

# Phabulous



## Micro-displays for AR

**Free-form micro-optics for brightness enhancement  
of OLED micro-displays for see-through optics**

Pilot Line Use Case by MICROOLED



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## Micro-displays for AR

### Free-form micro-optics for brightness enhancement of OLED micro-displays for see-through optics

Free-form microlens arrays (FMLAs) provide great advantages for improving pixel luminance of OLED micro-displays, especially for Augmented Reality (AR) applications with see-through glasses. MICROOLED designs, develops, and manufactures high-performance micro-displays for near-to-eye applications, as well as complete connected glasses systems. As partner of PHABULO $\mu$ S they are specifically looking into FMLAs for AR glasses for cycling and other sport activities. Main goal for this use case is to control the angular shape of light output and to enhance brightness of the OLED micro-display components, especially in connection with compact, free-space optics based micro-projection systems for wearable Augmented Reality applications. MICROOLED will evaluate performance and manufacturability of different designs of micro-optical elements in order to choose the right manufacturing process for industrialisation of the technology.

Stay up to date on the progress of this use case and follow us on social media, visit our website and register for our newsletter.

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