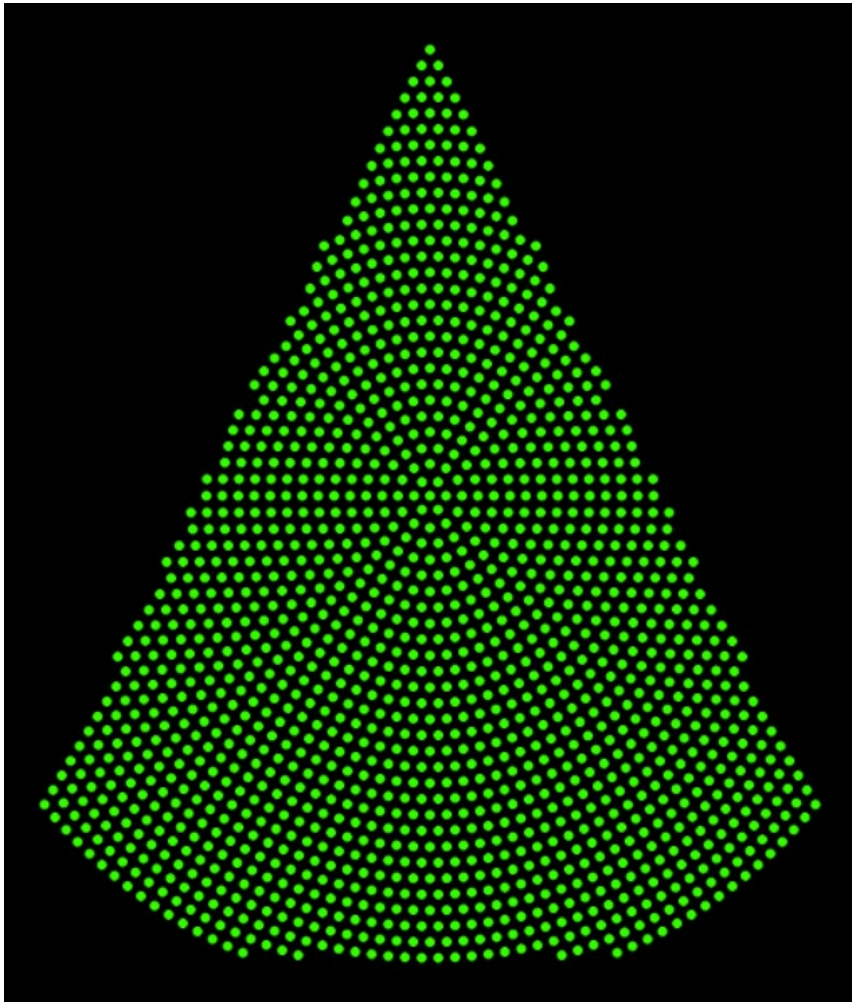
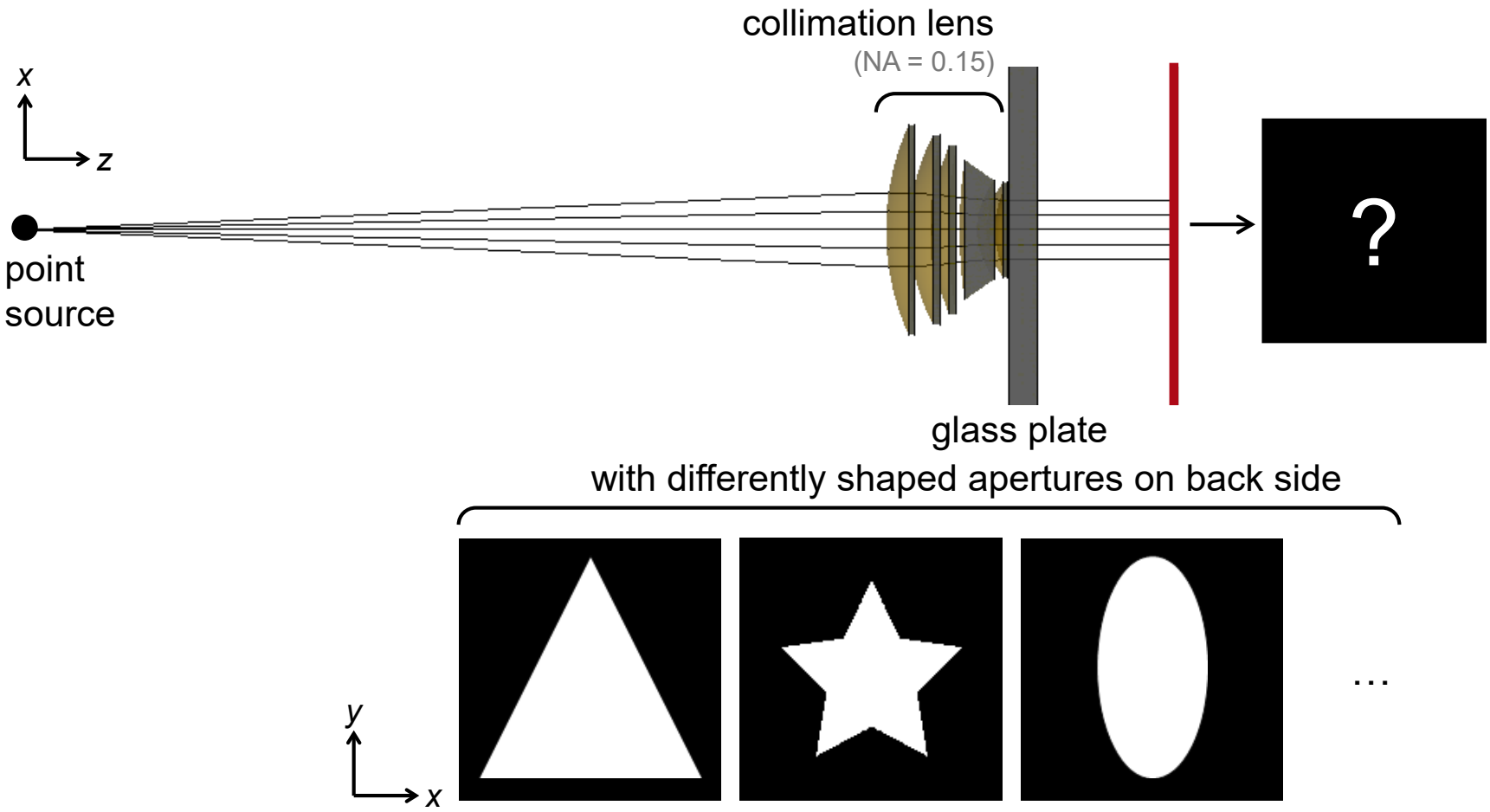
Tailored Light Outcoupling from Glass Plate with Arbitrarily Shaped Apertures

Abstract

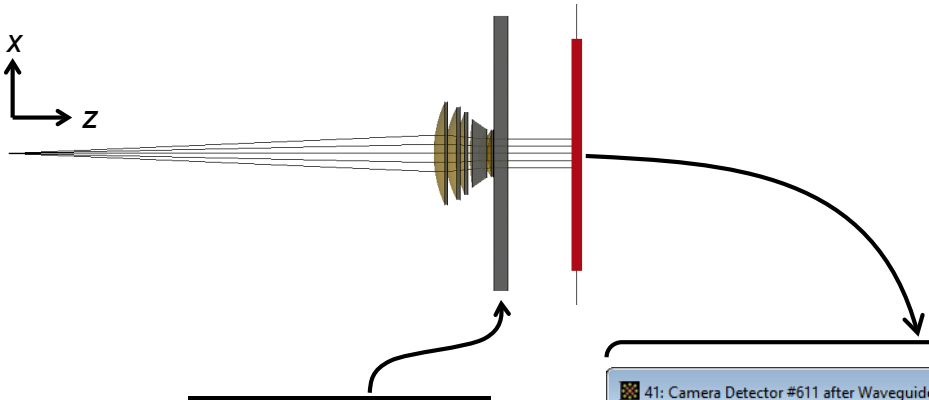


In modern imaging and display systems, apertures with different shapes may be encountered. For example, in- and outcoupling apertures of the waveguide in near-to-eye displays often have to be tailored in certain shapes. With the region concept in VirtualLab Fusion, apertures with arbitrary shapes can be defined flexibly. As examples, several aperture shapes are presented. Situations with fully and partially illuminated apertures are shown as well.

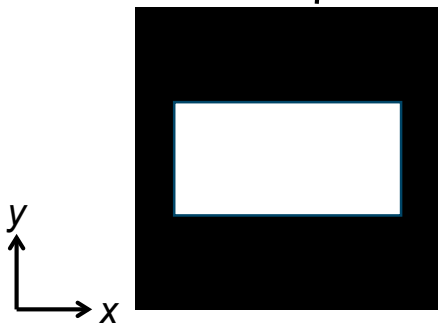
Modeling Task



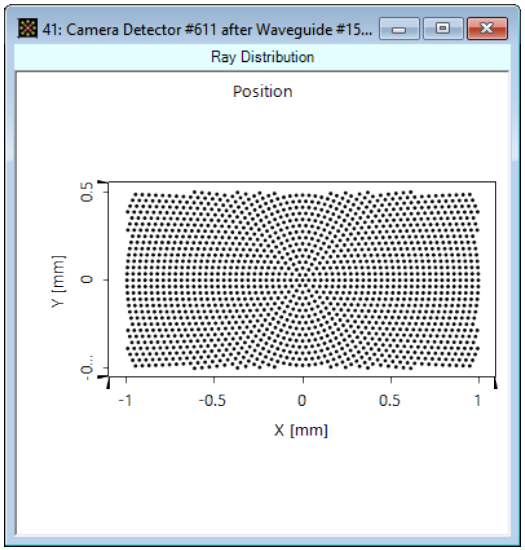
Results



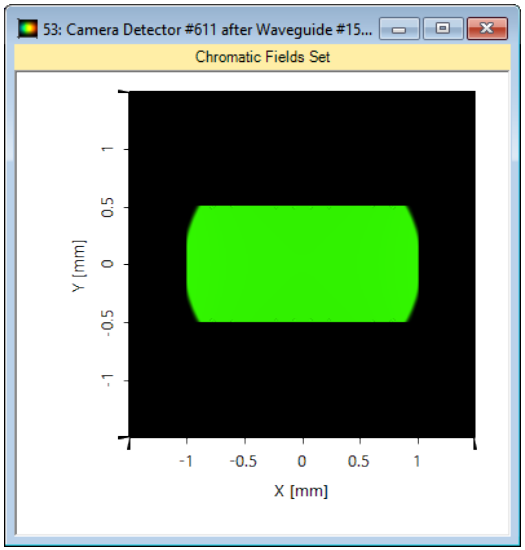
fully illuminated aperture



rectangular aperture

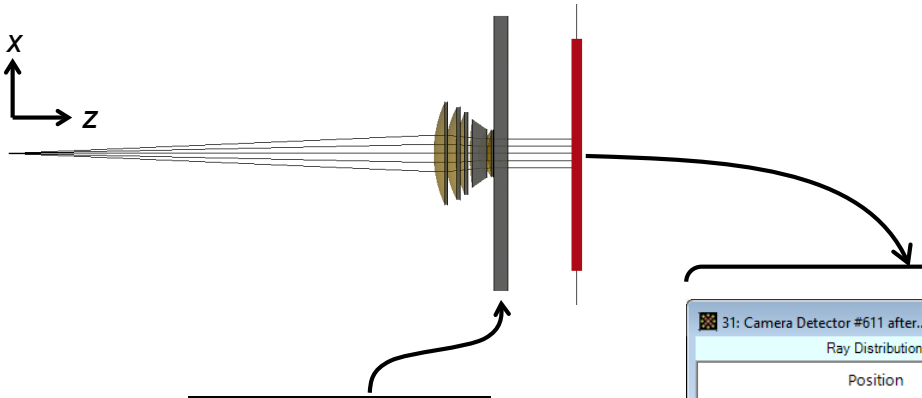


spot diagram

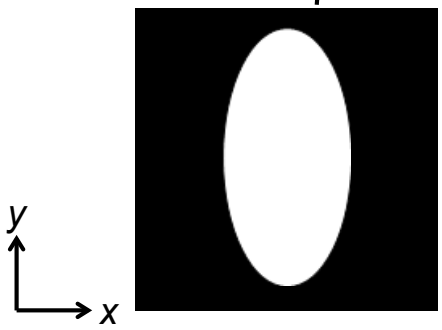


intensity pattern (real color view)

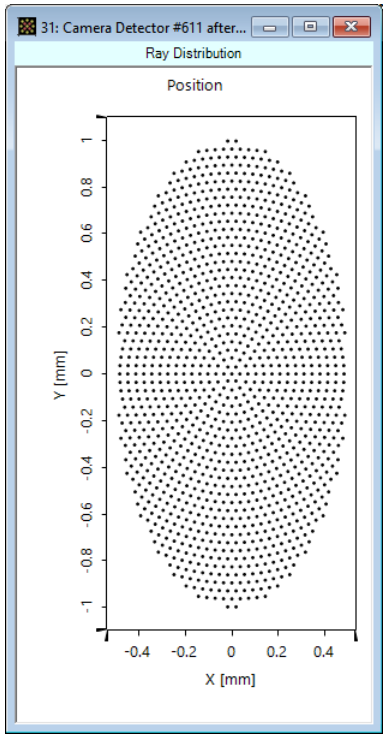
Results



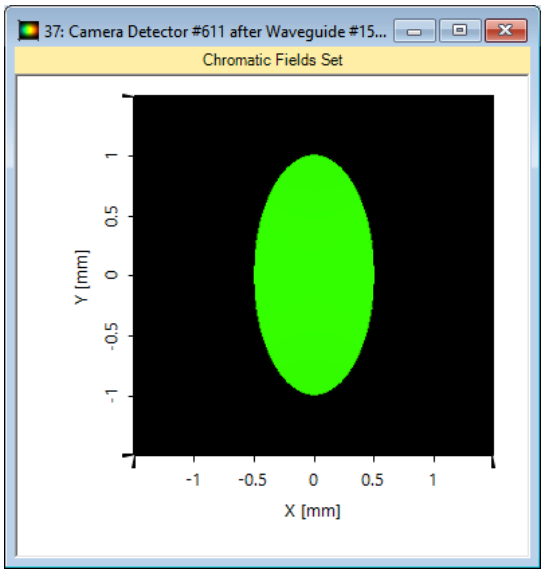
fully illuminated aperture



elliptical aperture

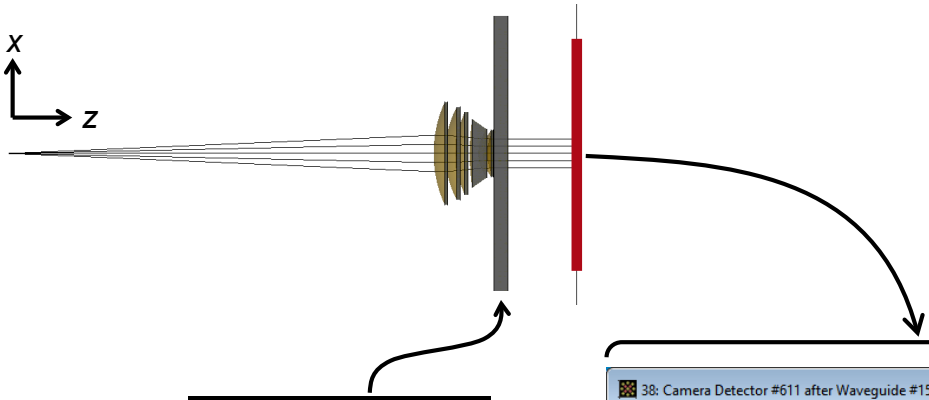


spot diagram

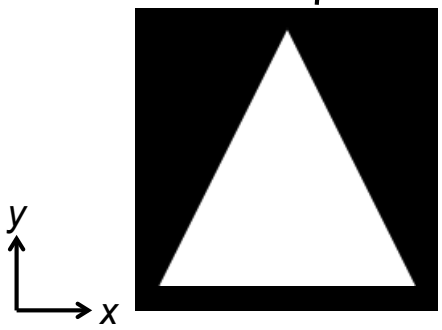


intensity pattern (real color view)

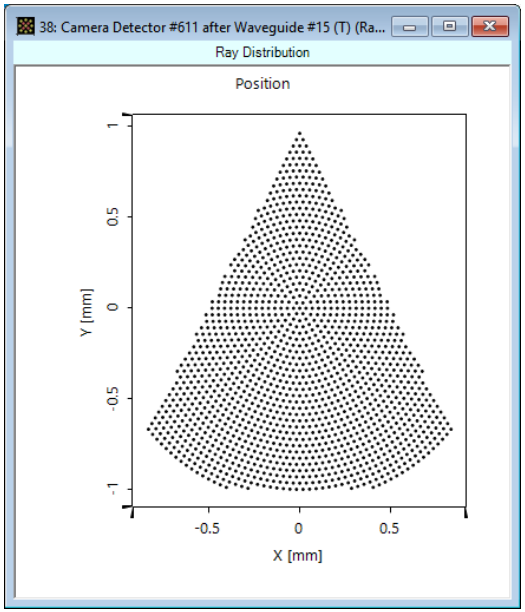
Results



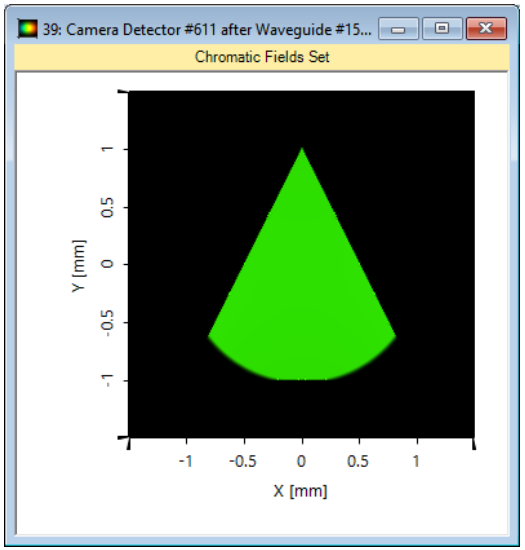
partially illuminated aperture



polygonal aperture

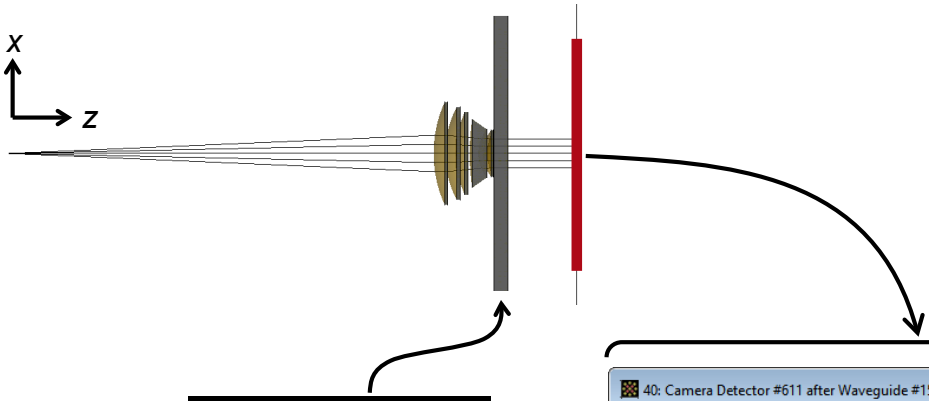


spot diagram

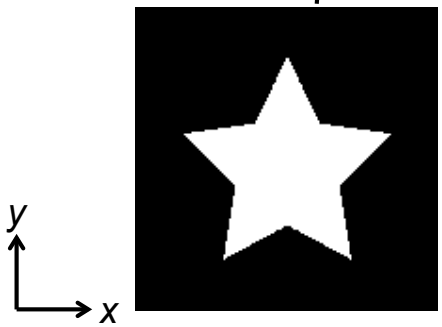


intensity pattern (real color view)

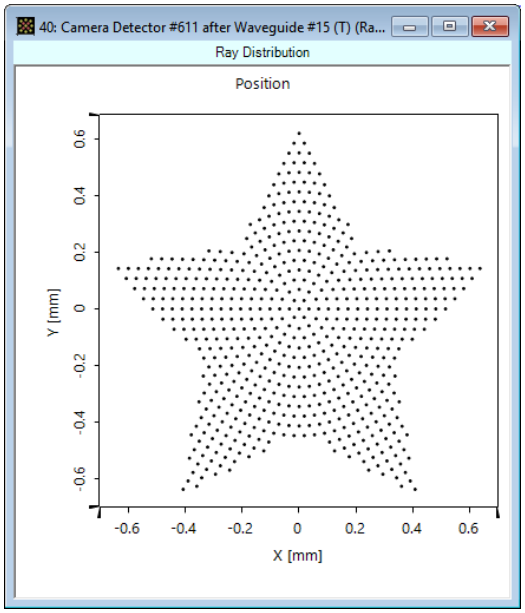
Results



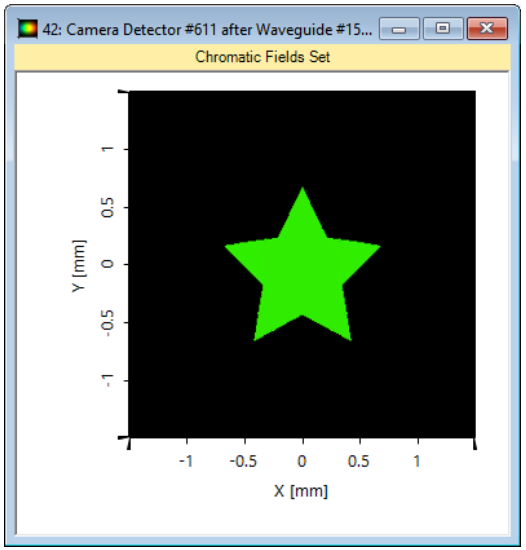
fully illuminated aperture



sampled aperture



spot diagram



intensity pattern (real color view)

Document Information

title	Tailored Light Outcoupling from Glass Plate with Arbitrarily Shaped Apertures
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