



Application bundles

Combine LED luminaires and intelligent controls for maximum performance and savings.

With the introduction of LED technology, lighting has entered the 21st century. Compared to conventional products, LED lamps and luminaires offer much lower energy consumption and a much longer lifetime. Also, as a digital light source, LED luminaires offer many new possibilities in terms of intelligent lighting.

Getting the combination right

To help installers make the most of the technical and commercial potential of LED, Philips has created special virtual packages called 'Application bundles'. These bundles are based on a real-life applications that will benefit from having the right combination of LED luminaires, or of luminaires and controls. As most elements are part of the popular CoreLine range, compatibility is guaranteed, and installation is hassle-free.

Tools to convey the clients

These application bundles come with a targeted set of tools that will help you convey the many benefits to clients. Each bundle has a suite of materials, including application insights, lighting designs, a tool to calculate the savings in terms of total cost of ownership, details on how to apply the product combination in the bundle, and much more.

Read on to discover all about the new Philips application bundles! For more information, go to www.philips.com/applicationbundles or your wholesaler.



Your Office application bundle:

CoreLine Recessed LED34S & Presence detector LRM1011

Office lighting insights

When you arrive at the office, you know what you'll be working on and who you'll be working with. And you want to be at your best.

In an office workspace, lighting can help people to concentrate, communicate and cooperate. The right light will create a healthy, comfortable and inspiring environment. Philips office lighting solutions meet all European norms for this application, and can reduce energy costs by up to 65% when combined with smart controls.



^{*}Based on the European average of 12 cent/kW hours (including maintenance and lamp replacement cost) and the lighting design for this application bundle.

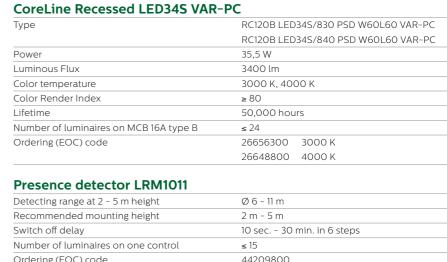
Bundle benefits

Ø 6,0 m

(walking across)

CoreLine Recessed Type LED34S VAR-PC Power Luminous Flux Lifetime · Replacing conventional TL-D & TL-5 · Energy saving • UGR < 19 Presence detector Ordering (EOC) code LRM1011 Automatic switches off light when not required · Small, unobtrusive sensor ratio (UGR ≤ 19). Controls **Detection coverage diagram**

Bundle specifications



Lighting design insights

Display reflections

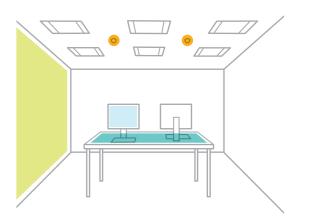
Minimize reflected glare on displays by using luminaires with proper office light distribution and a low glare

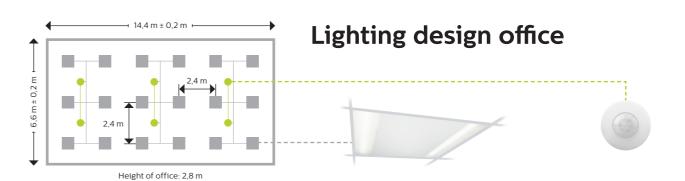
Illuminance requirements

EN12464-1 requirement at desk ≥ 500 lux. Higher levels increase visibility.

Controls are located above desks to create optimum effect for presence detection.

Create bright walls and ceilings by using wide light beams. This will make the entire space look more spacious and pleasant.





Luminaire types	# Lum.	Em [lux]	Sys. Power	Installed Power	W/m2	W/m2/100lux
Conventional 4xTLD 18 W	18	539	69,5 W	1251 W	13,2	2,4
CoreLine Recessed LED34S VAR-PC	18	515	35,5 W	639 W	6,7	1,2



Your Corridor application bundle:

CoreLine Downlight LED2OS & Presence detector LRM1011

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Corridor lighting insights

Corridors are important spaces in their own right: in a building, they connect all the work areas, offices, meeting rooms, restaurants etc.

Corridor lighting needs to facilitate the movement of people. It must provide a clear view, without consuming more energy than needed. Philips LED lighting for corridors was developed to deliver clear, instant-on light, while significantly reducing energy costs up to 75% when combined with intelligent detectors.



^{*}Based on the European average of 12 cent/kW hours (including maintenance and lamp replacement cost) and the lighting design for this application bundle.

Bundle benefits

CoreLine Downlight LED20S Replacing compact fluorescent · Energy saving Presence detector LRM1011 Automatic switches off light when not required Small, unobtrusive sensor **Detection coverage diagram** Ø 5.0 m (small movements) Ø 6,0 m (walking across)

Bundle specifications



Presence detector LRM1011

Detecting range at 2 - 5 m height	Ø 6 - 11 m
Recommended mounting height	2 m - 5 m
Switch off delay	10 sec 30 min. in 6 steps
Number of luminaires on one control	≤ 15
Cut-out diameter	36 mm
Ordering (EOC) code	44209800

Lighting design insights

Brightness

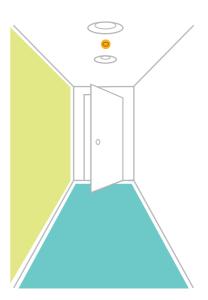
Corridors are confined spaces. Use wide light beams to create a sufficiently bright environment and good vertical illuminance. By providing sufficient light on doors and walls, occupants are guided through the corridor.

Control

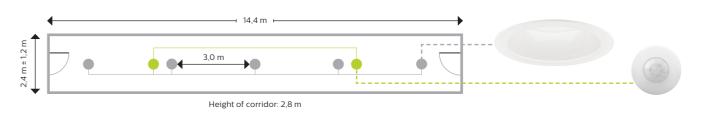
When placing presence detectors consider entrances and exits to avoid going into a dark corridor.

Illuminance requirements

EN12464-1 requirement at floor ≥ 100 lux. Higher levels increase feeling of comfort & safety.



Lighting design corridor



Luminaire types	# Lum.	Em [lux]	Sys. Power	Installed Power	W/m2	W/m2/100lux
Conventional PLC 2x26 W downlight	5	158	65,6 W	328 W	9,5	6,0
CoreLine Downlight LED20S	5	157	22 W	110 W	3,2	2,1



Your Industry application bundle:

CoreLine Waterproof LED60S & Movement detector LRM1040

Industry lighting insights

There is work to be done, and the workspace is big, with people and goods moving in and out. Here, productivity and safety must go hand in hand.

Industrial applications require effective lighting on a large scale, which means that low energy consumption and low maintenance are a must. But the lighting also needs to create a clear, safe and pleasant environment. With Philips lighting controls, the light switches off whenever the space is not being used, for extra savings.

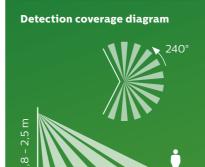


^{*}Based on the European average of 12 cent/kW hours (including maintenance and lamp replacement cost) and the lighting design for this application bundle.

Bundle benefits

CoreLine Waterproof LED60S Replacing conventional TL-D Energy saving **Movement detector** LRM1040

- Daylight override prevents switch on if enough daylight is available
- · Turns off lighting when not required



CoreLine Waterproof LED60S

Bundle specifications

Туре	WT120C LED60S/840 PSU L1500
Power	57 W
Luminous Flux	6000 lm
Color temperature	4000 K
Color Render Index	≥ 80
Lifetime	50,000 hours
Number of luminaires on MCB 16A type B	≤ 24
Ordering (EOC) code	84049700

Movement detector I RM1040

Movement detector Ethnio-10				
Detecting range at 2,5 m height	12 m			
Recommended mounting height	1,8 - 2,5 m (wall mounting)			
Switch off delay	5 sec 12 min.			
Number of luminaires on one control	≤ 24			
Ordering (EOC) code	22573700			

Lighting design insights

Uniformity

Use wide light beams in order to increase uniformity. High uniformity contributes to a comfortable workplace without disturbing shadows.

Controls

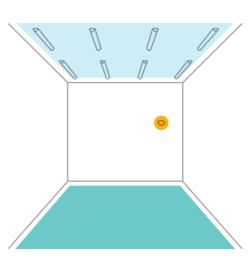
When placing a presence detector consider entrances and exits to avoid going into a dark area. Also take into account high furniture and machinery. These can block the detection zone.

Illuminance requirements

EN12464-1 requirement at task ≥ 300 lux for general machinery work. Higher levels increase visibility.

Waterproof luminaires

Many industrial environments are wet or dusty. Use waterproof luminaires for safe and reliable lighting.



Lighting design industry 12.0 m Height of hall: 4,0 m

Luminaire types	# Lum.	Em [lux]	Sys. Power	Installed Power	W/m2	W/m2/100lux
Conventional waterproof 2xTLD 58 W	16	336	110 W	1760 W	9,8	2,9
CoreLine Waterproof LED60S	16	328	57 W	928 W	5,2	1,6



Your Small car park application bundle:

CoreLine Waterproof LED40S & Movement detector LRM1040

Small car park lighting insights

Car parks are functional spaces; you go there only to drive in or out. And you always want a car park to be safe and easily accessible.

In a large but confined space like a car park, it is most important that people can find their way quickly and safely - whether they are walking or driving. That means bright, instant-on lighting with no dark spaces. But as the lights are always on, energy savings and minimal maintenance are also paramount.



^{*} Based on the European average of 12 cent/kW hours (including maintenance and lamp replacement cost) and the lighting design for this application bundle.

Bundle benefits

CoreLine Waterproof CoreLine



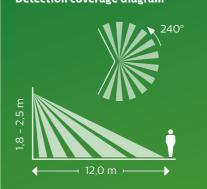
- Replacing conventional TL-D
- · Energy saving

Movement detector LRM1040



- Daylight override prevents switch on if enough daylight is available
- Turns off lighting when not required
- ID5/I

Detection coverage diagram



CoreLine Waterproof LED40S

Bundle specifications

Туре	WT120C LED40S/840 PSU L1200
Power	41 W
Luminous Flux	4000 lm
Color temperature	4000 K
Color Render Index	≥ 80
Lifetime	50,000 hours
Number of luminaires on MCB 16A type B	≤ 24
Ordering (EOC) code	84048000

Movement detector LRM1040

Detecting range at 2,5 m height	12 m
Recommended mounting height	1,8 - 2,5 m (wall mounting)
Switch off delay	5 sec 12 min.
Number of luminaires on one control	≤ 24
Ordering (EOC) code	22573700

Lighting design insights

Face recognition

Enhance comfort and safety by using wide light beams. This increases the uniformity and the vertical illuminance which helps to illuminate faces.

Illuminance requirements

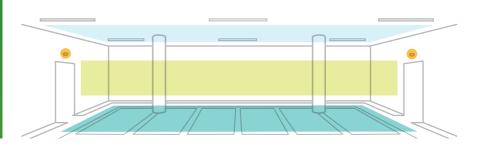
EN12464-1 requirement at floor ≤ 75 lux. Higher values increase feeling of safety.

Guidance

Place the luminaires in reference to the lanes and parking lots so they can support guidance through the car park.

Control

When placing presence detectors consider entrances and exits to avoid going into dark areas.



Lighting design small car park



Luminaire types	# Lum.	Em [lux]	Sys. Power	Installed Power	W/m2	W/m2/100lux
Conventional Waterproof 2xTLD 36 W	9	101	72 W	648 W	2,7	2,6
CoreLine Waterproof LED40S	9	111	41 W	369 W	1,5	1,4



Your Small storage application bundle:

CoreLine Batten LED38S & Movement detector LRM1032

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Small storage lighting insights

You're searching for that file, or that special component - and you need it now! Knowing where to look makes all the difference.

Storage spaces can be cramped and busy. With the right lighting, however, they can still be accessible and easy to navigate. Clear white light from carefully placed luminaires creates the right atmosphere, while motiondetector sensors also offers big energy savings of up to 70%.



^{*}Based on the European average of 12 cent/kW hours (including maintenance and lamp replacement cost) and the lighting design for this application bundle.

Bundle benefits

(small movements)

Bundle specifications CoreLine Batten LED38S CoreLine Batten LED38S Replacing conventional TL-D Energy saving No UV-emission **Movement detector** LRM1032 Movement detector unit replaces traditional light switch Turns off lighting when **Room elements** not required Room elements as shelves **Detection coverage diagram**

corceine Batter EED303	
Туре	BN120C LED38S/830 PSU L1200
	BN120C LED38S/840 PSU L1200
Power	40 W
Luminous Flux	3800 lm
Color temperature	3000 K, 4000 K
Color Render Index	≥ 80
Lifetime	50,000 hours
Number of luminaires on MCB 16A type B	≤ 24
Ordering (EOC) code	89961699 3000 K
	89957999 4000 K
Movement detector LRM1032	
Detecting range at 0.8 -1.5 m height	8 m

MOVEMENT detector ERMIOSE	
Detecting range at 0,8 -1,5 m height	8 m
Recommended mounting height	1,2 m
Switch off delay	10 sec 30 min. (10 settings)
Number of luminaires on one control	≤ 10
Ordering (EOC) code	44225800 LRM1032 3w
	44227200 LRM1033 2w (retrofit)

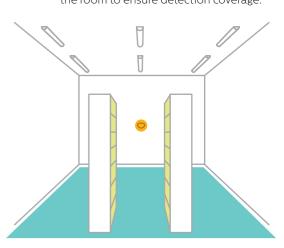
Lighting design insights

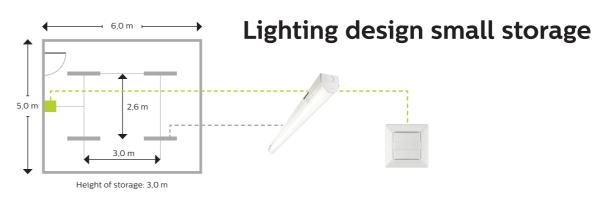
and drawers affect the light distribution. Try to position the luminaires between these elements. This will create a good vertical illuminance.

Illuminance requirements

EN12464-1 requirement at floor: 100 lux for storage rooms & 200 lux for archives. Higher levels increase visibility.

When placing a presence detector consider entrances and furniture in the room to ensure detection coverage





Luminaire types	# Lum.	Em [lux]	Sys. Power	Installed Power	W/m2	W/m2/100lux
Conventional batten 2xTLD 36 W	4	193	72 W	288 W	9,6	5,5
CoreLine Batten LED38S	4	163	40 W	160 W	5,3	2,2



Your Butcher application bundle:

CoreLine Downlight LED2OS & GreenSpace Accent Fresh Food Meat

Butcher lighting insights

A trip to the butchery is a trip to the imagination. After all, your choice of meat or poultry defines the character of your entire meal.

The magic word is: fresh. In a butcher's shop, the products on display have to look fresh and appealing. Philips's Fresh Food Meat lighting solution enhances the redness of the meat, making the cuts look their very best. Also, it extends the shelf life and minimizes food discoloration due to light, which helps to reduce waste.

Traditional

Conventional 2x18 W PL-C (8x) + 50 W SDW-TG (4x)

Savings over life*
€1980,-



CoreLine Downlight (8x)

+ GreenSpace Accent Fresh Food Meat (4x)

Bundle benefits

CoreLine Downlight LED20S



- · Replacing compact fluorescent
- Energy saving

GreenSpace Accent Fresh Food Meat*



- Perfect Accent lighting for highlighting fresh meat
- Replacing white SON
- · Energy saving

Firstead of the Greenspace Accent Fresh Food Meat, you can also use a track-mounted option: the EcoStyle Fresh Food Meat projector - EOC order code: 8534050 (white) or 85339900 (black). This alternativ also enhances the redness in the meat display. Lighting design will differ slightly if alternative products are used.

Bundle specifications

	CoreLine Downlight LED20S	GreenSpace Accent Fresh Food Meat			
Туре	DN130B LED20S/840 PSU PI6 WH	RS342B LED19S/FMT PSU-E WB II WH			
Power	22 W	36 W			
Luminous Flux	2100 lm	1900 lm			
Color temperature	4000 K	Fresh Food Meat			
Color Render Index	≥ 80	87			
Lifetime	50,000 hours	70,000 hours			
Number of luminaires					
on MCB 16A type B	≤ 15	≤ 40			
Ordering (EOC) code	85271200	26334100			
Cut-out diameter	200 - 205 mm	175 mm			

Lighting design insights

Glare and shadows

Limit the projector angle to < 20° to avoid glare for the staff and customers' shadows on the display.

Brightnes

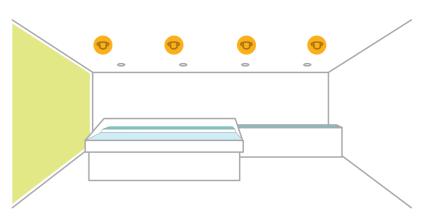
Light the walls to communicate that the store is open and make it appear more spacious. Max. downlight-to-wall distance: 1,2 m.

Task light

Use downlights in the working environment for countertop task lighting, EN 12464-1 norm requires 300 lux in sales areas.

Accent lighting

The human eye is drawn to higher brightness. Use accent lighting to create contrast and highlight the display.



Lighting design butcher

Height of	butcher: 3,0 m

Luminaire types	# Lum.	Em [lux]	Em [lux] counter	Sys. Power	Installed Power	W/m2	W/m2/100lux
Conventional PLC 2x18 W downlight	8	E10	OEA	51 W	653 W	18.9	3.7
Conventional SDW-TG 50 W accent spot	4	518	854	62 W	033 W	10,9	3,7
CoreLine Downlight LED20S	8	551	843	22 W	320 W	9.7	1.0
GreenSpace Accent LED19S Fresh Food Meat	4	331	043	36 W	320 W	9,7	1,8

^{*}Based on European average of 12 cent/kW hours including maintenance and lamp replacement cost



Your Bakery application bundle:

CoreLine Downlight LED2OS & EcoStyle Fresh Food Champagne

Bakery lighting insights

Who doesn't love bread? Stepping into a bakery means stepping into a world of warmth, comfort and goodness – with lighting to match.

The smell of fresh bread always brings a smile to people's faces. In a bakery, what matters is bringing out all the subtle colors and textures of the different kinds of bread on display. Customers should be able to see the taste of the bread, and experience a cosy atmosphere due to the warm lighting colour.

Traditional

Conventional 2x18 W PL-C (4x) + 100 W SDW-T (8x)

Savings over life*
€3732,-



Application bundleCoreLine Downlight (4x)

+ EcoStyle Fresh Food Champagne (8x)

Bundle benefits

CoreLine Downlight EcoStyle Fresh LED20S Food Champagne* DN130B LED20S/830 PSU PI6 WH ST440T LED27S/CH PSU WB II WH Туре Power 22 W 2700 lm Luminous Flux 2100 lm 3000 K Fresh Food Champagne Color temperature Color Render Index > 90 > 80 Lifetime 50.000 hours 70.000 hours Number of luminaires on MCB 16A type B ≤ 35 85338200 (white) / 85337500 (black) Ordering (EOC) code 200 - 205 mm Cut-out diameter not applicable

CoreLine Downlight LED20S



- · Replacing compact fluorescent
- Energy saving

EcoStyle Fresh Food Champagne



- Perfect Accent lighting for highlighting bread and pastries
- · Replacing white SON
- Energy Saving
- * Instead of the EcoStyle Fresh Food
 Champagne, you can also use a recessed
 accent option: the GreenSpace Accent
 Fresh Food Champagne EOC order code:
 26322800 (white). This alternative also
 enhances the colors and textures of the
 different breads on display. Lighting design
 will differ slightly if alternative products

Lighting design insights

Bundle specifications

Glare and shadows

Limit the projector angle to < 20° to avoid glare for the staff and customers' shadows on the display.

Brightness

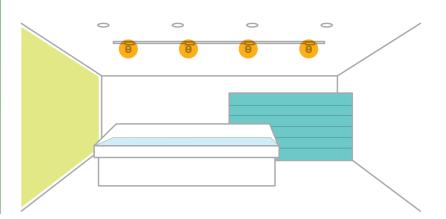
Light the walls to communicate that the store is open and make it appear more spacious. Max. downlight-to-wall offset: 1,2 m.

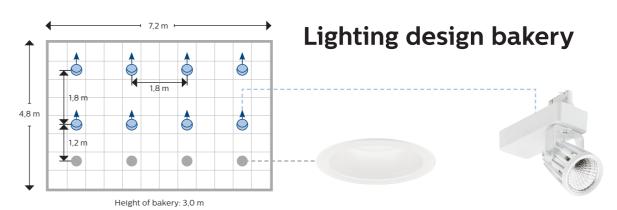
Accent lighting

The human eye is drawn to higher brightness. Use accent lighting to create contrast and highlight the display.

Shelves

With minimal glare risk, projectors lighting shelves can be tilted > 20°. To avoid shadows, the minimal light-to-shelf offset is 70 cm.





Luminaire types	# Lum.	Em [lux]	Em [lux] counter	Sys. Power	Installed Power	W/m2	W/m2/100lux
Conventional PLC 2x18 W downlight	4	E 13	964	51 W	1098 W	29.3	5,4
Conventional SDW-TG 100 W projector	8	543	904	112 W	1098 W	29,3	5,4
CoreLine Downlight LED20S	4	525	1144	22 W	400 W	10.9	2,1
EcoStyle Fresh Food Champagne LED27S	8	323	1144	49 W	400 W	10,9	2,1

^{*}Based on European average of 12 cent/kW hours including maintenance and lamp replacement cost



Your Classroom application bundle:

CoreLine Surfacemounted LED34S VAR-PC & Presence detector LRM1000

Classroom lighting insights

The bond between teachers and students is a very special one. It's all about passing on knowledge and discovering the world together.

Going to school should be fun, safe and educational. The classroom is a place where students can learn to excel. Philips LED lighting makes it easy to concentrate, in a healthy, warm and welcoming environment that encourages collaboration and group work. And with the use of intelligent sensors, energy costs can be reduced by up to 70%.



^{*}Based on European average of 12 cent/kW hours including maintenance and lamp replacement cost.

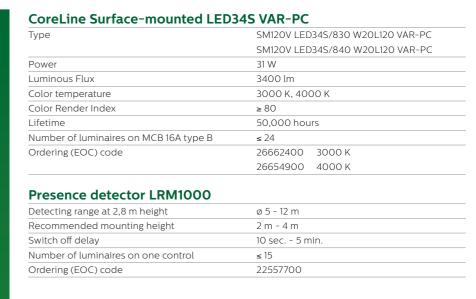
Bundle benefits

CoreLine Surface-mounted LED34S VAR-PC • Replacing conventional TL-D & TL-5 • Energy saving • UGR < 19 Presence detector LRM1000 • Automatic switches off light when not required • Ceiling surface mountable Detection coverage diagram

Ø 5,0 m

Ø 12,0 m (walking across)

Bundle specifications



Lighting design insights

Glare

Use low-glare luminaires for comfort, to improve the experience of students and teachers.

Blackboard

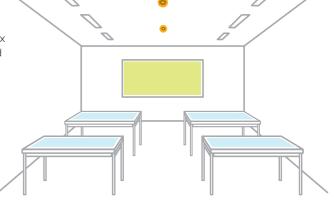
Add dedicated luminaires and adjust their arrangement to light the blackboard for readability.

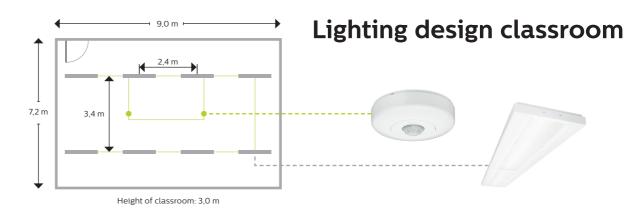
Illuminance

At desks, EN12464-1 requires 300 lux for classrooms and 500 lux for evening classes and adult education.

Controls

Locate the controls directly above the desks to optimize presence detection.





Luminaire types	# Lum.	Em [lux]	Sys. Power	Installed Power	W/m2	W/m2/100lux
Conventional 2xTL-D 36 W	8	410	576 W	72 W	8,9	2,2
CoreLine Surface-mounted LED34S VAR-PC	8	352	248 W	31 W	3,8	1,1



Your Restroom application bundle:

CoreLine Recessed Spot & Movement detector | RM1032

Restroom lighting insights

Restrooms are small spaces with that are sometimes slippery. So you want to be able to see well at all times.

When entering a restroom area, you shouldn't have to look for the light switch or wait for the light to gain its full strength. Philips waterproof luminaires and intelligent sensors make sure the light switches on as soon as you need it and off again when you leave, for extra convenience and substantial energy savings.



 $^{^* \, \}text{Based on European average of 12 cent/kW hours including maintenance and lamp replacement cost.} \\$

Bundle benefits

CoreLine Recessed Spot · Replacing conventional 50 W halogen lamps · Water resistant up to IP54 Slim design fits most ceiling types **Movement detector** LRM1032 Movement detector unit replaces traditional light switch Turns off lighting when not required **Detection coverage diagram**

Bundle specifications



Movement detector LRM1032 Detecting range at 0,8 - 1,5 m height 8 m Recommended mounting height 1,2 m Switch off delay 10 sec. - 30 min. (10 settings) Number of luminaires on one control ≤ 10 Ordering (EOC) code 44225800 LRM1032 3w 44227200 LRM1033 2w (retrofit)

Lighting design insights

Illuminance

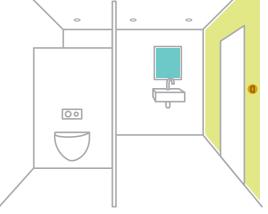
In these small spaces, light all surfaces sufficiently to make the space feel larger. EN12464-1 norm requires ≥ 100 lux for restrooms.

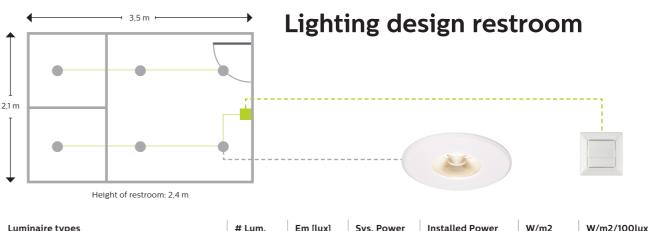
Controls

Apply a wall sensor to easily integrate the control with existing installations.

Mirro

Place luminaires next to a mirror, optimizing the amount of light and shadows.





Luminaire types	# Lum.	Em [lux]	Sys. Power	Installed Power	W/m2	W/m2/100lux
Conventional 50 W Halogen Spot	6	350	300 W	50 W	40,8	11,6
CoreLine Recessed Spot	6	340	66 W	11 W	8,9	2,6



Your Small Retail application bundle:

CoreLine Recessed Spot & CoreLine Projector

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Small Retail lighting insights

For retailers all that matters is to attract the right people to their store and engage them as long as possible, converting shoppers into buyers.

Small-scale stores offer an intimate shopping experience. Effective lighting brings out the shop's best features: overall illumination that enhances a welcoming environment, plus attractively lit windows and displays. This helps retailers draw in shoppers and turn them into happy customers.



Bundle benefits

CoreLine Recessed Spot

- Replacing conventional 50 W halogen lamps
- · Slim design fits most ceiling types

CoreLine Projector



- Substantial energy savings and longer lifetime reduce operational costs
- · One-to-one replacement from conventional luminaires to LED luminaires
- · Smooth and simple finish blends discreetly into any store interior
- · Instead of the CoreLine Projector on track you can also use a surface mounted option. EOC order code: 06944899 (3000 K). Lighting design will differ slightly if alternative products are used.

Bundle specifications

	CoreLine Recessed Spot	CoreLine Projector
Туре	RS141B LED6-32-/830 PSR PI6 WH	ST120T LED8S-24-/830 PSU BK
	RS141B LED6-32-/840 PSR PI6 WH	ST120T LED8S-24-/840 PSU BK
Power	11 W	11 W
Luminous Flux	650 lm	800 lm
Color temperature	3000 K, 4000 K	3000 K, 4000 K
Color Render Index	≥ 85	> 80
Lifetime	50,000 hours	30,000 hours
Number of luminaires		
on MCB 16A type B	≤ 40	≤ 40
Ordering (EOC) code	06904299 (3000 K)	06942499 (track mounted 3000 K)
Cut-out diameter	80 mm	not applicable

Lighting design insights

The shop window plays an important role in attracting people to the store. Use accent lighting to highlight the merchandise and to communicate that the store is open.

Glare and shadows

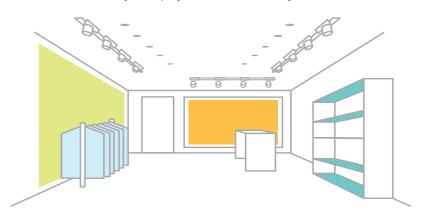
Limit the projector angle to < 20° to avoid glare for the staff and customers' shadows on the items you display.

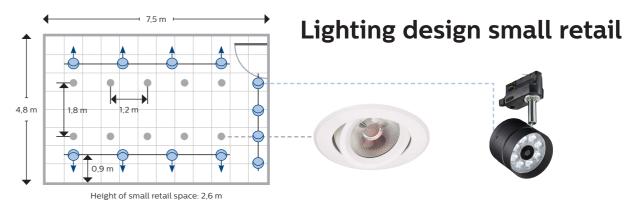
Light the walls to communicate that the store is open and make it appear more spacious. Add extra projectors to make it brighter.

Accent lighting

The human eye is drawn to higher brightness. Use accent lighting to create contrast and highlight the items you want to sell.

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Luminaire types	# Lum.	Em [lux]	Em [lux] rack	Sys. Power	Installed Power	W/m2	W/m2/100lux
Conventional 50 W Halogen Spot	22	181	858	54 W	1188 W	33	18,3
CoreLine Recessed Spot	10	276	1773	11 W	242 W	6.7	2.4
CoreLine Projector	12	2/6	1//3	11 W	242 W	6,7	2,4

*Based on European average of 12 cent/kW hours including maintenance and lamp replacement cost.

