Scanner & Metrology Test Recipe Handbook

Revision: 1.4
Date: 2025-10-08
Company: ACME Lithography Systems

Revision History

Version	Date	Author	Summary
1.4	2025-10-08	Manufacturing Engineering	Periodic update; limits & procedures clarified.

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§1 Parameter Definitions

Dose is measured in mJ/cm²; Best Focus (BF) in nm relative to nominal stage plane; Overlay reported per-axis and residual magnitude.

§2 Default Recipes by Product

See Table 2.1 for PX-7 defaults; override only with Engineering approval.

§3 Structured Recipe Example

```
{ "tool": "L-900", "product": "PX-7", "layer": "M1", "illumination": {"pupil":
"Annular", "sigma_in": 0.52, "sigma_out": 0.82}, "alignment": {"marks": "A5 grid",
"strategy": "2-pass"}, "exposure": {"dose_mJ_cm2": 24.5, "focus_offset_nm": -2} }
```

§4 Alignment Strategies

Standard: A5 marks, 2-pass; Alternative: A7 marks, single-pass for low-distortion layers.

Appendices & Tables

Table A.1: PX-7 Default Recipe (Table 2.1)

Parameter	Value
Pupil	Annular
Sigma In	0.52
Sigma Out	0.82
Dose (mJ/cm²)	24.5
Focus Offset (nm)	-2