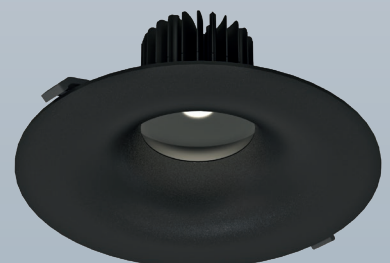
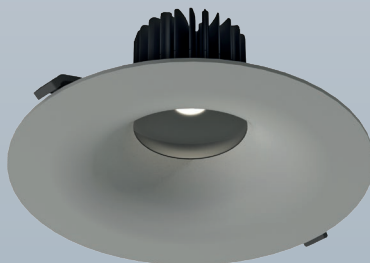
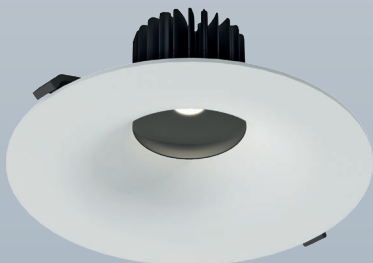


CLS

Emerald series

Indoor Downlighters

Unique Combination of Lightefficiency & Lightcomfort



Emerald series

CLS Emerald series

The Emerald series is the ultimate downlighter series for replacing traditional PL and CFL downlighters in the most divergent projects.

With a wide choice of light outputs up to 4200 lumen, colour temperatures, colours of the housing, dimming possibilities, large variety of installation dimensions and a great amount of visual comfort, the Emerald offers the appropriate and most favourable price solution for all possible projects.

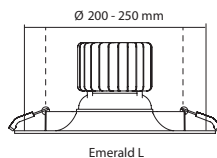
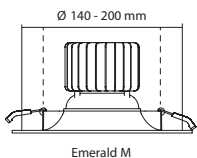
Some typical applications in which Emerald fixtures are successfully applicable are: offices, hospitals, healthcare institutions, schools, theatres, hotels, cinemas and retail projects.

Obviously, there are multiple reasons to choose for a quality brand in these different accommodations.

What makes the Emerald so versatile?

Simple Design Suitable for Existing Ceiling Holes From 140 up to 250 mm

Thanks to the modular Cone construction of the Emerald and the variable installation dimensions, it is possible to replace almost 98 % of the existing PL and CFL fixtures. This means that you are no longer tied to one specific brand. In addition, there are almost no LED alternatives next to the present ones of 2 x 26 and 2 x 42 Watt downlighters with an installation dimension of 250 mm.



High Light Efficiency

The LED light source is of the Japanese brand CITIZEN, the world market leader in the field of CoB LED technology.

In combination with the patent pending CLS Convex lens system a luminous efficiency up to 92% is achieved.

All versions of the Emerald series feature an A+ energy label.



Excellent Dimming

The CLS Emerald series offers a wide choice of dimming methods. Very important is that the dimming quality is unprecedentedly high. It says everything that, with the applications in which the quality of dimming is of great importance; users choose the LED solution by CLS.

CLS offers the following dimming methods:

- > 1-10V.
- > Phase Cut. (Mains dimming)
- > Digital through the DMX512 protocol.
- > DALI.

Visual Comfort

CLS has developed a number of unique innovative technical solutions, which guarantee high comfort. The holder of the LED light source is created in black to prevent reflections and glare.

In the standard version of the Emerald a soft diffusion filter is applied to create a soft homogeneous light beam.

The Office version of the Emerald is fitted with a unique lens system to ensure an extremely low UGR value. Depending on the chosen LED light source, the UGR value varies from 11 till 16.





Jansen Totaal Wonen, The Netherlands

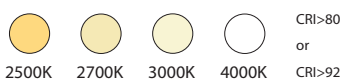
Wide Choice of Light Colour in Combination with Extremely Good Colour Rendition

The Emerald series offers a choice of four different white light colours. From extra warm white (2500K) for the use in the hotel and catering industry till neutral white light (4000K) for laboratory environments.

Most of the LED downlighters, and certainly the traditional PL and CFL, are designed to maximize light output, where unfortunately the quality of light is of less importance.

The Emerald offers the unique ability to create a number of models with a **CRI up to 92**. This means an extremely good colour rendition, causing all the colours in the room to come across as completely natural. This will lead to a much more pleasant perception of the work- or living environment.

This can lead to higher productivity in work environments or a considerably more pleasant living environment.



Wide Beam Angle

A wide beam angle offers the advantage of fewer fixtures needed to illuminate a room. It will be obvious that this means a significant reduction in the needed investment for lighting in a project.

Optimal Harmonization with Any Environment

To perfectly integrate the fixtures in the interior design of a room, the Emerald series is available in the colours white, grey and black.

In addition, CLS offers the possibility to supply the fixtures in almost any RAL colour. This provides architects and designers with the ultimate freedom to customize all fixtures to the 'corporate identity' of their clients.

Another interesting option is to mark a route within a building by choosing different colours of the housing per route. This can simplify finding a certain department in a hospital or a Town Hall, for instance.



Low Installation Height

Because of the huge amount of already present installations (climate control, data cabling etc.) above the ceilings in hospitals, offices and stores, there is often less space available for lighting.

With an installation height of 121 mm till a maximum of 146 mm, the Emerald will not create any unexpected surprises during the period of construction.

A Sound Investment

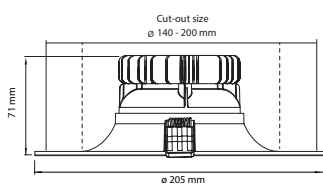
Components of the highest possible quality are used for the production of the Emerald series. No compromises are made for the quality of the individual parts. Next to the high quality Japanese LED modules, the power supplies are of European origin.

Unlike many other suppliers on the market who only claim to do so, CLS actually **designs and produces its fixtures in The Netherlands**. CLS belongs to a group of companies with more than 25 years of expertise in the professional lighting business.

Measurements

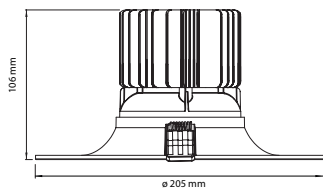
Emerald M

4 serie - Max. 15 Watt

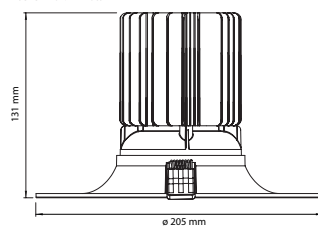


5 serie - Max. 20 Watt

6 serie - Max. 28 Watt

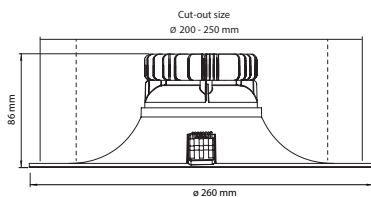


7 serie - Max. 41 Watt



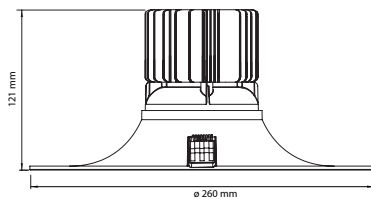
Emerald L

4 serie - Max. 15 Watt

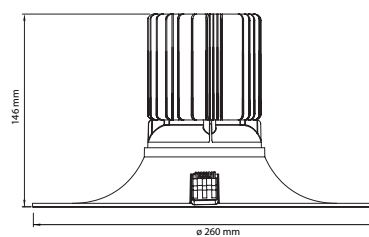


5 serie - Max. 20 Watt

6 serie - Max. 28 Watt

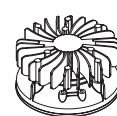


7 serie - Max. 41 Watt



Light engine

4 serie - 15 Watt



5 serie - 20 Watt

6 serie - 28 Watt



7 serie - 41 Watt



Technical specifications

LED:	1 x CoB
Available colours:	CRI>80 : 2500K, 2700K, 3000K & 4000K CRI>92 : 2700K, 3000K & 4000K
Beam angle:	4 & 5 serie : 71° Office : 50° 6 & 7 serie : 83° Office : 60°
Power supply:	4 serie : 350 mA 5 serie : 500 mA 6 serie : 700 mA 7 serie : 1000 mA
Power consumption:	4 serie : 15 Watt 5 serie : 20 Watt 6 serie : 28 Watt 7 serie : 41 Watt
Housing:	PC / aluminum
Swivel:	350° horizontal
IP value:	IP40
Cable length:	150 cm
Ambient temperature:	-10 °C till +40 °C

Icons

