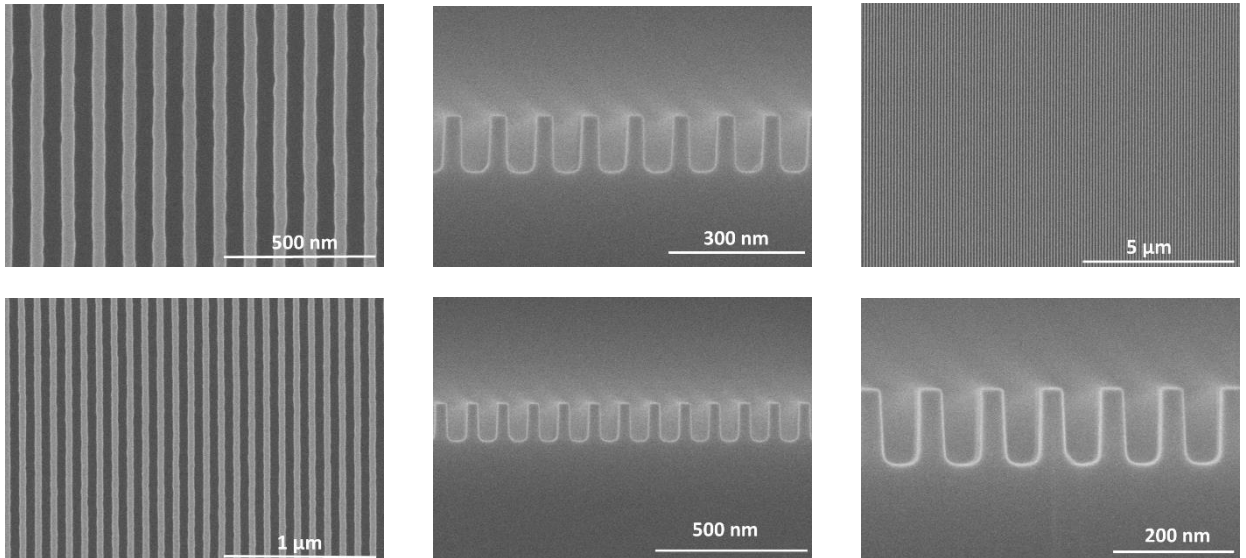


Wire Grid Polarizer (WGP) Standard Stamp

Wire Grid Polarizers (WGP) consist of closely packed metal lines. Fabrication by nanoimprint (NIL) requires a stamp to define the location and size of the lines. NILT is supporting WGP manufacturing by introducing a stamp series focusing on this specific application. Up to $\varnothing 300$ mm stamps can be provided upon request. The standard stamp program consists of two line grating geometries, 50 nm half pitch and 70 nm half pitch, that comes in stamp size of 48 mm x 52 mm.



	Type A	Type B
Stamp ID	WGPSS_50hp	WGPSS_70hp
Material	Silicon	Silicon
Linewidth	50 nm +/- 5%	70 nm +/- 5%
Pitch	100 nm +/- 5%	140 nm +/- 5%
Profile height	130 nm +/- 10%	150 nm +/- 10%
Stamp size	48 mm x 52 mm	48 mm x 52 mm
Stamp thickness	775 μm +/- 25 μm	775 μm +/- 25 μm
Pattern location	Fully patterned	Fully patterned
Active area	45 mm x 45 mm	45 mm x 45 mm

