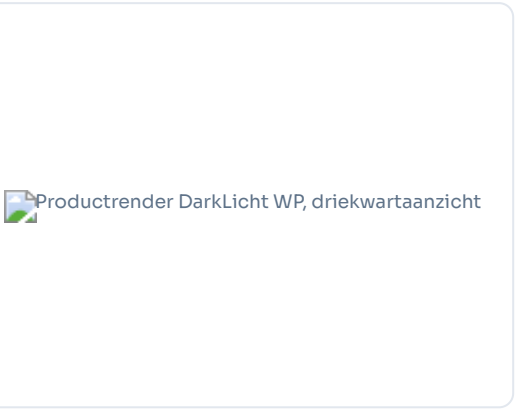
GLARE FREE LED WALL PACK

DarkLicht WP



Shown: DarkLicht WP Wallpack 100, 16,000 lm, cut off set to 69°.

CE · IP69K · IK08 · Class II · C5 ISO 9223 · Ta −45 … +50 °C · 90–305 VAC · internal driver · DALI-2 · sensor ready · ULOR 0 % · DarkSky DS-1 · 10–100 W settable

The wall pack is where obtrusive light usually starts. The DarkLicht WP mounts on the building and lights the ground in front of it, with a deep parabolic reflector that keeps the light off the facade, out of the windows beside it and out of the sky. Driver and control inside, power settable from 10 W.

LUMINOUS FLUX	POWER	EFFICACY
16,000 lm	10–100 W	160 lm/W
ULOR	**INGRESS**	**DRIVER**
0 %	IP69K	internal

Values apply to the standard version at 4000 K, Ta 25 °C, including reflector losses and driver consumption, with the cut off set to the standard position.

WHY IT IS SPECIFIED

The most complained about luminaire type, solved in the optic. A conventional wall pack throws light up the facade, into the windows above and across the boundary. The reflector removes the cause.

Power settable from 10 W, with the control inside. The 100 W version is settable from 10 to 100 W and the 60 W version from 10 to 60 W, over DALI-2, 0-10 V, PWM or NFC, with sensor integration available. One article covers an entrance, a dock and a perimeter route.

No mast, no foundation, no trench. Where a building edge is available, wall mounting removes the most expensive part of an exterior lighting project.

WHERE IT IS USED

- Building perimeters and service routes
- Loading docks and goods entrances
- Business park and commercial facades
- Fire escape routes and muster points
- External stairs and emergency exit doors
- Yard walls and boundary structures
- Under canopy and overhang positions
- Substation and plant room exteriors
- Waste and recycling compounds
- Camera support lighting on buildings
- Retrofit of conventional wall packs

VERSIONS

	Wallpack 100	Wallpack 60
Article base code	DRKW01	DRKW02
Luminous flux	16,000 lm	9,600 lm
Power	100 W, settable from 10 W	60 W, settable from 10 W
Efficacy	160 lm/W	160 lm/W
Supply	90–305 VAC	90–305 VAC
Driver	Internal BLD120	Internal BLD120
Dimensions	345 × 181 × 96 mm	345 × 181 × 96 mm
Weight	4.0 kg	4.0 kg

Both versions share one housing and one wall plate, so the output level is a setting rather than a different fitting on the wall.

Light output and optics

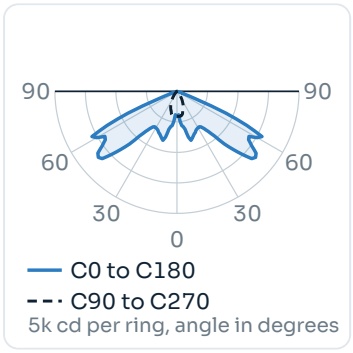
Values apply to the Wallpack 100 at Ta 25 °C with the cut off in the standard position. The whole DarkLicht line shares one light distribution, so the diagrams below apply to every type at its own luminous flux.

BEAM CHARACTERISTICS

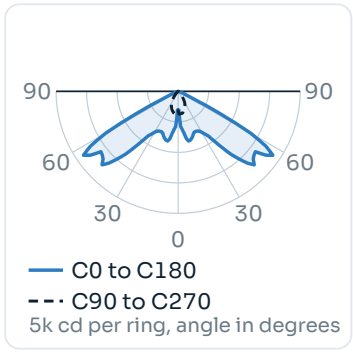
Setting	Distribution	Cut off	Beam angle 50 % of peak	Typical use
63°	Full cut off, asymmetric	63°	–	Tight boundaries, a site directly against housing or a carriageway
66° and 69°	Full cut off, asymmetric	66° and 69°	–	The usual settings for a yard or a car park
72°	Full cut off, asymmetric	72°	123°	Wider cover where the boundary allows it
75°	Full cut off, asymmetric	75°	132°	Maximum reach, sites without a sensitive boundary

The DarkLicht does not use lenses. A patented parabolic reflector throws the light forward and down and cuts it off completely above the set angle, which is set at the factory to the shield position given on the order, between 63 and 75 degrees. The two diagrams show the two shielding positions of the reflector. The whole DarkLicht line shares one light distribution, so one measured set covers every type in the range and a lighting designer works with one photometric behaviour at every mounting height.

LIGHT DISTRIBUTION



Shielding position 1



Shielding position 2

OBTRUSIVE LIGHT

ULOR at 0° tilt	**0 %**
Cut off angle	Factory set, shield position S1 to S5, 63° to 75°
Standards	NSVV guideline · DarkSky DS-1 · EN 12464-2 · EN 12193

A conventional floodlight lights everything in front of it, including the sky, the neighbour and the driver approaching the site. The DarkLicht range is built the other way around: a patented parabolic reflector, not a lens, cuts the light off completely above an angle that is set at the factory between 63 and 75 degrees and specified with the order. Upward light output ratio is 0 %, and the luminaires have been third party tested against the DarkSky DS-1 requirements at colour temperatures between 1700 and 2200 K.

COLOUR AND CONSISTENCY

Colour temperatures	5700 K, 5000 K, 4000 K, 3000 K, 2700 K, amber 2200 K, 1800 K, 1700 K
Tuneable white	4000 K with 2200 K and 1700 K, switchable in operation
DarkSky DS-1	Met at 1700 to 2200 K, third party tested
Colour rendering	Ra > 70 standard, optionally 80 or 90
Colour consistency	MacAdam step 3 or better
LED service life	TM-21 L90B05 > 103,500 h

Full specification

All values apply to the standard configuration at 25 °C ambient, including lens losses and driver consumption. A hyphen means the entry does not apply to that version.

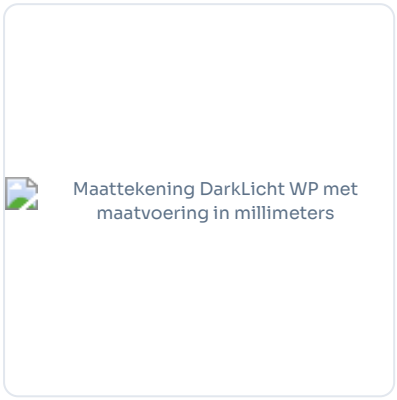
	Wallpack 100	Wallpack 60
PERFORMANCE		
Article base code	DRKW01	DRKW02
Luminous flux	16,000 lm	9,600 lm
Power consumption	100 W, settable from 10 W	60 W, settable from 10 W
Efficacy	160 lm/W	160 lm/W
Upward light output ratio	0 % at 0° tilt	
Cut off angle	63°, 66°, 69°, 72° or 75°, factory set, shield position S1 to S5	
ELECTRICAL AND DRIVER		
Supply voltage range	90–305 VAC, 50/60 Hz	
Current draw	0.83 A at 120 V · 0.45 to 0.36 A at 220 to 277 V	0.5 A at 120 V · 0.27 to 0.22 A at 220 to 277 V
Power factor at full load	> 0.9 at 70 to 100 % load	
Surge protection	6 kV line to line, 10 kV line to earth (IEC 61000-4-5)	
Dimming and control	0–10 V, PWM, DALI-2, or over NFC. Sensor integration available	
Power setting	10 to 100 W	10 to 60 W
Driver	Internal BLD120, no external box	
CONSTRUCTION		
Housing	Cast aluminium, less than 0.08 % copper	
Optic	Deep patented parabolic reflector, no lens	
Mounting	Facade mounting plate, aluminium, less than 0.08 % copper. Plate 344 mm wide, one Ø28 cable hole, six Ø5.2 holes on 315 mm and six on 200 mm	
Front	Impact resistant glass, IK08	
Protection class	Class II	
Ingress protection	IP66, IP67, IP68 and IP69K, each class tested separately	
Impact resistance	IK08 (IEC 62262)	
Corrosion class	C5 industrial and marine (ISO 9223)	
DURABILITY AND DIMENSIONS		
Ambient temperature	−45 to +50 °C	
LED service life	TM-21 L90B05 > 103,500 h	
Cable and termination	H07BQ-F, 4 cores (2 × 1.5 mm² + 2 × 0.5 mm²), 0.3 m	
Dimensions	345 × 181 × 96 mm	
Weight	4.0 kg	
Wind load	Not applicable to a wall mounted luminaire	
Warranty	5 years, extendable to 10 years under a maintenance agreement	

The power setting is a driver setting made over DALI-2 or NFC and can be changed after installation, which is what makes one article cover a dock door and a quiet perimeter route on the same building.

Mechanics, mounting and driver

All drawings are to scale and dimensioned in millimetres. DXF and STEP models are available on request.

HOUSING AND WALL PLATE



Dimensions	345 × 181 × 96 mm
Weight	4.0 kg
Mounting	Facade plate, aluminium
Front	Impact resistant glass, IK08
Optic	Deep patented parabolic reflector
Cable	0.3 m tail through the plate

CONTROL AND SETTING

Protocols	DALI-2, 0–10 V, PWM, NFC
Power setting	10 to 100 W, or 10 to 60 W
Sensor	Integration available
Set when	On site, and changeable afterwards
Cut off	63° to 75°, set mechanically

MOUNTING AND ACCESSORIES

Facade mounting plate	Aluminium, supplied as standard
Sensor	Integration available, specified at order
Ten year warranty	Under a maintenance agreement with JEL or an appointed party
Column version	DarkLicht D, for the yard in front of the building
Canopy version	Manta canopy, for a roof or a canopy
Machine version	DarkLicht S and DarkLicht Mini

INTERNAL DRIVER

Type	BLD120, inside the housing
External box	None
Case temperature	Tc −40 to +90 °C
Lifetime	≥ 100,000 h at Tc 75 °C
Control	0–10 V, PWM, DALI-2, or over NFC
Sensor	Integration available

One fitting, one cable, one setting. Driver and control inside the housing means the installation on a facade is a plate, a tail and a connection, with the power level set afterwards over NFC.

MOUNTING HEIGHT

Typical	Building perimeter, dock and escape route lighting
Cut off	Set so the light stops at the boundary, not at the wall
Above windows	The reflector keeps the facade above the luminaire dark
Retrofit	Replaces a conventional wall pack on the existing position

Ordering, standards and documents

ORDER CODE

Example **DRKW01-40K**

DarkLicht WP Wallpack 100, 4000 K

DRKW01 · DRKW02	Wallpack 100 at 16,000 lm · Wallpack 60 at 9,600 lm
57K · 50K · 40K · 30K · 27K	5700 K · 5000 K · 4000 K · 3000 K · 2700 K
22K · 18K · 17K	Amber 2200 K · 1800 K · 1700 K, DarkSky DS-1 range
TW	Tuneable white, 4000 K with 2200 K and 1700 K
Sensor	Specified at order, not part of the code

The cut off angle is a factory setting: give the shield position S1 to S5 with the order. The power level and sensor integration are specified at order as well.

COMBINATIONS

Tuneable white with DS-1 colours	Possible
Sensor with DALI-2	Possible
Power setting after installation	Over NFC
Ten year warranty	Under a maintenance agreement
DC supply	Not available
High temperature	Not available

STANDARDS AND VERIFICATION

Subject	Standard	Verification
Luminaire safety	IEC/EN 60598-1, -2-5	In-house test
EMC emission and immunity	EN 55015, EN 61547	Third party test
Ingress	IEC 60529 and ISO 20653. IP66, IP67, IP68, IP69K	In-house test
Impact	IEC 62262 IK08	In-house test
Corrosion	ISO 9223 class C5, industrial and marine	In-house test
Obtrusive light	NSVV guideline · DarkSky DS-1 at 1700 to 2200 K · EN 12464-2 · EN 12193	Third party test
Photometry	IES LM-79, IES files per optic	In-house test
Substances	RoHS, REACH	Self-declaration

BEFORE YOU ORDER

A sample luminaire to hang before you commit to a project quantity.

Five years warranty on the complete luminaire.

A DIALux calculation from our engineers, on your site drawing.

QR-code naar de productpagina van de DarkLicht WP

PRODUCT PAGE

IES files and revision history, DXF and STEP on request, and project references.
jelproducts.nl/en/products/darklicht-wp-wallpack

WHERE IT EARNS ITS PLACE

The DarkLicht WP earns its place along the building line. Perimeter routes, dock doors and escape routes are lit every night, they are the closest lighting on the site to the people who live next to it, and they are almost always the part of the project with the smallest budget. The WP is what lets that part be done properly without a mast, a foundation and a trench.

Notes. Values are for the standard configuration. The cut off angle is a factory setting and does not change the luminous flux, only where the light lands. The stated LED service life of L90B05 > 103,500 hours is the figure for the DarkLicht range and is lower than the 360,000 hours of the floodlight range; that is a property of this reflector platform. The JEL range is not ATEX or Ex certified.