

Solar coronagraphs in formation flying require several mechanical and technological constraints to be met. One of the most critical issues is the external occulter design and its optimization. The occulter edge requires special attention in order to minimize the diffraction while being compatible with the constraints of handling and integrating large delicate space components. Moreover, it is practically impossible to realize a full scale model for laboratory tests. This article describes the results of tests performed with a scaled-model breadboard of the ASPIICS coronagraph disk edge, using the Artificial Sun facility at Laboratoire d'Astrophysique de Marseille.

Keywords: Coronagraph, external occulter, apodization, stray light, measurements, ASPIICS, formation flying