

Design of Polymer Based 8-Channel, 100-GHz AWG Applying Various Photonics Tools

Dana Seyringer^{1, a)}, Lenka Gajdosova¹, Peter Gašo², and Dušan Pudiš²

¹*Vorarlberg University of Applied Sciences, Research Centre for Microtechnology,
Hochschulstraße 1,
6850 Dornbirn, Austria*

²*Faculty of Electrical Engineering, University of Žilina, Univerzitná 8215/1, 010 26 Žilina,
Slovakia*

^{a)}Corresponding author: dana.seyringer@fhv.at

Abstract. We present design and simulation of polymer based 8-channel, 100-GHz AWG, designed for central wavelength of 1550 nm. The input design parameters were calculated applying AWG-Parameters tool. The AWG layout was created and the simulations were performed applying commercial photonic tool PHASAR from Optiwave. The achieved transmission characteristics were evaluated by AWG-Analyzer tool. The achieved simulation results confirm a very good agreement between the designed and simulated transmission parameters.