

# EPS.LIGHT

**Technical Information**  
Illumination with LED modules  
1-2024

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## Description LED modules

### LUCOLED BL71

- 5 years warranty
- First 2 years extended warranty
- Lucolense wide beam technology
- High efficacy
- Constant Current Technology
- Narrow white binning



Lucoled Plus BL71 modules offer a high quality and efficient backlit solution for lightboxes with a depth of 120-300 mm.

Using the latest Top-Tier LED technology and high quality patented optics Lucoled Plus BL71 offers industry leading efficacy and coverage. This not only reduces the amount of modules needed for an application, but also the overall power consumption.

In a typical application of 160 mm deep only 4 modules per square meter are used at maximum wire spacing, making installation very fast and less labour intensive. Using only 28 W per square meter also the number of power supplies needed is strongly reduced.

### LUCOLED PR40

- 7 years warranty
- First 2 years extended warranty
- Prismatic Flat Beam technology
- Industry leading efficacy
- Constant Current Technology
- Narrow white binning



Lucoled Premium PR40 modules offer a high quality and efficient backlit solution for lightboxes and channel letters between 60 and 200mm deep.

Using the latest Top-Tier LED technology and prismatic flat beam optics Lucoled Premium series offers industry leading efficacy and coverage. This not only reduces the amount of modules needed for an application, but also the overall power consumption, reducing the total cost of ownership of a project.

Lucoled Premium series offers a 2 years extended warranty, making it the optimum choice for your high valued projects and critical installations. Your warranty exposure is reduced to a minimum.

## LUCOLED PV 44

- 5 years warranty
- First 2 years extended warranty
- Lucolense prismatic angle technology
- Highest efficacy
- Constant Current Technology
- Narrow white binning



Lucoled Premium Value PV40 and PV44 modules offer a high quality and efficient backlit solution for lightboxes and channel letters between 80 and 140mm deep.

Using the latest high efficient LED technology and high quality optics Lucoled Premium Value series offers industry leading efficacy and coverage. This not only reduces the amount of modules needed for an application, but also the overall power consumption, reducing the total cost of ownership of a project.

Lucoled Premium Value series offers a 2 years extended warranty, making it the optimum choice for your high valued projects and critical installations. Your warranty exposure is reduced to a minimum.

## Notes warranty LED modules

For the first 24 months LUCOLED can offer an extended warranty.

Under the extended warranty LUCOLED will reimburse client onsite labour, travel costs and other direct costs required to perform repair or replacement on LUCOLED products. Warranty starts from the date of delivery of the LUCOLED products.

Client needs to submit detailed records, including date of purchase, installation date, location, power supply serial numbers, module batch codes and proof of first flawless operation.

The following conditions apply:

- Product has been installed in accordance with local regulations and LUCOLED installation instructions by LUCOLED trained and certified installers.
- Product is being used for its intended use.
- Defective product needs to be returned to LUCOLED for analysis.
- Pictures of the defective product in installation need to be submitted as part of the claim.
- Prior to any repair LUCOLED becomes financially responsible for, LUCOLED reserves the right to verify that the defect was a result of defective material supplied by LUCOLED and not the result of installation workmanship, acts of God, misuse, abuse or any other reason that is not within the direct control or the responsibility of LUCOLED.
- Prior to any repair LUCOLED becomes financially responsible for, an estimate of repair costs needs to be approved by LUCOLED. LUCOLED reserves the right to engage third parties to carry out the repair. Client agrees to fully cooperate with third parties.
- All labour, travel, equipment costs must be passed on without markup or profit. Original invoices of rental equipment, lodging, etc. need to be submitted as part of the claim.
- The extended warranty is a system warranty and only valid if only LUCOLED components and approved accessories are used. Replacement of LUCOLED components with third party components, i.e. power supplies, will void the extended system warranty.

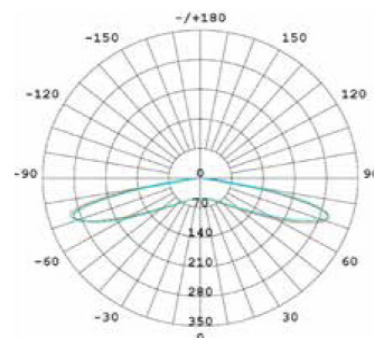
## Technical specifications BL71

### Use for profile depth 180mm (EPS.LUMI and EPS.RAIL)

- Dimensions 199x90x10mm
- Warranty 5 years (first 2 years extended)
- Beam angle: 1600
- Can be cut between every unit
- UL, CE and RoHS compliant
- Narrow white binning
- Constant Current Technology
- Operating temperature -25~+60C

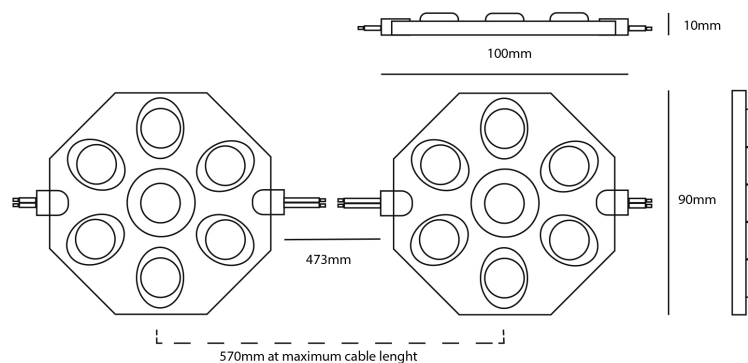


Luminous intensity distribution

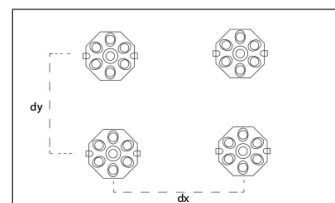


Item no.	LED colour	CT (K)	CRI	Power (W/Mod)	Flux (lm/Mod)	Efficacy (lm/W)	Voltage (DC)	Modules per chain
BL71-W65	white	6500	>70	7.0	850	121	24	10

### Dimensions



Lightbox depth (mm)	Space between modules (mm)	Installing density (pcs/m <sup>2</sup> )	Surface luminance range (cd/m <sup>2</sup> )
dz=120	dx=300, dy=300	9	1250-1350
dz=150	dx=450, dy=400	6	850-950
dz=180	dx=500, dy=500	4	450-550
dz=180	dx=450, dy=400	6	700-800
dz=180	dx=300, dy=300	9	1050-1150
dz=250	dx=500, dy=500	4	350-450



Results may vary depending on face material properties. The data above was obtained using 3mm thick opaque acrylic with a 54% light transmittance. Lucoled advises to paint the inside of the box/letters in a matt white colour for achieving an optimal result. Always test before production.

### Power supply capacity 24V series

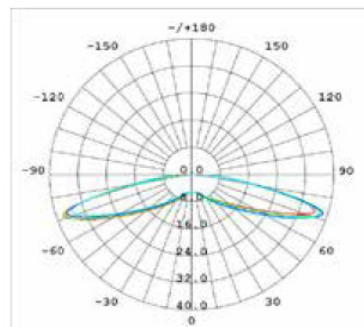
Item	PP2460	PPXS24100	PP24150	PP24200
Power Output	60W	100W	150W	200W
BL71 modules / power supply	7	13	19	25
Number of chains (maximum 10 modules per chain)	1	2	2	3

## Technical specifications PR40

Use for profile depth 120mm (EPS.LUMI and EPS.STOR)

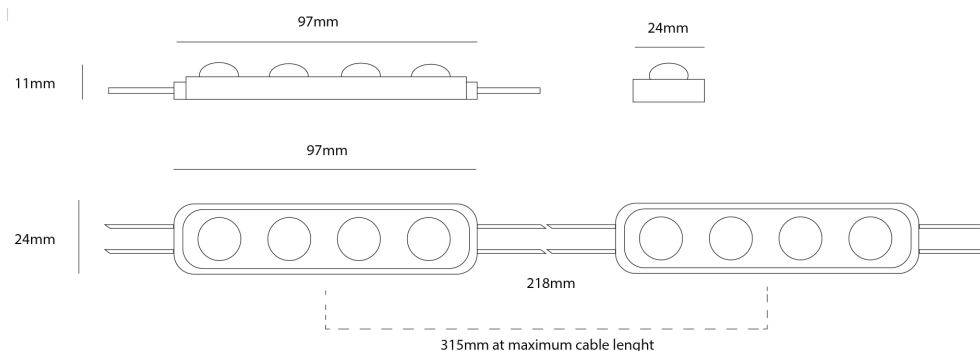
- Dimensions 97x24x11mm
- Warranty 7 years (first 2 years extended)
- Beam angle: 1600
- Can be cut between every unit
- UL, CE and RoHS compliant
- Narrow white binning
- Constant Current Technology
- Operating temperature -40~+60C

Luminous intensity distribution

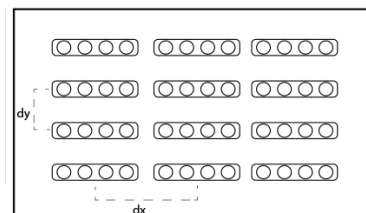


Item no.	LED colour	CT (K)	CRI	Power (W/Mod)	Flux (lm/Mod)	Efficacy (lm/W)	Voltage (DC)	Modules per chain
PR40-W70	white	7000	>70	1.2	195	163	12	20

### Dimensions



Lightbox depth (mm)	Space between modules (mm)	Installing density (pcs/m <sup>2</sup> )	Surface luminance range (cd/m <sup>2</sup> )
dz=60	dx=150, dy=150	43	2105-1840
dz=80	dx=180, dy=180	30	1630-1315
dz=100	dx=220, dy=250	18	1155-840
dz=120	dx=220, dy=300	14	735-470



Results may vary depending on face material properties. The data above was obtained using 3mm thick opaque acrylic with a 54% light transmittance. Lucoled advises to paint the inside of the box/letters in a matt white colour for achieving an optimal result. Always test before production.

### Power supply capacity 12V series

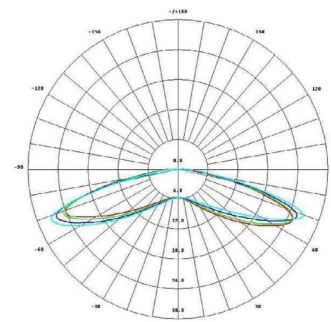
Item	PP1260	PP12100	PP12150	PP12200
Power output	60W	100W	150W	200W
PR40 modules/power supply	45	75	113	150
Number of chains (maximum 20 modules per chain)	2	3	5	7

## Technical specifications PV44

Use for profile depth 120mm, 150mm and 180mm  
(EPS.LUMI, EPS.STOR, EPS.RAIL)

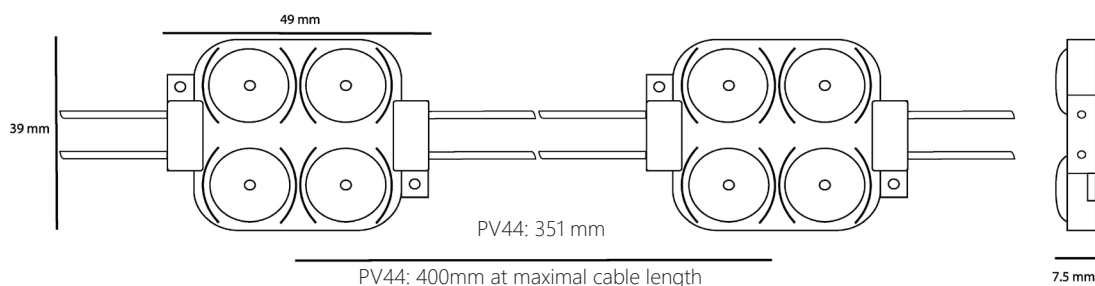
- Dimensions: 49 x 39 x 7.5mm
- Warranty 5 years (first 2 years extended)
- Beam angle: 170°
- Can be cut between every unit
- UL, CE and RoHS compliant
- Narrow white binning
- Constant Current Technology
- Operating temperature -25~+60°C

Lichtverteilung

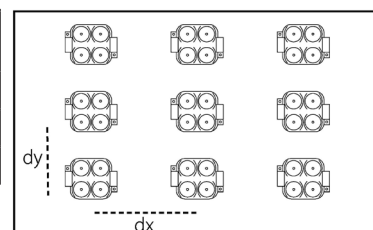


Item no	LED colour	CT (K)	CRI	Power (W/ Mod)	Flux (lm/ Mod)	Efficacy (lm/W)	Voltage (DC)	Modules per chain
PV44-W65	white	6500	>75	1.46	224	154	24	55

### Dimensions



Lightbox depth (mm)	Space between modules (mm)	Installing density (pcs/m <sup>2</sup> )	Surface luminance range (cd/m <sup>2</sup> )
dz=120	dx=325, dy=325	16	1100-1350
dz=150	dx=350, dy=350	9	650-800
dz=200	dx=400, dy=400	4	300-450



Results may vary depending on face material properties. The data above was obtained using 3mm thick opaque acrylic with a 54% light transmittance. Lucoled advises to paint the inside of the box/letters in a matt white colour for achieving an optimal result. Always test before production.

### Power supply capacity

Item	PP2430	PP2460	PP24100	PP24150	PP24200
Power output	30W	60W	100W	150W	200W
PV40 modules / power supply	18	38	63	94	125
Maximum 55 modules per chain					

### Packaging

Artikel	Qty (pcs/bag)	Qty (bag/carton)	total qty (pcs/ carton)	Total weight (kg)	Carton size (LxWxH) in mm
PV44	55	10	550	12.0	528x376x272

## Technical specifications power supplies

### Power supply 12V

- Output Voltage 12V
- Working temperature range -40°C~+65°C
- Input voltage range 100VAC~240VAC
- Input frequency range 50~60Hz
- Protective characteristics Over-Current, Short-Circuit, Over Voltage and Over-Temperature protection
- IP rating IP68
- MTBF ≥70000hrs. MIL-HDBK-217F (25°C)
- Warranty 7 Years, first 2 years extended

Code	Output current	Output power	Input current	Efficiency	Size (l×w×h)	Weight
PP1260	5A	60W	0.65A/115V - 0.35A/230V	≥86%	184x44x34mm	0,52kg
PP12100	8.33A	100W	1.1A/115V - 0.55A/230V	≥90%	204x67x35mm	0,88kg
PP12150	12.5A	150W	1.6A/115V - 0.8A/230V	≥92%	234x68x35mm	1kg
PP12200	16A	200W	2.8A max	≥88%	295x60x36mm	1,1kg

### Power supply 24V

- Output Voltage 24V
- Working temperature range -40°C~+65°C
- Input voltage range 100VAC~240VAC
- Input frequency range 50~60Hz
- Protective characteristics Over-Current, Short-Circuit, Over Voltage and Over-Temperature protection
- IP rating IP68
- MTBF ≥70000hrs. MIL-HDBK-217F (25°C)
- Warranty 7 Years, first 2 years extended

Code	Output current	Output power	Input current	Efficiency	Size (l×w×h)	Weight
PP2430	1.25A	30W	0.35A/115V - 0.19A/230V	≥84%	187x41x29mm	0,5kg
PP2460	2.5A	60W	0.65A/115V - 0.35A/230V	≥87%	184x44x34mm	0,52kg
PP24150	6.25A	150W	1.6A/115V - 0.8A/230V	≥93%	234x68x35mm	1kg
PP24200	8.34A	200W	2.8A max	≥90%	295x60x36mm	1,1kg



IP68



#### Important:

- Lucoled recommends loading power supplies up to 90% of their maximum listed capacity.
- Select a power supply for your installation loaded at more than 50% of its maximum load to meet Power Factor regulations.
- Install with adequate ventilation and not in direct sunlight.
- Power supplies to be installed by trained and certified staff.

## Technical specifications power supplies

### Power supply 12V SLIM SHORT

- Output Voltage 12V
- Working temperature range -25°C~+45°C
- Input voltage range 200VAC~240VAC
- Input frequency range 50~60Hz
- Protective characteristics Over-Current, Short-Circuit, Over Voltage protection
- IP rating IP67
- MTBF ≥50000hrs. MIL-HDBK-217F (25°C)
- Warranty 7 Years, first 2 years extended

Code	Outpt current	Output power	Input current	Efficiency	Size (lxwxh)	Weight
PPXS1230	2,5A	30W	0.22A/200-240VAC	≥85%	183x35x20mm	0,25kg
PPXS1260	5A	60W	0.38A/200-240VAC	≥87%	183x35x20mm	0,25kg
PPXS12100	8.3A	100W	0.7A/200-240VAC	≥90%	203x35x20mm	0,32kg
PPXS24100	4.2A	100W	0.7A/200-240VAC	≥90%	209x35x20mm	0,32kg

Information on dimmable power supply units, dimmers, RGB controls etc. is available on request.



#### Important:

- *Lucoled recommends loading power supplies up to 90% of their maximum listed capacity.*
- *Select a power supply for your installation loaded at more than 50% of its maximum load to meet Power Factor regulations.*
- *Install with adequate ventilation and not in direct sunlight.*
- *Power supplies to be installed by trained and certified staff.*

## Notes warranty Power supplies

LUCOLED power supplies come with a 7 year carry-in warranty.

For the first 24 months LUCOLED can offer an extended warranty.

Under the extended warranty LUCOLED will reimburse client onsite labour, travel costs and other direct costs required to perform repair or replacement on LUCOLED products.

For the next 36 months LUCOLED can offer an extended labour assistance warranty. LUCOLED will reimburse client EUR 65,- as a contribution to labour cost per failed power supply, in addition to a replacement power supply.

Warranty starts from the date of delivery of the LUCOLED power supplies. Client needs to submit detailed records, including date of purchase, installation date, location, power supply serial numbers, module batch codes and proof of first flawless operation.

The following conditions apply:

- Product has been installed in accordance with local regulations and LUCOLED installation instructions by LUCOLED trained and certified installers.
- Product is being used for its intended use.
- Defective product needs to be returned to LUCOLED for analysis.
- Pictures of the defective product in installation need to be submitted as part of the claim.
- Prior to any repair LUCOLED becomes financially responsible for, LUCOLED reserves the right to verify that the defect was a result of defective material supplied by LUCOLED and not the result of installation workmanship, acts of God, misuse, abuse or any other reason that is not within the direct control or the responsibility of LUCOLED.
- The extended warranty is a system warranty and only valid if only LUCOLED components and approved accessories are used. Replacement of LUCOLED components with third party components, i.e. power supplies, will void the extended system warranty.

## Results illumination test EPS profiles

Profile	Dimension (mm)	Fabric	Translucence	Modules	Number of modules	Rows	Module s/ Row	Total Lumen	Cd./m <sup>2</sup>
EPS.LUMI Main body 120	1000 x 1000 x 120	Toplight	ca. 30%	PR40-W70	16	4	4	3120	ca. 400 cd
		SEEMEE (B1150/B3852)	ca. 17,52%/ 18,95%	PR40-W70	16	4	4	3120	ca. 375-475 cd
		Toplight	ca. 30%	PV44-W65	16	4	4	3584	ca. 277 cd
		SEEMEE (B1150/B3852)	ca. 17,52%/ 18,95%	PV44-W65	16	4	4	3584	ca. 360 cd

Profile	Dimension (mm)	Fabric	Translucence	Modules	Number of modules	Rows	Module s/ Row	Total Lumen	Cd./m <sup>2</sup>
EPS.LUMI Main body 150	1000 x 1000 x 150	Toplight	ca. 30%	PV44-W65	16	4	4	3584	ca. 294 cd
		SEEMEE (B1150/B3852)	ca. 17,52%/18,95%	BL71-W65	16	4	4	3584	ca. 280 cd

# Results illumination test EPS profiles

Profile	Dimension (mm)	Fabric	Translucence	Modules	Number of modules	Rows	Module s/ Row	Total Lumen	Cd./m <sup>2</sup>
EPS.LUMI Main body 180	1000 x 1000 x 180	Toplight	ca. 30%	BL71-W65	4	2	2	3400	ca. 370 cd
		SEEMEE (B1150/B3852)	ca. 17,52%/18,95%	BL71-W65	4	2	2	3400	ca. 400 cd
		Toplight	ca. 30%	PV44-W65	16	4	4	3584	ca. 243 cd
		SEEMEE (B1150/B3852)	ca. 17,52%/18,95%	PV44-W65	16	4	4	3584	ca. 240 cd

EPS Systems KG  
Obere Leimbach 6  
57074 Siegen/Germany  
Fon +49 (0) 271.33 88 29-00  
[info@eps-systems.de](mailto:info@eps-systems.de)  
[www.eps-systems.de](http://www.eps-systems.de)