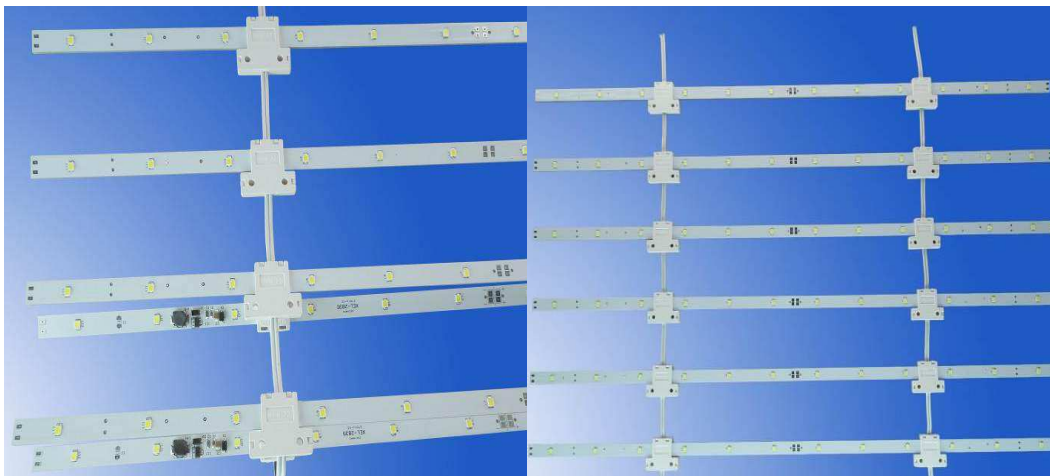


Ein LED Gitter zur Beleuchtung von Leuchtkästen und Leuchtreklamen

LED Grid for backlighting Light Boxes and Light Signage's.



Eigenschaften

- Beidseitig leuchtende Version (die Leuchtdioden sind auf beiden Seiten angebracht. Vorgesehen für zweiseitige Leuchtkästen)
- Einseitig leuchtende Version
- Möglichkeit der Abstandsregulierung zwischen den benachbarten Bändern (es ändert sich die Helligkeit und die Kosten der Beleuchtung)
- Sehr gleichmäßige Beleuchtung. Die Leuchtpunkte sind unsichtbar.
- Minimaler Abstand zwischen dem Leuchtgitter und der äußeren Acrylabdeckung: nur 9 cm
- Einfache Montage (eine Schraubverbindung)
- Das Leuchtgitter kann in Rollen gewickelt werden (dadurch auch – einfacher Transport)
- Es besteht die Möglichkeit in Reihe zu schalten (max. 100 Stück, 240 Watt)
- Man kann die gewünschten Beleuchtungsmaße einrichten. Das Leuchtband kann an markierten Stellen durchgeschnitten werden:

Comment „Limit resistor 3LED group“ → Ein Durchschneiden der Leiste ist nach je 3 LED Dioden möglich

Comment „Limit resistor 1LED group“ → Ein Durchschneiden der Leiste ist nach je 1 LED Diode möglich

Comment “Built in constant current inductive step-down” → Das Durchschneiden der Leiste ist unzulässig

LED Dioden – Hersteller: EPISTAR Taiwan Typ SMD 2835 oder SMD 5050

Parameter

- Speisung
 - a) Konstantspannung 12V oder 24V
 - b) Konstantstrom DC 12V~48V
- Ra 75/85

Lichtfarbe:

Warm White 2700 – 3200K

Neutral White 4200K-4700K

Cool White 6000K-6500K

Anwendung

Kleine und große Leuchtkästen

Billboards mit internen Beleuchtung

Einseitige und beidseitige Versionen

Features

- Version emitting light in two directions (LED's are mounted on the both sides. Version for double sided lighting box, signages and billboards).
- Version emitting light in one direction.
- Possibility to adjust distance between neighbouring LED strips (you can modify brightness and price of backlighting).
- Very homogenous backlighting (no hot spots).
- Minimum distance between LED grid and Acryl casing – 9 cm only.
- Easy mounting (screw connecting)
- LED grid can be rolled up into a roll for easy transportation
- Possibility of connecting in series (max. 100 Pcs, 240Watt)
- You can get the exact dimensions of backlighting. Lighting strip can be cut in indicated places:

Comment „Limit resistor 3LED group“ → you can cut strip each 3LED group

Comment „Limit resistor 1LED group“ → you can cut strip each 1LED group

Comment “Built in constant current inductive step-down” → cutting is not allowed

LED producer: EPISTAR Taiwan Type SMD2835 or SMD5050

Parameters

- Power supply
 - a) Constant Voltage 12V or 24V
 - b) Constant Current DC 12V~48V
- Ra 75/85

Light colour:

Warm White 2700 – 3200K

Neutral White 4200K-4700K

Cool White 6000K-6500K

Applications

Lighting boxes (large size and small size).

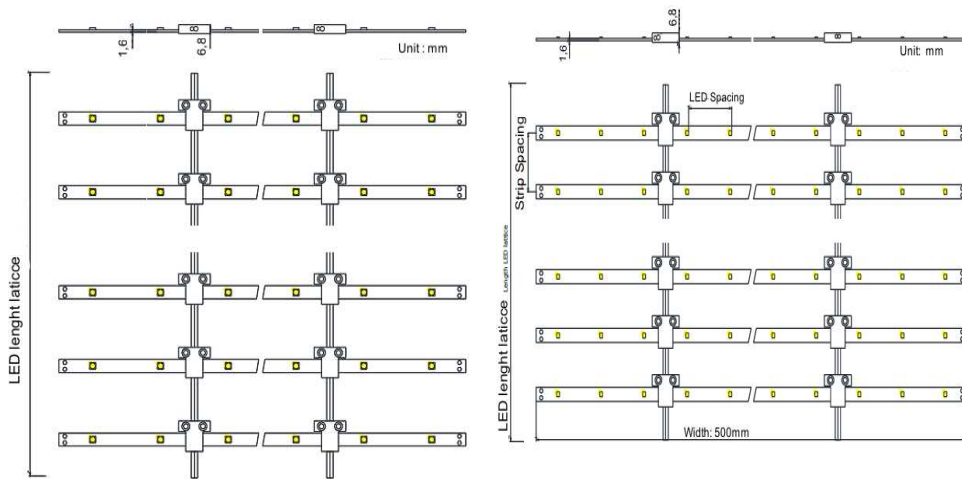
Billboards - internal backlighted.

One sided and double sided versions

Architecture: backlighting of walls and columns

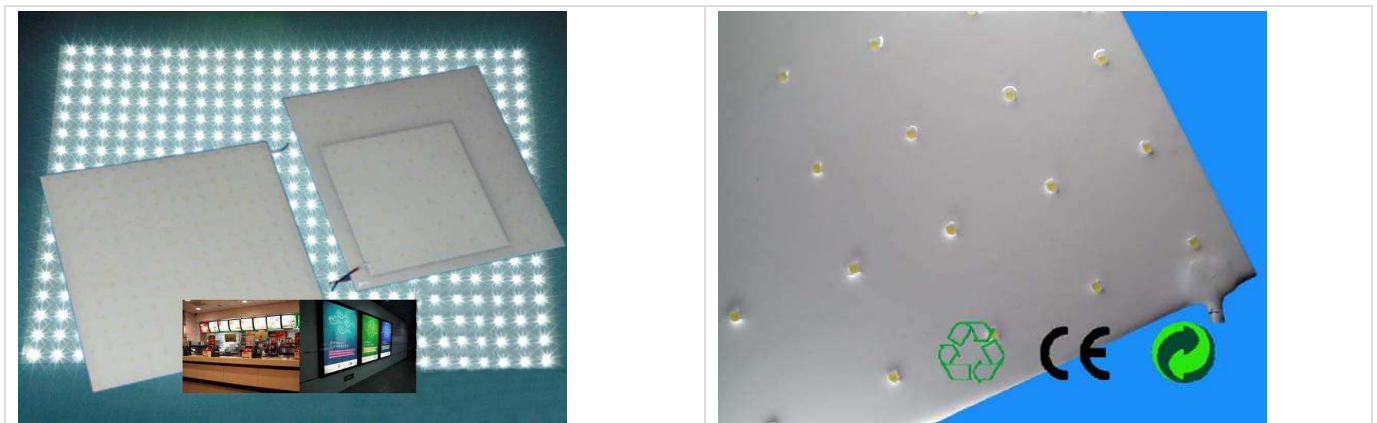
| MODEL | Strip Dimensions | LED QTY | Power / Lumen | DC Input | LED to LED spacing | Strip to Strip spacing | 12V Series connection | Comment |
|--|------------------|---------|---------------|---------------|--------------------|------------------------|-----------------------|---------------------------|
| MDZ41S-41-500-2835 | 500x10 x2.8mm | 12LED | 2.7W 270Lm | 12V or 24V | 41.6mm | 41 or 60mm | Max: 48pcs | Limit resistor 3LED group |
| MDZ41S-41-125-2835 | 125x10 x2.8mm | 3LED | 0.68W 68Lm | 12V or 24V | 41.6mm | 41 or 60mm | | |
| MDZ41S-41D-500-2835 Double side | 500x10 x2.8mm | 24LED | 5.4W 540Lm | 12V or 24V | 41.6mm | 41 or 60mm | Max: 24pcs | Limit resistor 3LED group |
| MDZ41S-41D-125-2835 Double side | 125x10 x2.8mm | 6LED | 1.4W 140Lm | 12V or 24V | 41.6mm | 41 or 60mm | | |

| | | | | | | | | |
|---|--|-------|---------------|---------------|--------|---------------|------------|------------------------------------|
| MDZ50S-50 -600-2835 | 600x10 x2.8mm | 12LED | 2.7W 270Lm | 12V or 24V | 50mm | 50mm | Max: 48pcs | Limit resistor 3LED group |
| MDZ50S-50 -150-2835 | 150x10 x2.8mm | 3LED | 0.68W 68Lm | 12V or 24V | 50mm | 50mm | | |
| MDZ50S-50D -600-2835 Double side | 600x10 x2.8mm | 24LED | 5.4W 540Lm | 12V or 24V | 50mm | 50mm | Max: 24pcs | Limit resistor 3LED group |
| MDZ50S-50D -150-2835 Double side | 150x10 x2.8mm | 6LED | 1.4W 140Lm | 12V or24V | 50mm | 50mm | | |
| MDZ41S-CC -24-500-2835 | 500x10 x2.8mm | 12LED | 2.4W 270Lm | 12~24V | 41.6mm | 41 or 60mm | Max:100pcs | |
| MDZ41S-CC -24-250-2835 | 250x10 x2.8mm | 6LED | 1.2W 138Lm | | | | | |
| MDZ41D-CC -24-500-2835 Double side | 500x10 x3.5mm | 24LED | 4.8W 540Lm | 12~24V | 41.6mm | 41 or 60mm | Max: 50pcs | Built-in constant current |
| MDZ41D-CC -24-250-2835 Double side | 250x10 x3.5mm | 12LED | 2.4W 278Lm | | | | | |
| MDZ41S-CC -48-500-2835 | 500x10 x2.8mm | 12LED | 2.4W 270Lm | 12~24V | 41.6mm | 41 or 60mm | Max:200pcs | inductive step-down |
| MDZ41S-CC -48-250-2835 | 250x10 x2.8mm | 6LED | 1.2W 138Lm | | | | | |
| MDZ41D-CC -48-500-2835 Double side | 500x10 x3.5mm | 24LED | 4.8W 540Lm | 12~48V | 41.6mm | 41 or 60mm | Max:100pcs | Not cut |
| MDZ41D-CC -48-250-2835 Double side | 250x10 x3.5mm | 12LED | 2.4W 278Lm | | | | | |
| MDZ60S -60-600-5050 | 600x10 x2.8mm | 10LED | 2.4W 240Lm | 12V | 60mm | 60mm | Max: 50pcs | Limit resistor 1LED group |
| IP66 | (Optional Conformal Coated IP66) Price extra | | | | | | | |



LED Hintergrundbeleuchtung für Leuchtkästen - Art WPR-3528

LED Backlights for Light-Boxes - Type WPR-3528



Beschreibung | Features

| | |
|--|---|
| Sehr hohe Leuchteffektivität – über 100 ~110 Lumen/W | High light intensity. Luminous efficiency more than 100~110 Lumen/W |
| Gleichmäßige Beleuchtung (keine Lichtstellen bei den einzelnen LED-Dioden) | Homogenous lighting (no hot spots). |
| Es besteht die Möglichkeit, ganz dünne Leuchtkästen zu bauen, | Possibility of building very thin light-boxes. |
| Wasserdicht (Klasse IP65) | Waterproof IP65 |
| Hohe Kühleffektivität (der Temperaturanstieg ist ab 5°C kleiner) | High efficiency cooling, the relative temperature rise is less than 5°C |
| Superdünn (Stärke kleiner als 3,5mm) | Ultra-thin, the thickness is less than 3.5mm. |
| Es besteht die Möglichkeit einer gleichzeitigen Verdunklung mehrerer untereinander verbundenen Paneele | Dimming can synchronize large area |
| Lebensdauer bis zu 50000h | Lifetime is up to 50, 000 hours |

Verwendung | Applications

Typische Verwendung: als Hintergrundbeleuchtung für Leuchtkästen Und Leuchtbuchstaben. Vor allem bei U-Bahnstationen, auf Flughäfen und in Handelszentren.

Mainly used for advertising light box, backlighting and signs. Especially suitable for metro, stations, airports and shopping centre.

Umbau alter Rasterleuchten mit Leuchtstoffröhren, in moderne LED Beleuchtung

Converting old grill fixtures to modern LED technology.

Mechanische Daten | Mechanical data

Verwendete Stoffe: Aluminium, Epoxidharz, LED Dioden

Materials: Aluminium, Epoxy Resin, LED diodes

Maße: 30cm, 40cm, 50cm, 60cm (verschiedene Kombinationen bei der Breite und Höhe).

Dimensions: 30 cm, 40 cm, 50 cm, 60 cm (different combinations of height and width).

Möglich sind untypische Maße – auf Bestellung.

Not typical dimensions on request.

Arbeitstemperatur -20°C ~ +55°C

Working temperature: - 20°C - 55°C

Weight: 2,5 kg (for panel 60 x 60 cm)

Elektrische Daten | Electrical Data

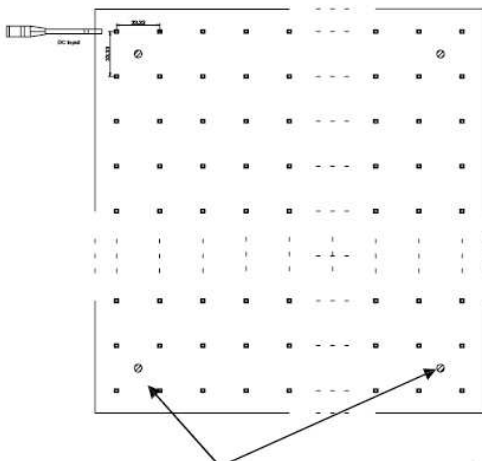
Speisespannung: 12V DC

Supply voltage: 12 V DC~

Lichtstrom: 5,5 lm ~ 6,5 lm pro LED Diode (weiß)

Luminous flux: 5,5 lm ~ 6,5 lm / single LED (white)

Maße | Dimensions



An diese Stellen kann man Öffnungen mit \varnothing 8 mm bohren.

Drilling holes \varnothing 8mm are allowed in these places



Hinteres Speisekabel

Supply cord from the back side

Vorderes Speisekabel

Supply cord from the front side

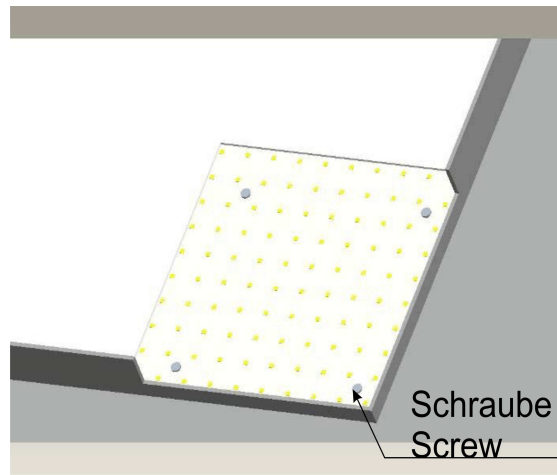
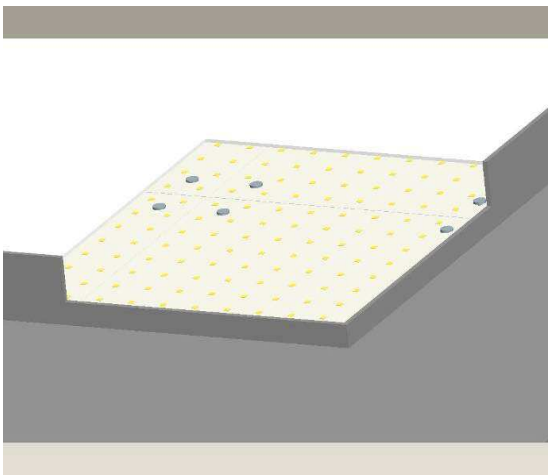
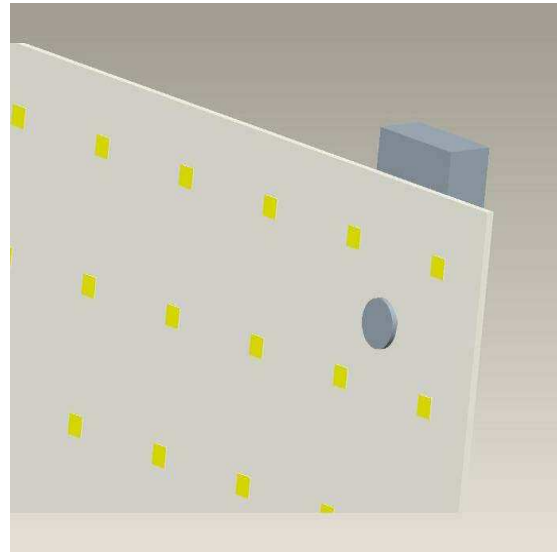
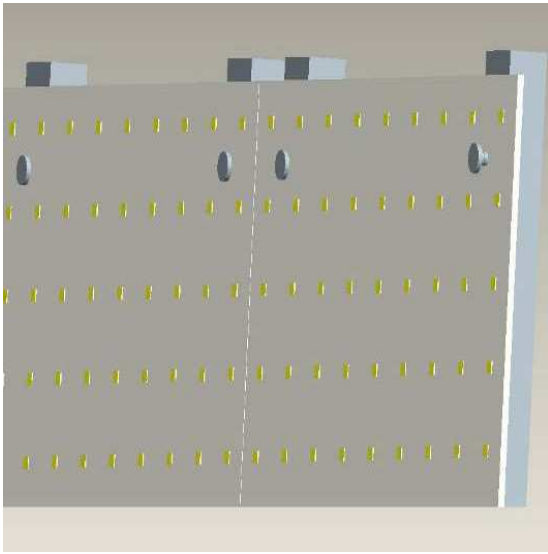
Achtung: In der Standardausführung sind keine Öffnungen vorhanden. Das Speisekabel wird von vorn angebracht. Bohrungen werden von uns auf Bestellung gemacht.

Attention: There are not drill LED holes in standard performance. Supply cord is from the front side. Holes can be drill LED on

request.

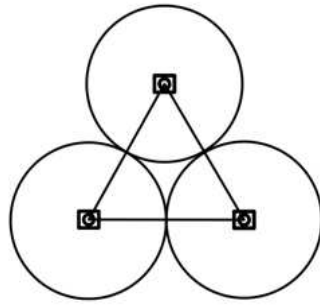
Installation in den Leuchtkästen

Installation in Light – Boxes

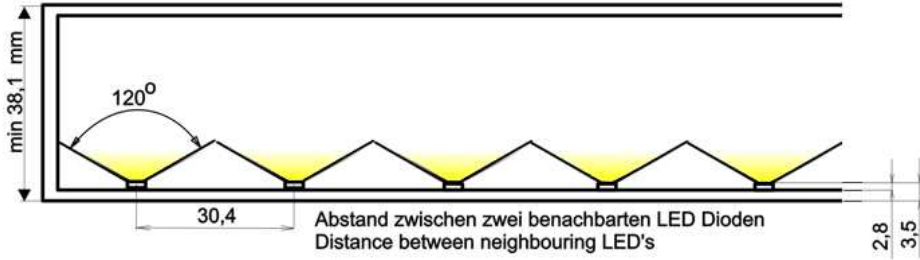


Abstand zwischen dem unterem Licht und der vorderen Platte des Leuchtkasten.
 Distance between backlight panel and front cover of lighting box.

minimum 38,1mm

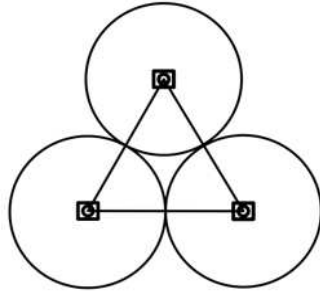


Gleichmäßige Beleuchtung (keine Lichtstellen bei den einzelnen LED-Dioden)
 Homogenous lighting (no hot spots).

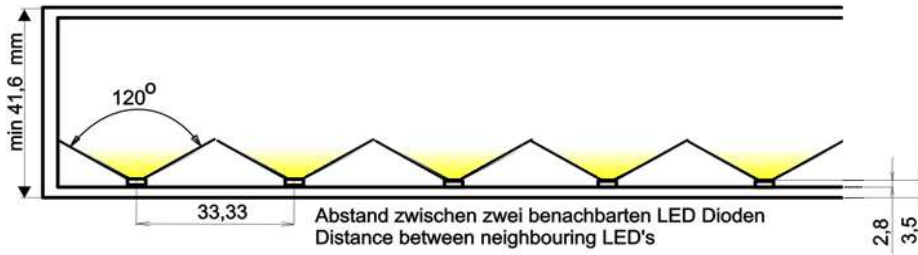


Abstand zwischen dem unterem Licht und der vorderen Platte des Leuchtkasten.
 Distance between backlight panel and front cover of lighting box.

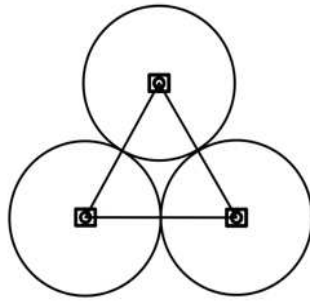
minimum 41,6mm



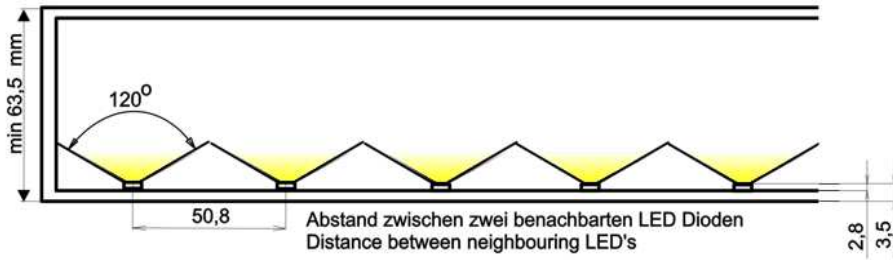
Gleichmäßige Beleuchtung (keine Lichtstellen bei den einzelnen LED-Dioden)
 Homogenous lighting (no hot spots).



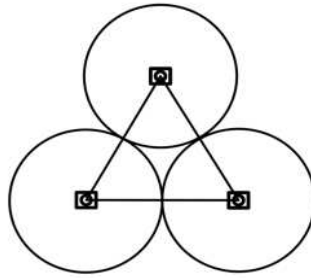
Abstand zwischen dem unterem Licht und der vorderen Platte des Leuchtkasten.
 Distance between backlight panel and front cover of lighting box.
 minimum 63,5mm



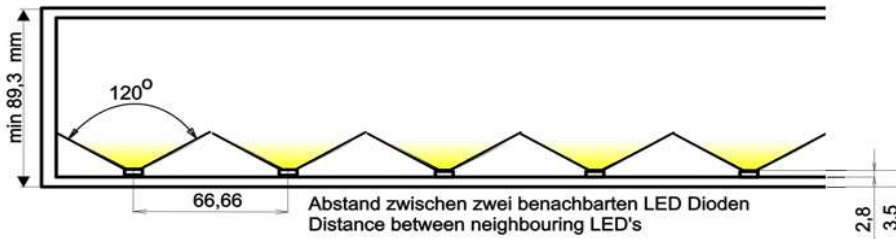
Gleichmäßige Beleuchtung (keine Lichtstellen bei den einzelnen LED-Dioden)
 Homogenous lighting (no hot spots).



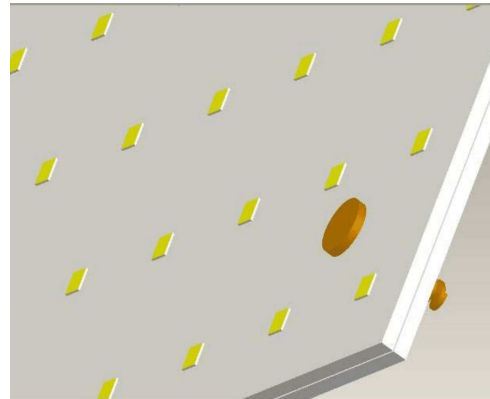
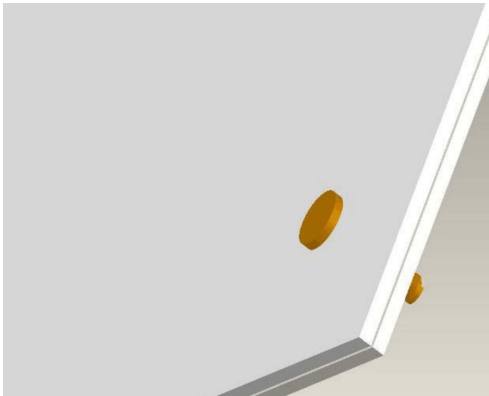
Abstand zwischen dem unterem Licht und der vorderen Platte des Leuchtkasten.
 Distance between backlight panel and front cover of lighting box.
 minimum 89,3mm



Gleichmäßige Beleuchtung (keine Lichtstellen bei den einzelnen LED-Dioden)
 Homogenous lighting (no hot spots).



Umbau alter Rasterleuchten mit Leuchtstoffröhren, in moderne LED Beleuchtung
Converting old grill fixtures to modern LED technology.



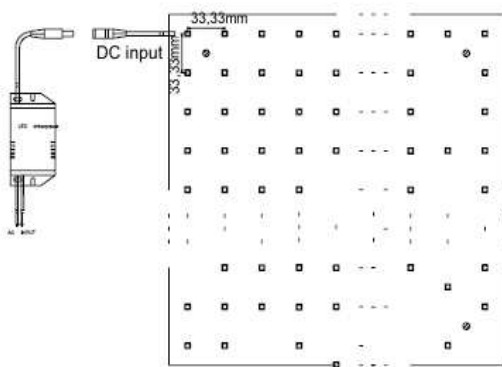
Bei dieser Version gibt es eine Lichtzerstreuungsblende (diese verhindert eine Blendung durch einzelne Leuchtdioden)

Version ohne Lichtzerstreuungsblende (dadurch ist die Beleuchtung heller)

Version with light-dispersing cover
(prevents against glaring by single LED's)

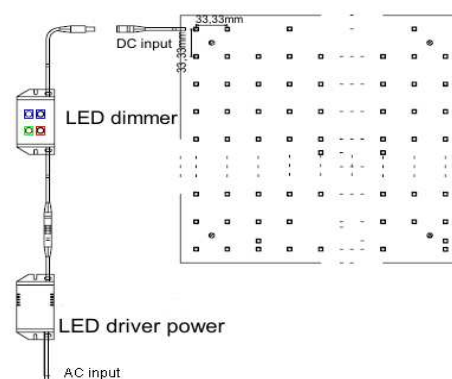
Version without light-dispersing plate
(we get bigger light flux).

Plan der elektrischen Verbindungen | Wiring diagram



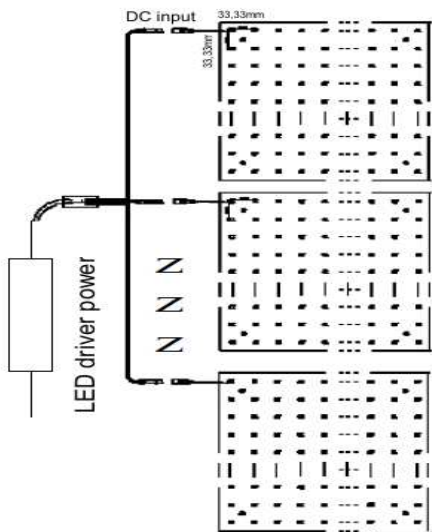
Single connection

Anschluss einer einzelnen unteren Beleuchtungsplatte
Single backlight connection

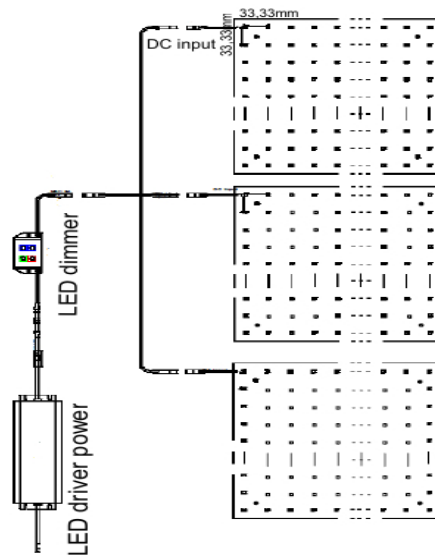


Anschluss einer einzelnen unteren Beleuchtungsplatte mit Dimmer

Single backlight connection with dimmer

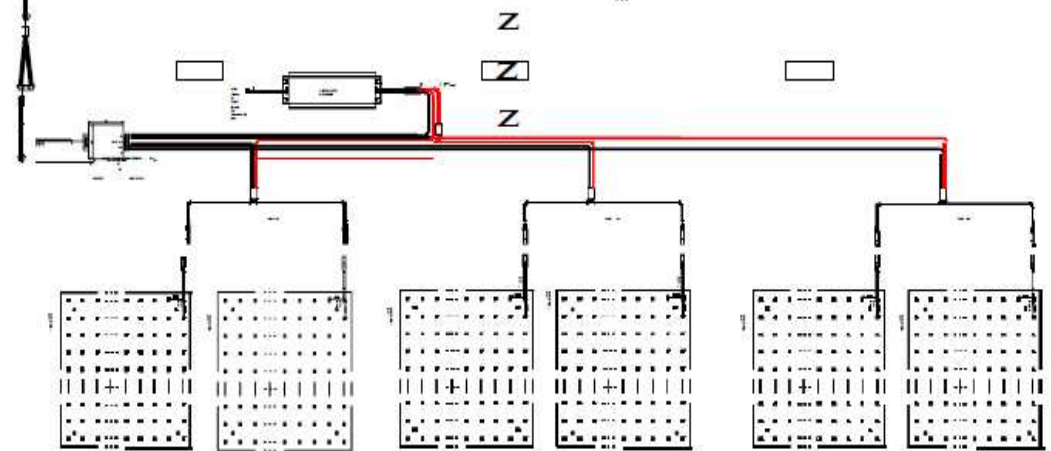
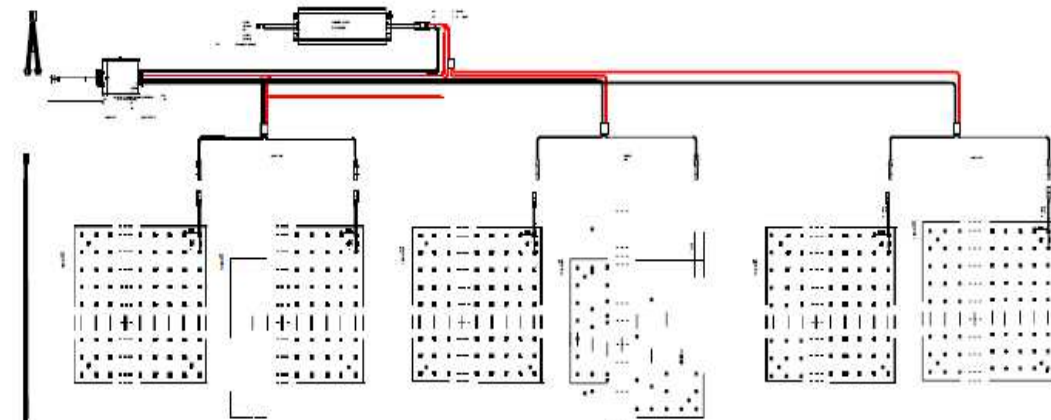
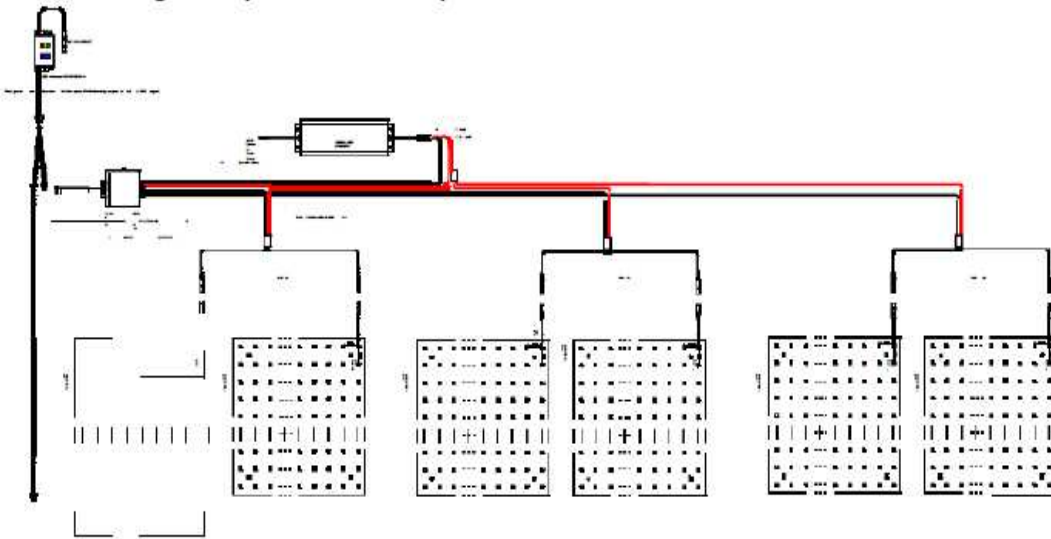


Anschluss mehrerer unteren Beleuchtungsplatten
 Multiple LED ALU panel wiring diagram



Anschluss
 mehrerer unteren Beleuchtungsplatten mi Dimmer
 Multiple LED ALU panel wiring diagram with dimmer

Gleichzeitiges Dimmen mehrerer Beleuchtungsplatten
Simultaneous dimming for multiple LED ALU panel



Sicherheitsbestimmungen

Während der Montage dürfen keine Leiterbahnen auf der Leiterplatte beschädigt sein.

Empfohlen wird eine elektrische Parallelschaltung.

Der LED Treiber muss die entsprechende Leistung und Spannung haben.

Eine fehlerhafte Polarisierung +/- kann die LED Platte beschädigen.

Safety regulations

Do not damage copper paths on the Printed Circuit Board.

Parallel electric connection of multiple panels is recommended.

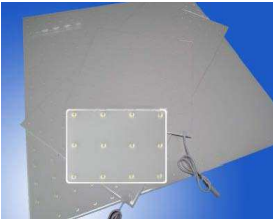
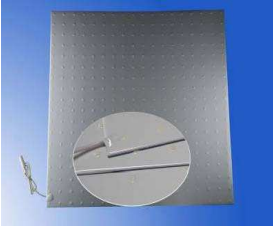
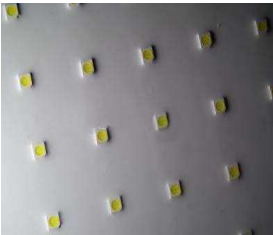
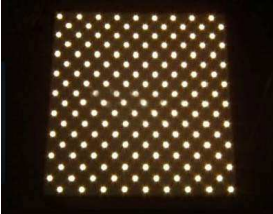
LED driver should have proper voltage and power.

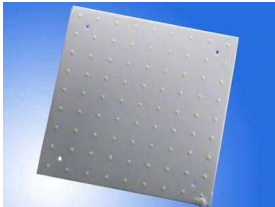
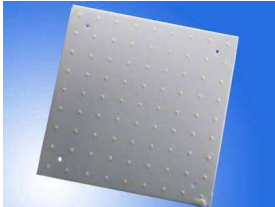
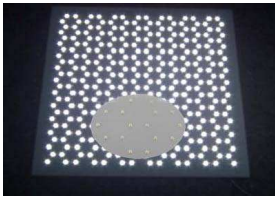

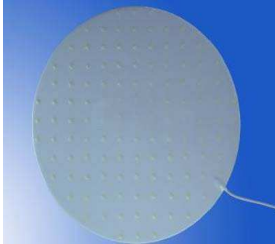
Wrong polarisation can destroy LED panel.

Falls die LED Tafel auf einem metallischen Untergrund montiert wird, muss eine entsprechende elektrische Isolierung als Absicherung gegeben sein.

Proper insulation should be used in case of mounting on metal surface.


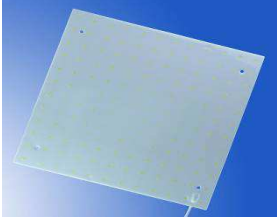
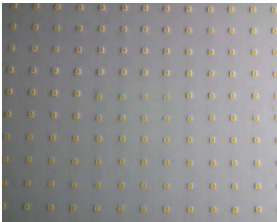


12V LED Panel SMD3528

| MODEL | | Leistung Power | Lichtstrom Luminous flux[lm] | Spannung Voltage [V] | White | R | G | B | Photo |
|---|--------------------|-------------------|------------------------------------|----------------------------|---------------|---|---|---|---|
| | | | | | Warm white | | | | |
| WPR-3528-33 SMD3528 LED LED Abstand LED-spacing 33.3mm | 30x30cm 81 LED | 5.5W | 550lm | DC12V | | | | |  |
| | 30x60cm | 11W | 1100lm | | | | | | |
| | 50x50cm | 15W | 1500lm | | | | | | |
| | 60x60cm 324 LED | 22W | 2200lm | | | | | | |
| WPR-3528-30 SMD3528 LED LED Abstand LED-spacing 30.5mm | 27x27cm 81 LED | 5.5W | 550lm | DC12V | | | | |  |
| | 27x54cm | 11W | 1100lm | | | | | | |
| | 54x54cm 324 LED | 22W | 2200lm | | | | | | |
| WPR-3528-25 SMD3528 LED LED Abstand LED-spacing 25mm | 30x30cm 144 LED | 11W | 1100lm | DC12V | | | | |  |
| | 30x60cm 288 LED | 20W | 2000lm | | | | | | |
| | 60x60cm 576 LED | 39W | 3900lm | | | | | | |
| WPR-3528-X66 SMD3528 LED LED Abstand LED-spacing 47mm | 20x20cm | 1.4W | 140lm | DC12V | | | | |  |
| | 20x30cm | 2.8W | 280lm | | | | | | |
| | 30x30cm | 4.3W | 430lm | | | | | | |
| | 20x60cm | 4.3W | 430lm | | | | | | |
| | 30x60cm 81 LED | 6W | 600lm | | | | | | |
| | 60x60cm 162 LED | 12W | 1200lm | | | | | | |

| | | | | | | | | | |
|--|------------------------------|------|--------|-------|--|--|--|--|---|
| WPR-3528-45 SMD3528 LED LED Abstand LED-spacing 45mm | 27x27cm 36 LED | 2.8W | 280lm | DC12V | | | | |  |
| | 27x54cm 72 LED | 5.6W | 560lm | | | | | | |
| | 54x54cm 144 LED | 11W | 1100lm | | | | | | |
| WPR-3528-50 SMD3528 LED LED Abstand LED-spacing 50.8mm | 30x30cm 36 LED | 2.8W | 280lm | DC12V | | | | |  |
| | 30x60cm 72 LED | 5.5W | 580lm | | | | | | |
| | 60x60cm 144 LED | 11W | 1100lm | | | | | | |
| WPR-3528-H50 (WPR-3528-H45 Only 595x595mm size, same price and H50 60x60) | 30x30cm 84 LED | 6.5W | 650lm | DC12V | | | | |  |
| | 30x60cm 168 LED | 13W | 1300lm | | | | | | |
| | 60x60cm 336 LED | 26W | 2600lm | | | | | | |
| WPR-3528-16 SMD3528 LED LED Abstand LED-spacing 16.6mm | 30x30cm 324 LED | 22W | 2200lm | DC12V | | | | |  |
| | 30x60cm 648 LED | 42W | 4200lm | | | | | | |
| | 60x60cm 1296 LED | 82W | 8200lm | | | | | | |
| WPR-3528-R23 Runden Round LED panel | Diameter 300mm 121 LED | 8.5W | 820lm | DC12V | | | | |  |
| | | | | | | | | | |
| WPR-3528-R33 Runden Round LED panel | Diameter 300mm 61 LED | 4.2W | 420lm | | | | | | |

12V LED Panel SMD5050

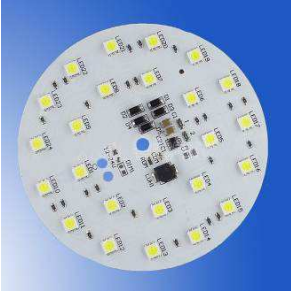


| MODEL | Diameter mm | Leistung Power | Luminous flux [lm] | Spannung Voltage [V] | Photo |
|-------|----------------|-------------------|-----------------------|-------------------------|-------|
|-------|----------------|-------------------|-----------------------|-------------------------|-------|

| | | | | | |
|---|---------------------|------|---------|--------|---|
| WPR-5050-33 SMD5050 LED LED-spacing 33mm | 30x30CM 81 LED | 15W | 1500lm | DC 12v |  |
| | 30x60CM 162 LED | 30W | 3000lm | | |
| | 60x60CM 324 LED | 58W | 5800lm | | |
| WPR-5730-25 SMD5730 LED LED-spacing 25mm | 30x30CM 144 LED | 25W | 2500lm | DC 12v |  |
| | 30x60CM 288 LED | 50W | 5000lm | | |
| | 60x60CM 576 LED | 100W | 10000lm | | |
| WPR-5050-25 SMD5050 LED LED-spacing 25mm | 30x30CM 144 LED | 25W | 2500lm | DC 12v |  |
| | 30x60CM 288 LED | 50W | 5000lm | | |
| | 60x60CM 576 LED | 100W | 10000lm | | |
| WPR-5050-25 SMD5050 LED LED-spacing 25mm | 10x70CM 108 LED | 19W | 1900lm | DC 12V |  |
| | 45x55CM 396 LED | 70W | 7000lm | | |
| | 40x60CM 384 LED | 69W | 6900lm | | |
| WPR-5050-16 SMD5050 LED LED-spacing 16.6mm Konstanstrom Treiber forderte Kühlblech Installation forderte Constant Current Driver required Heatsink system required | 60x60CM 1296 LED | 200W | 20000lm | DC 12V |  |
| | 20x50CM 360 LED | 65W | 6500lm | | |
| | 30x30CM 324 LED | 58W | 5800lm | | |

Round LED ceiling lamps

| MODEL | Diameter mm | LED driver | Leistung Power | Illuminance Equivalent fluorescent | Luminous flux lm | Photo |
|-----------------------------------|-----------------|-----------------|----------------|------------------------------------|------------------|---|
| WPR-5050- D16 60 LED | Φ160mm 1pcs | EFV-018 1pcs | 11W | 22W | 990lm |  |
| | | PCD-16 1pcs | 12.8W | 25W | 1100lm | |
| WPR-5050- D20 69 LED | Φ200mm 1pcs | EFV-018 1pcs | 12W | 22W | 1080lm | |
| | | PCD-16 1pcs | 12.8W | 25W | 1100lm | |
| WPR-5050- D26 76 LED | Φ260mm 1pcs | EFV-018 1pcs | 16W | 32W | 440lm | |
| | | PCD-16 1pcs | 17W | 34W | 1520lm | |
| WPR-5050- D30 108 LED | Φ300mm 1pcs | EFC-020 1pcs | 20W | 40W | 1800lm |  |
| | | ELN-30 1pcs | 20W | 40W | 1800lm | |
| WPR-5050-D40 192 LED | Φ400mm 1pcs | EFC-020 2pcs | 40W | 80W | 3600lm | |
| | | ELN-30 2pcs | 40W | 80W | 3600lm | |
| WPR-5050- D50 300 LED | Φ500mm 1pcs | EFC-020 3pcs | 70W | 140W | 6300lm |  |
| | | ELN-30 2pcs | 70W | 140W | 6300lm | |
| WPR-5050- D50B 192 LED | Φ500mm 1pcs | EFC-020 2pcs | 40W | 80W | 3600lm | |
| | | ELN-30 2pcs | 40W | 80W | 3600lm | |
| WPR-5050-F25 200x500mm | 160 LED 1pcs | EFC-020 2pcs | 40W | 80W | 3600lm |  |
| WPR-5050-F25 370x370mm | 225 LED 1pcs | EFC-020 2pcs | 50W | 100W | 4500lm | |
| WPR-3528-F25 370x370mm | 225 LED 1pcs | EFV-018 1pcs | 16W | 32W | 1450lm | |

12V SMD5050 Round LED Panel

| Model | Dimensuions Thickness 3,5mm Power 0,21/ LED | Luminous flux [lm] | Illuminance Lux (Centre distance) depth | | | | Photo |
|--|--|-----------------------|--|-----|-----|-----|--|
| | | | 1m | 2m | 3m | 5m | |
| WPR-5050- F16 66 LED AL PCB | Φ160 mm 13,8 W 12V | 1380 lm | 450 | 130 | 65 | |    |
| WPR-5050 F20 87 LED AL PCB | Φ200 mm 18,2 W 12V | 1820 lm | 580 | 180 | 98 | | |
| WPR-5050-25 F26 80 LED | Φ260 mm 16,8 W 12V | 1680 lm | 470 | 140 | 71 | | |
| WPR-5050-25 F30 112 LED | Φ300 mm 23,5 W 12V | 2350 lm | 750 | 220 | 97 | | |
| WPR-5050-25 F40 192 LED | Φ400 mm 40 W 12V | 4000 lm | 1420 | 356 | 159 | | |
| WPR-5050-25 F50 300 LED | Φ500 mm 60 W 12V | 6000 lm | 1500 | 375 | 168 | | |
| WPR-5050-25 F60 440 LED | Φ600 mm 90 W 12V | 9000 lm | 2560 | 860 | 418 | 210 | |
| WPR-5050-25 F80 788 LED | Φ800 mm 130 W 12V | 13000 lm | | | | | |
| WPR-5050-33 F80 444 LED | Φ800 mm 90 W 12V | 9000 lm | 2560 | 860 | 418 | 210 | |
| WPR-5050-25 F50B 192 LED | Φ500 mm 40 W 12V | 4000 lm | 1420 | 356 | 159 | | |
| WPR-5050-25 F60B 300 LED | Φ600 mm 60 W 12V | 6000 lm | 1500 | 375 | 168 | | |
| WPR-5050 F10 24 LED IP20 | Φ100 mm 5 W 12V | 550 lm | | | | | |
| WPR-5050-C21-48 48 LED AL PCB | Φ210 mm 10 W 12V | 1000 lm | | | | | |