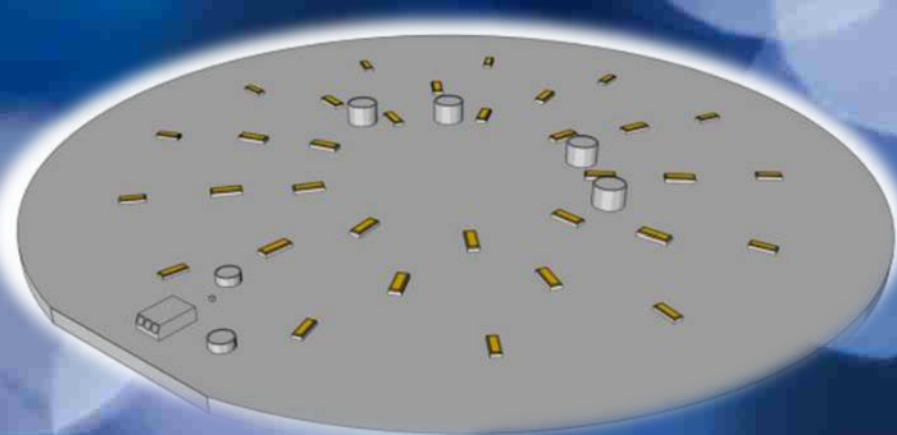
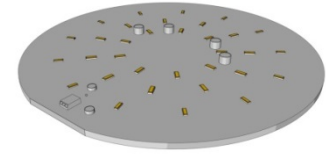


# Zhaga Book 16 “Round planar non-socketable LED Light Engine”

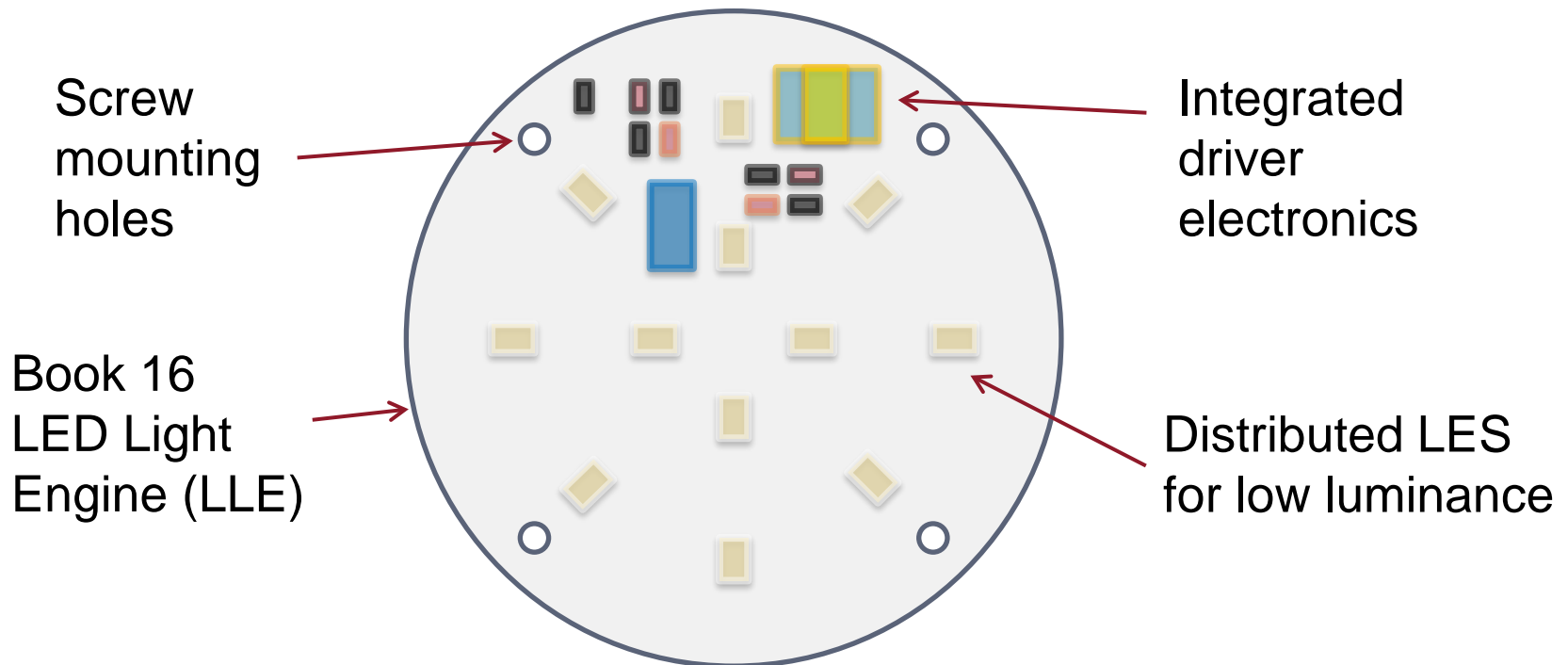
Edition 1.0  
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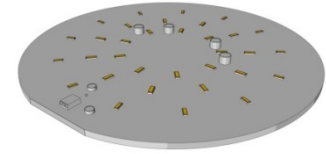




# Book 16 overview

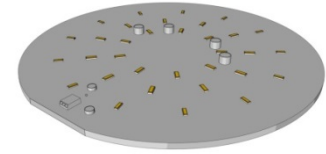
- Book 16 defines a **family of circular LED light engines** (LLEs) that are especially suited to be used in **flat, circular, low-luminance applications**.





## Book 16 overview

- The LED light engines (LLEs) have an **integrated LED driver** (electronic control gear).
- As luminance and power density is low, thermal management is easy. A dedicated heat sink is often not necessary.
- The **maximum LLE height is very low**, such that disc-shaped luminaires are a prominent application.
- The LLEs are intended to be installed and replaced by luminaire makers only.

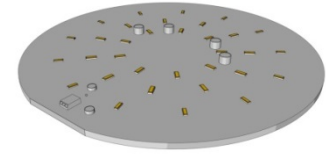


# Book 16 module categories

- Book 16 has five LLE categories, defined by their maximum diameter. Two more sub-categories allow easy mounting in existing luminaires.

Category	Maximum LLE diameter	Number of mounting holes
D13	130 mm	3
D18	180 mm	3
D25 (A and B)	250 mm	4
D35 (A and B)	350 mm	3 or 4
D50	500 mm	4

- The light-emitting surface (LES) is not specified. Most LLEs are expected to have a distributed LES on top of the LLE.



## Further specification details

### MECHANICAL:

The Book defines

- Maximum outline
- Mounting hole positions

### ELECTRICAL:

- Mains power

### PHOTOMETRIC:

- Representative image for LES shape/look
- Refer to Book 1 for requirements for: Flux, CRI, CCT

### THERMAL:

- Simple thermal interface based on reference luminaire measurement

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