PHILIPS

Application bundles

Classroom

Combine an LED luminaire with an intelligent control for maximum performance and savings

Up to
70%
energy savings

Your Classroom application bundle:
CoreLine Surface-mounted 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%.

More info:
www.philips.com/applicationbundles

Traditional
Conventional 2x36 W TLD (8x)

Savings over life*
€2675,–

€3717,–

€1042,–

Application bundle
CoreLine Surface-mounted LED34S VAR-PC (8x) incl. detector

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

Bundle benefits

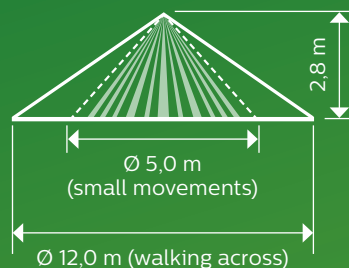## CoreLine Surface-mounted LED34S VAR-PC

- 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

2,8 m

Ø 5,0 m (small movements)

Ø 12,0 m (walking across)

Bundle specifications

CoreLine Surface-mounted LED34S VAR-PC

Type	SM120V LED34S/830 W20L120 VAR-PC
	SM120V LED34S/840 W20L120 VAR-PC
Power	31 W
Luminous Flux	3400 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	26662400 3000 K
	26654900 4000 K

Presence detector LRM1000

Detecting range at 2,8 m height	ø 5 – 12 m
Recommended mounting height	2 m – 4 m
Switch off delay	10 sec. – 5 min.
Number of luminaires on one control	≤ 15
Ordering (EOC) code	22557700

Lighting design insights

Glare
Use low-glare luminaires for comfort, to improve the experience of students and teachers.
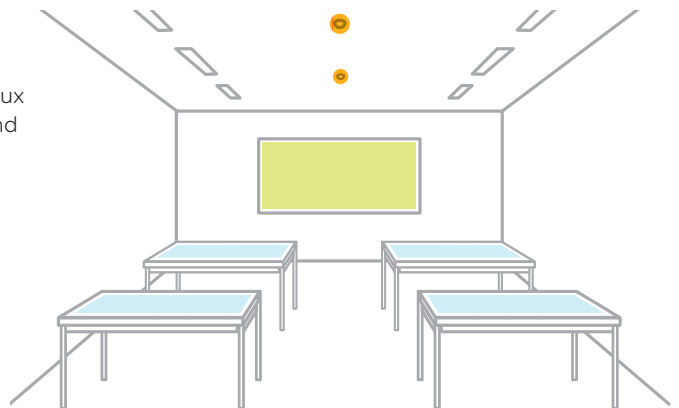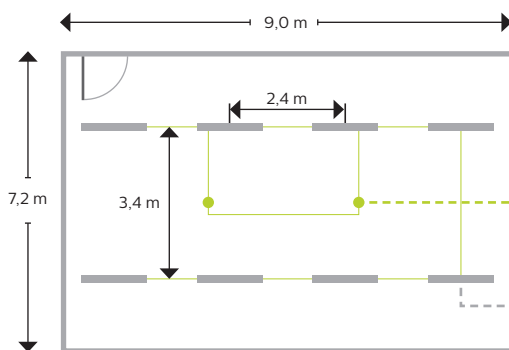
Illuminance
At desks, EN12464-1 requires 300 lux for classrooms and 500 lux for evening classes and adult education.

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

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

Lighting design classroom

9,0 m

2,4 m

3,4 m

7,2 m

Height of classroom: 3,0 m

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