

RETROREFLECTOR USING A BIREFRIGENT WEDGE FOR EFFICIENT VELOCITY ABERRATION COMPENSATION. V. P. Vasiliev<sup>1</sup> OJSC «RPC «PSI», 53 Aviamotornaya st. Moscow, 111024, Russia, [lavaser@kmail.ru](mailto:lavaser@kmail.ru)

With introduction of optically anisotropic components, it is possible to deflect the return laser beam from a retroreflector relative to the incoming beam by any predetermined value, thus providing compensation for velocity aberration without considerable loss of return signal intensity caused by division of the reflected beam into separate lobes which normally occurs when dihedral angle offset is used.

Various practical solutions for this approach are presented, and experimental verification is provided.