



1. Title:	Characterization of grazing incidence collectors under near production conditions
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### 3. Abstract body:

The thermal behaviour of grazing incidence collectors to be used in future EUVL scanners is of special interest due to the significant thermal load on the collector with the EUV source operating at power levels well in excess of 10 kW. A test stand comprising a high power EUV source and a cooled collector as well as suitable metrology for evaluating the performance of the collector under high power operating conditions has been built.

Temperature measurements at different locations on the collector allow for estimation of the cooling capability and scaling to future production power loads. The optical performance of single and dual shell collectors, i.e., total collector transmission and spatial stability of the far field distribution, and their dependence on power load as well as investigation on the transient behaviour are presented.

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