



See better,
work better

LED Inspection lamps

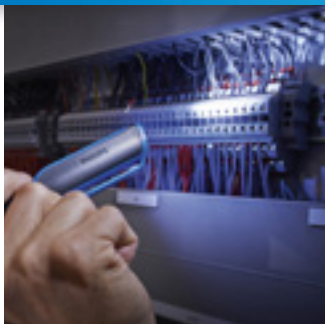


PHILIPS

LPL19B1

Penlight Professional

The portable inspection tool



Very intense white light for optimal vision

- ▶ High quality LEDs with 120-lumen light output
- ▶ Natural white light of 6000 K

Access very narrow cavities

- ▶ LED pointer on top: 20 lumens
- ▶ Small and compact

Up to every inspection job

- ▶ Water and dust proof: IP54
- ▶ Shock-resistant housing
- ▶ 11-hour battery autonomy



Now
120
lumens



LPL03RECHX1 / LPL04RECHX1

Penlight Premium

High-power LUXEON® Rebel LED lamp
in a compact format



Comfort vision for fatigue free work

- ▶ High-power LUXEON® LEDs with 120-lumen light output
- ▶ Natural white light of 6000 K
- ▶ Homogeneous and wide beam

See what remains hidden to others

- ▶ Strong LED pointer of 90 lumens

Robust, comfortable and hands-free

- ▶ Rotatable clip holder with integrated magnet
- ▶ Robust aluminium housing with soft grip

Fast charging and consistent light output

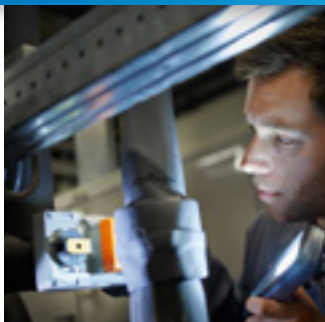
- ▶ Latest LFP battery technology (1200 mAh) delivers great battery life
- ▶ Up to 6-hour battery autonomy



LPL12X1 / LPL13X1

RCH20

Cordless professional lighting tool



Very homogeneous and white light

- ▶ 1 Strip LED with 200 lumens light output
- ▶ 6000 K color temperature for limited eye strain
- ▶ Broad illumination area of 70°

Hands-free use

- ▶ Powerful integrated magnet
- ▶ Retractable 360° hook

Quickly ready for use

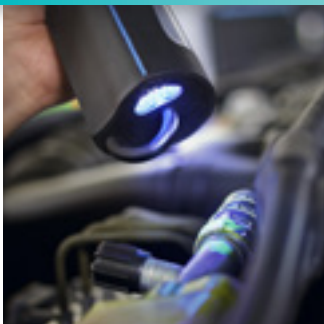
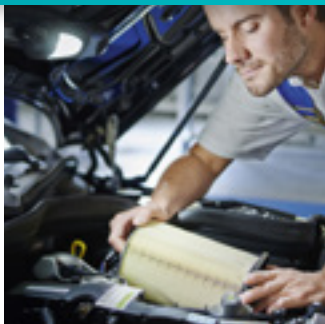
- ▶ Up to 3 hours operating time
- ▶ Fast recharging on docking station



LPL10UVX1 / LPL11UVX1

RCH30

Cordless professional lighting tool
with UV leak detector



More light for optimal vision

- ▶ 8 High-power LUXEON® LEDs with 220 lumens light output
- ▶ Increased beam angle of 70°

Robust and highly resistant solution

- ▶ Improved battery capacity: 4-hour battery autonomy
- ▶ Docking station for inductive charging
- ▶ High protection rating: IP66 and IK09

The easy to use and versatile tool

- ▶ Integrated magnet
- ▶ UV-light function to detect air conditioning leaks
- ▶ Smart shape for easy positioning



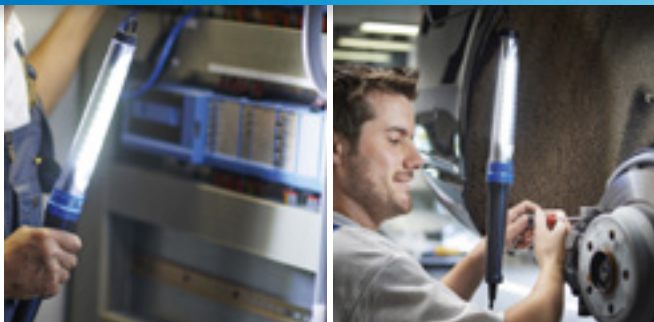
Improved
light output



LPL16X1

CBL20

Professional lighting tool



Improved light output

- ▶ 12 powerful LEDs with 300-lumen light output producing a 100° wide angle
- ▶ More natural light temperature of 6000 K

Robust and resistant

- ▶ Robust protective housing: IP54 and IK07
- ▶ Operates from -10° up to 40°

Comfortable and easy to use

- ▶ Comfortable soft grip
- ▶ Retractable hook



LPL14X1 / LPL15X1

CBL30

Professional lighting tool with focus light



Best-in-class light output

- ▶ 12 High-power LUXEON® LEDs with 330 lumens light output under a wide angle of 100°
- ▶ Strong LED pointer of 90 lumens
- ▶ 6500 K color temperature

Robust and ultra resistant

- ▶ Robust protective housing: IP54 and IK07
- ▶ Operates from -10° up to 40 degrees

Ultra slim and easy to use

- ▶ Ultra-slim design that fits that allows it to reach even the narrowest of spaces
- ▶ Versatile 360° magnetic hook to clip onto all surfaces
- ▶ Soft ergonomic grip



MDLS

Multidirectional lighting system



The Multidirectional Lighting System consists of three independent LED modules, each of which can be placed at the user's convenience to provide lighting wherever it is needed around a vehicle – or in a specific area.

Replaces four tools

- ▶ Use as light-box, torch, spotlight and light-bar

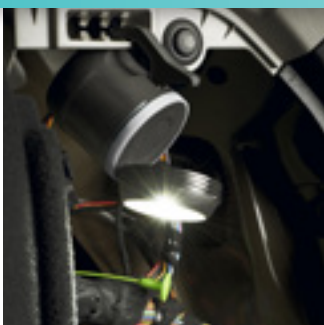
Designed for professional long-time repair jobs

- ▶ High-power LUXEON® Rebel LEDs
- ▶ Natural white light of 6 000 K
- ▶ Two light modes: 600 and 360 lumens
- ▶ Rotatable heads and adjustable lenses

Robust tools

- ▶ Robust protective housing: IP54 and IK07
- ▶ Robust toolbox for storing and recharging of the modules

All-in-one lighting system for professionals



High work
autonomy

Hands-free
lighting

Fast
recharging

Optimum
visibility



LED Inspection lamps

Ideal for brief inspection

120
lumens



120
lumens



200
lumens



220
lumens



300
lumens



330
lumens



600
lumens



LED work lamps

Ideal for maintenance and inspection work

300
lumens



330
lumens



600
lumens





Penlight Professional



IK07
Shock resistance



IP54
Water resistance



Grease and solvent
resistant



Battery



Clip



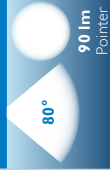
Ultra-slim



Overall performance



Penlight Premium



IK07
Shock resistance



IP54
Water resistance



Grease and solvent
resistant



Rechargeable



Clip, magnet



Ultra-slim



Overall performance



RCH20



IK07
Shock resistance



IP65
Water resistance



Grease and solvent
resistant



Rechargeable



Hook, magnet



Compact



Overall performance



RCH30



IK09
Shock resistance



IP66
Water resistance



Grease and solvent
resistant



Rechargeable



Hook, magnet



Compact



Overall performance



CBL20



IK07
Shock resistance



IP54
Water resistance



Grease and solvent
resistant



100-240V cable



Hook



Slim



Overall performance



CBL30



IK07
Shock resistance



IP54
Water resistance



Grease and solvent
resistant



100-240V cable



Hook, magnet



Ultra-slim



Overall performance



MDLS
Multidirectional lighting system



IK07
Shock resistance



IP54
Water resistance



Grease and solvent
resistant



Rechargeable



Clamp, magnet



3 modules



Overall performance

Compare our full range of



	Penlight Professional	Penlight Premium	RCH20
Light output (lumens)	130 lm	120 lm	200 lm
Beam angle	35 – 44°	80°	70°
Boost mode (lumens)	–	–	–
Pointer (lumens)	20 lm	90 lm	–
Color temperature (Kelvin)	6000 K	6000 K	6000 K
Number of LEDs	6 + 1	4 + 1	1 strip LED
UV light	–	–	–
Impact protection rating (IK)	IK07	IK07	IK07
Ingress protection rating (IP)	IP54	IP54	IP65
Rechargeable	–	✓	✓
Charging time (hours)	–	2 h	4 h
Operating time (hours)	up to 11 h	up to 6 h	up to 3 h
USB plug	–	✓	–
Cable (meters)	–	–	–
Holder	Clip holder	Clip holder, 80° rotatable	Retractable hook, 360° rotatable
Magnet	–	✓	✓
Power consumption (Watt)	1.3 W	6 W	2.4 W
Operating line voltage	3 × AAA = 4.5 V	100-240 V	100-240 V
Operating temperature	0°C – 40°C	-10°C – 50°C	-10°C – 40°C
Storage temperature	-20°C – 60°C	-20°C – 60°C	-20°C – 60°C
Product weight	70 g	90 g	360 g

of workshop lamps



RCH30	CBL20	CBL30	MDLS
220 lm	300 lm	330 lm	360 lm
70°	100°	100°	360° total illumination
–	–	–	600 lm
–	–	90 lm	–
6500 K	6000 K	6500 K	6000 K
8	12	12 + 1	3
✓	–	–	–
IK09	IK07	IK07	IK07
IP66	IP54	IP54	IP54
✓	–	–	✓
4 h	–	–	1 module: 1 h 3 modules: 2 h
up to 4 h	–	–	Normal: 5 h Boost: 3 h
–	–	–	–
–	5 m	6 m	–
Retractable hook, 360° rotatable	Retractable hook, 360° rotatable	Clip-on hook, 360° rotatable	Heavy duty clamping hook
✓	–	✓	✓
2.5 W	5 W	5 W	5.7 W
100-240 V	100-240 V	100-240 V	100-240 V
-10°C – 50°C	-10°C – 40°C	-10°C – 40°C	-30°C – 50°C
-20°C – 60°C	-20°C – 60°C	-20°C – 60°C	-20°C – 60°C
660 g	300 g	200 g	1550 g 3 modules + box

More about LEDs

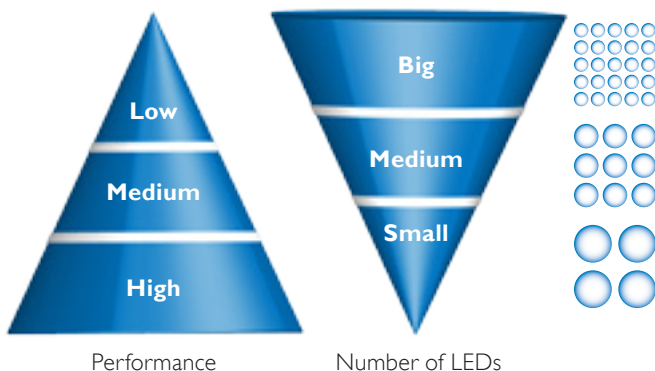
How to differentiate the different types of LEDs?



	Level 1 Low-power-LED	Level 3 Mid-power-LED	Level 5 High-power-LED
Power	Low: 0.1 W	Medium: 0.5 W	High: > 1 W
Flux	Low < 10 lumens	Medium < 20 lumens	High ~ 100 lumens
Temperature resistance	< 100°C	< 115°C	> 135°C
Shape	Dome, full plastic enclosure	High thick- ness, thick white housing	Low thickness, thin white housing

There are only a few suppliers producing high power LEDs.

Does the number of LEDs affect the lamp performance?



The better the LED, the fewer LEDs are needed.

Light quality

What do lumen and lux mean?

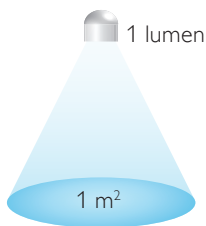
Luminous flux (lumen, lumens, lm)

Emitted amount of visible light in all directions

Intensity of illumination (lux, lx)

Luminous flux over a given surface

$$1 \text{ lux} = 1 \text{ lumen per m}^2$$



Lux values do not always give a clear indication of the light output: A laser, for example, has very high lux values but is relatively low in lumen output. Therefore, at Philips, we prefer to communicate about a real light output, measured in lumens.

What is color temperature?

White ≠ white!

The higher the color temperature, the whiter and cooler the light

Different light colors for different application fields

- ▶ 6000 K for maximum attention
- ▶ 10000 K extremely clear but sterile light



10000K



6000K



2000K

10000 K

9000 K

8000 K

7000 K

6000 K

5000 K

4000 K

3000 K

2000 K

1000 K

sky blue

warm white

Living room Office work Maintenance / repair works / Inspection

Comfort Long-time work



IP Ingress Protection

Degree of protection provided against the intrusion of solid objects, dust, accidental contact and water in electrical equipment.

1st digit: solid particle protection

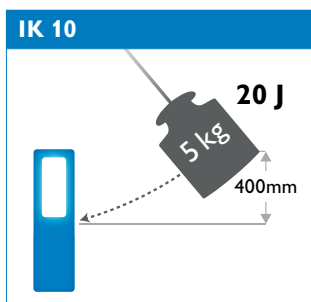
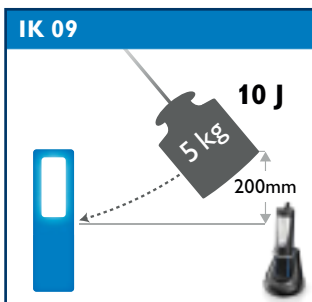
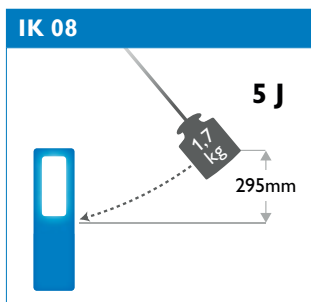
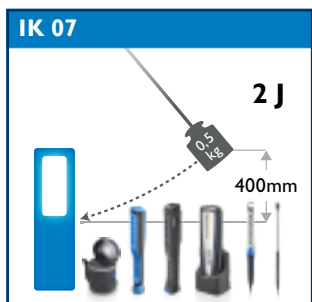
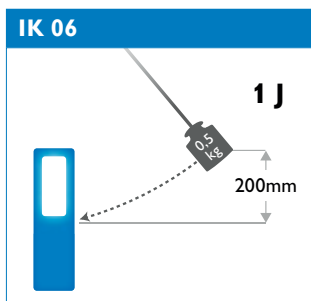
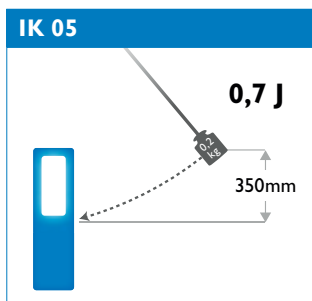
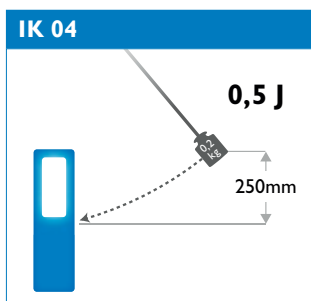
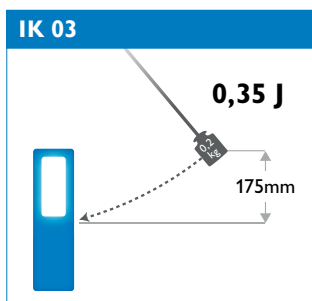
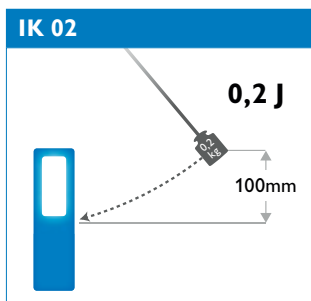
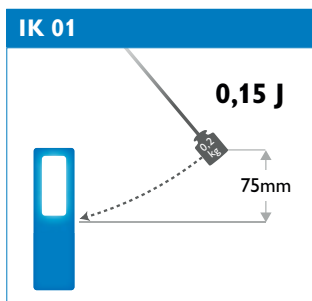
Level	Object size	
IP 1X	> 50 mm	
IP 2X	> 12.5 mm	
IP 3X	> 2.5 mm	
IP 4X	> 1 mm	
IP 5X	Dust protected	
IP 6X	Dust tight	

2nd digit: liquid ingress protection

Level	Protected against	
IP X1	Dripping water	
IP X2	Dripping water when tilted up to 15°	
IP X3	Spraying water	
IP X4	Splashing water	
IP X5	Water jets	
IP X6	Powerful water jets	
IP X7	Immersion < 1 m	
IP X8	Immersion > 1 m	

IK Impact Resistance

Degree of protection provided by enclosures for electrical equipment against external mechanical impacts.



Ordering information

Order Entry

Penlight Professional

LPL19B1

Penlight Premium EU

LPL03RECHX1

Penlight Premium UK

LPL04RECHX1

CBL20 EU

LPL16X1

CBL30 EU

LPL14X1

CBL30 CH

LPL15X1

RCH20 EU

LPL12X1

RCH20 UK

LPL13X1

RCH30 EU

LPL10UVX1

RCH30 UK

LPL11UVX1

MDLS

LPL073MODX1

MDLS spare part

LPL05SPAREX1





EAN1	EAN3	GOC	MOQ
8 727 900 388 190	8 727 900 388 206	38819031	6
8 727 900 387 520	8 727 900 387 537	38752033	2
8 727 900 387 544	8 727 900 387 551	38754433	2
8 727 900 389 548	8 727 900 389 555	38954831	6
8 727 900 389 500	8 727 900 389 517	38950031	6
8 727 900 389 524	8 727 900 389 531	38952431	6
8 727 900 389 463	8 727 900 389 470	38946331	6
8 727 900 389 487	8 727 900 389 494	38948731	6
8 727 900 389 425	8 727 900 389 432	38942531	6
8 727 900 389 449	8 727 900 389 456	38944931	6
8 727 900 387 704	8 727 900 387 711	38770466	1
8 727 900 387 667	8 727 900 387 674	38766733	2

Contact

Visit our website www.philips.com/automotive

Toll-free number  **00 800 7445 4775**



