

Fig. 3. Calculated and experimental Stokes parameters and the state of polarization of amplified combination of radially and azimuthally polarized beam. (a) Calculated results; (b) experimental results.

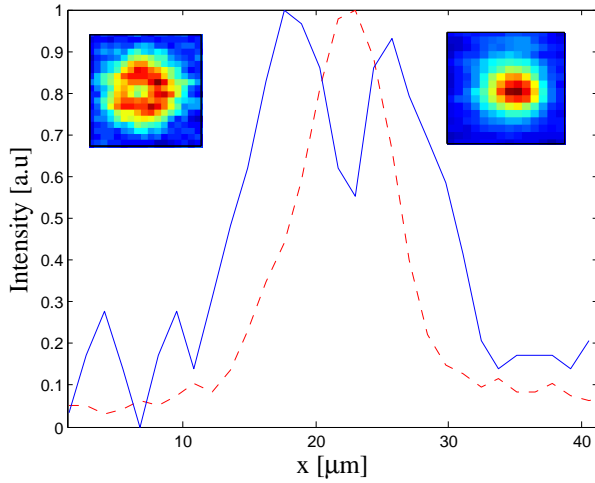


Fig. 4. Experimental cross-sections of the far-field intensity distributions of the amplified radially polarized light beam with and without conversion to a linearly polarized near Gaussian beam. Solid (blue) curve - before conversion; dashed (red) curve - after conversion. Left inset depicts the far field intensity distribution before conversion and right inset the far field intensity distribution after conversion.

6. R. Oron, S. Blit, N. Davidson, A. A. Friesem, Z. Bomzon, and E. Hasman. *Appl. Phys. Lett.*, **77**, 3322, (2000).
7. T. Grosjean, D. Courjon and M. Spajer. *Opt. Comm.*, **203**, 1, (2002).
8. N. Heckenberg, R. McDuff, C. Smith, and A. White. *Opt. Lett.*, **17**, 221, (1992).
9. J. -L. Li, K. -I. Ueda, M. Musha, A. Shirakawa, and Z. -X. Zhang. *Opt. Lett.*, **31**, 2969, (2006).
10. J. -L. Li, K. -I. Ueda, M. Musha, A. Shirakawa, and Z. -X. Zhang. *Opt. Lett.*, **32**, 1360, (2007).
11. A. V. Nesterov and V. G. Niziev. *J. Phys. D:Appl. Phys.*, **33**, 1817, (2000).
12. K. Venkatakrishnan and B. Tan. *J. of MicroMech. and MicroEng.*, **16**, 2603, (2006).
13. G. P. Agrawal, "Fiber-Optics Communicatio Systems" (A Wiley interscience publication, John Wiley and Sons) 1997, Chap. 2.
14. G. Volpe and D. Petrov. *Opt. Comm.*, **237**, 89, (2004).
15. E. Hecht, "Optics" (Addison Wesley, San Francisco, Cal-