Information

An overview of LED products and solutions

PHILIPS

An overview of LED products and solutions

'This brochure offers a window on the world of Philips LED lighting. This side of the brochure explores Philips' portfolio of state-of-the-art LED solutions, the tools used to achieve these spectacular results. The other side of the brochure is intended to provide inspiration, by outlining a variety of projects where LED lighting has helped turn visionary design into practical reality.'

We take LED lighting seriously

Philips is the world's leading manufacturer of high-power LEDs and a pioneer in the use of solid-state lighting solutions for everyday applications, including automotive lighting, computer displays, LCD televisions, signage and signaling – and, of course, general lighting.

Our patented LUXEON® Power Light sources are the first to combine the brightness of conventional lighting with the small footprint, long life and energy efficiency.
We manufacture billions of LEDs annually and produce the world's brightest red, amber, blue, green and white LEDs.

Our latest addition – LUXEON® K2 LED – offers significant increases in luminous flux, permitting a much broader range of solid-state lighting applications than ever before.

Combined with creative design, this has laid the foundation for a new generation of cutting-edge luminaires.

And this is just the beginning…

Accent
Beamer LED, Spot LED, Accent LED

Wall / Grazing
LEDline², Grazer LED, Wallwasher LED, LED module systems

Front
Dynaflood LED, LEDflood

Contour
Batten LED, Flexible Tube LED

Water (Spa)
Underwater LED

Pannel
Origami LED

Guidance
Marker LED, Wallmarker LED, Amazon LED

Pedestrian
Citywing

Controls
ColourChaser (DMX)

Customized solutions

Various
Deco LED, LED String, Affinium LED freezer lighting, Imageo, dLine, Candeo

Beamer LED, spot on

Beamer LED is a projector luminaire for outdoor architectural floodlighting. It incorporates a single high-power LED and is designed for light projection over distances up to 30 m, with perfect control of spill light.

The aluminum housing and U-bracket ensure a robust, solid construction, enabling the Beamer LED to withstand harsh outdoor conditions.
This projector offers maximum aiming flexibility – Zoomspot adjustment, beam rotation, tilt and pan – ensuring complete freedom of installation.
In addition to white and saturated colors, thanks to the new Solgel filter technology light blue and yellow gold are also possible.
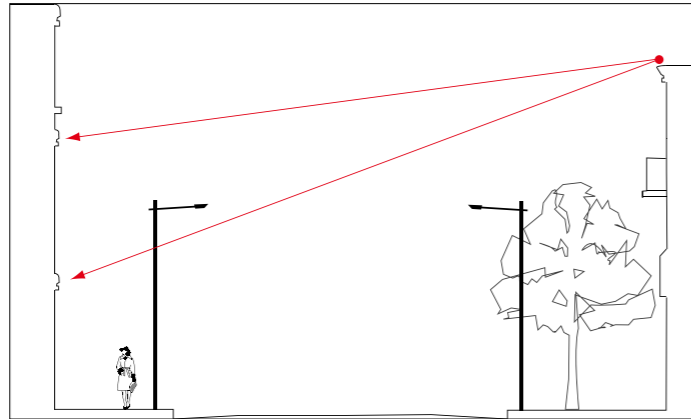Beamer LED is available in surface-mounted and pole-mounted versions.
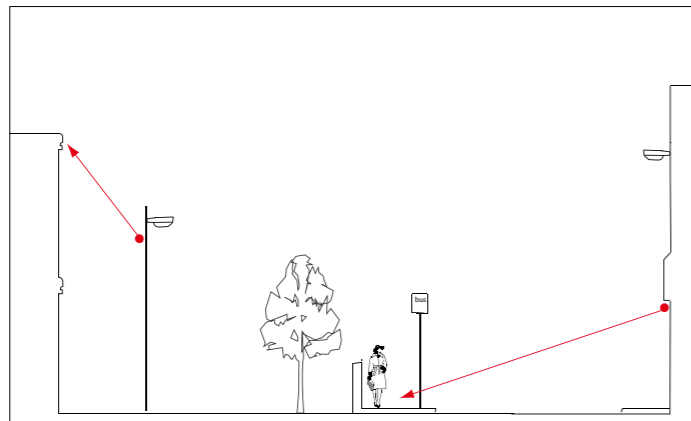
A versatile beam
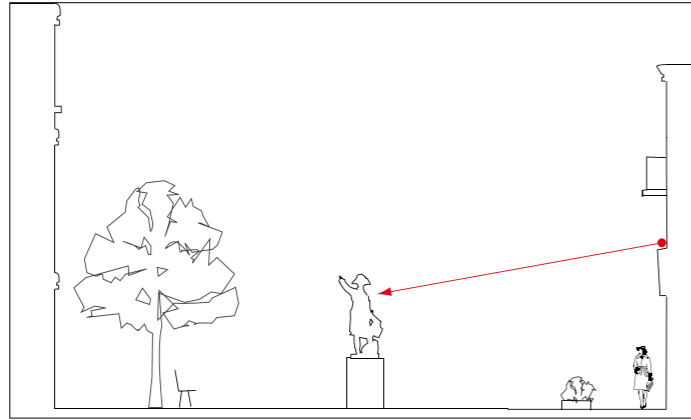
Spot (2x1.1°)
Light projection for long distances of up to 30 m. Used for places that are difficult to access or facades where it is not permitted for luminaires to be mounted.
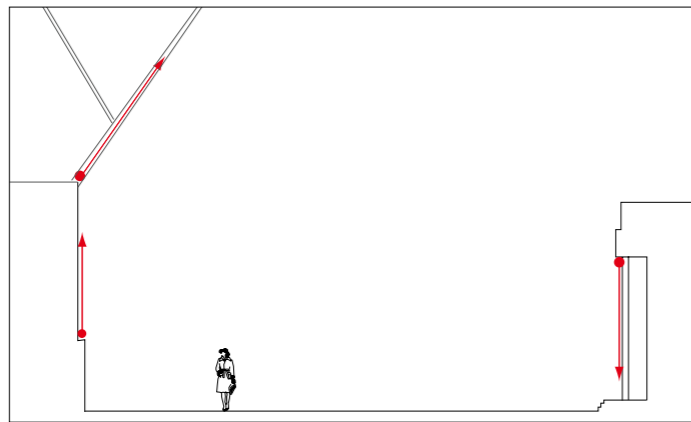
Zoomspot (2x1.7° to 2x5.8°)
Freedom to adjust the size of the spot in relation to the object and the distance. Recommended distance is between 10 and 20 m.
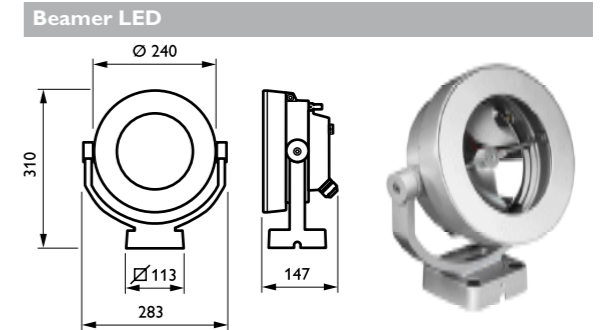
Line (2x1.3° by 2x25°)
Projection of a line that is 10-50 cm in width depending on the distance and is adjustable in length. For creating patterns or underlining objects or edges.

Grazing
Light with a close offset to the object. The beam of light reaches up to 20 m and is approximately 15 cm wide. For underlining vertical or horizontal architectural elements.

Technical information Beamer LED

Beamer LED

Ø 240
310
Ø 113
283
147

Type	Spot (RND2)
	Zoomspot (RND2-6)
	Line (LIN6-50)
	Grazer (C-NB)
Light source	1 × LUXEON® / optical module
	Radiation pattern: lambertian
	350 mA / 750 mA
Light color	White (WH), red (RD), green (GN), blue (BL), amber (AM), cyan (CY). White with Solgel filter: light blue (LBL), light transmission 55%. White with Solgel filter: Yellow (YE), light transmission 67%. White with dichroic filter: Warm White 3 400 K, light transmission 60%
Power supply	110 - 240 V AC / 50 - 60 Hz with integrated gear
	Consumption < 5 W
Operating temperature	- 20°C < Ta < +35°C Outdoor
Clasification	IP66
	Class I and Class II
	IK08
Material	Housing and U bracket: die-cast aluminum (anodic grey paint RAL 9006)
	Optic: anodized parabolic reflector, lenses and prisms in methacrylate
	Cover: tempered glass
	Cover frame: brushed stainless steel
Remarks	Flexible positioning and aiming possibilities
	horizontal axis: -170 to +170° (cable restriction)
	vertical axis: -90 to +90°
	Beam rotation: (external ring on the housing)
	-180 to +180°
	Through wiring; two M20 cable glands
	(3 × 2,5 mm²)
	Thermal management system for long life time;
	50.000 hours, 70% lumen maintenance

Small delight
Spot LED 1 x K2 is a real revolution in accent lighting. With an adjustable projector head of only Ø 31 mm, this is an incredibly small luminaire. Spot LED 1 x K2 is available as a complete range - surface-mounted, recessed, and wall-mounted.

Sparkling and sustainable
Spot LED 3 x K2 offers incredible energy and maintenance savings in hospitality applications and adds sparkle to retail environments. Maximizing light output and efficiency, it incorporates 3 x LUXEON® K2 high-power LEDs and is available as recessed and track-mounted, There is a choice of square and round ceiling rings for fixed recessed versions to add that finishing touch.

Spot LED

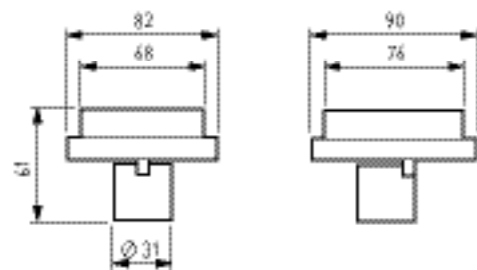Spot LED is an innovative and stylish family of projectors, track and downlights featuring the latest LED technology. It incorporates the LUXEON® K2 high-power LED, which delivers more light than ever before, and has no UV/IR radiation.

iF
product
design
award

2007

Spot LED surface-mounted

Spot LED recessed and semi-recessed

Spot LED recessed

Spot LED track mounted

	Spot LED recessed	Spot LED track mounted
Types	Recessed fixed with separate transformer (included): Round : BBG 450 Square : BBG 451	Track mounted spot with adaptor suitable for mounting on minorail track BRG440
Light source	3 × LUXEON ® K2, 9.9 W (12.4 W including transformer losses)	3 × LUXEON ® K2, 9.9 W
Light Color	Cool white	Cool white
Power supply	220-240 V / 50 Hz	220-240 V / 50 Hz
Optic	Narrow beam: 2 × 5° Medium beam: 2 × 12.5°	Narrow beam: 2 × 5° Medium beam: 2 × 12.5°
Classification	IP20	IP20
Materials	Housing: brushed aluminium and polycarbonate Optics: polycarbonate Ceiling ring: brushed aluminum	Housing: brushed aluminium and polycarbonate Optics: polycarbonate
Accessories		Track in brushed aluminium finish ZRG 440 L1000/L2000 (compatible with accessories from Minorail Express RCS800, use minimum 3 pcs. Spot LED with ZCS800 TPS, 150 VA transformer power supply)
Remarks	Lifetime 50.000 hours, 70% lumen maintenance	Lifetime 50.000 hours, 70% lumen maintenance

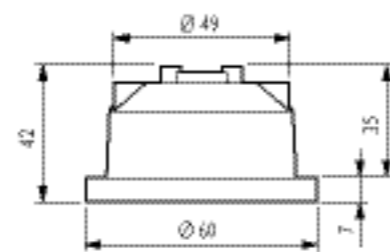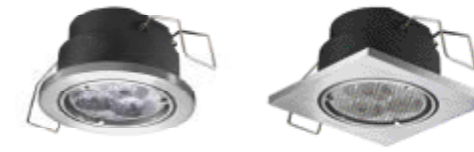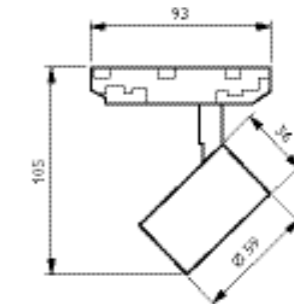|	With integrated transformer:	Semi-recessed adjustable:
Types	With integrated transformer: 1 × LED: BCG401 2 × LED: BCG402 1 × LED wall: BWG401 1 × LED desk: BDG400 (transformer is integrated in mains plug) 1 × LED: BCG400 (delivered with separate transformer)	Semi-recessed adjustable: 1 × LED square: BBG401 1 × LED round: BBG400 2 × LED square: BBG402 Recessed fixed: 1 × LED round: BBG410 1 × LED square: BBG411
Light source	1 × Luxeon® K2 or 2 × Luxeon® K2, 4 W	1× Luxeon® K2, 4 W
Light color	Cool white or blue (BWG401 only in cool white)	Cool white or blue
Power supply	220-240 V AC / 50 - 60 Hz	220-240 V AC / 50 - 60 Hz Separate transformer included
Optic	Narrow beam: 2 × 5° Medium beam: 2 × 12.5° (BWG401 only in 2 × 12.5°)	Narrow beam: 2 × 5° Medium beam: 2 × 12.5°
Classification	IP20	IP20
Materials	Housing: brushed aluminum and polycarbonate Optic: polycarbonate Base plate: brushed aluminum and polycarbonate	Housing: brushed aluminum and polycarbonate Optic: polycarbonate Ceiling ring: brushed aluminum
Remarks	Lifetime: 50,000 hours, 70% lumen maintenance	Lifetime: 50,000 hours, 70% lumen maintenance

Product shown: BBG450
All dimensions in mm

Product shown: BBG440All
dimensions in mm

Product shown: Spot LED BCG400
All dimensions in mm

Product shown: Spot LED BBG401
All dimensions in mm

AccentLED, accentuate
without the heat

When you choose Philips AccentLED lamps as a lighting solution, you get more than just new technology. AccentLED lamps offer energy-saving benefits of up to 80% compared with other technologies and have a highly intense and clearly defined beam, which does not generate heat.

If you want minimum maintenance but maximum effect on heat-sensitive products, choose Philips AccentLED.

AccentLED E27	AccentLED GU10	AccentLED MR16

| AccentLED Lamps	
Type	Low-voltage (MR16 GU5.3) and mains-voltage (GU10 and E27) LED reflector lamps for replacement of incandescent and halogen reflector lamps in specific indoor applications
Light source	1x LUXEON® 12W power LED
Light color	Warm white (3000K)
	Cool white (5500K)
Beam angle	10°
Beam intensity	240-335 cd
Remarks	The MR16 type is dimmable (6-12 V).
	Lifetime is 35,000 hrs. lumen maintenance.

LEDline², composing with light

LEDline² is a LED-based range of linear floodlights that can be used to illuminate and enhance both contemporary and historical architecture. LEDline² features high-power Luxeon® LEDs, dedicated optics, high-quality materials and lighting electronics. And the RGB / AWB version offers dynamically changing colours.

The linearity of LEDline² is designed to complement the geometry of the architecture, turning surfaces into 'curtains' of light and transforming light into objects. LEDline² RGB / AWB is compatible with DMX and enables dynamic color changes.

LEDline² features the latest technical innovations to facilitate installation, including an integrated power supply and a sealed-for-life optical unit.

The LEDline² AWB delivers the full palette of natural white light, revealing the beauty of the architectural materials used.
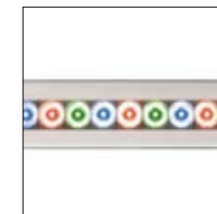
LEDline² RGB   LEDline² AWB   LEDline² Mono

New image
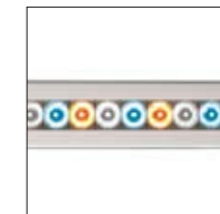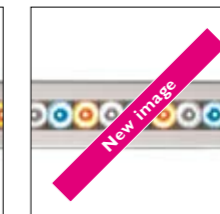
Containing high-power Luxeon® LEDs, the LEDline² provides precise
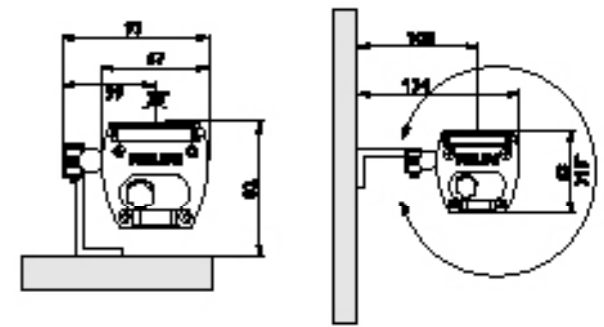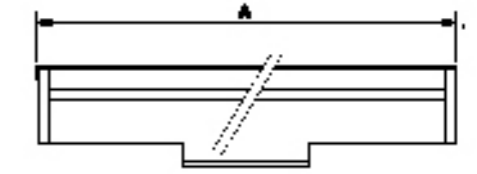light distribution and uniform illuminance, and is ideal for scene setting.
LEDline²'s unique collimating optic generates unrivalled power, enabling
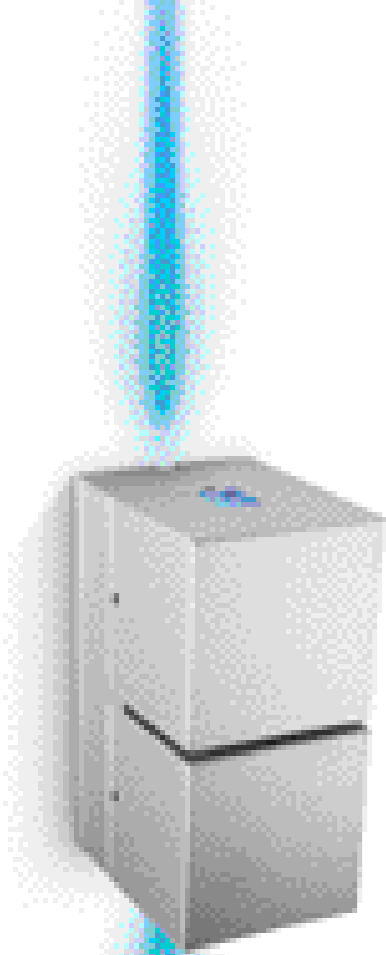the designer to create a strong, continuous wash of light.

Lighting effects of LEDline²

Medium beam
2 × 15°

Façade
Wash of light covering 7 m

Wide beam
2 × 27°

Façade
Wash of light covering 5 m

LEDline²

Types	Recessed:
	12 × LED: BBS713
	24 × LED: BBS176
	Surface mounted:
	6 × LED: BCS716
	12 × LED: BCS713 / BCS722
	24 × LED: BCS716
	48 × LED: BCS722
	3 × 12 × LED: BVS733
Light source	Luxeon® LED
	Max. 65 W per meter
Light color	Mono color: amber (AM), green (GR), red (RD), blue (BL),
	white (WH)
	Tri-color: red, green and blue (RGB), amber, white and blue (AWB)
Power supply	230-240 V AC / 50-60 Hz (integrated driver)
Optic	Symmetrical collimating lenses
	Narrow beam 2 × 3°
Complementary optic	Medium beam (2 × 15°)
	Wide beam (2 × 27°)
Driver	DMX driver integrated
Controls (optional)	ColourChaser DMX, ColourChaser Wheel
IP	IP66
Materials	Housing: anodized aluminum
	End caps: polycarbonate (grey)
	Cover: PMMA
	Bracket: anodized aluminum
Dimensions (HxWxL)	63 × 67 × 300 (A) mm*
	63 × 67 × 600 (A) mm*
	63 × 67 × 1200 (A) mm*
	* Length depends on the amount of LED's and the beam width.
	For detailed information, please visit our e-catalogue
Remarks	Tilt: wall-mounted 315°
	Tilt: surface-mounted 30°
	Lifetime 50.000 hrs, 70% lumen maintenance

Product shown: LEDline² RGB
BCS716 and BCS722
All dimensions in mm

Grazer LED,
for striking light patterns

Grazer LED is a family of innovative grazing luminaires with LUXEON® inside. This plug-and-play range enables grazing concepts on walls and ceilings, and these can be adjusted to create vertical, inclined or horizontal grazing light patterns.

The Grazer LED luminaires are impact-resistant and cool to the touch, and also feature low power consumption. Grazer LED is available in cube (single and twin) and carousel (single and twin) versions. There are two accessories for the single cube version – a refractor and a luminance accessory.

Grazer LED rectangular		**Grazer LED round**
Type	BCG421 / BCG422	BCG431 / BCG432
Light source	1 x LUXEON® I or 2 x LUXEON® I	1 x LUXEON® I or 2 x LUXEON® I
Light color	Blue, amber, cool white, red, green	Blue, amber, cool white, red, green
Power supply	100-240 V / 50-60 Hz	100-240 V / 50-60 Hz
	Integrated transformer	Integrated transformer
	Power consumption: 1.7 W (single) / 2.4 W (twin)	Power consumption: 1.7 W (single) / 2.4 W (twin)
Classification	IP20	IP20
	Class I	Class I
	Glow wire test 850° C	Glow wire test 850° C
	EN 60598	EN 60598
Material	Housing: aluminium	Housing: aluminium
	Optics: polycarbonate	Optics: polycarbonate
Remarks	Life-time 50,000 hrs, 70% lumen maintenance	Life-time 50,000 hrs, 70% lumen maintenance
	Luminance accessory (ZCG421 O)	
	Refractor accessory (ZCG 421 P)	
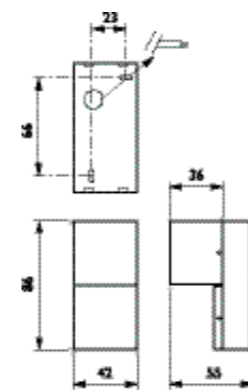
Product shown:
BCG421
All dimensions in mm
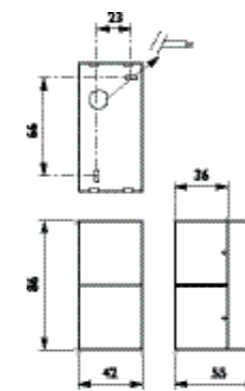
Product shown:
BCG422
All dimensions in mm
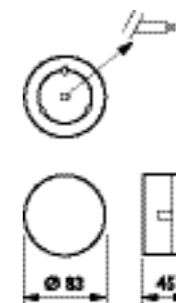
Product shown:
BCG431 / BCG432
All dimensions in mm

Benefits

Saturated colours - maximum visual effect
Dynamic lighting (excl. on/off)
Long life - lower cost of ownership
Robustness - reliability, shock and vibration-proof
Safe operation; 24 V DC

Applications

• Shop lighting, hospitality, city beautification
• Architectural lighting and particularly wall-washing effects

LED Module 1 × 1
Narrow beam

LED Module 2 × 2
Medium wide beam

LED Module 1 × 4
Line beam

LED module systems, design flexibility

A LED Module is a highly versatile, self-contained modular lighting sub-system – almost any configuration is possible. You can confidently integrate LED Modules into your next architectural design, because we have taken care of optical, thermal and mechanical optimization. Each LED Module is available with different optics (for narrow, medium and line beams) and can operate on a Xitanium™ or LED power driver.

To create various lighting effects we offer three ranges

1. For dynamic multicolor changing effect: LED module system RGBA
2. For dynamic single color effects: LED module system
3. For static lighting: LED Modules on/off

LED module system RGBA		**LED module system**	
Range	1 type	40 different types	
Light source	LUXEON® LEDs of 1 or 3 W	LUXEON® LEDs of 1 or 3 W	
LED color	RGBA combined in one module	One single color per module	
		Red, green blue, amber, cool white, warm white	
Power supply	LED power driver 20, 60, 100 W, or Xitanium 40, 67 and 80 W	LED power driver 20, 60, 100 W, or Xitanium 40, 67 and 80 W	
Control interface	DALI / DMX	DALI / DMX	
Optics	Medium, narrow or line beam	Medium, narrow or line beam	
Materials	Housing: aluminum, Optics: UV-stabilized polycarbonate	Housing: aluminum, Optics: UV-stabilized polycarbonate	

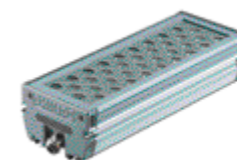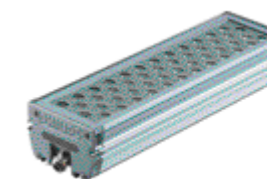| **LED module system on/off**	
Range	17 different types
Light source	LUXEON® LEDs of 1 or 3 W
LED color	One single color per module
	Red, green blue, amber, cool white, warm white
Power supply	LED power driver 20, 60, 100 W, or Xitanium 40, 67 and 80 W
Control interface	-
Optics	Medium, narrow or line beam
Materials	Housing: aluminum, Optics: UV-stabilized polycarbonate

Dynaflood LED, stunning wall-washing

Dynaflood LED is a wall/surface-mounted floodlight that harnesses the power of LUXEON® I LEDs to create attractive wall-washing effects. Featuring four lines of LEDs (9, 12 or 15) in a compact aluminum housing, it offers a high lumen output and an endless choice of colors – cool white, warm white, blue, red, green, amber and RGB mixing

DynaFlood 36 LEDs

Type	BCS835
Light source	4 × 9 × Luxeon I™
Lamp colour	RGB
	Mono: Red, amber, green, blue, cool white or warm white
Power supply	24 V DC
Consumption	Max 42 W
Controls (optional)	RGB: ColourChaser DMX, Colour Chaser Wheel
	Mono: Switch only
Optic	12° (30° and 50° upon request)
Operating temperature	-20°C < Ta < 35°C
Classification	Class III, IP65, IEC60598-I
Lifetime	50 000 hrs (30% lumen depreciation)
Materials	Housing: anodized extruded aluminium
	Bracket: galvanized steel
	End cover: high pressure die-cast aluminium
Remarks	Installation: Plane 60° vertically
	Surface mounting 130°
	Lifetime 50.000 hrs., 70% lumen maintenance

DynaFlood 48 LEDs

Type	BCS845
Light source	4 × 12 × Luxeon I™
Lamp colour	RGB
	Mono: Red, amber, green, blue, cool white or warm white
Power supply	24 V DC
Consumption	Max 56 W
Controls (optional)	RGB: ColourChaser DMX, Colour Chaser Wheel
	Mono: Switch only
Optic	12° (30° and 50° upon request)
Operating temperature	-20°C < Ta < 35°C
Classification	Class III, IP65, IEC60598-I
Lifetime	50 000 hrs (30% lumen depreciation)
Materials	Housing: anodized extruded aluminium
	Bracket: galvanized steel
	End cover: high pressure die-cast aluminium
Remarks	Installation: Plane 60° vertically
	Surface mounting 130°
	Lifetime 50.000 hrs., 70% lumen maintenance

DynaFlood 60 LEDs

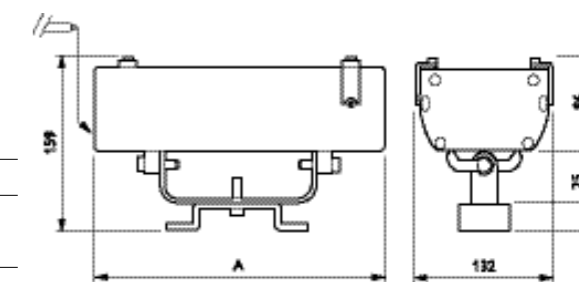| Type	BCS855
Light source	4 × 15 × Luxeon I™
Lamp colour	RGB
	Mono: Red, amber, green, blue, cool white or warm white
Power supply	24 V DC
Consumption	Max 70 W
Controls (optional)	RGB: ColourChaser DMX, Colour Chaser Wheel
	Mono: Switch only
Optic	12° (30° and 50° upon request)
Operating temperature	-20°C < Ta < 35°C
Classification	Class III, IP65, IEC60598-I
Lifetime	50 000 hrs (30% lumen depreciation)
Materials	Housing: anodized extruded aluminium
	Bracket: galvanized steel
	End cover: high pressure die-cast aluminium
Remarks	Installation: Plane 60° vertically
	Surface mounting 130°
	Lifetime 50.000 hrs., 70% lumen maintenance

Product shown: BCS835-36, BCS835-48 and BCS835-60

All dimensions in mm

	A
BCS835-36	350
BCS835-48	450
BCS835-60	550

LEDflood,
enhancing structures

LEDflood is a distinctive outdoor floodlight for illuminating and enhancing structures with light.
High-efficiency collimating optics fit each LED, ensuring precise light distribution and uniform illuminance over longer distances.

LEDflood is available with a fixed rotational beam (2 x 3°) or fixed linear beam (2 x 3° / 2 x 27°) for grazing or spot/linear lighting.
In combination with the patented Zoomspot system, the beam can be adjusted continuously from 2 x 3° to 2 x 15° within a single floodlight.
Flexible aiming (tilt and pan) ensures freedom of installation.

The control platform for LEDflood is DMX, enabling dynamic light.
The color combinations WH/AM , BL/WH and AWB deliver the full palette of natural white, revealing the beauty of the architectural material used. The RGB color combination delivers the full range of colors from saturated to pastels and enables dynamic color changes.
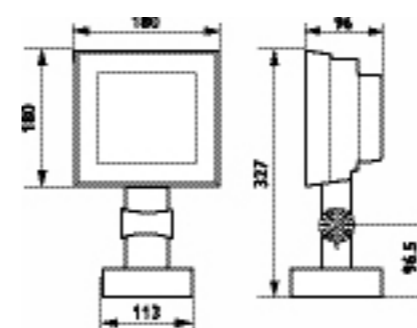
LEDflood is suitable for wall and surface mounting and, upon request, pole mounting.

Product shown: LEDflood RGB BCP731

All dimensions in mm

Zoomspot   Beam locker

LEDflood surface-mounted	
Type	BCP731 mono
	BCP732 bi-color
	BCP733 tri-color
Light source	9 x Luxeon® K2 (amber, red, white, blue, green)
	Radiation pattern, lambertian 350 mA / 1 A
Light color	Mono color: white (WH), blue (BL), amber (AM), red (RD) and green (GN)
	Bi-color: white and amber (WH/AM), blue and green (BL/GN), white and blue (WH/BL)
	Tri-color: amber, white and blue (AWB), red, greenand blue (RGB)
Power supply	220-240 V AC / 50-60 Hz with remote gearbox
Optic	Collimating lenses:
	- without Zoomspot (2x3°)*
	- with Zoomspot (Spot from 2x3° to 2x15°)
	- with linear prism (vertical and horizontal line from 2x3° to 2x27°)
Driver	DMX driver integrated
Controls (optional)	ColourChaser DMX, ColourChaser Wheel
Classification	IP66, IK08
	Remote gearbox: IP65
Materials	Housing: die-cast aluminum (anodic grey paint RAL 9006)
	Optic: collimating lenses in methacrylate
	Cover: tempered glass with silver screen print around optic (anodic grey paint RAL 9006)
	Cover frame: brushed stainless steel
	Remote gearbox: die-cast aluminum (anodic grey paint RAL 9006)
Dimensions (HxWxL)	327 x 113 x 180 mm
Remarks	Thermal management system
	Remote Gearbox includes two external cable glands, PG8 for DMX in / DMX out
	Adjustment:
	Horizontal axis: -170° to +170°
	Vertical axis: -67.5° to + 67,5°
	Lifetime 50 000 hrs., 70% luminance
	* Not available for RGB and AWB
	** Except for linear glass version

iF product design award 2006

Product shown:

Batten LED BCS103, BCS106, BCS109 and BCS112

All dimensions in mm

	A
BCS103	300
BCS106	575
BCS109	890
BCS112	1185

Batten LED, ideal for scene setting

Batten LED is a mono-color luminaire available in five standard color versions – red, green, blue, amber and white – for dynamic ambience, façade lighting and luminance applications.

It is ideal for scene setting with color, with the light appearing to become an integral element of the architecture. It can be used to power-wash a surface from 1m up to 3 m, to reveal form and texture. The batten form of the luminaire minimizes the dark area between adjoining fixtures.

The low-power, high-efficiency Batten LED is available in four versions, with 24, 48, 72 and 96 individual LEDs respectively.

Batten LED

Type	BCS103 / BCS106 / BCS109 / BCS112
Light source	BCS103: 24 × LED
	BCS106: 48 × LED
	BCS109: 72 × LED
	BCS112: 96 × LED
Light color	Red, green, blue, white, amber
Power supply	24 V DC
IP	IP65
Material	Housing: PMMA
	Clips: steel
Dimensions (HxWxL)	BCS103: 85 × 50 × 300 (A) mm
	BCS106: 85 × 50 × 595 (A) mm
	BCS109: 85 × 50 × 890 (A) mm
	BCS112: 85 × 50 × 1185 (A) mm
Remarks	Sealed for life
	Remote Power supply
	Lifetime 30 000 hrs., 70% luminance
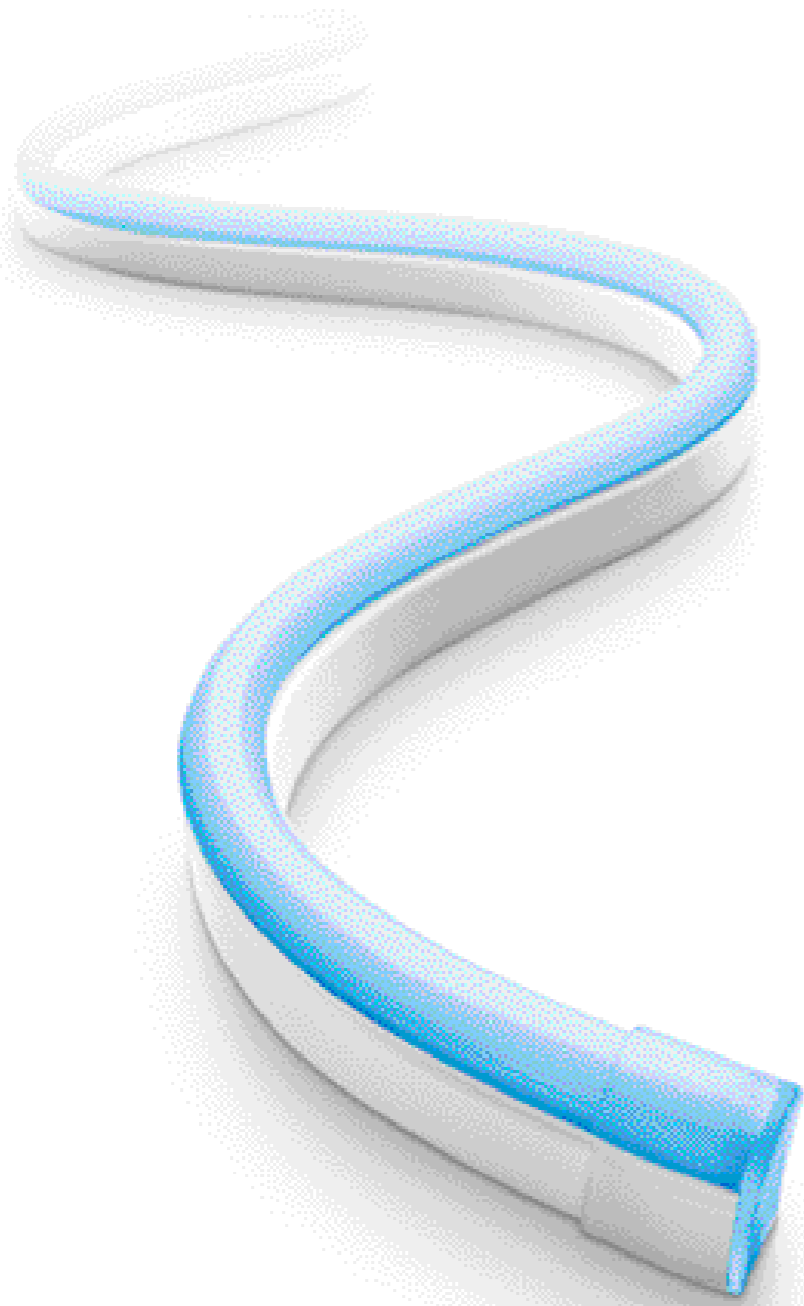
Flexible tube LED, bendable light

The Flexible tube LED is a linear luminaire that creates a
clean and smooth colored line. 79 LEDs per meter produce
a high luminosity on the surface of the tube.

**Its miniaturized, flexible structure and uniform luminance make it ideal
for integration in architectural elements. The tube can be customized
in length on site and is highly impact-resistant.**

Flexible tube LED

Type	BCG200
Light source	79 x LED per meter
	4.7 W per meter (red, amber)
	6.6 W per meter (white, green, blue)
Light color	White, red, green, blue or amber
Power supply	220-240 V AC / 50 HZ
	Power cord with AC / DC converter
	Maximum installation length 50 m
Protection	IP44 connectors, IP65 tube
Materials	Tube: silicon modified PVC
Dimensions (HxWxL)	27.5 mm x 14 mm x L*
Remarks	Lifetime: 30 000 hrs., 30% lumen maintenance

* Marked multiple cutting lengths:
Flexible tube LED white, blue and green can be cut every 91 cm
Flexible tube LED red and amber can be cut every 152 cm

Underwater LED, illumination in water

Underwater LED is a compact, innovative spot and recessed solution designed to create amazing effects in wet or water environments, like fountains. Fully IP68 to a depth of 10 m, it offers a choice of beams – 12°, 25° and 40° – for precision illumination of, for example, fountains or ponds.

Underwater LED is available in blue, white and RGB versions; other colors are available upon request.

	Underwater LED surface mounted	**Underwater LED recessed**
Type	BCB 450 surface mounted	BBB 450 Recessed
Light source	3 × LUXEON® LED 1	1 × LUXEON® LED 1
		3 × LUXEON® LED 1
Lamp colour	RGB	RGB
	Mono: Blue, cool white	Mono: Blue, cool white
Power supply	Current Driven, 350mA	Current Driven, 350mA
Consumption	Max 4 W	1 × LED: Max 2 W
		3 × LED: Max 4 W
Controls (optional)	RGB: ColourChaser DMX, Colour Chaser Wheel with slave interface	RGB: ColourChaser DMX, Colour Chaser Wheel with Slave interface
	Mono: Switching only	Mono: switching only
Optic	12°, 25° and 40°	12°, 25° and 40°
Operating temperature	-20°C < Ta < 35°C	-20°C < Ta < 35°C
Classification	Class III, IP68	Class III, IP68
Lifetime	50 000 hrs., 70% lumen maintenance	50 000 hrs., 70% lumen maintenance
Materials	Housing : stainless steel and chrome, Tempered Glass	Housing: stainless steel and chrome, Tempered Glass
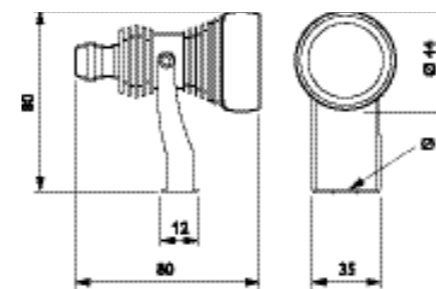
Product shown: BCB 450

All dimensions in mm
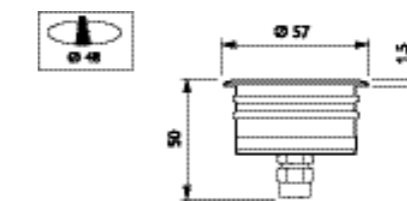
Product shown: BBB 450 3 × LED

All dimensions in mm

Product shown: BBB 450 1 × LED

All dimensions in mm

Product shown:
Origami BCG730
All dimensions in mm

Product shown:
Origami BPG732
All dimensions in mm

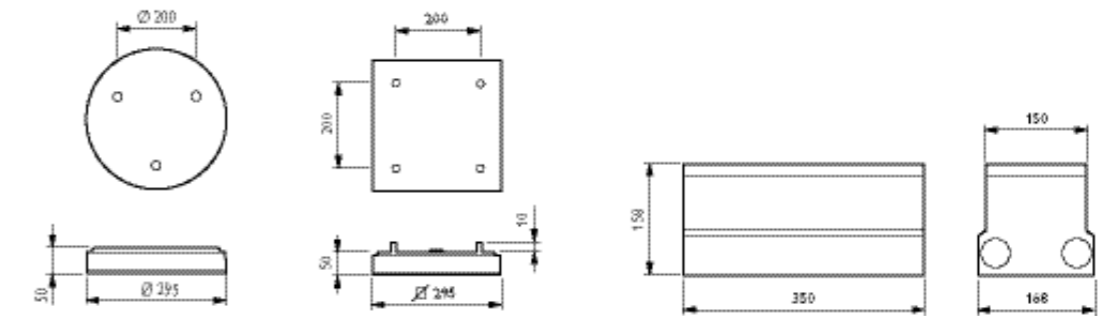Product shown:
Origami BBG731
All dimensions in mm

Origami, expressive

Origami is a rimless lighting tile with maximum color impact. It comes in square, circular and rectangular models. Its evenly lit surface displays a virtually unlimited range of dynamically changing colors (RGB).

The pace of the color changes can be easily adjusted. Origami is compatible with both DALI and DMX and has a pre-programmed color-changing mode for stand-alone usage.

Origami is available in surface-mounted, suspended and recessed versions.

Dynamically changing colors

	Origami Round	Origami Square	Origami Rectangular
Type	295 mm Surface-mounted BCG730	295 mm Surface-mounted BCG732 Suspended BPG732	295 mm Surface-mounted BCG731 Recessed BBG731
	595 mm Surface-mounted BCG760 Suspended BPG760	595 mm Surface-mounted BPG762 Suspended BPG762	
Light source	BCG730 RGB: 27 × Luxeon® LED, 54 W 9 × Luxeon® LED, 18 W	BCG732 and BPG732 RGB: 27 × Luxeon® LED, 54 W 9 × Luxeon® LED, 18 W	BCG731 and BBG731 RGB: 9 × Luxeon® LED, 18 W 3 × Luxeon® LED, 6 W
	BCG760 and BPG760 RGB: 108 × Luxeon® LED, 216 W Mono: 36 × Luxeon® LED, 54 W	BCG760 and BPG762 RGB: 108 × Luxeon® LED, 216 W Mono: 36 × Luxeon® LED, 54 W	
Light color	RGB red, green, blue, amber or white	RGB red, green, blue, amber or white	RGB red, green, blue, amber or white
Power supply	24 V DC	24 V DC	24 V DC
Optic / cover	Multi-layer diffuser	Multi-layer diffuser	Multi-layer diffuser
Driver	DMX driver and DALI driver integrated	DMX driver and DALI driver integrated	DMX driver and DALI driver integrated
Controls (optional)	ColourChaser DMX, ColourChaser Wheel, ColourChaser DALI	ColourChaser DMX, ColourChaser Wheel, ColourChaser DALI	ColourChaser DMX, ColourChaser Wheel, ColourChaser DALI
IP	IP20	IP20	BCG731: IP20 BBG731: IP67
Materials	Housing: anodized aluminum Backplate: steel Top cover: acrylic	Housing: anodized aluminum Backplate: steel Top cover: acrylic	Housing: anodized aluminum BBG731: Recessed housing: die-cast aluminum Cover: tempered glass Recessed box: steel
Dimensions (HxWxL)	BCG730: 295 × 295 × 50 mm BCG760 and BPG760: 595 × 595 × 50 mm	BCG732 and BPG732: 295 × 295 × 50 mm BCG760 and BPG762: 595 × 595 × 50 mm	BCG731: 295 × 95 × 50 mm BBG731: 350 × 150 × 158 mm
Remarks	* When no external control signal is detected, RGB versions revert to their automatic pre-programmed color sequence. Lifetime 50 000 hrs., 70% lumen maintenance	* When no external control signal is detected, RGB versions revert to their automatic pre-programmed color sequence. Lifetime 50 000 hrs., 70% lumen maintenance	Recessed or semi-recessed Lifetime 50 000 hrs., 70% lumen maintenance

Marker LED, eye catching

Featuring SMD LEDs in combination with a diffusing glass cover, this luminaire is a clearly visible marker with a uniform light output. The Marker LED RGB version enables dynamic color changes, opening up a wide range of creative options and effects.

The robustly designed Marker LED is available in round, rectangular and square versions and has an easy-to-install wall- and ground-recessed mounting box.

Marker LED   Recessed box   Pre-recessed box

Marker LED round	
Type	220-240 V: BBG300
	24 V: BBG301
Light source	12 × SMD LED
Light color	RGB, red, green, blue, amber and cool white
Power supply	24 V
	220-240 V AC / 50 Hz
Cover	Glass with internal diffuser
Contols (optional)	ColourChaser DMX, ColourChaser Wheel
Classification	IP67
Materials	Top cover: tempered glass
	Top ring: stainless steel
	Gearbox: polycarbonate
Dimensions (HxWxL)	24 V: 68 × 95 × 95 mm
	220-240 V: 92 × 95 × 95 mm
Remarks	Lifetime 50 000 hrs., 70% lumen maintenance
	Mounting accessories:
	recessed box 2 × M20, height 145 mm
	pre-recessed box for concrete, height 178 mm

Marker LED square	
	220-240 V: BBG310
	24 V: BBG311
	16 × SMD LED
	RGB, red, green, blue, amber and cool white
	24 V
	220-240 V AC / 50 Hz
	Glass with internal diffuser
	ColourChaser DMX, ColourChaser Wheel
	IP67
	Top cover: tempered glass
	Top ring: stainless steel
	Gearbox: polycarbonate
	75 × 100 × 100 mm
	Lifetime 50 000 hrs., 70% lumen maintenance
	Mounting accessories:
	recessed box 2 × M20, height 109 mm
	pre-recessed box for concrete, height 143 mm

| Marker LED rectangular	
Types	220-240 V: BBG320
	24 V: BBG321
Light source	40 × SMD LED
Light color	RGB, red, green, blue, amber and cool white
Power supply	24 V
	220-240 V AC / 50 Hz
Cover	Glass with internal diffuser
Contols (optional)	ColourChaser DMX, ColourChaser Wheel
Classification	IP67
Materials	Top cover: tempered glass
	Top ring: stainless steel
	Gearbox: polycarbonate
Dimensions (HxWxL)	75 × 100 × 200 mm
Remarks	Lifetime 50 000 hrs., 70% lumen maintenance
	Mounting accessories:
	recessed box 2 × M20, height 109 mm
	recessed box for concrete, height 143 mm
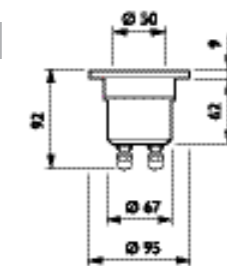
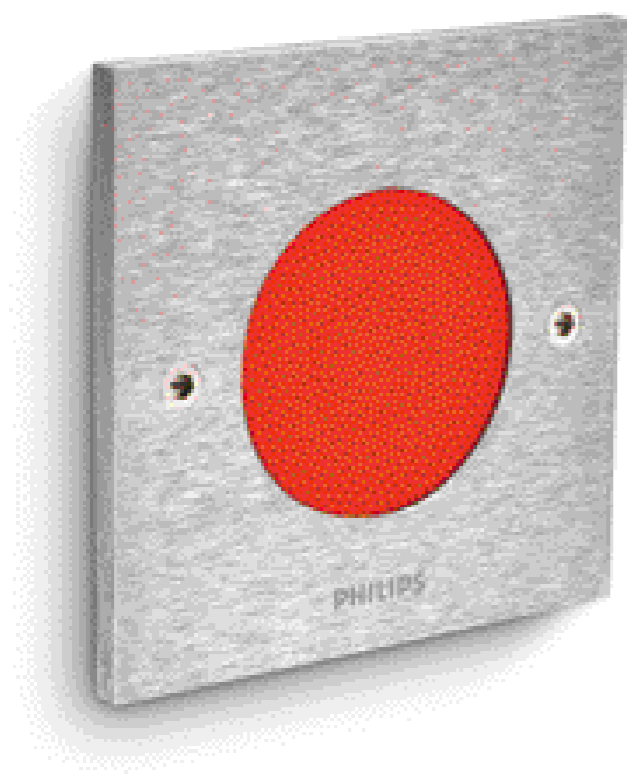Product shown: Marker LED BBG301
All dimensions in mm
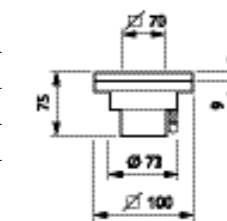
Product shown: Marker LED BBG311
All dimensions in mm
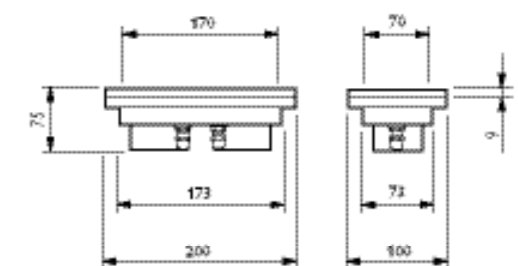
Product shown: Marker LED BBG321
All dimensions in mm

Wall Marker LED, enhancing interiors

Easy to recess in existing plug housings, the fully flush Wall Marker LED offers a choice of colors (white, blue and RGB) to enhance the indoor ambience. The brushed high-grade aluminum creates an attractive look and feel, while the frosted flat cover produces a uniform color effect.

Wall Marker LED is available in round and square versions.

	Wall marker 3 LEDs	Wall marker 5 LEDs
Type	BBW 300-3 LED round BBW 301-3 LED square	BBW 300-5 LED round BBW 301-5 LED square
Light source	3 x LEDs 1,3 W SMD on PCB	5 x LEDs 0,8 W SMD on PCB
Lamp colour	RGB with automatic changing colors	Mono: Blue, cool white
Power supply	240V AC	240V AC
Consumption	Max 5W	Max 5W
Controls	RGB: Automatic sequence. Switch to select static colour	Mono: Switch only
Classification	IP 20	IP 20
Materials	Cover: Brushed Aluminium and polycarbonate	Cover: Brushed Aluminium and polycarbonate
Lifetime	30 000 hrs., 70% lumen maintenance	30 000 hrs., 70% lumen maintenance
Installation	Recessed in existing plug housing	Recessed in existing plug housing
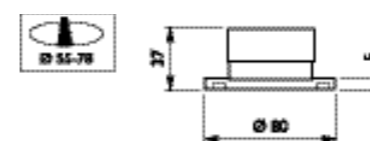
Product shown: BBW300

All dimensions in mm
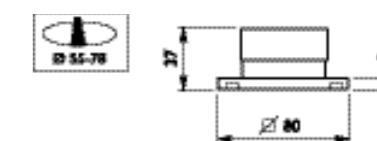
Product shown: BBW301

All dimensions in mm
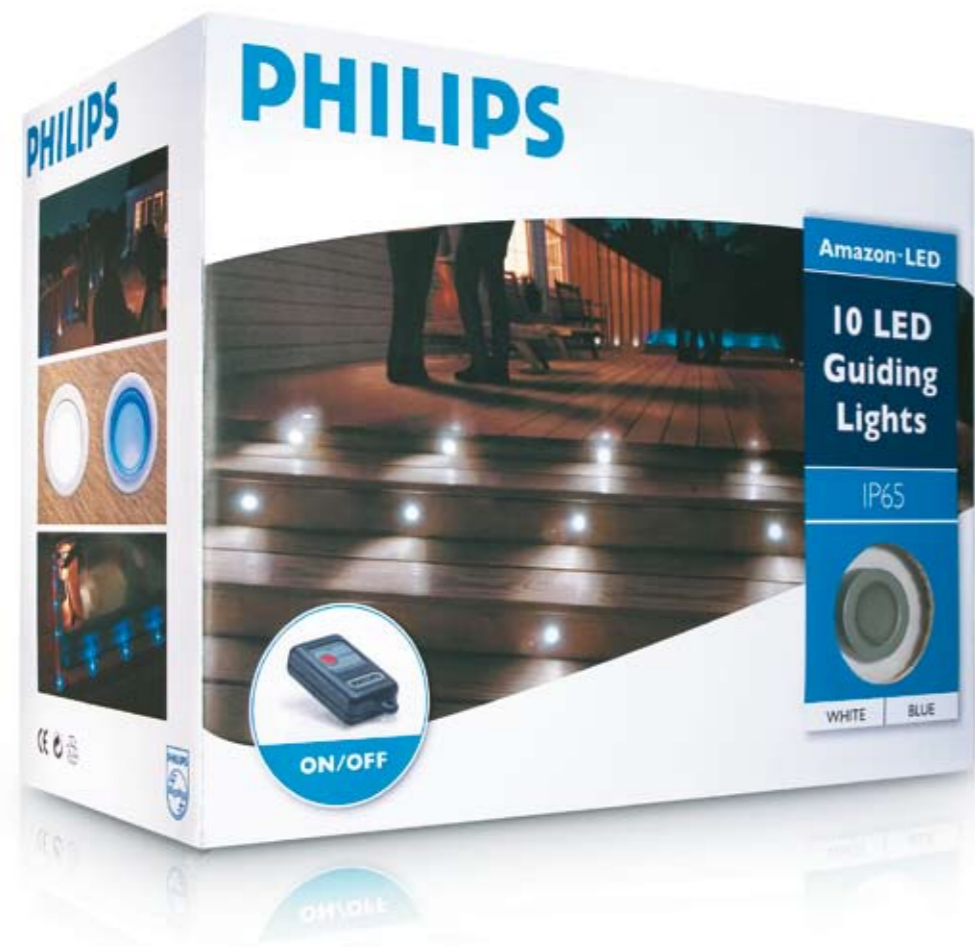
Amazon LED

Create an attractive and appealing entrance or pathway
with guiding lights. Amazon LED Kit, available in white and
blue, is a complete guiding light kit with remote control
that can be applied on your deck, terrace or garden.

Amazon LED Kit

Type	BBC 211
Light source	10 leds 0,6 W SMD
Lamp color	blue, cool white
Power supply	9V DC
Consumption	8W max
Controls (optional)	Mono: switching only
Optic	Polycarbonate
Operating temperature	-20°C < Ta < 35°C
Classification	Class II, IP65, IEC60598-I
Materials	Housing: Coated die-cast Aluminium
Installation	Recessed

CityWing Pedestrian LED, paving the way forward

CityWing is a complete lighting solution characterized by miniaturization and elegance. This architectural pedestrian luminaire features 18 high-power LUXEON® K2 LEDs, offering improved illuminance.

The combination of white and/or amber LEDs produces warm-white and cool-white light (color temperatures from 2700 K up to 4750 K). The 4 m-high optical units, in conjunction with 5° tilt, allow 10-12 m spacing between masts.

Warm light
2700 K
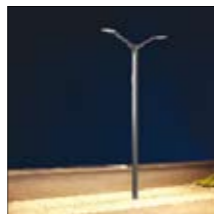
Neutral light
3200 K

Cool light
4750 K
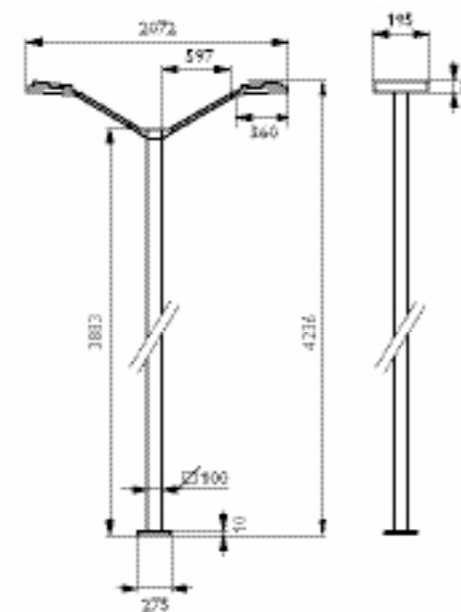
Product shown: Pedestrian LED BPS740

All dimensions in mm

Pedestrian LED luminaire

Type	BPS740 Two optical modules, two brackets, hub and electronic driver
	ZPS740 Square mast (with integrated driver)
Light source	18 × Luxeon® K2 (white)
Light color	2700 K
	3200 K
	4000 K (bi-color AM/WH)
	4750 K (full white)
Power supply	220-240 V AC / 50-60 Hz
	(driver integrated in the mast)
Optic	Extensive rotation-symmetrical collimating lenses (cut off: 60°)
Classification	IP65 (remote gear IP43)
Materials	Housing optical unit: die-cast aluminum (anodic grey paint, RAL 9006)
	Optic: collimating lenses in methacrylate
	Optic frame: frosted stainless steel
	Mast and brackets: extruded aluminum (anodic grey paint, RAL 9006)
Dimensions (HxWxL)	4236 × 195 × 2072 mm
Remarks	Tilt optical module: 5°
	Thermal management system
	Lifetime 50 000 hrs., 70% lumen maintenance

iF product design award 2006 gold

Create your own
atmosphere - in-a-box solutions

ColourChaser is a range of simple, easy-to-use lighting control
solutions that enable users to create their own lighting ambience.

Providing out-of-the-box functionalities, Philips' user-friendly control solutions
are ready for use directly after installation. Even users with minimal technical
background can install and operate these 'in-a-box solutions'. With the
ColourChaser family, it is possible to directly set a color, dim, or create one's own
color sequence, simply by pushing a button or turning a wheel.
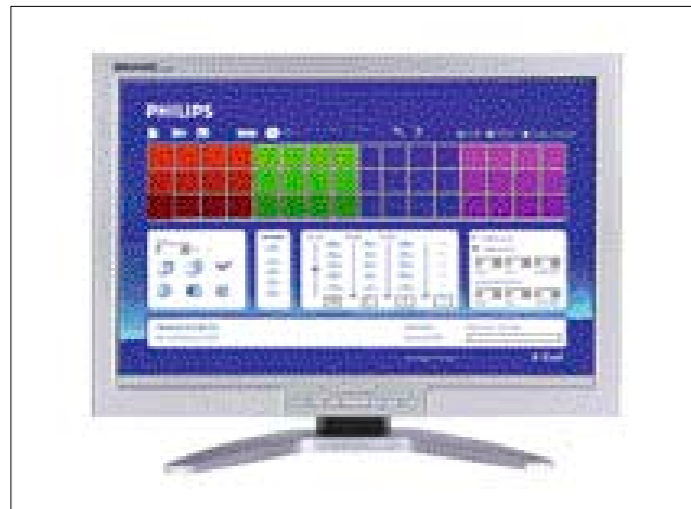
Dedicated Dynamic sequences can be created with Windows-compatible software (included) and directly uploaded to the ColourChaser DMX.

DMX to DALI converter

Type	LRC9630/00
Input	DMX512
Output	4 Channels DALI
Power supply	230 V
Materials	DIN Rail Unit: PC
Dimensions	60 × 90 × 105 mm

ColourChaser Wheel RGB (24 V)	**ColourChaser DMX**

Type	LRC9610/00	LRC9600/00
Protocol	DMX512	DMX512
Channels	3	144
Color Mixing	RGB (DMX addresses 1, 2 and 3)	RGB, RGBA, RGBW, single channel
Power supply	24 V DC (230 V adapter included)	230 V
IP	IP20	IP20
Materials	Housing anodized aluminum	Housing DIN-rail unit: PC
Dimensions	35 × 85 × 85 mm	60 × 90 × 105 mm
Remarks	Directly set a colour, dim, or set a pre-programmed automatic color sequence.	Create your own sequence or use one of the four pre-programmed sequences

MULTI-UTILITY MANAGER (MUM)

Type	LRC9602/00
Input	USB for connection to the PC (software included)
Output	XLR connector for connection to the luminaire
Materials	Powder coated steel
Dimensions	100 × 40 × 40 mm

Deco LED Outdoor
G50 E27

DecoLED Indoor
Candle E14

DecoLED Indoor
G50 E27

DecoLED Indoor
GU10

DecoLED Outdoor
G50 B22

DecoLED Outdoor
G50 E27

DecoLED, decorate with color

When you choose Philips DecoLED as a decorative lighting solution, you get more than just a great choice of colored lighting. Suitable for indoor and outdoor use, Philips DecoLED lamps offer up to 80% energy savings and are reliable and safe. The DecoLED outdoor types are especially durable due to their special, weatherproof, non-breakable bulb. The lifetime of the lamps is extremely high in comparison to incandescent solutions, lasting up to 20,000 hours. This also makes them a sustainable alternative. If you want colorful lighting you can rely on, choose Philips DecoLED.

DecoLED Lamps	
Type	Various LED lamps for replacement of low-wattage incandescent lamps for a wide range of decorative, party and architectural lighting applications
Light source	5 mm LEDs, wattages differ per color type between 0.4 W and 1.5 W for color changing version
Light color	Single colors: red, green, blue, yellow, cool white, warm white. Color changing lamp gradually changes every 5.4 seconds with fixed sequence: white (light blue), cyan, yellow, green, purple, blue and red. Total cycle 38 sec. Color changing versions to operate fully synchronized for a minimum of 48 hours
Power	230-240 V, 50 Hz
Remarks	Bulb material is made from UV-resistant polycarbonate. Bulb and cap are glued waterproof and almost unbreakable. Ideal for outdoor use in street decorations. The glass bulb version for indoor applications is available in different types: dichroic reflector with GU10 cap, candle shape with E14 cap and Bulb shape with E27 cap

Plane washing

Reverse lighting

Cove lighting

Lighting behind acrylics

Spot lighting

Flexibility

Thanks to the string's small dimensions and flexible wiring, you can create new and slimmer architectural or decorative designs.

Low energy consumption

Energy consumption of the Philips Affinium LED string system is only around 4 W per metre (e.g. for red).

Savings in maintenance costs

Philips Affinium LED string system is maintenance free for up to 50,000 hours, whereas traditional lighting systems often need replacing after just 20,000 hours.

Affinium LED string, to create decorative light effects in a simple way

The LED string is a flexible chain of LED devices operating on a LED power driver. It is an easy to install solution which enables you to create great lighting effects.

	Affinium LED string	Affinium LED string
Type	Kit version.	Reel version.
Range	All-in-one-box solution consisting of 2 m or 6 m Affinium LED string, a 20 W LED Power Driver, attachment clips and tapes, connectors and a simple tool to click the string in the connectors.	For large projects we offer separate reels of 20 m of LED string. Accessories are available separately.
Light source	LEDs <0.5 W	LEDs <0.5 W
Light color	Red, green, blue, amber, cool white (6300 K) and warm white (3000 K)	Red, green, blue, amber, cool white (6300 K) and warm white (3000 K)
Power	Differs per color from 114 mW (whites) to 221 mW (red and amber)	Differs per color from 114 mW (whites) to 221 mW (red and amber)
Classification	IP66	IP66
Power supply	Included in kit.	LED power driver 20, 60 or 100 W
Beam angle	130 degrees per LED device for the colored LEDs, and 105 degrees for the white LEDs	130 degrees per LED device for the colored LEDs, and 105 degrees for the white LEDs

LFM 100 left 18W   LFM 100 center 36W   LFM 100 right 18W

Affinium LED freezer modules			
Type	LFM 100 left 18W	LFM 100 center 36W	LFM 100 right 18W
	5000 K 1491 mm	5000 K 1491 mm	5000 K 1491 mm
Position in the freezer mullion	Left	Center	Right
Wattage, typical	18	36	18
Light source	LED	LED	LED
Light color	Cool white 5100 K	Cool white 5100 K	Cool white 5100 K
Color rendering	≥ 72	≥ 72	≥ 72
LED power driver	100 W-24 V	100 W-24 V	100 W-24 V
Classification	IP54	IP54	IP54
Materials	Housing: Polycarbonate	Housing: Polycarbonate	Housing: Polycarbonate
	Inside profile: aluminum	Inside profile: aluminum	Inside profile: aluminum
Color of profile	Grey	Grey	Grey
Lifetime, rated	50,000 hours, 70% lumen	50,000 hours, 70% lumen	50,000 hours 70% lumen
	maintenance	maintenance	maintenance
Remarks	During 2007 Philips will introduce more Affinium LED freezer modules to fulfil customer requirements on different		
	illumination levels and freezer heights		

Left   Centre   Centre   Centre   Centre   Right
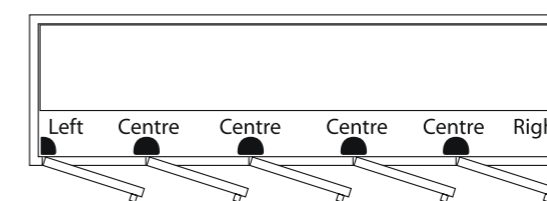
Module for left and right mullion

Affinium LED freezer lighting, stimulating the frozen food category

This new family of LED freezer modules is designed for replacement of traditional tubular fluorescent lamps inside vertical full-height glass-door freezer cabinets. The modules are operated by a Philips LED power driver of 100 W, 24 V.

The LED freezer modules offer the following key benefits:
• an excellent Total Cost of Ownership
• a much better visual impression of merchandise on display and the entire freezer section
• significantly improved sustainability due to lower energy consumption, reduced landfill and waste, and elimination of hazardous substances such as mercury and lead.

The warm, romantic elegance created by candlelight is hard to beat. But candles themselves are not particularly convenient. They can be awkward to light, and can go out prematurely, signalled by an unwanted thin column of smoke. They are often unusable in outdoor situations when there is a wind. When knocked over they spill hot wax over tablecloths, carpets - and people. And the danger of fire is ever present, particularly when children are around.

Exactly like the real thing
With Imageo Candle Light, you have the glow and gentle flicker associated with candles, but none of the drawbacks of an open flame. It looks identical to a conventional frosted glass candleholder with candle inside.

Turned on - or off - by one shake
Another extremely appealing aspect of the Imageo Candle Light is that there is no on/off switch. To turn it on, you simply pick it up and shake it. This, for instance, allows a waiter in a restaurant to create candlelight with a flourish. It is an appealing feature that rarely fails to impress.

Never run out of candle light
The Imageo Candle Light comes in a set of twelve lamps with a storage base that also doubles as a recharging unit. With a recharging time of approximately eight hours, they will always be ready for action once again in the morning after charging overnight. And with an operating time of approximately 20 hours, you need never run out of candlelight, regardless of how long the party goes on!

Imageo candle lights.
Intimacy of candle light
with a led source

Wouldn't it be great to have the intimate atmosphere of candlelight without the hassle of candles? That's exactly what you get with the Imageo Candle Light. Ideal for restaurants, hotels and cafes (both indoors and outside) or anywhere else where ambience is vitally important for business.

	Imageo
Type	Professional set with 12 candle charger
Light source	2x 5 mm LED per candle
Light color	a gentle flame color
Power	12V charger
	Candle's are operated by a rechargeable battery
Remarks	Charging time for 12 set is 10 hours, operating time is 20 hrs
	Candle's are waterresistant, so can be used both indoor and outdoor

PHILIPS dPix

Type	dPix 1/100	dPix 2/100	dPix 4/100
Number of RGB pixels per string	16	16	16
Color	Black	Black	Black
Ingress protection	IP65	IP65	IP65
Operating temperature	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C
Lifetime	Min 50.000h, Typ. 70.000h	Min 50.000h, Typ. 70.000h	Min 50.000h, Typ. 70.000h
Color resolution	48 bits	48 bits	48 bits
Pixel pitch	100 mm	100 mm	100 mm
Number of LEDs per pixel	1	2	4
Brightness per pixel	1,5 cd	3 cd	6 cd
String length (excl. connectors)	1600 mm	1600 mm	1600 mm
Order number	VWS040 016x001 1A BK	VWS040 016x001 2C BK	VWS040 016x001 4E BK

dLine, spatial video displays

The Philips dLine range is a revolutionary new concept in architectural and retail LED design. The dPix is a flexible string of LED pixels or "dPix" and the dTube is a rigid tube of LED pixels, both of which may be used to accentuate interior or exterior spaces, to create amazing visual effects on buildings and structures, and to create very large area video and animation displays.

The dPix and dTube are two of the building blocks of the Philips dLine family of LED based creative display products, which allows designers unparalleled power and flexibility in creating spectacular customised display effects for retail, architectural, exhibition and rental applications.

dTubes are very easy to mount, and can be delivered on pre-assembled frames, making it very easy to integrate into a building structure. dTube is a "pixel in a tube" which comes as standard with 5 cm, 7.5 cm or 10cm pixel pitches.

dPix are very flexible, allowing simple creation of curved or complex 3D displays, and thin, allowing for virtually transparent or "see through" arrays. dPix is a "pixel on a string" which comes as standard on 10cm, 20cm, 30cm centres, with up to 32 "dPix" per string, cascadable to any desired length.

PHILIPS dTube

Type	dTube 1/075	dTube 2/075	dTube 4/075
Number of RGB pixels per tube	16	16	16
Color	Aluminium base with black PCB	Aluminium base with black PCB	Aluminium base with black PCB
Ingress protection	IP65	IP65	IP65
Operating temperature	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C
Lifetime	Min 50.000h, Typ. 70.000h	Min 50.000h, Typ. 70.000h	Min 50.000h, Typ. 70.000h
Color resolution	48 bits	48 bits	48 bits
Pixel pitch	75 mm	75 mm	75 mm
Number of LEDs per pixel	1	2	4
Brightness per pixel	1,5 cd	3 cd	6 cd
String length (excl. connectors)	1200 mm	1200 mm	1200 mm
Order number	VWS031 016x001 1A BK	VWS031 016x001 2C BK	VWS031 016x001 4E BK

Philips Candeo	
Type	VWL015, VWL025, VWL035
Brightness	2000 cd/m²
Display dimensions	2592 x 1458 mm
Display screen type	3 in 1 SMD LED
Viewing angle	150° (H) / 150° (V)
Pixel pitches	4.5, 6.75, 10.125 mm
Colour temperature	6500 K
Refresh rate	>150 Hz
Grey scale	16 bit
Colour resolution	48 bit
Power consumption	3200 W
LED lifetime	>70 000 hours
Optional accessories	Wall bracket, pedestal

Candeo, look on the bright side

The most effective communication in larger indoor environments occurs from a distance of 5 to 50 meters. Until now, there has been no suitable means of dynamic communication that can overcome the issue of size for full impact and the ambient light conditions. With this in mind, Philips Vidiwall has developed the Philips Candeo range of displays, designed specifically to bridge this gap.

The Philips Candeo LED video screen is the latest in professional display solutions. These seamless LED-based screens display all content with ultra-high brightness so viewing is crystal clear, even in bright ambient conditions. Philips Candeo is the true out-of-the-box solution and through the use of Dynamic Power Control, can be operated from a regular European mains socket.