



Where brilliance meets intelligence

Discover Philips HLD LED technology



The global projection market is changing rapidly. New applications and technologies are creating more efficient, powerful, and intelligent projectors incorporating features such as interactivity, voice control and smart capabilities. With high-quality imaging increasingly becoming the standard, how can you best future-proof your investment in projection?

As the world leader in both LED lighting and UHP projector lamps, we have been at the forefront of projector technology with award-winning innovations for over 25 years. And now, our latest HLD LED technology is set to revolutionize the projector market.

Game-changing technology

HLD LED is unique in that it works around the 'law of etendue' to deliver a superb color experience and incredible brightness while enabling new levels of resolution. On top of that our patented HLD LED technology is energy-efficient, scalable, completely maintenance free, environmentally friendly and easy on the eyes.

Applications

This breakthrough innovation opens up wide-ranging possibilities across many applications, from education, corporate and simulation settings to screenless TV, set to dominate the future.

Your future looks bright

There's no doubt that HLD LED is the future of projection, and we are committed to further develop this technology to keep you ahead of the exciting new possibilities in projection.

Think instant on, no lamps to change – ever, reduced energy use and sustainability coupled with complete freedom of design. All with the quality and reliability you'd expect of the #1 company in LED lighting backed by a solid reputation for outstanding innovation, customer centricity, reliability and operational excellence.

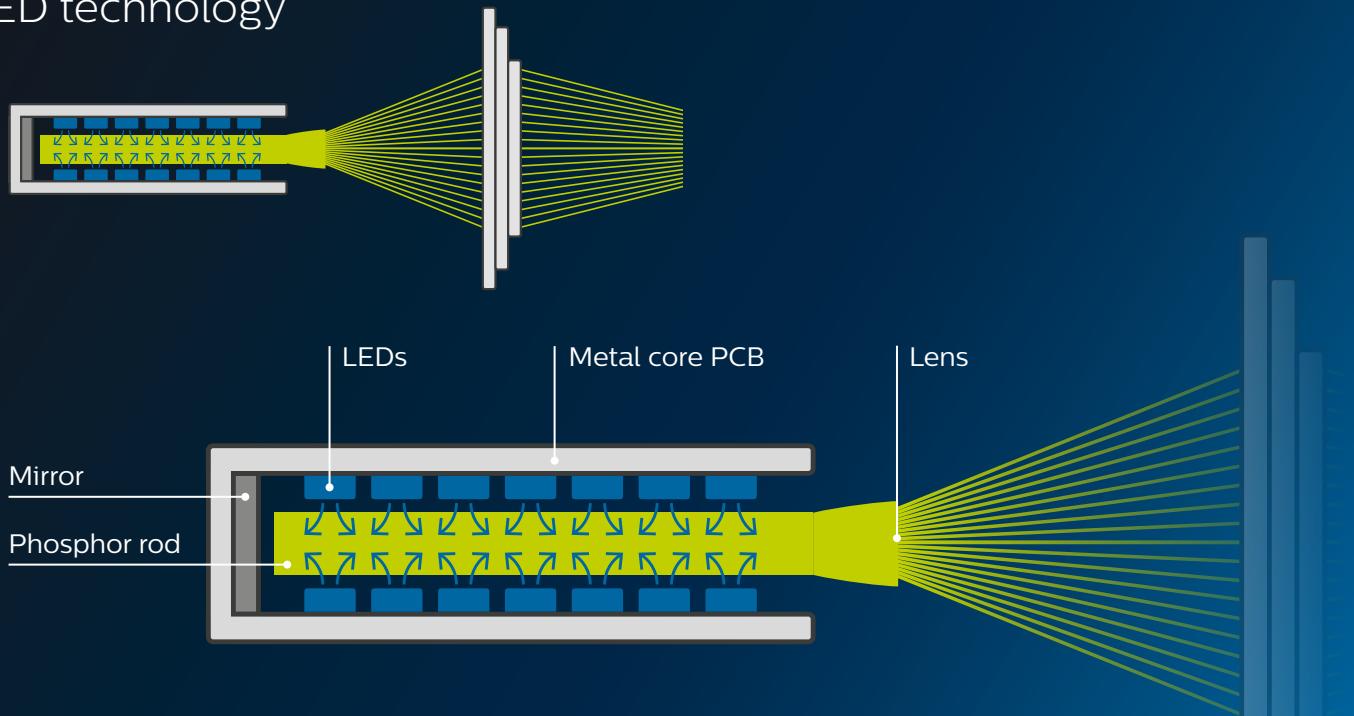
Continuous innovation

We believe this next generation of LED light source will secure the future of projection, and we are committed to further develop this technology towards a smart, simple, build-in platform that will allow you to stay ahead of the changing needs of projection innovation.

Work with us

If you're looking for a high-performance, energy-efficient and a hassle-free solution make sure you talk to us!

HLD LED technology



How Philips HLD LED technology breaks the limits of LED brightness

Projector brightness is determined by two main characteristics of the projection light source: the output and the distribution of the light.

The distribution should be very narrow, in order to collimate the light rays efficiently into a controlled beam that will bring full intensity to the area needed (the imaging device). How does this work with LED Projection lighting? Let's compare normal LED projection with HLD LED Technology and discover how we secured the future of LED projection.

Normal LED projection

LED's have by nature a Lambertian light distribution. Which means that the light is spread forward towards all directions (typically 180°). The disadvantage for projection with regular LED light is that the broad distribution is not concentrated to 1 point, and therefore only a small portion can be used for projection. Resulting that most of the LED light is lost, not providing the required brightness needed.

HLD LED technology

Our patented HLD LED technology solves this problem in a unique way. By combining multiple LED's and pumping it directly onto a phosphor rod (light tunnel). The light of the LEDs are combined through the rod into a very narrow light beam, creating an extremely bright point source of light which perfectly fits projection requirements and without any loss of light.

Unique innovation by combining LEDs & Phosphor rod

A series of high brightness blue LEDs are directed into a patented phosphor rod, where the light can be converted to green or yellow output.

