suspended (or movable) part of the luminaire would require a relatively high current through the electromagnetic coils of the stationary part.
Hereinafter the passive magnetic material used in the movable part is referred to as "magnet" as opposed to the active electromagnetic coils used in the stationary part.

The invention is now described by the following aspects and embodiments, with reference to the figures.

FIGURE 1 shows a schematic overview of an example embodiment of the present invention. The Invented luminaire 100 has a stationary construction comprising a stationary part 101, a base 201, an arm 301 connecting the stationary part 101 and the base 201 and a movable part 401 which may comprise a disc coated with remote phosphor. The movable part 401 comprises a (preferably permanent neodymium) magnet 402. The magnet 402 is connected to the movable part 401 or may be incorporated in the material of the movable part 401. The movable part 401 is magnetically suspended beneath the stationary part 101, and is preferably positioned between stationary part 101 and base 201.

One or more electromagnetic coils 102 are positioned in the stationary part 101. In close vicinity of and preferably beneath electromagnetic coils 102 a small recess is provided for holding one or more Hall Effect sensors 103. The Hall Effect sensors 103 are preferably aligned with the center of the electromagnetic coil. The Hall Effect sensors 103 measure the strength of the magnetic field close to the Hall Effect sensors 103. The Electromagnetic coils 102 comprise a ferrite core with a copper wire windings, for example with 450 turns.

The electromagnetic coils 102 and the Hall Effect sensors 103 have preferably two cables (not shown) for power supply and three cables (not shown) for transporting signals. All cables go through an opening in stationary part 101 via arm 301 to base 201.
Base 201 comprises a control unit which is connected to the electromagnetic coils 102 via the two cables and which is connected to the Hall Effect sensors 103 via the three cables.