Optical Aberrations in Very Large Horizontal Field of View Collimating Cross Cockpit Displays

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ABSTRACT

Large numbers of Cross Cockpit Collimating Displays has been deployed since the 1980s. The Field of View (FOV) of these systems has continued to increase and currently systems with a 60° x 225° FOV is included in standard offerings. This paper considers optical aberrations encountered in systems with a HFOV greater than 225°.

BIO

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Jeff Bayer received a B.S.E.E from Wright State University in Electrical Engineering in 1989. He is currently employed by Esterline as part of a business segment buyout from Barco. He has worked in simulation since graduation with varied responsibilities. He is currently serving as a Senior Systems Engineer. He was responsible for the 'Closed Loop Design' effort in the development of the CD-2260, Barco's 11' large FOV Cross Cockpit Collimated Display. As an R&D Manager he was responsible for the development of the Barco Generation Seven Raster Calligraphic Projectors. He has travelled widely and is dedicated to creating innovative, cost effective and high quality products for simulation.