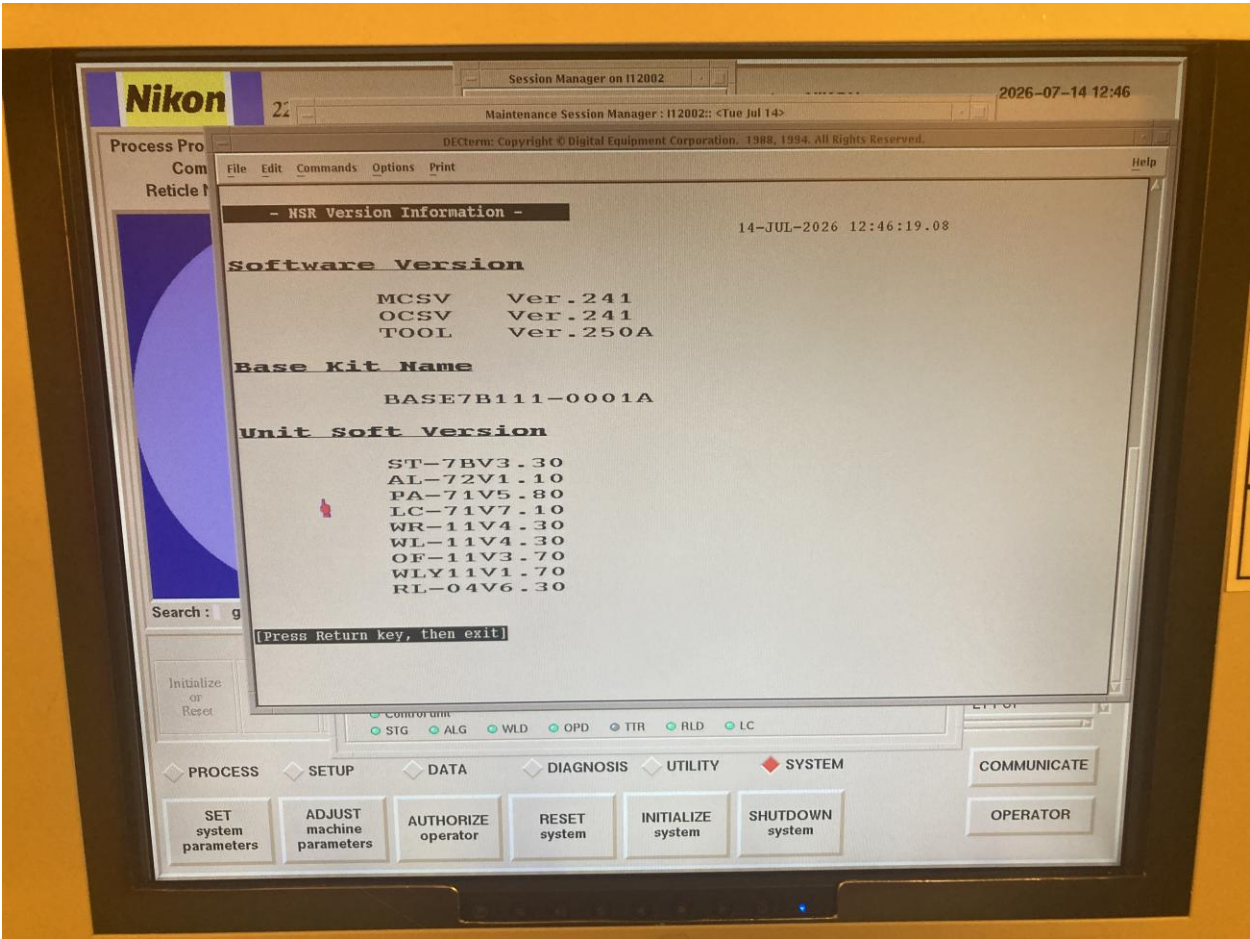


No	ITEM	SPEC	RESULT
1	Total Focus Deviation	Max-Min $\leq 0.30\mu\text{m}$	0.336 μm
2	Lens Astigmatism	$ V-H \leq 0.30\mu\text{m}$	0.248 μm
3	Lens Dynamic Distortion	X,Y = Within $\pm 50\text{nm}$	Data not Available
4	Wafer Flatness Accuracy	1) Flat Within $\geq$ Max-Min 3.0 μm 2) L.F.S Within $\geq$ Max-Min 0.8 μm	1. 2.130 μm 2. 0.75 μm
5	Exposure Power	Within $\geq 700\text{mW}/\text{cm}^2$	594 mW/cm^2
6	Illumination Uniformity	Within $\pm 1.5\%$	0.86%
7	Stage Precision Accuracy 1) Stepping Accuracy	1) $3\sigma \leq 50\text{nm}$	1) X: 12nm Y: 11nm
8	Wafer Pre-Alignment Repeatability	$3\sigma \leq 15\mu\text{m}$	X : 4.232 μm Y : 3.343 μm T : 4.386 μm
9	Integrator Accuracy	Target: Ave $\leq 1\%$	Ave Max = 0.14%
10	Alignment Accuracy 1) FIA-EGA 2) LSA-EGA	FIA-EGA = $ M + 3\sigma \leq 75\text{nm}$ LSA-EGA = $ M + 3\sigma \leq 75\text{nm}$	1) X = $\pm 50\text{nm}$ Y = $\pm 40\text{nm}$ 2) X = $\pm 50\text{nm}$ Y = $\pm 30\text{nm}$

Software

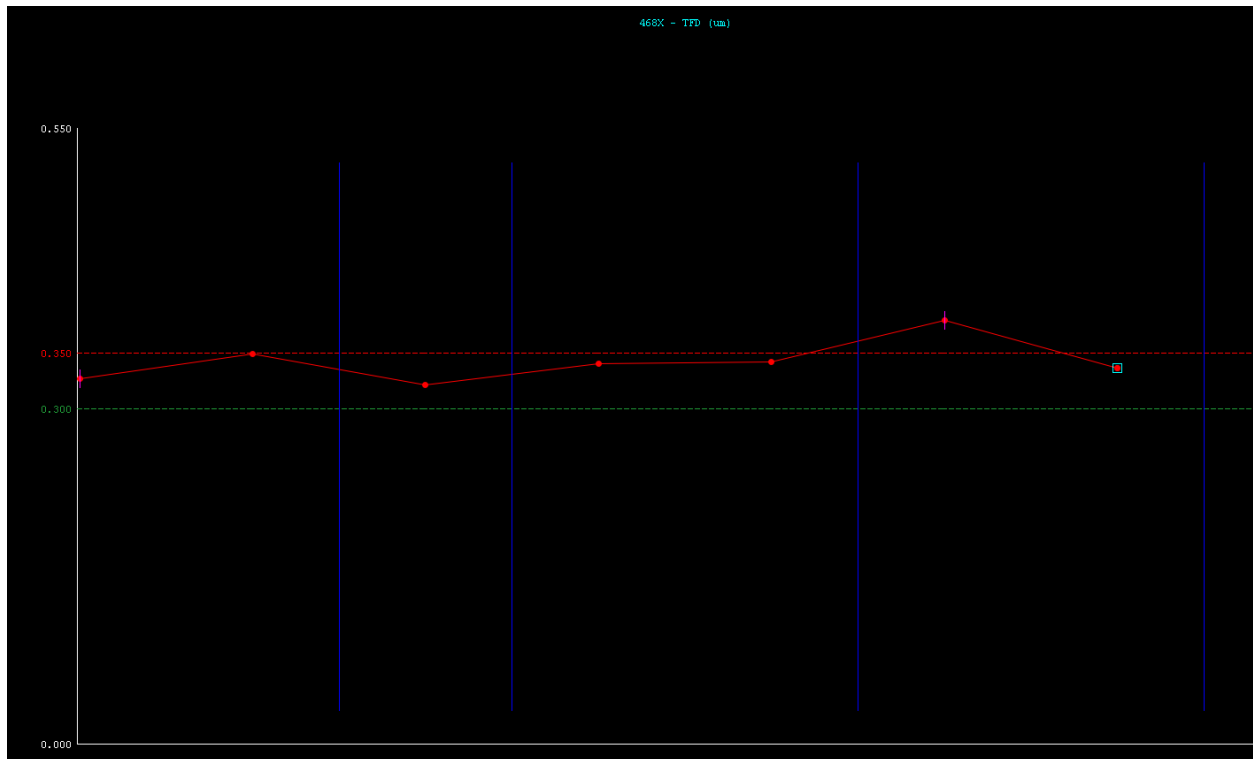


1. Total Focus Deviation (2018-2022):

(0.25 μ m L&S / 15Point V/H)

SPEC: Max-Min $\leq$ 0.30 μ m

Result: Max – Min = 0.336 μ m

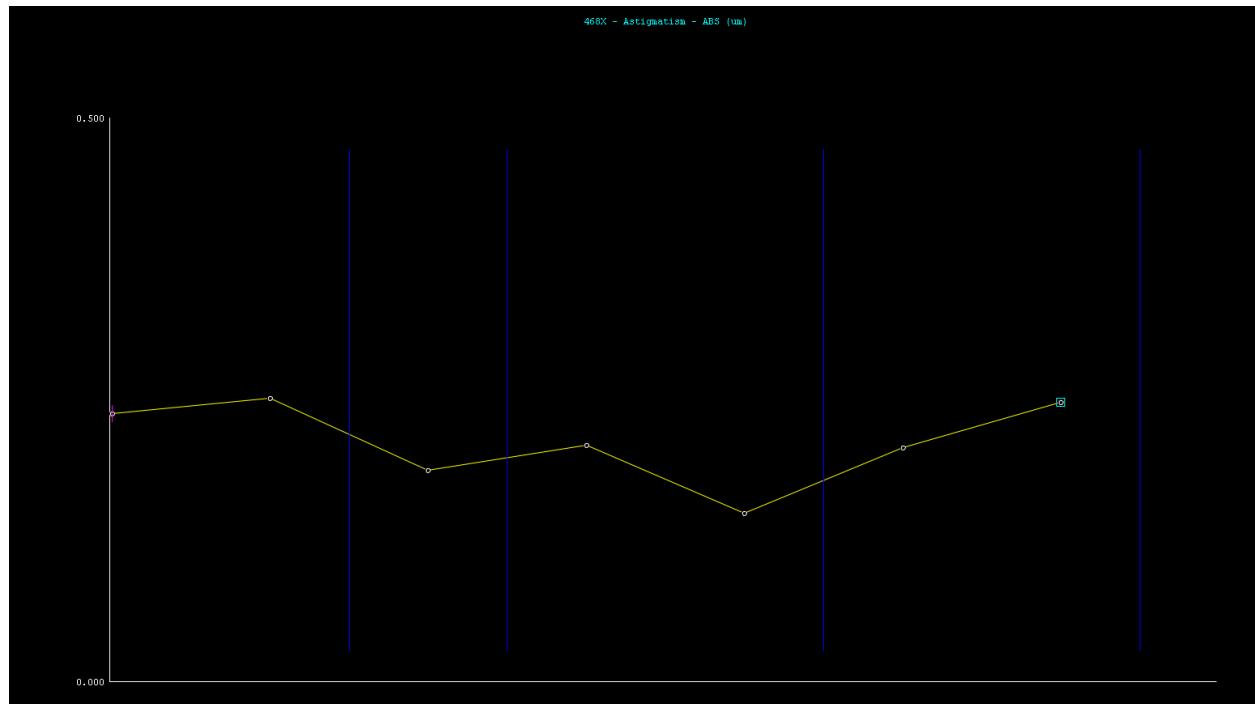


2. Lens Astigmatism (2018-2022):

(0.25 μm L&S / 15Point V/H)

SPEC: $|V-H| \leq 0.30\mu\text{m}$

Result: $|V-H| = 0.248\mu\text{m}$



3. Lens Dynamic Distortion (2025):

SPEC: X,Y = Within $\pm 50\text{nm}$

Result: X = $-2\text{nm} \sim 40\text{nm}$

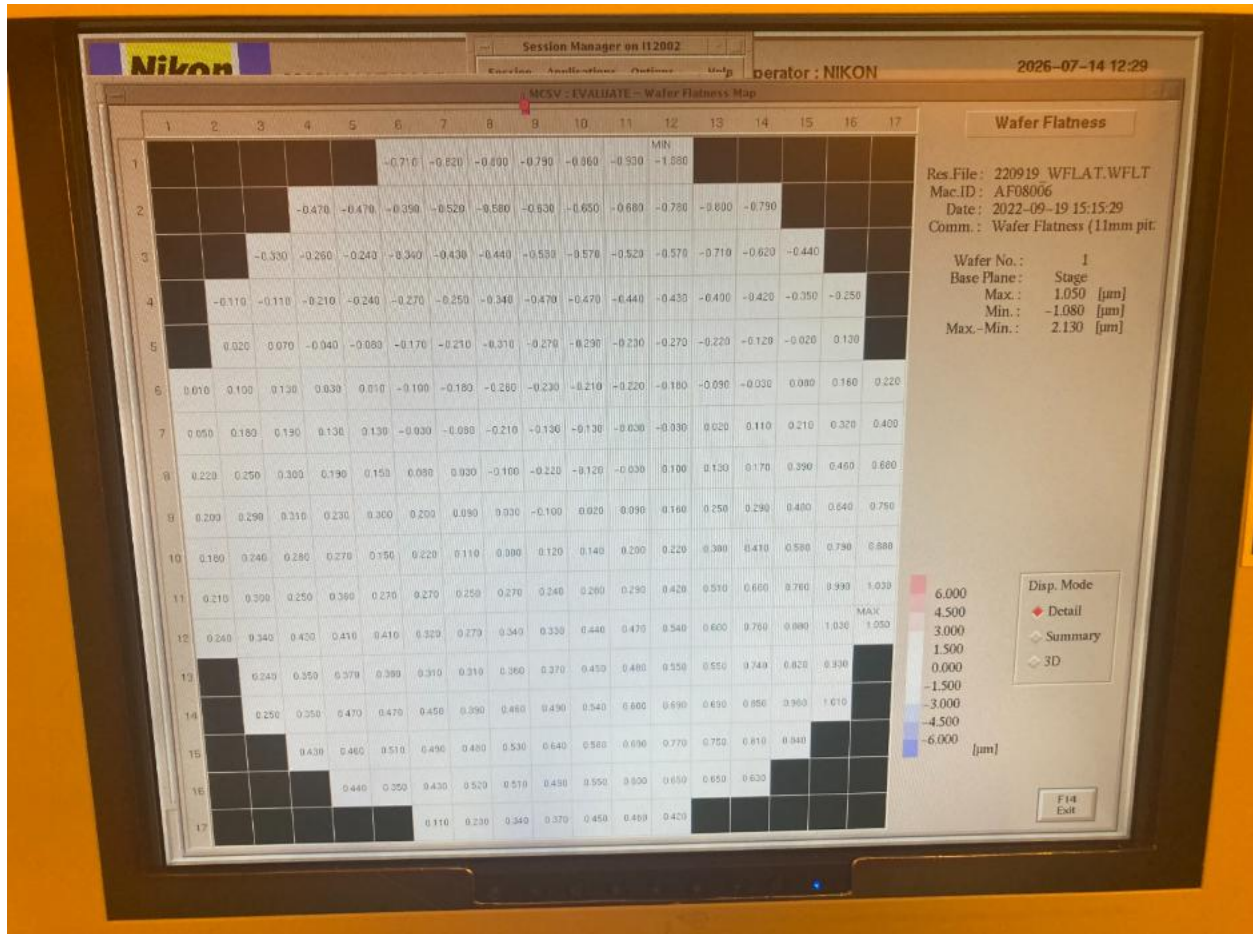
Y = $15\text{nm} \sim 42\text{nm}$

Data not available, no MESR files on tool

4. Wafer Flatness Accuracy (2022):

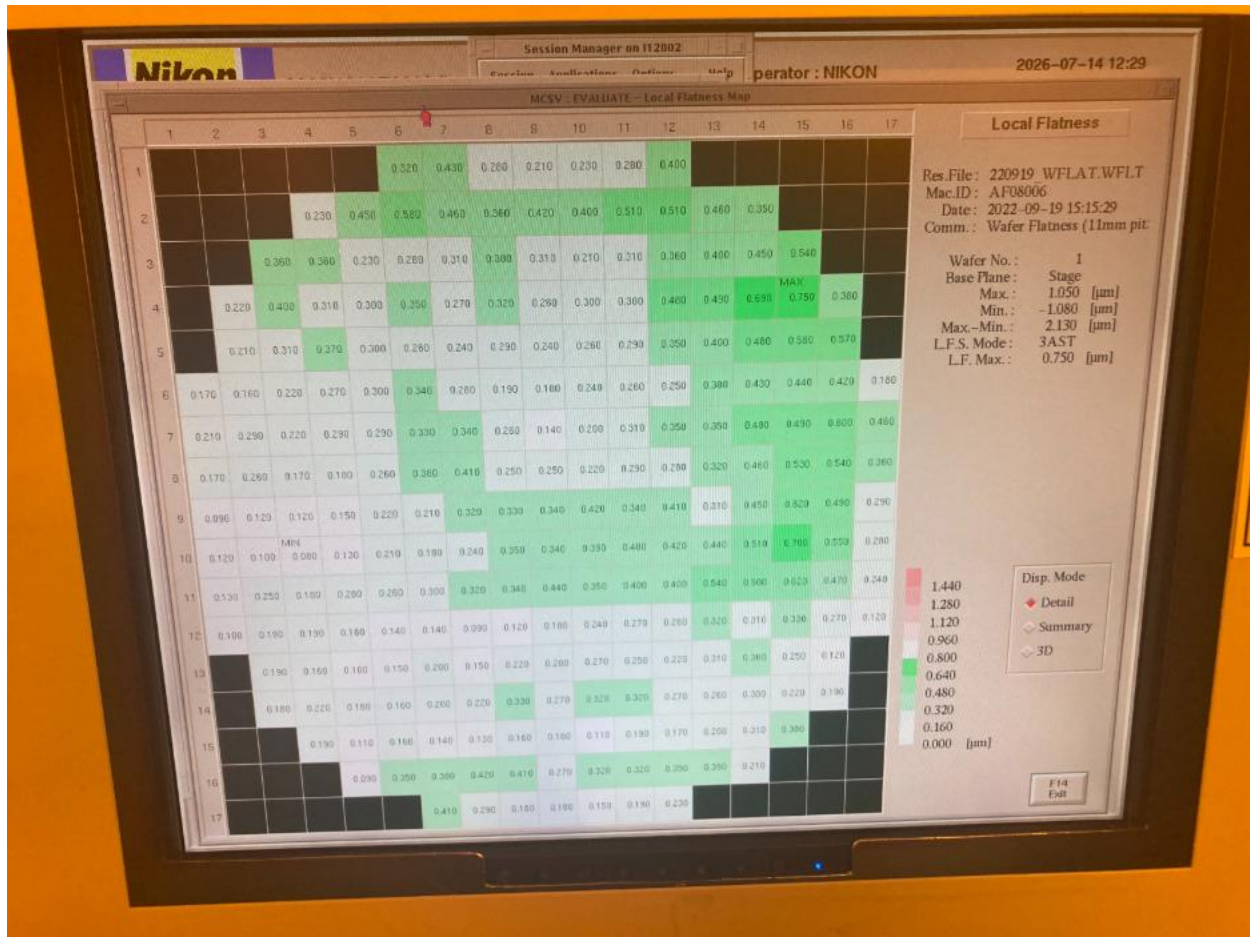
SPEC: 1) Flat Within $\geq$ Max-Min $3.0\mu\text{m}$

Result: Max-Min = $2.130\mu\text{m}$



SPEC: 2) L.F.S Within $\geq$ Max-Min $0.8\mu\text{m}$

Result: Max-Min = $0.750\mu\text{m}$



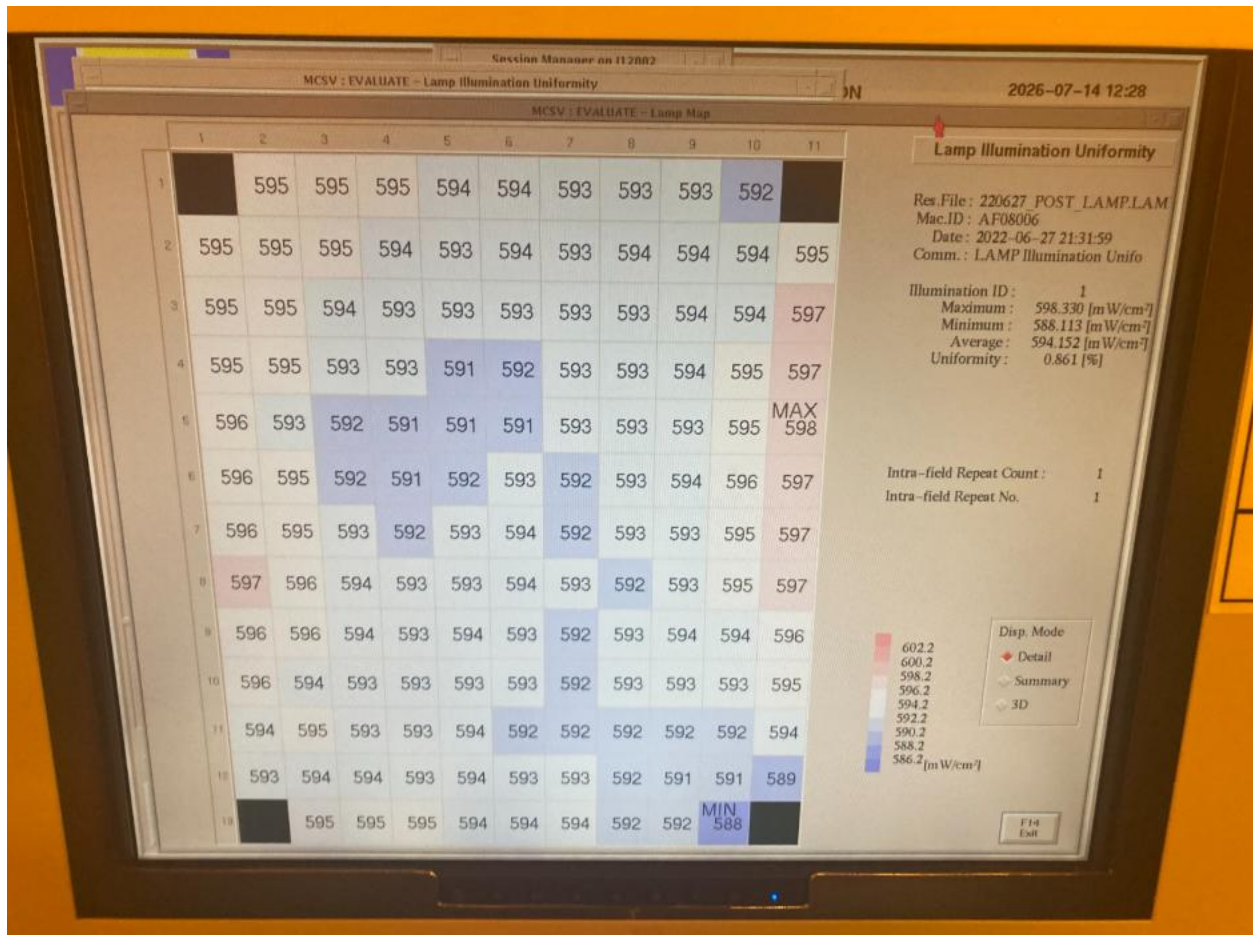
5/6 Exposure Power / Uniformity (2022):

SPEC: Power = Within $\geq 700\text{mW/cm}^2$

Spec: Uniformity Within $\pm 1.5\%$

Result: 1) Illumination Power = 594mW/cm^2

2) Uniformity = 0.86%



7. Stage Precision Accuracy (2018-2022):

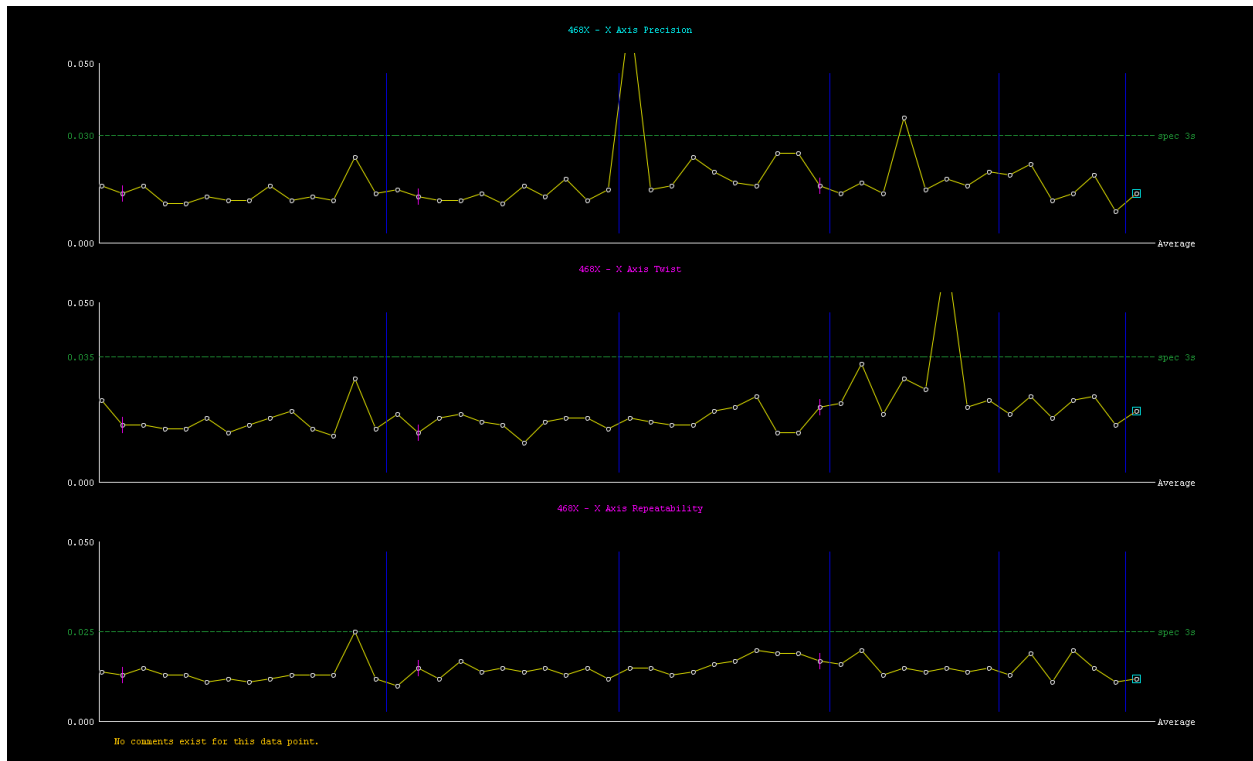
SPEC: Step X,Y $3\sigma \leq 50\text{nm}$

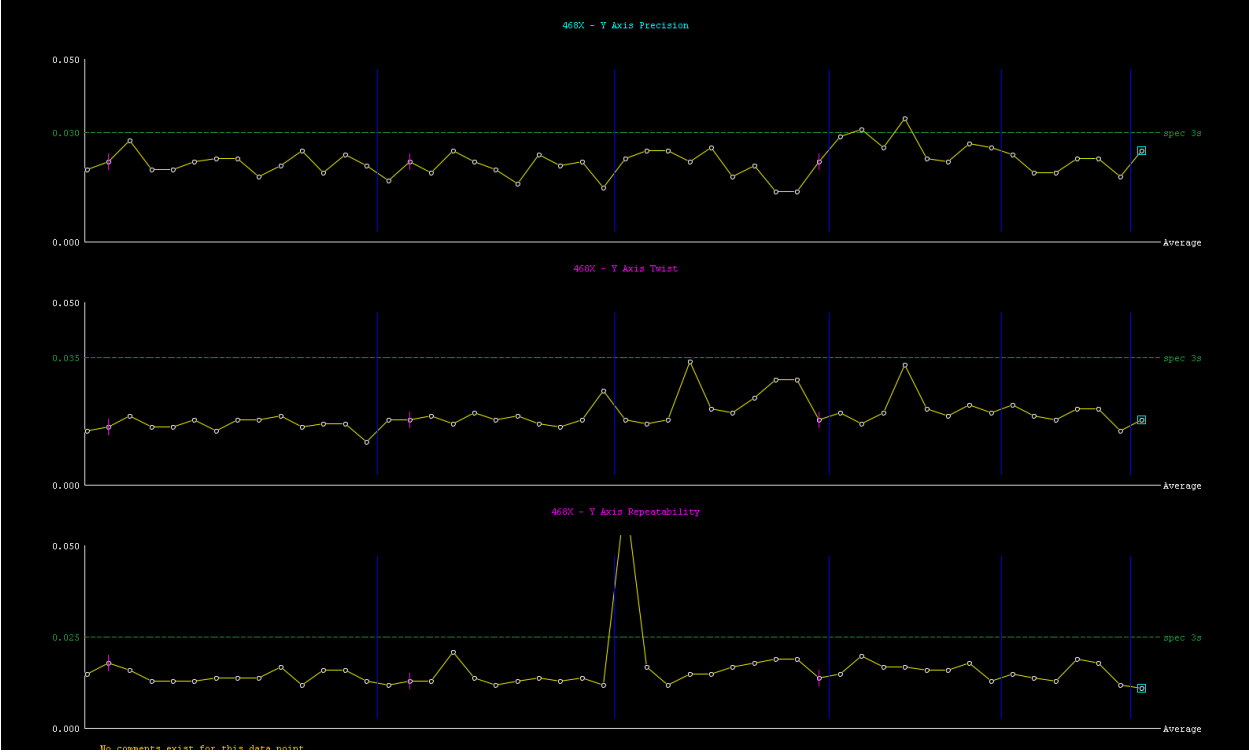
Result:

1) Stepping Accuracy

X(3σ) : 12nm

Y(3σ) : 11nm





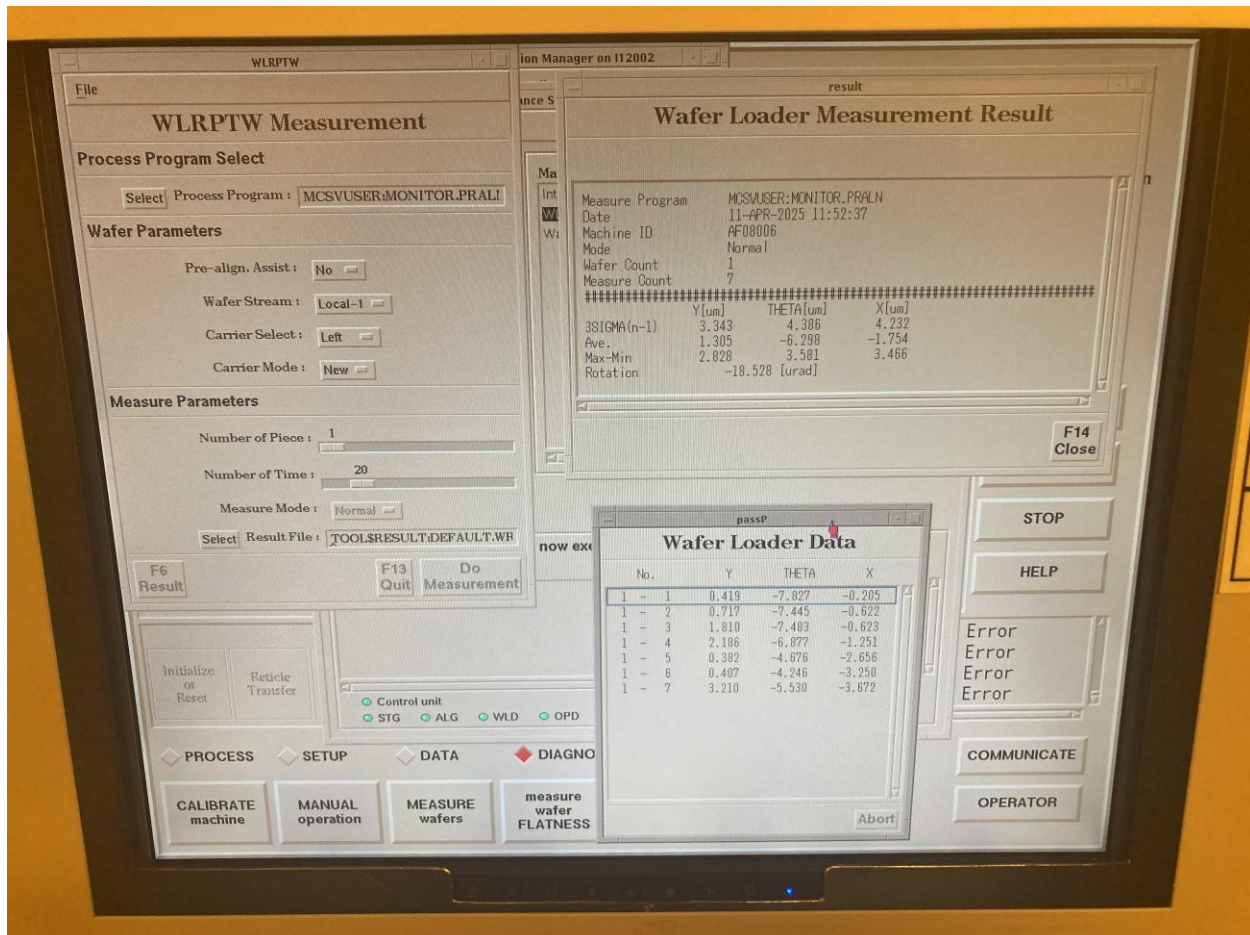
8. Wafer Pre-Alignment Repeatability (2025):

SPEC: $3\sigma \leq 15\mu\text{m}$

Result: $X(3\sigma) = 4.232\mu\text{m}$

$Y(3\sigma) = 3.343\mu\text{m}$

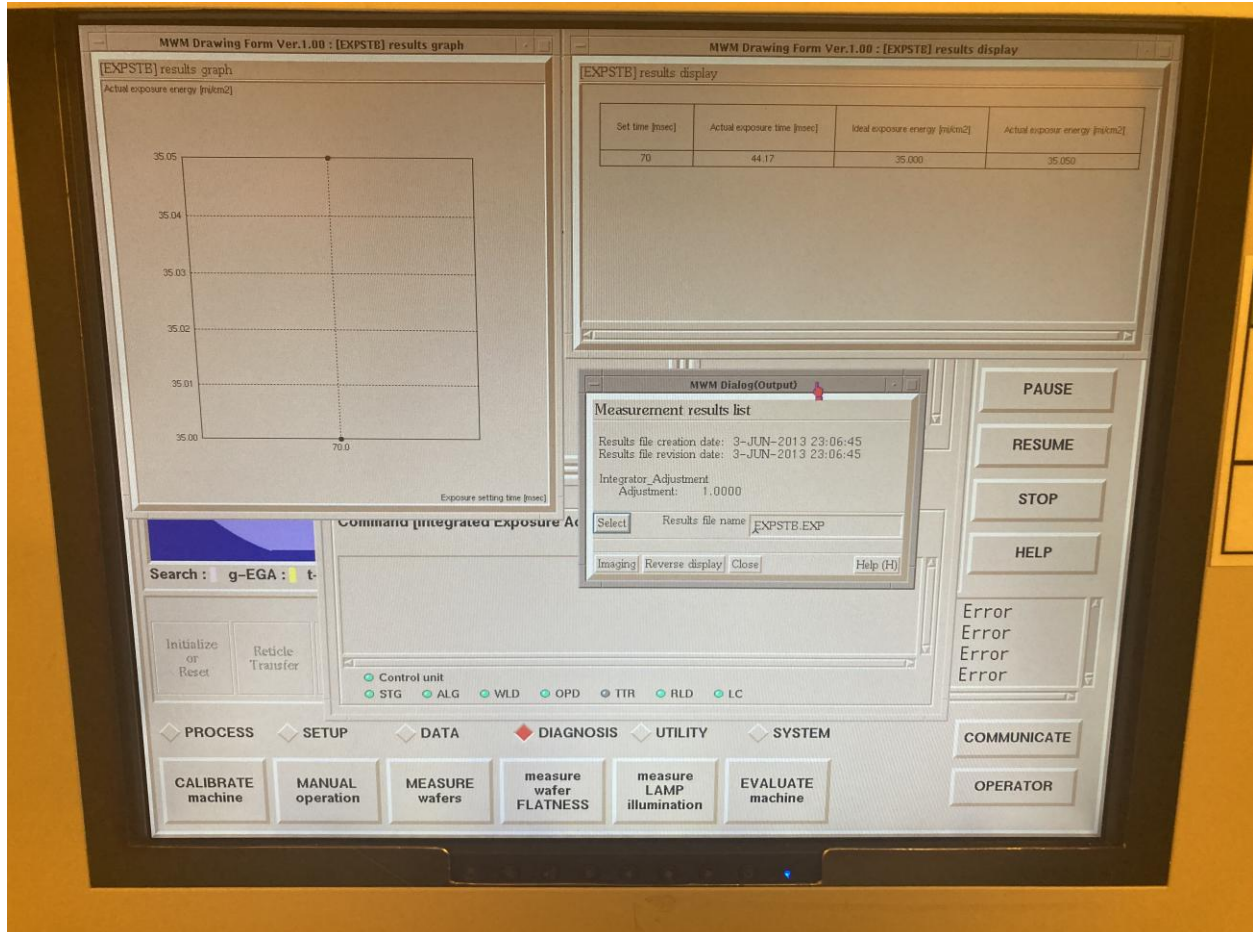
$T(3\sigma) = 4.386\mu\text{m}$



9. Integrator Accuracy (2026):

SPEC: Ave $\leq 1.0\%$

Result: Max = 0.14%

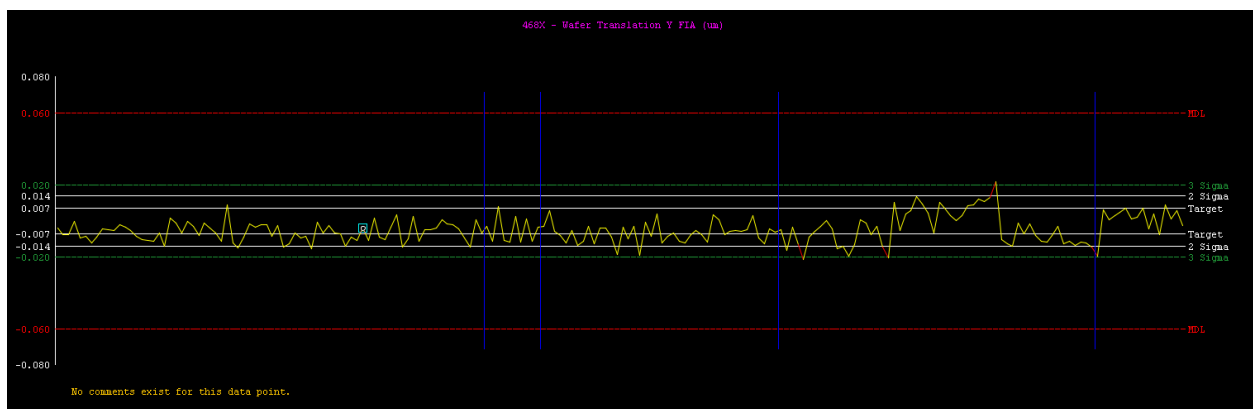
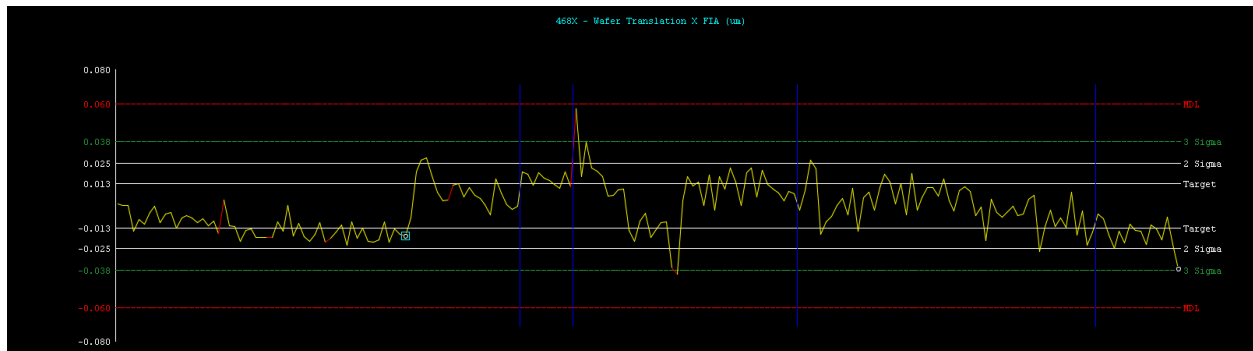


10-1 FIA (2026):

SPEC: FIA-EGA = $|M| + 3\sigma \leq 70\text{nm}$

Result: FIA-EGA X = 50nm

FIA-EGA Y = 40nm



10-2 LSA (2026):

SPEC: LSA-EGA = $|M| + 3\sigma \leq 70\text{nm}$

Result: LSA-EGA X = 50nm

LSA-EGA Y = 30nm

