**ABSTRACT**

  We propose a new approach for generating a multiple focal hole segment of subwavelength size, by tight focusing of a phase modulated azimuthally polarized Laguerre Bessel Gaussian beam (APLBGB). The focusing properties are investigated theoretically by vector diffraction theory. We observe that the focal hole segment with multiple focal structures separated with different axial distances can be generated by properly tuning the phase of the incident azimuthally polarized Laguerre Bessel Gaussian beam. We presume that such multiple focal whole patterns may find applications in atom optics, optical manipulations and multiple optical trapping.