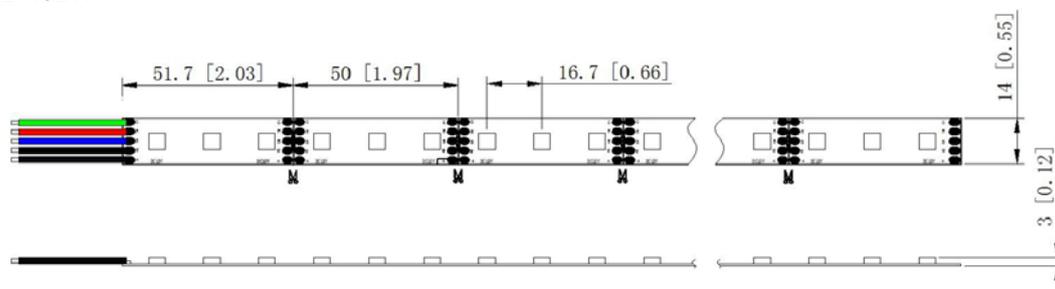
NOTE:

1. Test environment temperature : 25±2°C.
2. The luminous flux and power tolerance within ±10%.
3. The actual data of each single product may differ from the typical values. The data is subject to change without notice.
4. The luminous flux is tested with single color on.
5. Different color temperature will make luminous flux different.
6. The RGB power and luminous flux tested at three lights on and under control, the same below

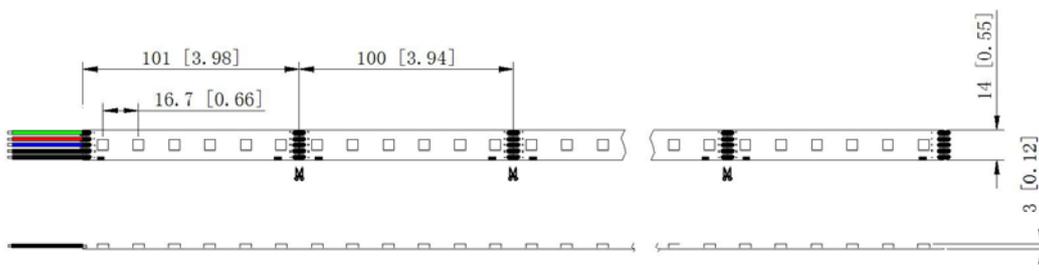
Profile Drawings

Unit:mm

TN-F5050-60-12-RGBW

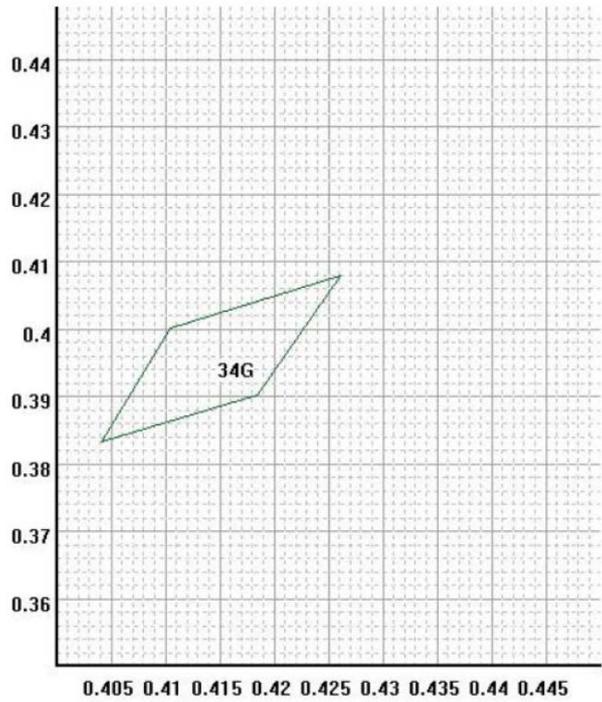


TN-F5050-60-24-RGBW





CIE Chromaticity Diagram

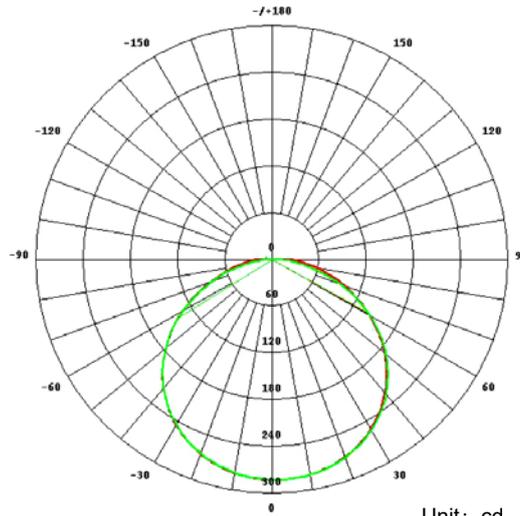


Warm white chromaticity coordinates target bitmap

chromaticity coordinate	
X	Y
0.4041	0.3832
0.4104	0.4001
0.4261	0.4077
0.4185	0.3902

NOTE: The diagram is for reference only. Different suppliers might have different diagrams.

Luminous Intensity Distribution Diagram



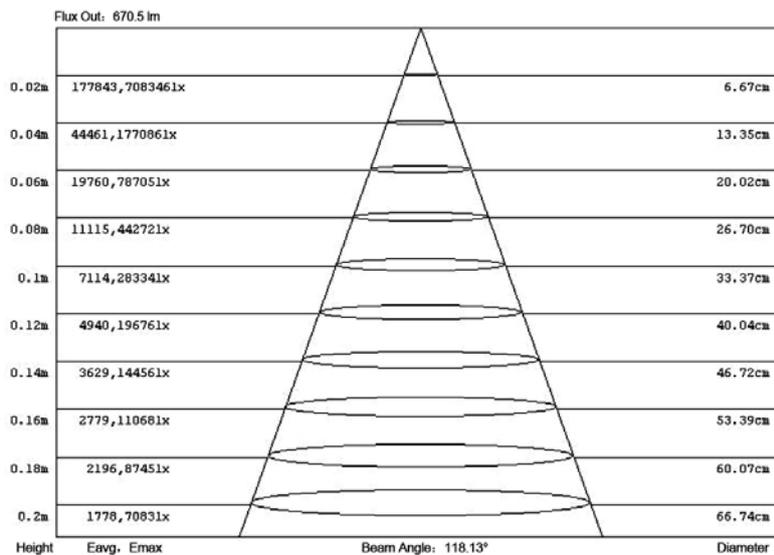
Unit: cd

— C0 /180,118.1°

— C90/270,118.4°

AVERAGE BEAM ANGLE(50%): 118.2°

Average Illumination

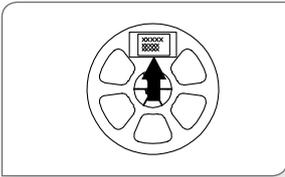


NOTE:

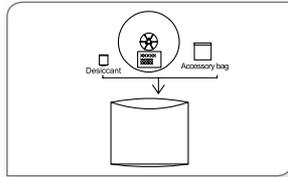
Luminous Intensity Distribution Diagram: The data is of TN-F5050-60-24-RGBW with 3500K, and it will be different due to different test condition, this one is for reference only.



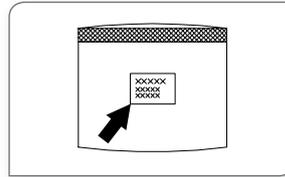
packing



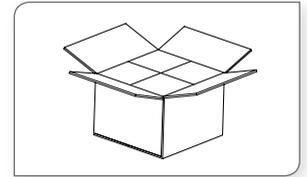
Label the reel;



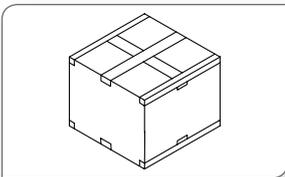
Put reel, accessory bag and desiccant together into static shielding bag;



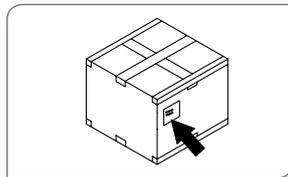
Seal and label the static shielding bag;



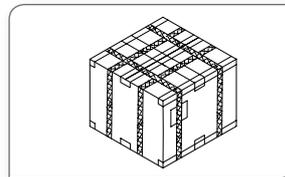
Put the packed static shielding bag into carton box;



Seal the carton box;



Label the box;



Use packing belt to pack. Add edge protectors if necessary.

Packaging information

Model No.	Product Size L*W(mm)	Carton Size(mm)	Reel/Carton	Net Weight(kg)	Gross Weight(kg)
TN-F5050-60-12/24-RGBW	5000X14	550X400X340	70	8.25(1±10%)	13.05(1±10%)

Note:

1pcs (5m) per reel, packed in the static shielding bag.

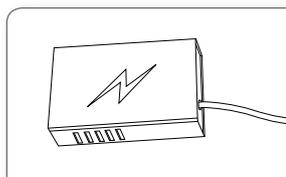
The above quantity and weight are only for the illustrated packaging method. There will be differences in the quantity and weight with other packaging methods.the concrete object shall prevail.

Installation

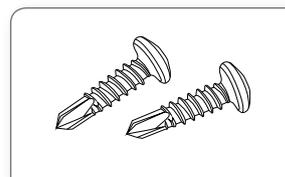
1.Products and Tools



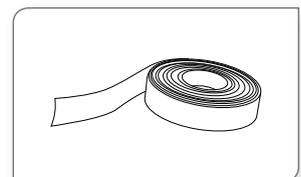
TN-F5050-60-12/24-RGBW



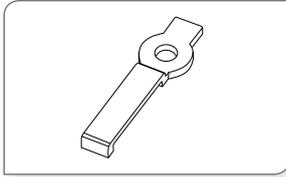
LED power supply



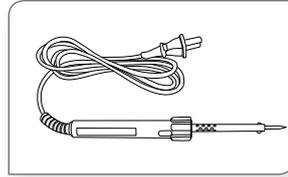
Self-tapping screw



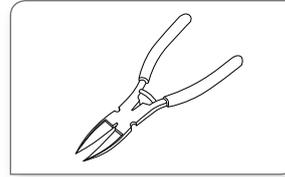
Insulation Tape



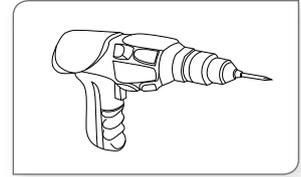
Clips



Electric iron



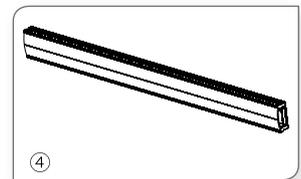
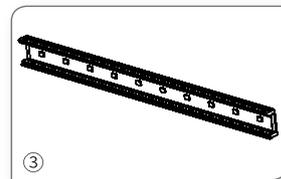
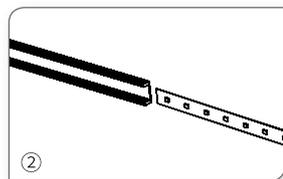
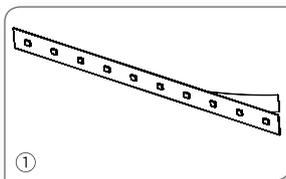
Diagonal pliers



Electric drill

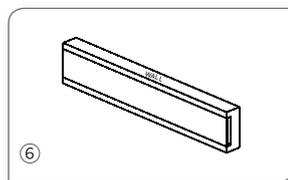
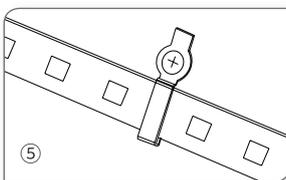
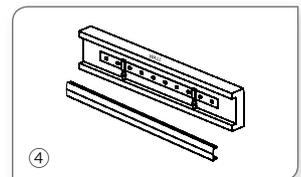
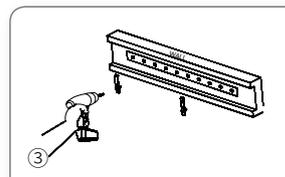
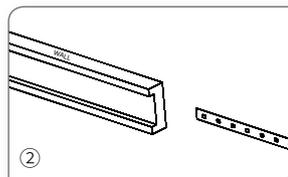
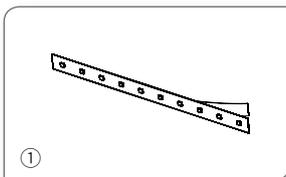
2.Installation Methods and Steps

Aluminum channel installation



1. Peel away the self adhesive tape on the back of strip.
2. Cut off the excess part based on the installation position.
3. Evenly arrange the strips with appropriate space in the track.
4. Install the cover and end cap.

Covered channel installation



1. Peel away the self adhesive tape on the back of strip.
2. Cut off the excess part based on the installation position.
3. Evenly arrange the strips with appropriate space in the track and fix them with clips.
4. Install the cover and end cap.
5. Clip installation as the figure show
6. Finished



Attentions before installation

- Before installation, check that the product parameters are consistent with the requirements (Seeing product specifications or product labels)
- Load voltage, current, power and power supply should be matched with the product.
- Follow the instructions of wiring diagram (first connect the load and then the power supply) to avoid short circuit.
- Make sure the correct connection of positive and negative poles between products and power supply. Otherwise, the light will not be on.
- Make sure the power cord firmly screwed into the terminal and it should not be pulled out by hands.
- The terminal should have insulation, waterproof and anti-corrosive treatment.
- If the working length exceeded the max run length, make sure to have extra power supply.
- If it needs higher current of a LED, make sure having extra cooling.

Common Faults and Troubleshoot

Quick Guide		
Problems	Reasons	Solutions
All LEDs can not light on.	No electric supply.	Power on
	Automatic power protection from the open or short circuit in output of the power supply.	Fix the short circuit problem.
	Wrong connection of power supply.	
LEDs can not light on partly.	Some switching mode power supplies are not powered.	Check the power supply system to fix it.
	Power supply line error.	
	Mistaken wire connection of some of products	Correctly connection
Brightness of LED is inconsistent for insufficient.	Power overloaded.	Replace with more powerful power
	Power supply circuit excessive consumption.	Make sure the working voltage of the product within $\pm 5\%$ of standard voltage, or keep balance by circuit power consumption.
	Excessive quantities in series connection of the product	Reduce the quantities of the product in series connection to meet requirement.
LED flicker.	Connection point fault.	Remove bad connection point.
	Switching power supply failure.	Replace a new power supply.
	Wrong Installation or use of products	Please follow the instructions

⚠ Warning

- Do not disassemble or retrofit the light. Do not touch the surface of the light with a sharp object.
- Do not do live-line working during installation, especially for high voltage product.
- Do not use any organic chemical solvents.
- Use neutral glass adhesive to fix this product and it needs to be dried 4 hours in the open environment after operation.
- Treat the ends and the circuit connection points that are not connected to the main line with insulation, waterproof, and anti-corrosion in the installation.
- Use 18AWG (0.75mm² cross-sectional area) or thicker core wire to avoid adverse consequences caused by overheating, if the power cable need to lengthen.
- Make sure the input voltage meets the requirements and lines are connected correctly before lighting on.
- This product is for signage, and do not use as general lighting.
- Series connection within the max run.
- The length of the power cable between the power supply and the led strip should not exceed 2 meters. Otherwise, large circuit loss will lead to inconsistent brightness.
- Installation, maintenance and repair should be operated by a qualified technician.

Statements and Recycling

Statements:

Repair should be operated by a qualified technician, if the external circuit or main line of this product is damaged.
The parameters given in this manual are typical values and for reference only.
All illustrations and drawings in this manual are for reference.
This product is subject to change without notice.

Recycling:

LED lighting products belongs to electronic products, please do recycling treatment according to the relevant WEEE directives.