

Trouble Response Playbook (Tier-1/Tier-2)

Revision: 3.0

Date: 2025-10-08

Company: ACME Lithography Systems

Disclaimer: This is a fictional internal document created for demo purposes. Any resemblance to real products or specifications is coincidental.

Revision History

| Version | Date | Author | Summary |
|---------|------------|---------------------------|---|
| 3.0 | 2025-10-08 | Manufacturing Engineering | Periodic update; limits & procedures clarified. |

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§TR-1 Pre-Check Failures

If interlocks not green → stop; escalate to Tier-2 if unresolved in 10 min.

§TR-2 Dose Drift

Localized drift → check pupil clipping; sensor recal; global drift → verify source ripple & PFN caps.

§TR-3 Overlay Residual High (Y-dominant)

Inspect reticle chuck flatness; run stage thermal comp; if residual persists > 3.5 nm, schedule chuck re-seat.

§TR-4 Focus Map Tilt

Verify wafer clamping and stage leveling; run BF re-map; if tilt > 8 nm across field, Tier-2.

Appendices & Tables

Table A.1: Decision Tree Snippets

| Symptom | Check | If yes → | If no → |
|----------------------|-------------------|--------------------------|----------------------|
| Dose localized drift | Pupil clipping | Adjust pupil; re-run D25 | Recal dose sensor |
| Overlay Y high | Chuck warp signs | Re-seat chuck | Thermal comp routine |
| Focus tilt | Stage level drift | Leveling routine | Clamp check |