

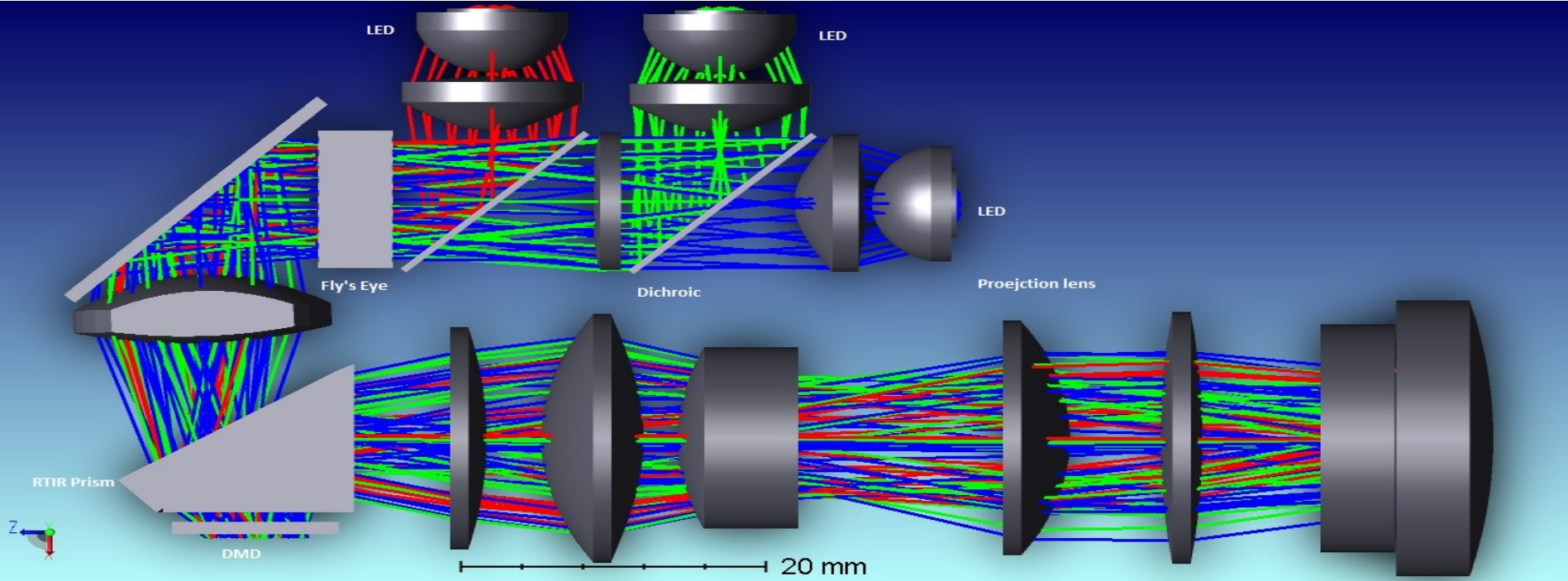
Example DLP3010 (.3 720 TRP) Optical Reference Design

Please refer to “*Optical Engine Reference Design for DLP3010 Digital Micromirror Device*” application note for details of this reference design.

Optical engine specification

Features	Description
Maximum brightness	Up to 299 lumens at 20 watts (Please refer to application note for details)
Efficiency	Up to 28 lumens/watt (Please refer to application note for details)
Image Quality	
<ul style="list-style-type: none">Contrast ratio	Depends on optical engine design and management of stray, flat-state and off-state light inside the engine
<ul style="list-style-type: none">Modulation Transfer Function(MTF)	50% at 93 lp/mm (as designed)
<ul style="list-style-type: none">Uniformity	> 70%
System	
<ul style="list-style-type: none">Dimension (optical system only) Does not include mechanical housing and heat sink	94 mm(L) x 50 mm(W) x 25 mm (H)
<ul style="list-style-type: none">Throw ratio	1.4
<ul style="list-style-type: none">Offset	100%

Optical system layout



Notice

- This reference design is solely intended to assist designers who are developing systems that use the DLP3010 DMD. The performance and results listed in these documents are based on the design simulation tool Zemax. The actual performance of the end product will depend on the final design and manufacturing processes.
- Customer will need to carefully make trade-offs on design parameters and materials to achieve their own target specs.

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