

Design of Low Loss Silicon Nitride 8-Channel AWG

Dana Seyringer^{1, a)}, Lenka Gajdosova¹, Catalina Burtscher¹, Anton Kuzma², Jozef Chovan²,
Frantisek Uherek²

¹*Vorarlberg University of Applied Sciences, Research Centre for Microtechnology,
Hochschulstraße 1, 6850 Dornbirn, Austria, e-mail: dana.seyringer@fhv.at*

²*International Laser Centre, Ilkovicova 3, 841 04 Bratislava, Slovakia*

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

Abstract. We present design and simulation of the low loss silicon nitride based AWG applying our proprietary AWG-Parameters tool. The AWG was designed for TM-polarized light with a central wavelength of 850 nm and simulated applying commercial photonic tool PHASAR from Optiwave. The achieved transmission characteristics were evaluated by AWG-Analyser tool. We reached a very good agreement between the designed and simulated transmission parameters.