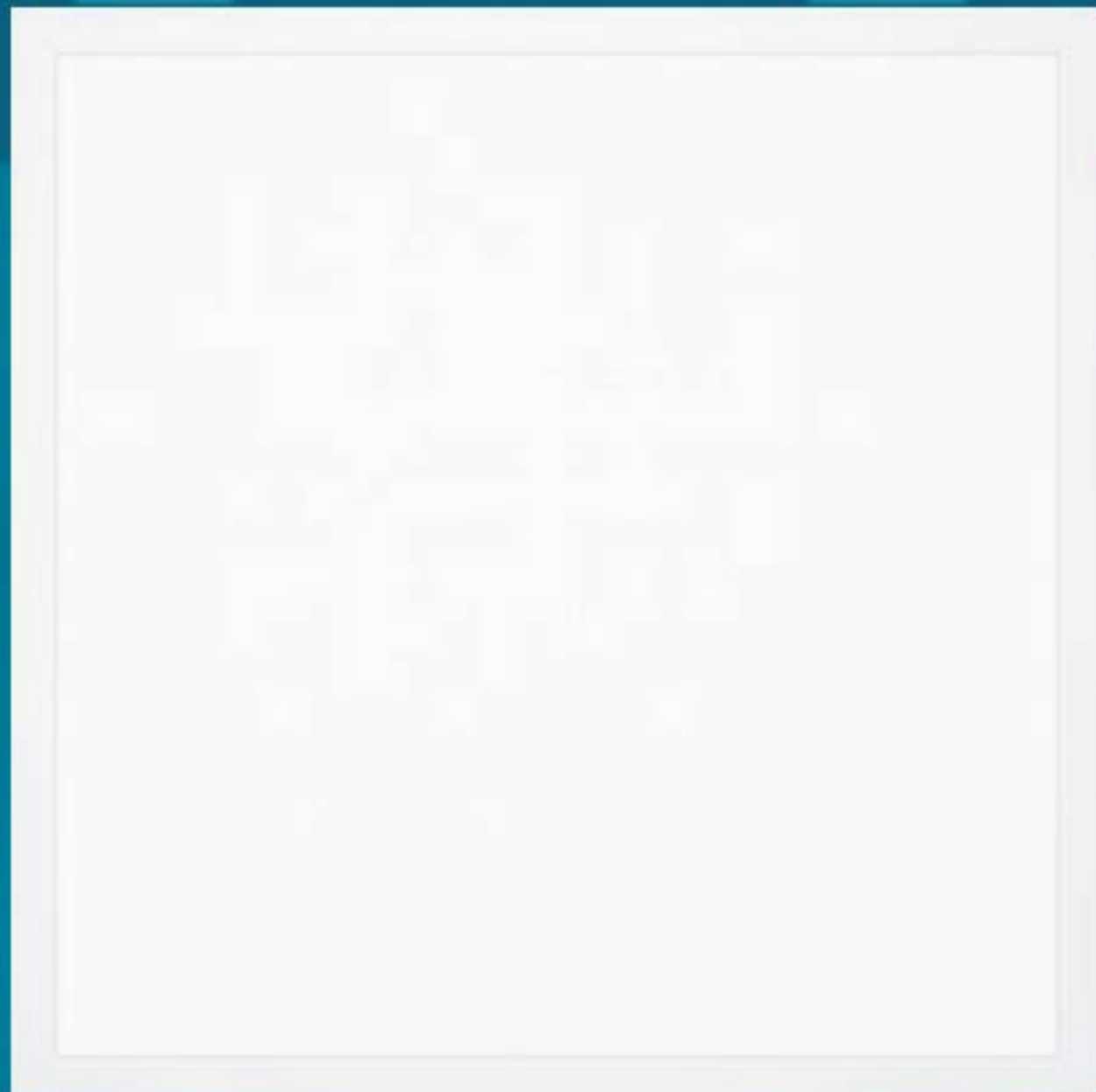# BACKLIT PANEL

MODEL: PLB-VN

V LIGHTING

Market Leading Performance from 130LM/W to 160LM/W

5 years warranty

130-160 LM/W

DLC QPL LISTED

☑ Regular Series

☑ Power & CCT Tunable Series

☑ 2.4G Wireless CCT Tunable Series

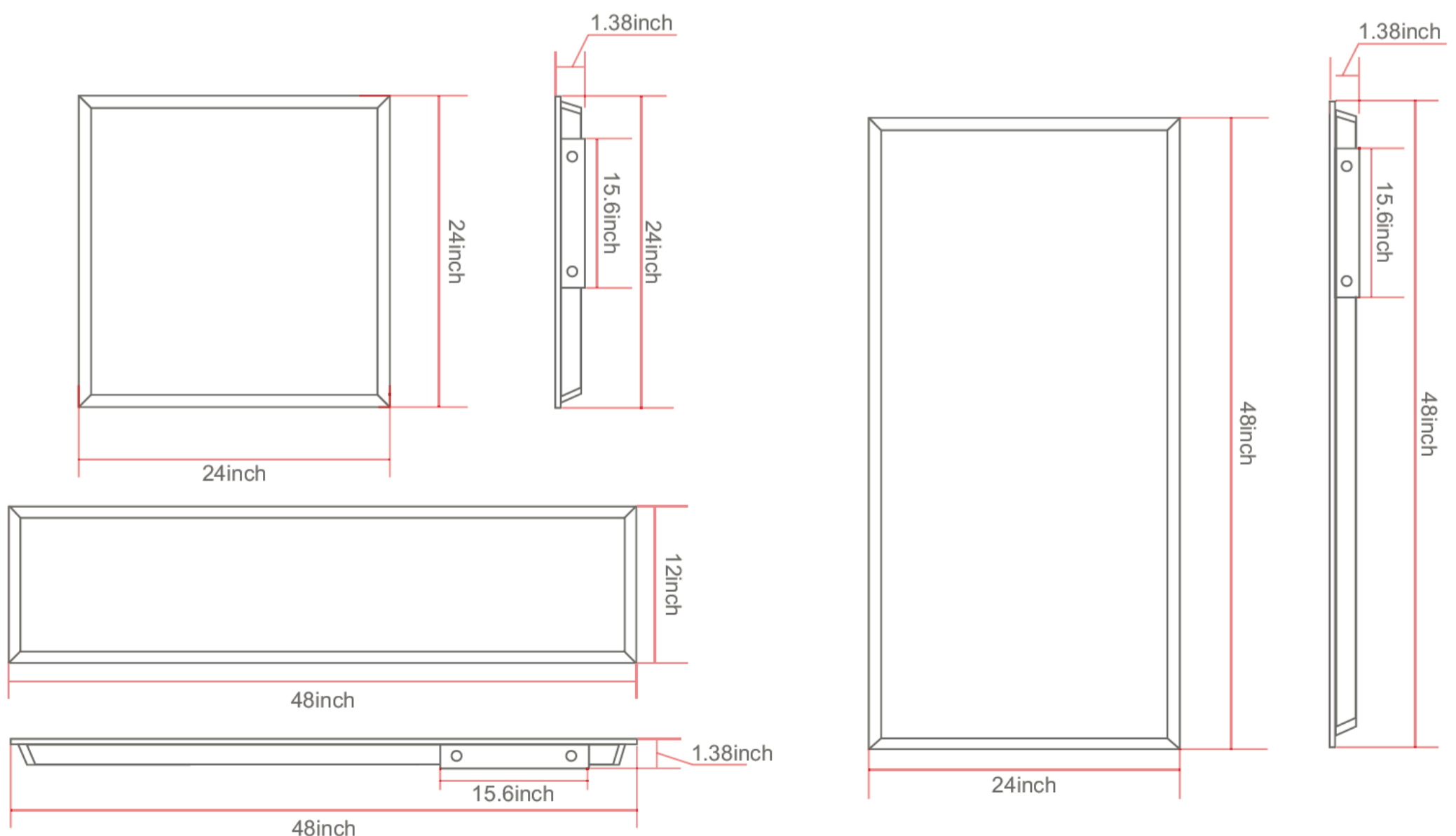| UL CERTIFIED | 347V High Voltage | 2.4G 2.4G Wireless | 90 MIN Emergency function | Sensing function | 3000K 6000K CCT Adjustable | 0-10V Dimmable | Non Flicker | Saving 80% |

LHB APPLICATIONS

NLV Lighting Backlit Panel luminaires are designed for a wide variety of applications for use in office buildings, retail shops, warehouses, manufacturing, gyms, and other industrial buildings. These fixtures are designed for 10 ft to 20 ft ceilings heights. The power and CCT tunability provides customers the option to use same fixture for multiple locations. A unique and intelligent IC control programed driver provides consistent color mixing and protection of all electronics. All luminaires come with a high-quality diffuser providing added protection and glare control. These fixtures are energy-efficient replacements for linear fluorescent and HID fixtures.
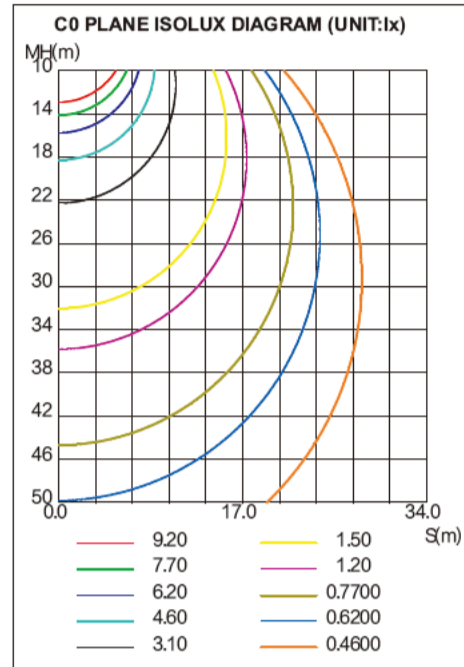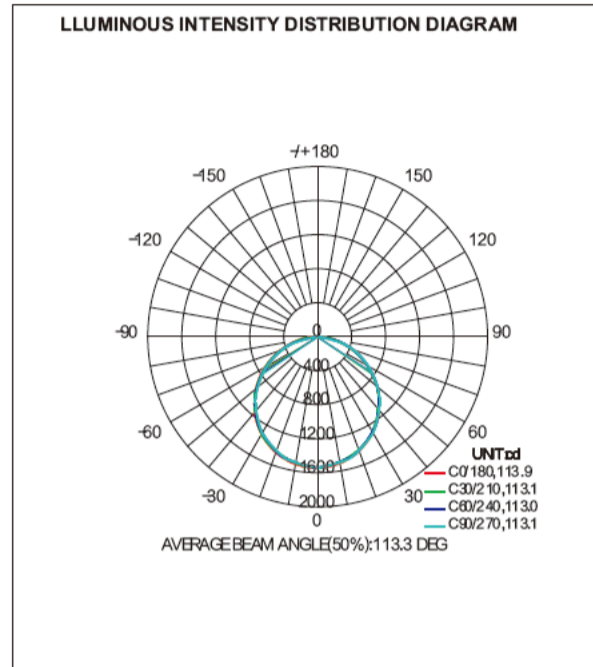
PRODUCT FEATURES

- Power Range: 20W to 60W
- Efficacy Range: 130 to 160 LM/W
- Tunable CCT and Power from 3000K to 5000K & 20W to 60W
- Operating Temperature: -40°C to 50°C
- Tier-1 LED suppliers; LM80 rated at CRI >80
- 120V to 277V and 120V to 347V
- PF >0.90, THD ≤ 15%
- Emergency battery back up option
- Motion Sensing and Dimming
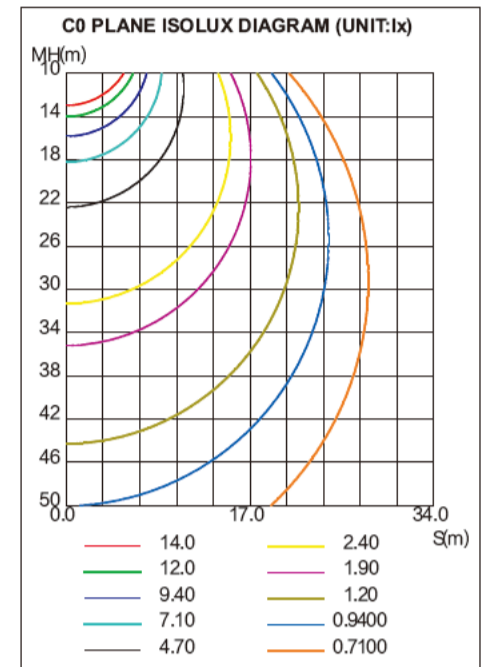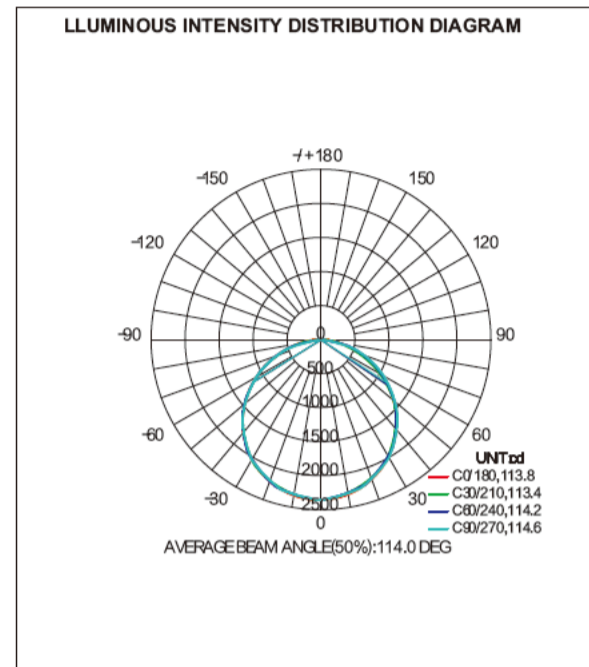- Standard 5 Year warranty

PHYSICAL DIMENSIONS

PHOTOMETRICS

24 x 24inch 35W

LLUMINOUS INTENSITY DISTRIBUTION DIAGRAM

-/+180

150

-150

120

-120

90

-90

60

-60

30

-30

0

400
800
1200
1600
2000

UNT:cd
C0/180,113.9
C30/210,113.1
C60/240,113.0
C90/270,113.1

AVERAGE BEAM ANGLE(50%):113.3 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)

MH(m)

10
14
18
22
26
30
34
38
42
46
50

0.0   17.0   34.0   S(m)

9.20	1.50
7.70	1.20
6.20	0.7700
4.60	0.6200
3.10	0.4600

24 x 48inch 50W

LLUMINOUS INTENSITY DISTRIBUTION DIAGRAM

-/+180

150

-150

120

-120

90

-90

60

-60

30

-30

0

500
1000
1500
2000
2500

UNT:cd
C0/180,113.8
C30/210,113.4
C60/240,114.2
C90/270,114.6

AVERAGE BEAM ANGLE(50%):114.0 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)

MH(m)

10
14
18
22
26
30
34
38
42
46
50

0.0   17.0   34.0   S(m)

14.0	2.40
12.0	1.90
9.40	1.20
7.10	0.9400
4.70	0.7100

APPLICATIONS

Regular Series

2.4G Wireless CCT Tunable Series

3000K

4000K

5000K

Power & CCT Tunable Series

V LIGHTING

PRODUCT SERIES

Regular Back-lit LED Panel Light Series
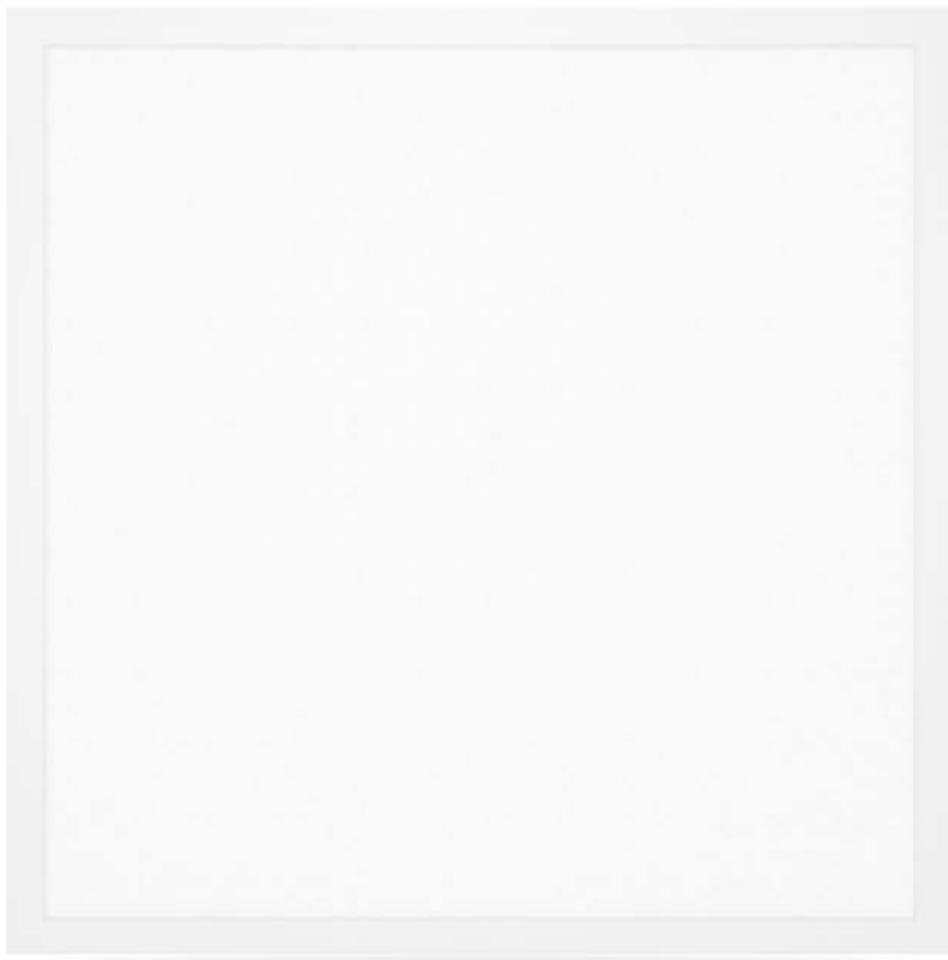
2.4G Wireless CCT Tunable Back-lit LED Panel Light Series

Handheld remote controller

Wall type remote controller

3000K 3500K 4000K 5000K
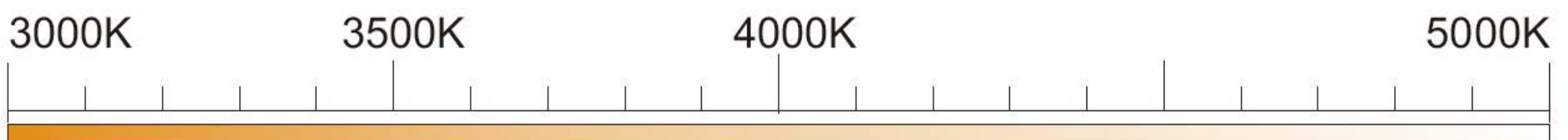
PRODUCT SERIES

Power & CCT Back-lit LED Panel Light Series

	3000K	3500K	4000K	5000K
CCT Tunable				

	20W	25W	30W	35W
Power Tunable				

CCT	Power
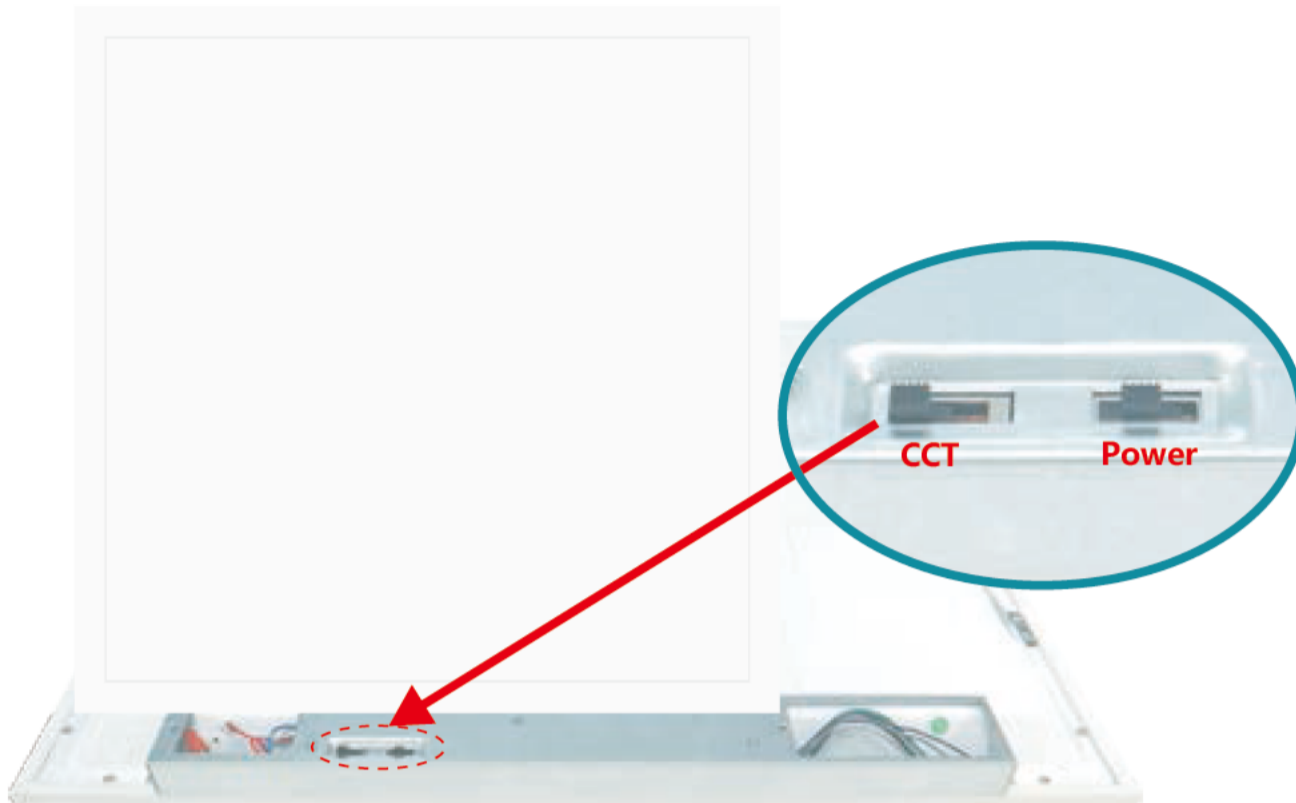
20W 3000K 25W 3000K
20W 3500K 25W 3500K
20W 4000K 25W 4000K
20W 5000K 25W 5000K

30W 3000K 35W 3000K
30W 3500K 35W 3500K
30W 4000K 35W 4000K
30W 5000K 35W 5000K

OPERATION

THE WALL TYPE REMOTE CONTROLLER

Button	Description
I / O	**I** Turn on **O** Turn off Wall-type remote controller can be used directly as a switch
I	Long pressing (6-9 seconds) the button "ON" until the light goes out, the current brightness and color temperature are automatically saved. Turn off lights then turn on , the last saved brightness and color temperature will be displayed by default.
O	Turn off the light to save the current color temperature then turn on the light , the last saved color temperature will be displayed by default.
ID	**Light code matching button** Pressing the 'ID' buttons simultaneously will keep the remote controller's indicator on, turn on the light and release the buttons after the light has been on for 2s completing the matching process. Matching code for several lights together is available. If you need to use both handheld controller and wall controller for the same light, please don't use this function, directly use the following copy function.
A	**Brightness adjustor**
CCT	Press the 'CCT' button, the color temperature will cycle between 3000K/3500K/4000K/5000K. After shutting down/turning off the current color temperature will be saved.

OPERATION

THE HANDHELD REMOTE CONTROLLER

	ON · OFF	**ON** Turn on **OFF** Turn off Handheld remote controller cannot be used directly as a switch, it should be used together with the switch.
	OFF	Turn off the light to save the current color temperature then turn on the light, the last saved color temperature will be displayed by default.
	ID	**Matching code for light** Long pressing the 'ID' button will keep the controller's indicator on, then turn on the light and release the 'ID' button after the light flashes, matching code complete. Matching code for several lights simultaneously is available.
	ID + ▼	**Release the code and disconnect light from remote controller** Press the botton ID + ▼ together, then turn on the light, the light will flash to finish releasing the code on the lights.
	1 2 3 4	**Group selecting button** Grouping lights (matching code process needs to be completed first). Turn off the lights, continue pressing the group selection button for 3s, then turn on the lights, the lights will flash to finish grouping.
	Save	**Save button** Long pressing (3-5 seconds) the button "SAVE" until the light goes out, the current brightness and color temperature are automatically saved. Turn off lights then turn on, the last saved brightness and color temperature will be displayed by default.
	ALL	**All Groups are selected**

5000k	4000k	3500k	3000K

☀ 25% brightness	☀ 50% brightness
☀ 75% brightness	☀ 100% brightness

▲ Increase brightness	▼ Decrease brightness
◀ Decrease color temperature	▶ Increase color temperature

Power the light off then power it on, the last saved brightness (which is saved by the button "SAVE") and the last saved color temperature (which is saved by the button "SAVE" or "OFF") will be displayed by default. The defaulted factory setting of the light is 100% brightness and 4000K.

The matching method of handheld remote controller and wall-type remote controller, the wall controller can copy some of the functions of the handheld controller by the following method.

NO	Grouping	Handheld controller	Wall-type controller
1	1	1+ID	ON+CCT
2	2	2+ID	ON+CCT
3	3	3+ID	ON+CCT
4	4	4+ID	ON+CCT
5	ALL	ID	ON+CCT

After 10s of each operation the controller will enter standby power saving mode. If you need to make adjustments, simply press the "ON" button, the indicator will flash to show it is working. (If the controller is under working mode, the indicator will flash no matter which button is pressed).

Power the light off then power it on, the last saved brightness (which is saved by the button "ON") and the last saved color temperature (which is saved by the button "ON" or "OFF") will be displayed by default. The defaulted factory setting of the light is 100% brightness and 4000K.

ORDERING INFORMATION - Regular Series

Example: NLV-BLP-R-VN-30W22-50K-277V-130LPW-DSE-WH

MODEL #	POWER	CCT (K)	Input Voltage	LM/W	Size
NLV-BLP-R-VN	25 30 35 40 50	30K 3000K 35K 3500K 40K 4000K 50K 5000K 57K 5700K	AC 120 - 277 V Or AC 120 – 347V	130 OTH	2 x 2 1 x 4 2 x 4

NOTE: 40W and 50W are only available in 2 x 4 size
Options:
DDM - Dimming function
DDS – Dimming + Sensing function
DDE – Dimming + Emergency function
DSE – Dimming + Sensing + Emergency function
Color :
WH – White
CC – Custom Color

ORDERING INFORMATION – Tunable Series

Example:

Power & CCT Tunable: NLV-BLP-T-VN-50W24-50K-277V-130LPW-DSE-WH
Wireless CCT Tunable : NLV-BLP-W-VN-35W22-50K-277V-130LPW-DSE-WH

MODEL #	POWER	CCT (K)	Input Voltage	LM/W	Size
NLV-BLP-T-VN	20-25-30-35	30K 3000K 35K 3500K 40K 4000K 50K 5000K	AC 120 - 277 V Or AC 120 – 347V	130 OTH	2 x 2 1 x 4 2 x 4
NLV-BLP-W-VN	35-40-45-50				

NOTE: 20-25-30-35 W series is available in 2x2 and 1x4 sizes
35-40-45-50 W series is available in 2 x 4 size only

Options:
DDM - Dimming function
DDS – Dimming + Sensing function
DDE – Dimming + Emergency function
DSE – Dimming + Sensing + Emergency function
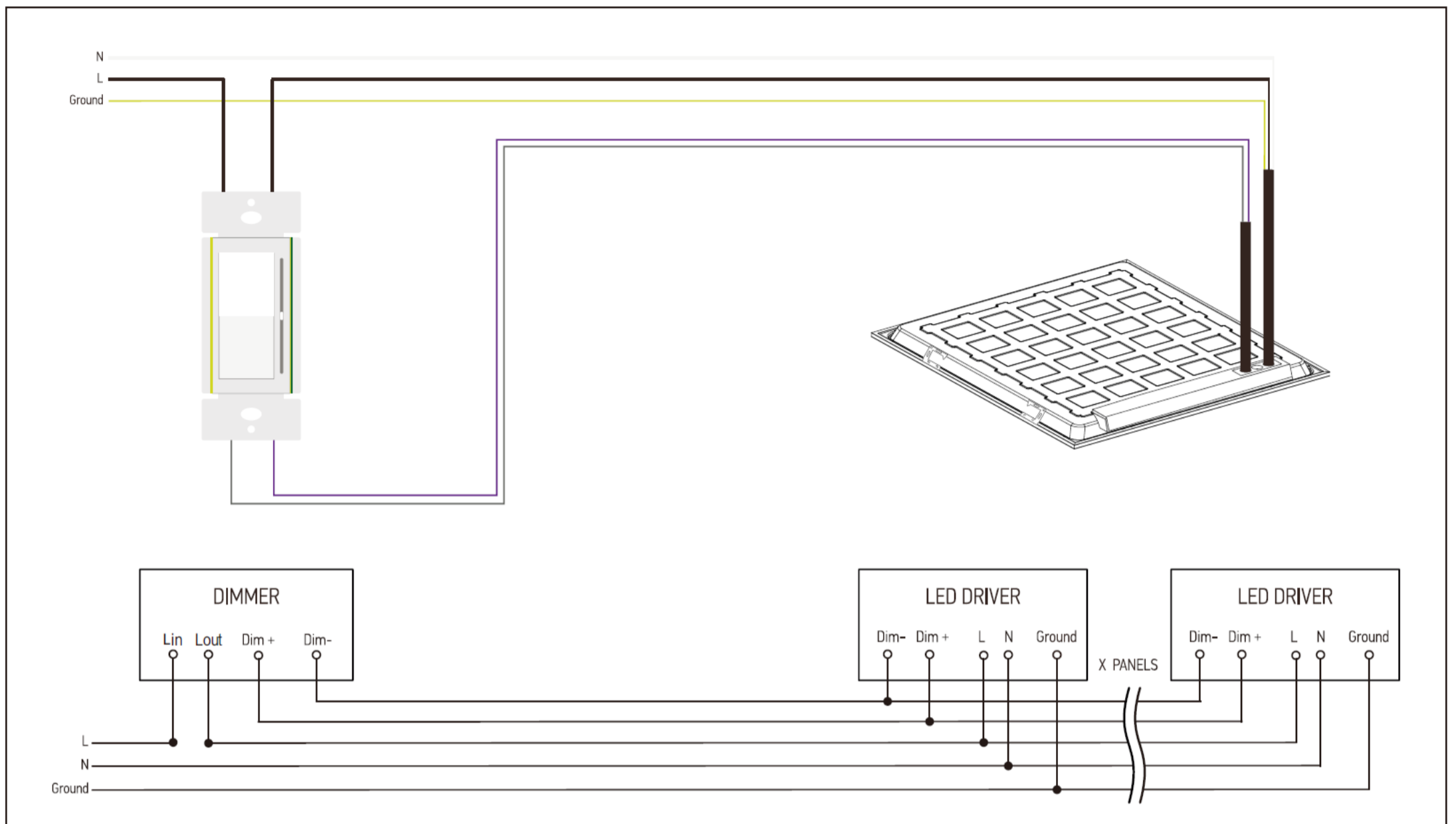**Color :**
WH – White
CC – Custom Color

PACKAGING INFORMATION

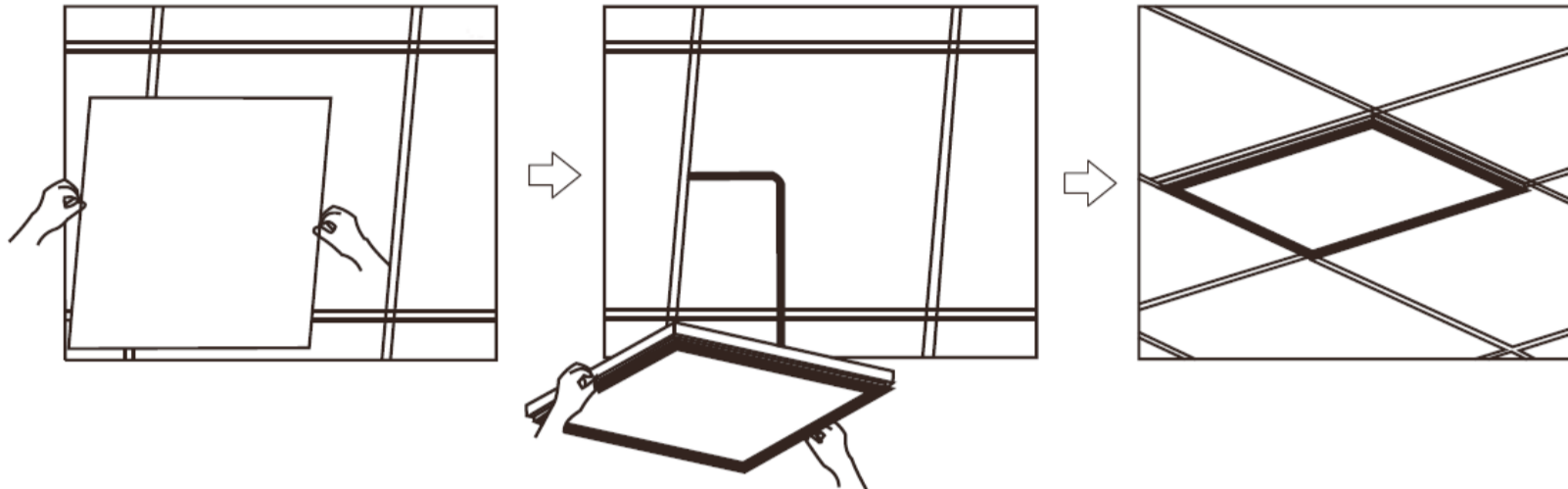| Item (inch)	N.W (lbs)	Carton Size (inch)	QTY/ctn(pcs)	G.W/ctn(lbs)	Qty loaded by 20GP	Qty loaded by 40GP	Qty loaded by 40HQ
24*24	5.07	25.39*3.94*25.59	2	11.5	1620 pcs	3264 pcs	4032 pcs
12*48	5.51	49.4*3.94*13.78	2	12.6	1544 pcs	3240 pcs	3774 pcs
24*48	9.26	49.4*3.94*25.59	2	20.5	800 pcs	1668 pcs	2070 pcs
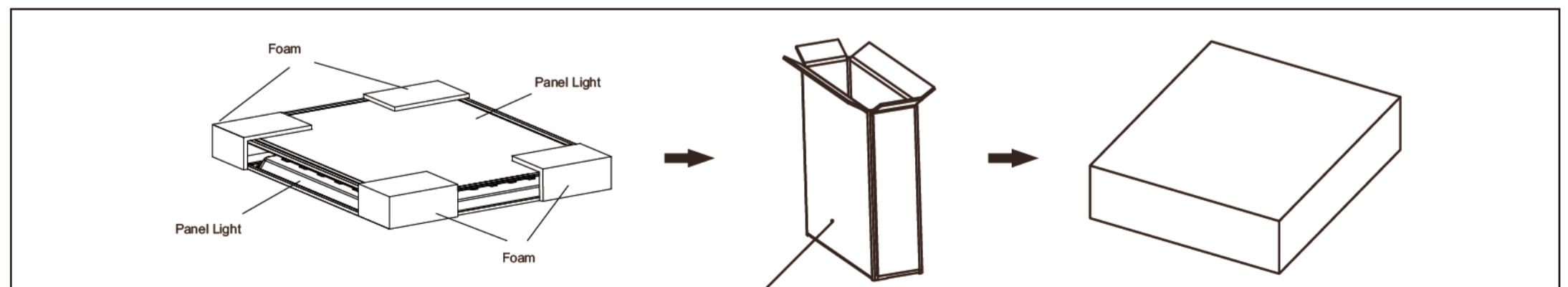
ELECTRICAL SCHEMATIC DIAGRAM

INSTALLATION - SAFETY NOTICE

The installation of these fixtures shall be done by licensed and qualified contractors only. NLV Lighting shall not held liable for any personnel or property damage.
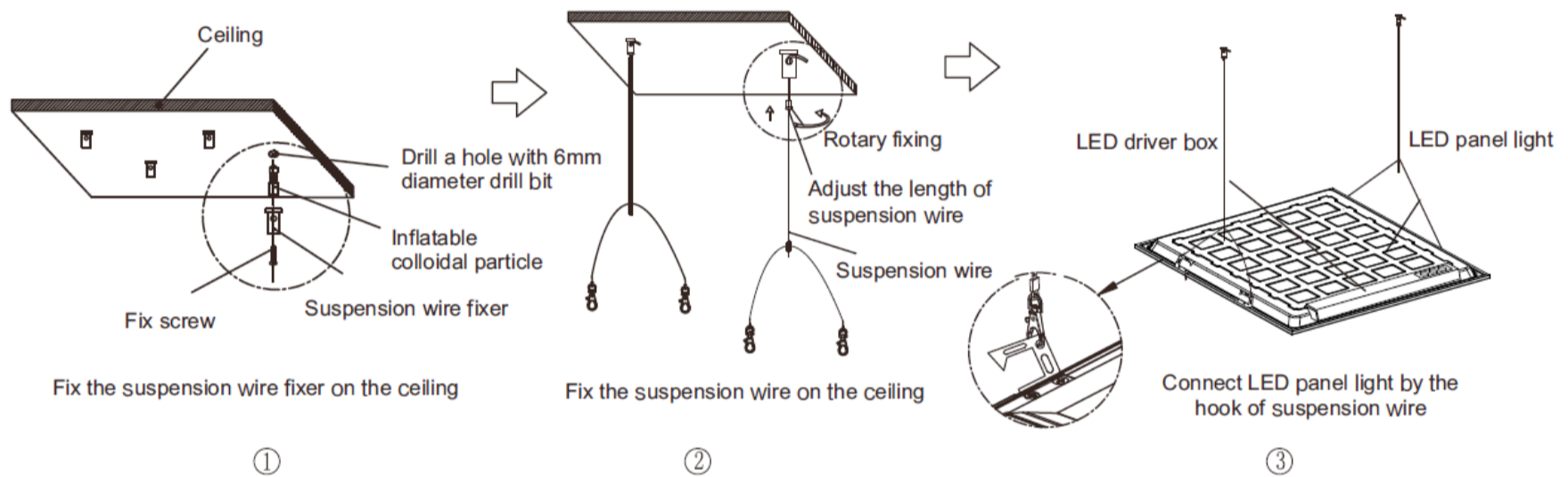
- Turn power off before inspection, installation or removal
- Properly ground all electrical enclosures
- Follow local codes and all NEC codes
- Use only UL or IEC approved Wires and other electrical accessories required
- Check the supply voltage and protect the lighting circuit by 15 -20A circuit breaker

INSTALLATION

Recessed Mounted Installation

Suspending Installation

Ceiling

Drill a hole with 6mm diameter drill bit

Inflatable colloidal particle

Fix screw

Suspension wire fixer

Fix the suspension wire fixer on the ceiling

①

Rotary fixing

Adjust the length of suspension wire

Suspension wire

Fix the suspension wire on the ceiling

②

LED driver box

LED panel light

Connect LED panel light by the hook of suspension wire

③

Surface Mounted Installation

Ceiling

* 2 (A1/A2)

* 2 (B1/B2)

(A1)

(B1)

(A2)

Ceiling

(A1)

(B1)

(A2) LED panel light

Ceiling

(B2)

(A2)

1. Parts A1, A2, B1, B2;
2. First install A1, A2, and B1(as illustrated);
3. As is shown in the figure, fix A1 and A2 on the ceiling or on the roof, and then insert the Back-lit panel light directly (the end with power source enters later);
4. Install B2, finish installation.

LIGHTING

Contact Info

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Email: info@nlvlighting.com

Phone number: +1-408-641-1848

www.**nlvlighting**.com

3000K

4000K

5000K