"TIR") lens is mounted in the base of the luminaire. The LED is a so-called High intensity LED and emits a bright omnidirectional "Royal Blue" light. The use of the TIR lens on the LED results in a focused beam of light. By aligning top piece and base of the luminaire results in the beam of light projecting directly on the magnetically suspended disc. As the disc is coated with a layer of preferably yellow phosphor, the "Royal blue" light is absorbed and emitted as white light. In this way the disc is acting as a light source.

By varying the types and/or blends of phosphor, the color of the light which is excited by the phosphor may be varied as well. By providing multiple discs, each with another type or blend of phosphor, a user may vary the color of the light emitted by the luminaire, by simply changing the disc for another disc. By varying the amount of phosphor or the thickness of the layer of phosphor, the light intensity may also be varied. By varying the color of the LEDs (e.g. in an RGB LED) and/or by using different types of discs, varying in material and/or transparency, different colors emitted by the luminaire may be achieved.

The attracting force of the electromagnetic coil increases as the current through the electromagnetic coils rises. Alternatively, the attracting force of the electromagnetic coil decreases when the current through the electromagnetic coils drops. In this way the attracting force of the electromagnetic coils may be controlled by a control unit which regulates the current. The Invented luminaire, brought on the market under the trademark Lunaluxx, uses this type of current control to position the magnet attached to the plastic disc is in an equilibrium state. Hereinafter the combination of disc with magnet is referred to as "disc".

In practice, because of air streams and other influencing factors, the equilibrium position will be constantly disturbed. The control unit is therefore arranged for controlling the system, maintaining the equilibrium state and more specifically compensate for these outside influences.

As the attracting force exerted on the disc becomes greater than the gravitational force exerted on the disc, the disc will start moving towards the electromagnetic coil. One or more Hall Effect sensors sense the corresponding increase in the strength of the magnetic field.