TECHNICAL SPEC FOR Stepper

System Model:
Canon FPA 3000 i4 SN 506496i4

Tool has been shut down by Litho tech.
Electricity, cooling water, Vacuum and CCA are closed.
Cables between Main unit and power box are still connected, locking kit and demounting for transport to be provided by buyer.

Wafer size: 6 inch

Wafer type: Jeida flat

Chuck type: pin chuck

Reticle changer type: (Canon standard?) I4 library Canon

Inline right or left: left

Particle checker (PPC): No

Touch panel type: Canon standard

Options:

Reticle size: 5 inch

Reticle alignment: see specs below

Wafer alignment: see specs below

Auto focus:see specs below

Auto feeder: Yes

Wafer tilt:

Wafer feeder: Yes

Track interface: Yes, tool was used inline, interface is track part

Laser: HeNe

Lens data: see below

Stage and U-lens at shutdown
Intensity: 420 mW/cm2
Uniformity: 2.5%

Stage vibration data:

Used for 0.35micron line and space? Y

Chuck maintenance tool: No

Reticle bar code reader: Yes

Cassette bar code reader: No

SW Version:

OS:

Vintage: 2006

Missing/defective parts: none

Canon

Installation Results after Lens replacement

Customer	**Alcatel**
Machine	**FPA-3000i4**
Serial No.	**#506496i4**
Customer ID No.	**Stepper 6**
Period of Lens Replacement	**31/01/00 - 03/03/00**

Unit	Item	Parameter	Result	Spec	Judge
Lens	Performance	CD DOF @0.50um	**1.62um**	>1.20um	OK
		T/B DOF @0.50um, 80 deg	**1.38um**	>1.20um	OK
		CD Uniformity @0.50um	**0.033um**	0.050um	OK
		Field Curvature (Tilt Comp.)	**0.060um**	<0.40um	OK
		Image Field Deviation (Tilt Comp.)	**0.16um**	<0.40um	OK
		Astigmatism	**0.10um**	<0.25um	OK
		CD Linearity @0.50um	**3.96%**	<10%	OK
		CD DOF @0.35um	**1.24um**	>0.60um	OK
		T/B DOF @0.35um, 83.6 deg	**0.98um**	>0.60um	OK
		CD Uniformity @0.35um	**0.029um**	0.040um	OK
		Field Curvature (Tilt Comp.)	**0.11um**	<0.40um	OK
		Image Field Deviation (Tilt Comp.)	**0.24um**	<0.40um	OK
		Astigmatism	**0.17um**	<0.25um	OK
	Lens Heating (Mode 1 NA 0.52, Sig 0.60)	Focus change	**0.20um**	<0.30um	OK
	COMA amount	Max Angle Difference	**1.07 deg**	<2 deg	OK
XY Stage	Step Accuracy (Max of 3 wafers)	X-X	**0.0169um**	<0.040um	OK
		Y-X	**0.0136um**	<0.040um	OK
		X-Y	**0.0204um**	<0.040um	OK
		Y-Y	**0.0188um**	<0.040um	OK
	Repeatability (Max of 3 wafers)	X	**0.0266um**	<0.030um	OK
		Y	**0.0245um**	<0.030um	OK
	XYSA (Using Ref Wafer)	X Scaling	**-0.002ppm**	<0.50ppm	OK
		Y Scaling	**-0.014ppm**	<0.50ppm	OK
		Orthogonality	**-0.002ppm**	<0.50ppm	OK
Illumination	Standard Illumination (NA 0.63, Sig 0.65)	Intensity	**10470W**	>6500W	OK
		Uniformity	**0.68%**	<1.00%	OK
	Special Illumination (Mode 1 NA 0.52, Sig 0.60)	Intensity	**9080W**	>6500W	OK
		Uniformity	**0.87%**	<1.20%	OK
	Light Integrator Repeatability	Total Accuracy	**0.53%**	<1.00%	OK
	Masking Blades	Max	**25um**	0 - 100um	OK
		Min	**5um**	0 - 100um	OK
		Grey Zone	**20um**	<30um	OK
Alignment	AGA Mode 1 (Using Ref Wafer)	X M+3 sig	**0.0562um**	<0.090um	OK
		Yl M+3 sig	**0.0482um**	<0.090um	OK
		Yr M+3 sig	**0.0398um**	<0.090um	OK
	Reticle Rotation	Average	**0.0051um**	0.010um	OK
		Repeatability	**0.009um**	0.020um	OK
		ROC Repeatability Max	**0.003um**	0.010um	OK
Prealignment	Mechanical	Xl	**4.747um**	<30um	OK
		Yl	**6.113um**	<30um	OK
		Xr	**11.013um**	<30um	OK
		Yr	**5.731um**	<30um	OK
	TV	3 sigma X	**0.546um**	<3um	OK
		3 sigma Y	**0.581um**	<3um	OK
Focus System	TTLAF	Repeatability	**0.04um**	<0.07um	OK
	Uneven Focus	Tilt Offset	**2.5ppm**	<4ppm	OK
Throughput	Tilt ON	Wafers per hour	**69.3**	>67	OK
	Tilt OFF	Wafers per hour	**71.6**	>69	OK