ASML 5000/50 ACCEPTANCE TEST SPECIFICATIONS

Customer:	EO Technical
Site:	Vancouver
Machine serial number:	3379
Model:	*5000/50*
Wafer size:	6"
Purchase order no:	
Software Release:	8.1.0/3.1.0
Test completion date:	*See notes in side-bar*

Parameter	Specification (absolute values)	FAT		SAT	
		Measured	Accept	Measured	Accept
1. Illumination					
1.1 Illumination Homogeniety					
15.0 x 15.0 mm [%]	**≤ 3.0**	2.03	5/3/2019		
9.4 x 19.0 mm [%]	**≤ 3.0**	1.62	5/3/2019		
Illumination intensity [mW/cm2]	**≥ 245**	261	5/3/2019		
2. Reticle masking					
2.1 Reticle masking [µm]	**≤ 500**	475	2/15/2019		
3. Lens distortion					
3.1 Non-correctable error [nm]					
X @15x15	≤ 120nm	81	5/7/2019		
Y @15x15	≤ 120nm	81	5/7/2019		
Mag	<50nm/cm	-5	5/7/2019		
Die Rotation	<5urad	0.523	5/7/2019		
Trapezoidal X	<50nm/cm2	-121	5/7/2019		
Trapezoidal Y	<50nm/cm2	1	5/7/2019		
4. Material handling					
4.1 Pre-alignment accuracy(Optical Sensor)					
Xm1w1 (um)	≤ 7	1	4/5/2019		
Ym1w1 (um)	≤ 7	2.2	4/5/2019		
Ym1w2 (um)	≤ 7	3.3	4/5/2019		
5. Overlay performance					
5.1 Stage repeatability					

X [nm]	≤ 100	84	5/7/2019		
Y [nm]	≤ 100	64	5/7/2019		
5.2 Single machine overlay (99.7%)					
X - Max 99.7%	≤ 150	61	5/9/2019		
Y - Max 99.7%	≤ 150	51	5/9/2019		
6. Wafer throughput					
6.1 Wafer throughput at 200 mJ/cm2	≥ 47	53.6	5/9/2019		
6.4 Reticle exchange time (seconds)	≤ 40	19.2	4/5/2019		

The tests below require CD CIM or Other					
Focus Leveling					
Out Of Focus	Zero per wafer				
Imaging (Target CD)					
UDOF	>1.2um				
Intra Filed CD	+/- 0.05um @ 0.5+/-0.025um mean CD				
Target CD reproducibility	0.5 +/-0.05um				
Overlay					
Box in Box	<150nm				
Overlay on Produt wafer	<150nm				
System Stability					
3 day run test	Zero errors				
Contamination					
Topside particles	,3 Particles (0.5um or larger)				