Transaction Information

ToolId	STP1332
ToolStatus	Running Wafers
Location	Dresden
WaferSize	300 mm
FabSection	Lithography

General Product Information

VendorSupplier	ASML
Model	XT 1250B
Vintage	2005
SerialNo	m4623
AssetDescription	ALC1332STP
SoftwareVersion	4.1.0
CIM	SECS, GEM
Process	ARF

Hardware Configuration (Fab)

SystemType	Description	Quantity	Status
Main System	Main Frame	1	OK
Factory Interface	FOUP	1	OK
Handler System	ASML Reticle Handler	1	OK
Handler System	ASML Wafer Handler	1	OK
Options System	OIU Unix	1	OK
Others			

Hardware Configuration (Subfab / Auxilliary Units)

Description	Quantity	Status
Cymer Laser XLA-165	1	OK
MAIN DISTRIBUTION CAB.	1	OK
ELECTROCABINET #2	1	OK
ELECTROCABINET #3	1	OK
EXHAUST CABINET	1	OK
LENS CIRCUIT WATER CAB.	1	OK
MOTOR CIRCUIT WATER CAB	1	OK
AIR CONTROL CAB.	1	OK
PURGE HOOD BLOWER	1	OK

Missing/Faulty Parts / Accesorries List

Description	Quantity

Description	Quantity
non	

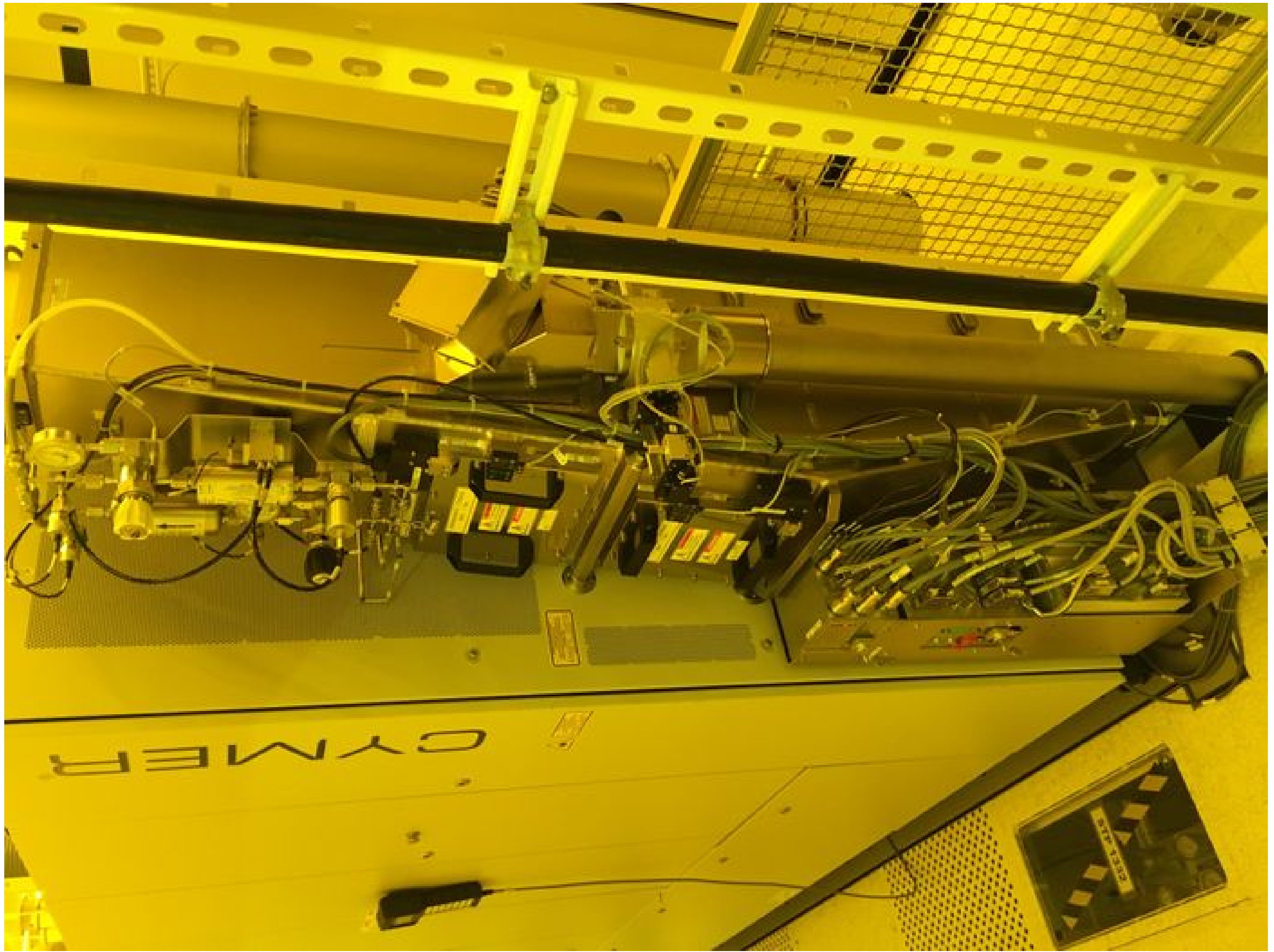
Tool Pictures

missingparts	NONE

No Picture

general	Mainframe

general	Mainframe



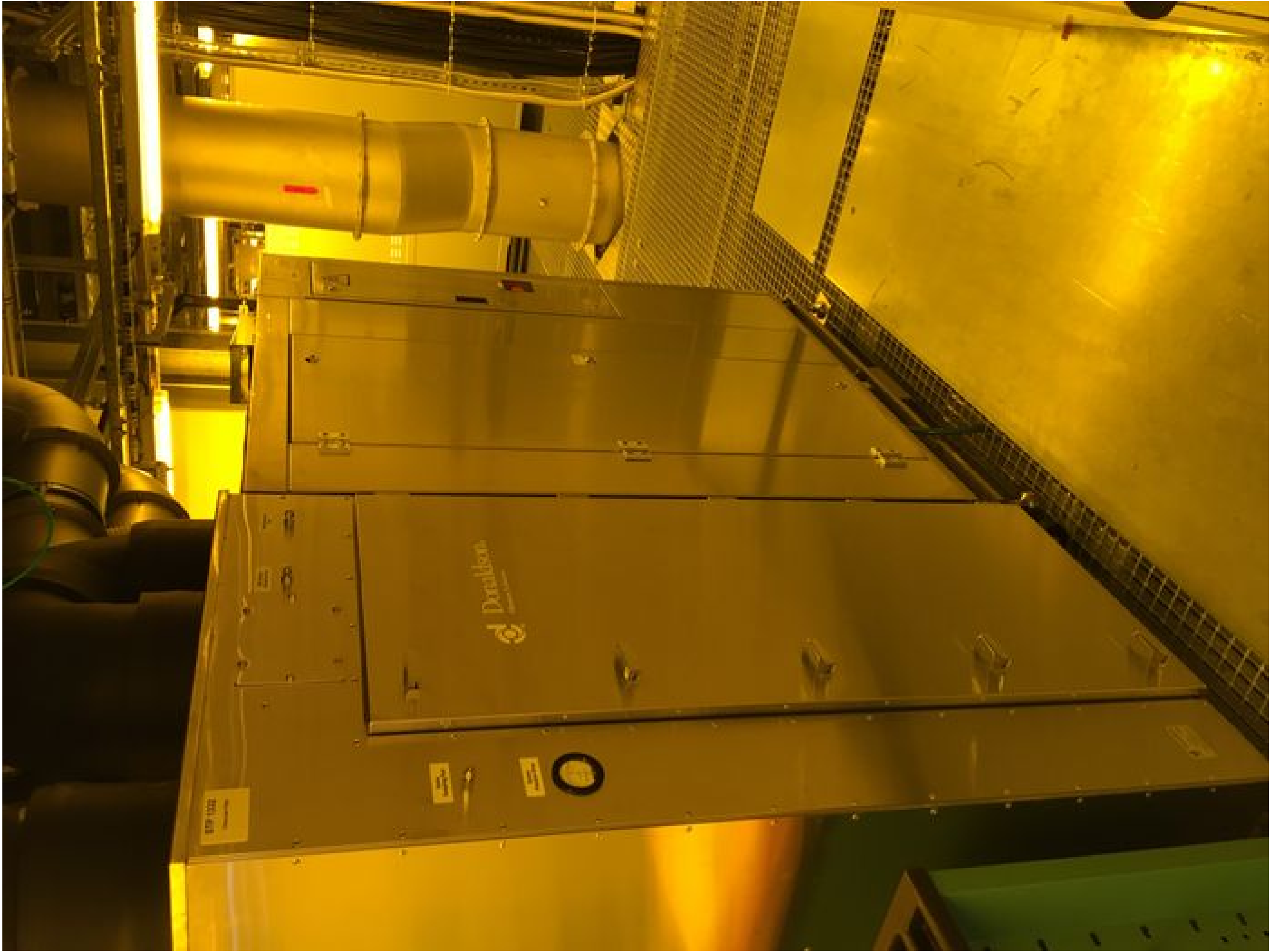
CYMER

hardwarefab	Tool HW Config

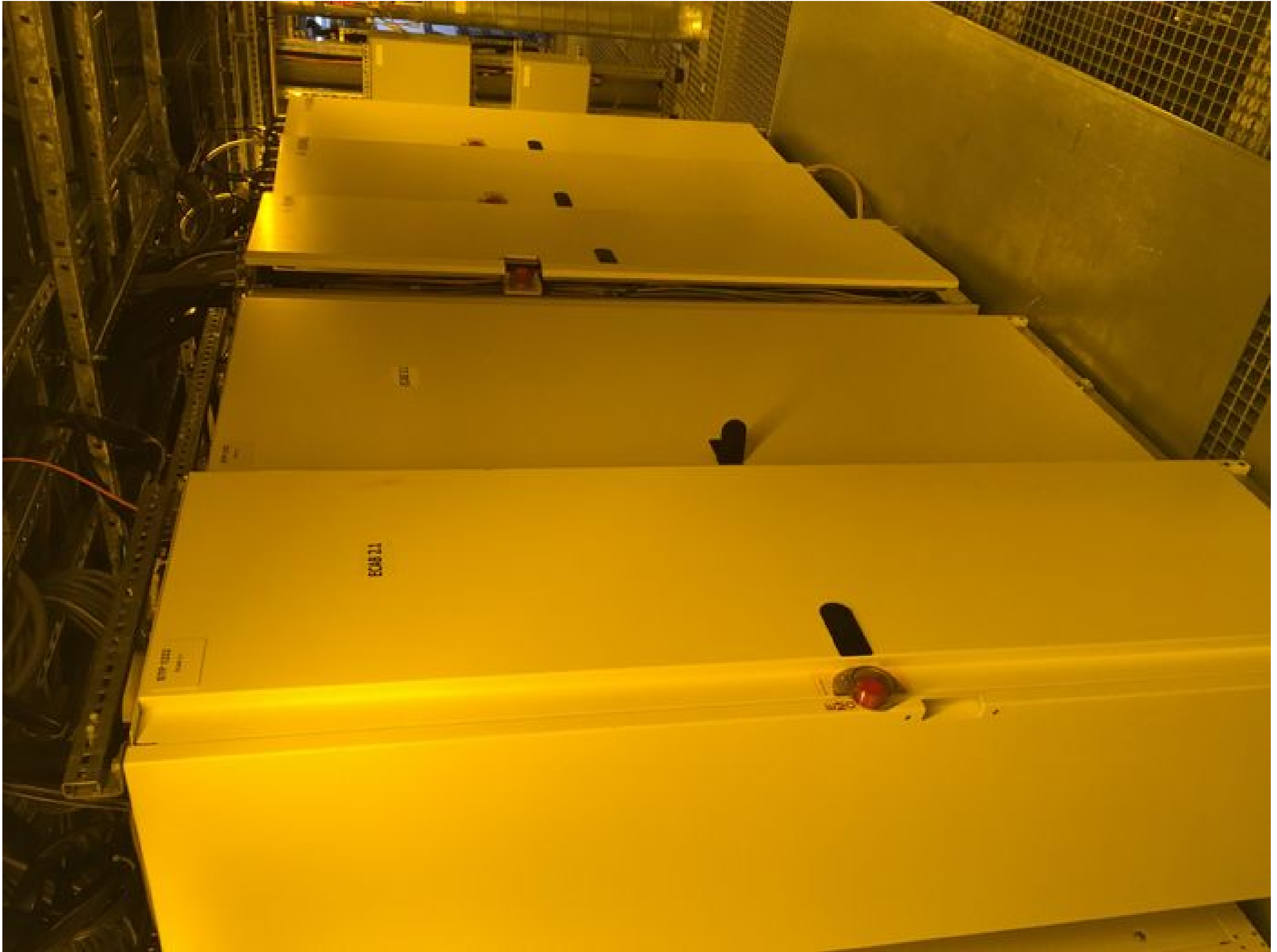
hardwarefab	Tool HW Config

hardwarefab	Tool HW Config

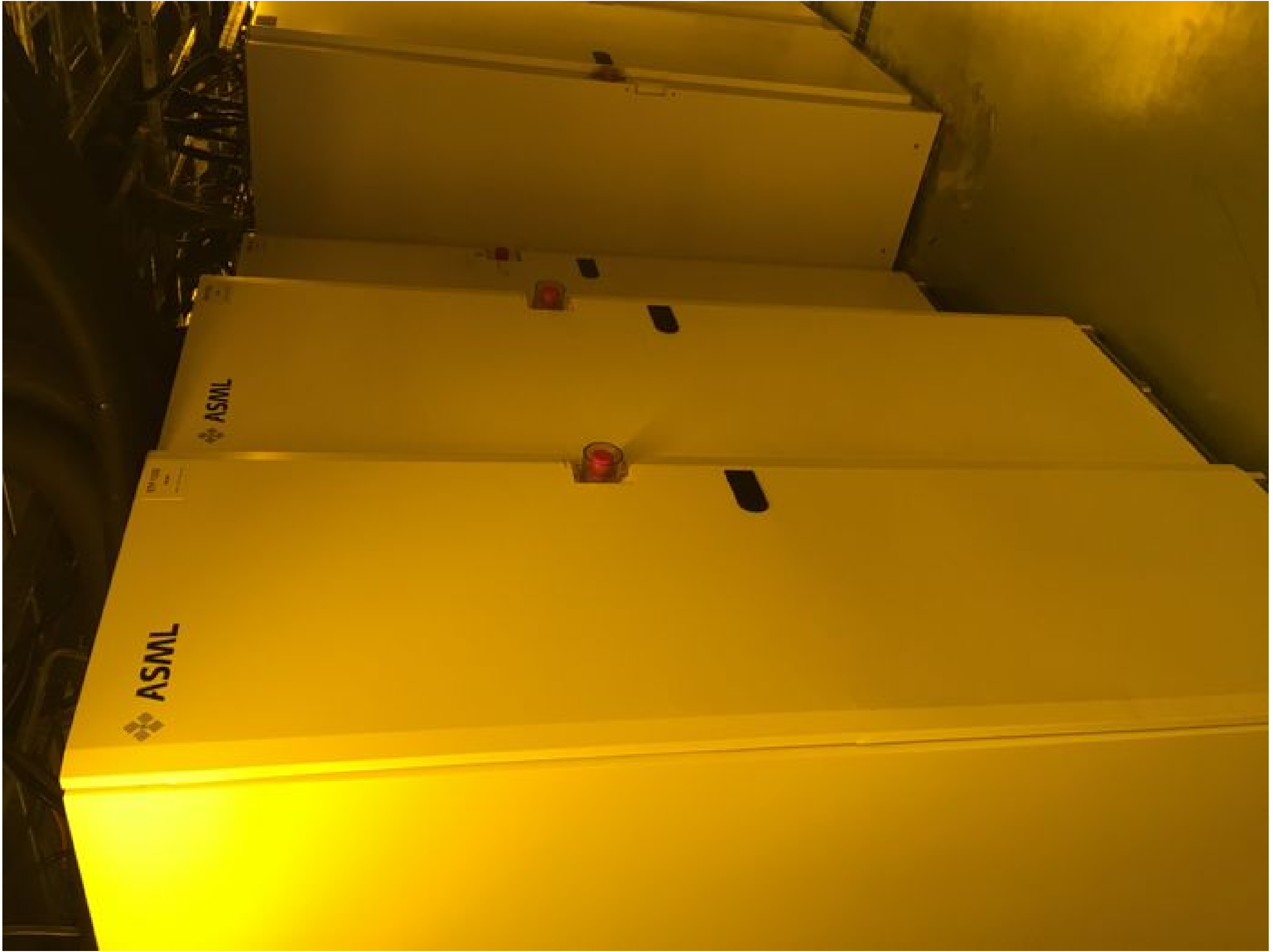
hardwaresubfab	SubFab Config



hardwaresubfab	SubFab Config



hardwaresubfab	SubFab Config



manufactureserial	Tool SN

Additional Configuration Files

```
Configuration read from : Equipment
Configuration date      : 2019-11-11

Machine number      : 4623
System type         : XTREV1:1250PEP_D
System architecture : XT Machine Architecture Rev1
Light-source type   : Cymer Laser: XLA 165
Wavelength          : 193nm
```

Installed Patches

AT_4.1.0.c_0001c	AT_4.1.0.c_0065c	AT_4.1.0.c_0129c	AT_4.1.0.c_0193c
AT_4.1.0.c_0002c	AT_4.1.0.c_0066c	AT_4.1.0.c_0130c	AT_4.1.0.c_0194c
AT_4.1.0.c_0003c	AT_4.1.0.c_0067c	AT_4.1.0.c_0131c	AT_4.1.0.c_0195c
AT_4.1.0.c_0004c	AT_4.1.0.c_0068c	AT_4.1.0.c_0132c	AT_4.1.0.c_0196c
AT_4.1.0.c_0005c	AT_4.1.0.c_0069c	AT_4.1.0.c_0133c	AT_4.1.0.c_0197c
AT_4.1.0.c_0006c	AT_4.1.0.c_0070c	AT_4.1.0.c_0134c	AT_4.1.0.c_0198c
AT_4.1.0.c_0007c	AT_4.1.0.c_0071c	AT_4.1.0.c_0135c	AT_4.1.0.c_0199c
AT_4.1.0.c_0008c	AT_4.1.0.c_0072c	AT_4.1.0.c_0136c	AT_4.1.0.c_0200c
AT_4.1.0.c_0009c	AT_4.1.0.c_0073c	AT_4.1.0.c_0137c	AT_4.1.0.c_0201c
AT_4.1.0.c_0010c	AT_4.1.0.c_0074c	AT_4.1.0.c_0138c	AT_4.1.0.c_0202c
AT_4.1.0.c_0011c	AT_4.1.0.c_0075c	AT_4.1.0.c_0139c	AT_4.1.0.c_0203c
AT_4.1.0.c_0012c	AT_4.1.0.c_0076c	AT_4.1.0.c_0140c	AT_4.1.0.c_0204c
AT_4.1.0.c_0013c	AT_4.1.0.c_0077c	AT_4.1.0.c_0141c	AT_4.1.0.c_0205c
AT_4.1.0.c_0014c	AT_4.1.0.c_0078c	AT_4.1.0.c_0142c	AT_4.1.0.c_0206c
AT_4.1.0.c_0015c	AT_4.1.0.c_0079c	AT_4.1.0.c_0143c	AT_4.1.0.c_0207c
AT_4.1.0.c_0016c	AT_4.1.0.c_0080c	AT_4.1.0.c_0144c	AT_4.1.0.c_0208c
AT_4.1.0.c_0017c	AT_4.1.0.c_0081c	AT_4.1.0.c_0145c	AT_4.1.0.c_0209c
AT_4.1.0.c_0018c	AT_4.1.0.c_0082c	AT_4.1.0.c_0146c	AT_4.1.0.c_0210c
AT_4.1.0.c_0019c	AT_4.1.0.c_0083c	AT_4.1.0.c_0147c	AT_4.1.0.c_0211c
AT_4.1.0.c_0020c	AT_4.1.0.c_0084c	AT_4.1.0.c_0148c	AT_4.1.0.c_0212c
AT_4.1.0.c_0021c	AT_4.1.0.c_0085c	AT_4.1.0.c_0149c	AT_4.1.0.c_0213c
AT_4.1.0.c_0022c	AT_4.1.0.c_0086c	AT_4.1.0.c_0150c	AT_4.1.0.c_0214c
AT_4.1.0.c_0023c	AT_4.1.0.c_0087c	AT_4.1.0.c_0151c	AT_4.1.0.c_0215c
AT_4.1.0.c_0024c	AT_4.1.0.c_0088c	AT_4.1.0.c_0152c	AT_4.1.0.c_0216c
AT_4.1.0.c_0025c	AT_4.1.0.c_0089c	AT_4.1.0.c_0153c	AT_4.1.0.c_0217c
AT_4.1.0.c_0026c	AT_4.1.0.c_0090c	AT_4.1.0.c_0154c	AT_4.1.0.c_0218c
AT_4.1.0.c_0027c	AT_4.1.0.c_0091c	AT_4.1.0.c_0155c	AT_4.1.0.c_0219c
AT_4.1.0.c_0028c	AT_4.1.0.c_0092c	AT_4.1.0.c_0156c	AT_4.1.0.c_0220c
AT_4.1.0.c_0029c	AT_4.1.0.c_0093c	AT_4.1.0.c_0157c	AT_4.1.0.c_0221c
AT_4.1.0.c_0030c	AT_4.1.0.c_0094c	AT_4.1.0.c_0158c	AT_4.1.0.c_0222c
AT_4.1.0.c_0031c	AT_4.1.0.c_0095c	AT_4.1.0.c_0159c	AT_4.1.0.c_0223c
AT_4.1.0.c_0032c	AT_4.1.0.c_0096c	AT_4.1.0.c_0160c	AT_4.1.0.c_0224c
AT_4.1.0.c_0033c	AT_4.1.0.c_0097c	AT_4.1.0.c_0161c	AT_4.1.0.c_0225c
AT_4.1.0.c_0034c	AT_4.1.0.c_0098c	AT_4.1.0.c_0162c	AT_4.1.0.c_0226c
AT_4.1.0.c_0035c	AT_4.1.0.c_0099c	AT_4.1.0.c_0163c	AT_4.1.0.c_0227c
AT_4.1.0.c_0036c	AT_4.1.0.c_0100c	AT_4.1.0.c_0164c	AT_4.1.0.c_0228c
AT_4.1.0.c_0037c	AT_4.1.0.c_0101c	AT_4.1.0.c_0165c	AT_4.1.0.c_0229c
AT_4.1.0.c_0038c	AT_4.1.0.c_0102c	AT_4.1.0.c_0166c	AT_4.1.0.c_0230c
AT_4.1.0.c_0039c	AT_4.1.0.c_0103c	AT_4.1.0.c_0167c	AT_4.1.0.c_0231c
AT_4.1.0.c_0040c	AT_4.1.0.c_0104c	AT_4.1.0.c_0168c	AT_4.1.0.c_0232c
AT_4.1.0.c_0041c	AT_4.1.0.c_0105c	AT_4.1.0.c_0169c	AT_4.1.0.c_0233c
AT_4.1.0.c_0042c	AT_4.1.0.c_0106c	AT_4.1.0.c_0170c	AT_4.1.0.c_0234c
AT_4.1.0.c_0043c	AT_4.1.0.c_0107c	AT_4.1.0.c_0171c	AT_4.1.0.c_0235c
AT_4.1.0.c_0044c	AT_4.1.0.c_0108c	AT_4.1.0.c_0172c	AT_4.1.0.c_0236c
AT_4.1.0.c_0045c	AT_4.1.0.c_0109c	AT_4.1.0.c_0173c	AT_4.1.0.c_0237c
AT_4.1.0.c_0046c	AT_4.1.0.c_0110c	AT_4.1.0.c_0174c	AT_4.1.0.c_0238c
AT_4.1.0.c_0047c	AT_4.1.0.c_0111c	AT_4.1.0.c_0175c	AT_4.1.0.c_0239c
AT_4.1.0.c_0048c	AT_4.1.0.c_0112c	AT_4.1.0.c_0176c	AT_4.1.0.c_0240c
AT_4.1.0.c_0049c	AT_4.1.0.c_0113c	AT_4.1.0.c_0177c	AT_4.1.0.c_0241c
AT_4.1.0.c_0050c	AT_4.1.0.c_0114c	AT_4.1.0.c_0178c	AT_4.1.0.c_0242c
AT_4.1.0.c_0051c	AT_4.1.0.c_0115c	AT_4.1.0.c_0179c	AT_4.1.0.c_0243c
AT_4.1.0.c_0052c	AT_4.1.0.c_0116c	AT_4.1.0.c_0180c	AT_4.1.0.c_0244c
AT_4.1.0.c_0053c	AT_4.1.0.c_0117c	AT_4.1.0.c_0181c	AT_4.1.0.c_0245c
AT_4.1.0.c_0054c	AT_4.1.0.c_0118c	AT_4.1.0.c_0182c	AT_4.1.0.c_0246c
AT_4.1.0.c_0055c	AT_4.1.0.c_0119c	AT_4.1.0.c_0183c	AT_4.1.0.c_0247c
AT_4.1.0.c_0056c	AT_4.1.0.c_0120c	AT_4.1.0.c_0184c	AT_4.1.0.c_0248c
AT_4.1.0.c_0057c	AT_4.1.0.c_0121c	AT_4.1.0.c_0185c	AT_4.1.0.c_0249c
AT_4.1.0.c_0058c	AT_4.1.0.c_0122c	AT_4.1.0.c_0186c	AT_4.1.0.c_0250c
AT_4.1.0.c_0059c	AT_4.1.0.c_0123c	AT_4.1.0.c_0187c	AT_4.1.0.c_0251c
AT_4.1.0.c_0060c	AT_4.1.0.c_0124c	AT_4.1.0.c_0188c	AT_4.1.0.c_0252c
AT_4.1.0.c_0061c	AT_4.1.0.c_0125c	AT_4.1.0.c_0189c	AT_4.1.0.c_0253c
AT_4.1.0.c_0062c	AT_4.1.0.c_0126c	AT_4.1.0.c_0190c	AT_4.1.0.c_0254c
AT_4.1.0.c_0063c	AT_4.1.0.c_0127c	AT_4.1.0.c_0191c	AT_4.1.0.c_0255c
AT_4.1.0.c_0064c	AT_4.1.0.c_0128c	AT_4.1.0.c_0192c	AT_4.1.0.c_0256c
AT_4.1.0.c_0065c			AT_4.1.0.c_0257c
			AT_4.1.0.c_0258c
			AT_4.1.0.c_0259c
			AT_4.1.0.c_0260c
			AT_4.1.0.c_0261c
			AT_4.1.0.c_0262c
			AT_4.1.0.c_0263c

```
Patch Switches
SWITCH_034 : ENABLED    AT_4.1.0.c_0087c   Level sensor Ry drift correction
SWITCH_031 : DISABLED   AT_4.1.0.c_0038c   Fading Control Switch
SWITCH_031 : DISABLED   release            Fading Control Switch
SWITCH_030 : ENABLED    release            Lens heating History in LH Feedforward
SWITCH_038 : DISABLED   AT_4.1.0.c_0232c   Improve robustness DPCM mark
SWITCH_035 : DISABLED   AT_4.1.0.c_0203c   SASO robustness and fiber connectivity
SWITCH_036 : DISABLED   AT_4.1.0.c_0201c   Extended X width masking range
SWITCH_037 : ENABLED    AT_4.1.0.c_0206c   PDO offset for EFL LS spots

System Variability Parameters
No system variability parameters defined


Configuration Items
Track Pre-warning signal (APR)                                                : APR enabled
Avoid Track INPUT/OUTPUT conflicts, Raise AS after APR                        : Avoid Track INPUT/OUTPUT conflicts enabled
Active wafer release for dry WS                                               : False
Closing disk type                                                             : No closing disk present
Safeguard to prevent loading of reticles with too wide or mispositioned pellicles : Disabled
Continuous clampable wafer table for dry WS                                   : Absent
Type of wafertable on chuck 2 for immersion machine                           : Zerodur version 1
Type of wafertable on chuck 1 for immersion machine                           : Zerodur version 1
WS Immersion throughput package                                               : None
WS Immersion thermal control package                                          : None
extended docking interface at Prealigner                                      : ECC_0MM
Wafer Stage Configuration                                                     : Wafer Stage type 2 configuration
Wafer Carrier Location                                                        : Left
Wafers per Carrier                                                            : 25
Wafer Mark Sensor                                                             : Absent
Wafer Id Reader                                                               : Absent
Wafer Size                                                                    : 300mm
Wafer Track                                                                   : Present
Wafer Stage Type                                                              : Dual Chuck
Wafer Stress Relaxation                                                       : False
Lower Docking Plate                                                           : Present
WS Balance Mass                                                               : Stainless Steel
WH Robot Power Amplifier                                                      : CPM 10
Wafer Stage Fast Stiff X Move Electronics                                     : Present
Wafer Stage Mirror Block Down Electronics                                     : Present
Universal Prealignment                                                        : Disabled
Interferometer axis version at exposure                                       : 3 plus 1 axis
Wafer Handling Pneumatics                                                     : Dedicated
Wafer Switch                                                                  : Absent
Chuck 1 wafer size                                                            : 300mm
Chuck 2 wafer size                                                            : 300mm
Type of immersion hood for immersion                                          : None
Specifies chuck1 layout relev. for Immersion                                  : Chuck does not support immersion
Specifies chuck2 layout relev. for Immersion                                  : Chuck does not support immersion
Specifies chuck1 config                                                       : Dry
Specifies chuck2 config                                                       : Dry
Specifies chuck1 version                                                      : not specified
Specifies chuck2 version                                                      : not specified
Changed Short Stroke diff XY controller                                       : Disabled
Docking wheels at WH unload                                                   : Present
Docking plate height                                                          : Low
Immersion Hood version                                                        : Absent
Carrier Handler Type                                                          : Mark III 300
```

Wafer Handling Load Robot Type	: Double Fold Arm, 12 mm Z stroke
Wafer Handling Unload Robot Type	: Double Fold Arm, 12 mm Z stroke
Wafer Handling Store Unit	: Absent
Wafer Handler wrt BF Shifted in Z	: Not Shifted
Reticle streaming lite	: Disabled
Enhancements in Reticle Monitor	: no enhancements
Reticle streaming	: Disabled
Improvements for reticle handling	: Disabled
Extend IRIS maximum particles scanned to 50000.	: Present
Zeroing type for Encoders Measurement System	: Using extra hall sensors for zeroing
Reticle Stage Chuck Type	: Glued Leafspring
Reticle Stage Chuck Type	: TYPE_2: Glued LS, Pneum. GC, IFM / ENC
Nitrogen purging of Reticle Stage	: RS is not purged
Reticle Carrier Location	: Left
Integrated Reticle Inspection System	: PPD2 with IRIS5um functionality.
Integrated Reticle Library	: IRL with original functionality
Reticle Size	: 6 inch
Reticle Carrier Tag Reader	: Present
Reticle Stage Long Stroke Motor Type	: Cobalt Ferro 18 teeth
Reticle Stage Long Stroke Config	: TYPE_3:CoFe_18 motor, SB controlled, int. vacuum supply, pneum GC
Automated Reticle Transport System	: Absent
Reticle Stage Lenscooler Box	: Lenscooler Box with anti-aliasing Filter
Maximum Reticle ID Length	: 24 Characters
Reticle Stage Measurement System on Scan	: Heidenhain Encoders
Relative direction of ws to rs on the X axis	: Same
RS Object Field	: Normal
Reticle exchange type	: Retex option: E
Iris feature Scan	: Present
Reticle Handler type	: Original
2D Barcode Reader	: Absent
Integrated Reticle Inspection System Configuration.	: Enable creation of OSIRIS viewable files for PPD2 systems.
Settle time reduction to improve the throughput	: Don't care
Scan speed increase to improve the throughput	: Don't care
WS Immersion Hood Only Testrig	: Absent
Version of RS/WS IO library	: Version 1
Dynamic Performance Calculation	: Mark 1
Stages Sample Rate	: 5.0 kHz
Interferometer Electronics	: Ifsr
Capacitive z-height sensor type.	: Dual Z sensor board
Ifm config at measure side.	: 8 axes
UV Shutter Optimized Open Time	: Optimized UV Shutter Open Time V2
DoseSystemPerformanceTest sequence	: Test sequence 1
PEP-ADC Intensity	: Disable PEP-ADC Intensity;
Online Lamp Peak	: Disable Online Lamp Peak;
Dose Intensity Optimization	: Disable Dose Intensity Optimization;
Laser Gas Life eXtension	: Disable Laser Gas Life eXtension;
Type of multi foil lens element	: none
Depolarizer type	: fixed depolarizer present
PSE Location	: not applicable
PCE Location	: not applicable
Intensity Calibration Per DOE	: Disabled
Pupil qualification method	: Centre of gravity method
Polarized illumination amorph DOE.	: Only unpolarized illumination.
Fresnel corrections for WSSS	: Disabled
Is NA accuracy measurement allowed?	: Disabled
Exchangeable Pupil Lens Element	: No EPLE
Multifunction Active Lens Element	: 0
Multifunctional Active Elements	: 0
Use Sigma Calibration	: no Sigma Calibration
Use Sigma WIP Preserving Offsets	: no Sigma WIP Preserving Offsets
THFFC FDE model lens dependent	: Disabled
BALE Type	: Don't Care
TIS diffuser	: TIS diffuser absent
Determination of NA ellipticity	: Disabled
XML output for LITHOGUIDE	: Disabled
Use validity ranges around UIP data when Enabled.	: Use exact matching for UIP data
Number of EXLE elements	: 0
Functional use of Active Elements	: ALE function as ALE
Polarization Shaping Element Retractor	: No PSER hardware installed in the machine
Method for alignment of the laser beam	: Align the beam by optimizing pupil symmetry parameters (LUPO)
Pupil TIS angular sensitivity calibration and correction	: TIS Pupil Measurement will not be improved
Describes at what plane the BMU measures	: BMU readings are directly used as if they are at DOE1 plane
Lens Type	: 12
Light-source Architecture	: Laser
Light-source Type	: Cymer Laser: XLA 165
Light-source Wave-length	: 193nm
DOSEMAPPER	: Present
DOSE_MAPPER_1	: Present
REMA architecture	: REMA C
Illuminator Type	: 120
Zoom Axicon Architecture	: ZZA
Zoom Axicon Type	: 120
NA Control Architecture	: NA2 Torlon
NA Control Type	: 120
Automated DOE Exchanger	: Present
Automated DOE Exchanger Architecture	: 16 slots
UNICOM	: Present
UNICOM Architecture	: 1 Motor
Test Table	: Absent
Imaging Electronics Architecture	: B Architecture
Attenuator Type	: Variable
Test Table Z Axis	: Worm Wheel
PUPICOM	: Present
PUPICOM Architecture	: DC Motor with gearbox
Number of Z Lens Manipulators	: 5
Number of Active Lens Elements	: 1
Number of Bi-directional Active Lens Elements	: 0
Number of Active Manipulator Elements	: 0
Number of Active Elements	: 1
Number of Half Dome Mirrors	: 0
Number of Semi-Active X-Y Lens Manipulators	: 4
Setup sensor board version	: Setup SSD version 1
Imaging Generic Power Amplifier	: Generic Power Amplifier
Imaging Control Rack Configuration	: IPDR
Type of projection multiplexer board	: MUX Absent
LEC Rack in Electronic Architecture	: Present
Projection GPA Configuration Version	: Version 2
Number of Lens NEXZ Manipulators	: 5
Number of Lens Z Manipulators Using Camdisk	: 0
Spotsensor surface coating	: Bilatal
Energy Sensor	: VLOC
Spot Sensor Chuck 1	: VLOC
Spot Sensor Chuck 2	: VLOC
Modelling for MAXYS	: Absent
Uniformity Improvement Package	: Present
Number of pre-amps available per Z-manipulator	: 0
Immersion	: Absent
Pupil measurements with ILIAS	: Present
Automatic CUA	: Absent
Beam Control	: Beam adjustment
Extended Spot Sensor Matching	: Present
Number of Rxm	: 5
Number of Rym	: 5
Diaphragm Limiter	: Absent
NA1 motor type	: None
Spot Sensor Reticle Stage	: Absent
Smooth Field Uniformity	: Absent
Exchangeable Last Lens Element	: Present
Exchangeable Pupil Lens Element	: Absent
Number of manipulable ELLE axes	: 0
UV Shutter version	: UV Shutter version 1
Dosecontrol Hardware	: ISB
Illuminator platform	: Aerial 2
Polarization	: Absent
Automatic PCE exchanger	: Absent
Automatic CUA exchanger architecture	: Not applicable
Test table architecture	: Aerial 2
Illumination modes	: All illumination modes
DUV Lightsource Power Level	: 45.00 Watt
Lens Top Tool Connection	: Lens Top Tool can be mounted on top of the Lens
Scanning Energy Sensor Calibration	: Static Energy Sensor Calibration
Position of Spot Sensor on Chuck 1	: Spot Sensor Position on Chuck 1 layout 1
Position of Spot Sensor on Chuck 2	: Spot Sensor Position on Chuck 2 layout 1
Z-capture for low relfectivity wafers	: Off
TIS plate deformation correction	: Disabled
FSM Flexibility package	: Disabled
Field width optimised leveling	: Disabled
Constrained fit	: Disabled
Levelling throughput improvement on measure side	: No levelling throughput package
Point-to-Point LS Machine Matching	: Disabled
Circuit Dependent FEC	: Present
Focus Monitoring	: Present
Extended LS areas	: Disabled
Air Gauge	: Absent
Type of Air Gauge	: No Air Gauge device present
Reticle shape correction	: Enabled
LS focus node	: LS focus node 3
Level Sensor Processing Rack	: LCSR
LS_PEMM_CONFIG	: Present
LS_CPU_CONFIG	: 3 CPU's available
BaseLiner overlay high order intrafield	: BaseLiner-Overlay high order intrafield is enabled.
BaseLiner focus high order intrafield	: BaseLiner-Focus high order intrafield is disabled.
BaseLiner focus control	: BaseLiner-Focus application is enabled

BaseLiner focus control. : BaseLiner focus application is enabled.
BaseLiner overlay control. : BaseLiner-Overlay application is enabled.
Pattern Matcher fullchip : Absent
Pattern Matcher : Absent
Maximum numerical aperature (NA) that can be used in Lot Production : level 0
Log missed translations : Disabled
Allow even orders usage : Present
Multilingual UI : Absent
Improved Maintenance action scheduling. : Disabled
Recipe Creator : Absent
Lot Report Data Category : Enhanced Diagnostics
CDC : Enabled
EFESE : Absent
PED control mode : Absent
Proximity Matching : Present
mbds control : Present
Enhanced exposures 1 : Present
Data collection not covered by FOCUS and OVERLAY : InformPro Data Collection disabled.
Overlay Data Collection : Overlay Data Collection disabled.
XML Lot Report Content Level : Basic
Enable the Maintenance Assistant : Disable Maintenance Assistant
EDA Interface : Disabled
Equipment Constants via SECS interface : Enabled
LCI WaitWatcher plug-in : Absent
Reorder Lot Service : Present
Shot Data Collection : Absent
Focus Data Collection : Absent
Alignment Recipe Override : Alignment Recipe Override Disabled
Alignment Strategy ID Standard or Extended. Protected. : Alignment Strategy ID max length is 15 characters
Enable to support SMASH XY mark types. : SMASH XY marks are not supported.
Specifies which mark types are supported : ASML marks only
Alignment laser configuration : 2 color laser
OADB Improved Dynamic Range : Disabled
board configuration : ODB + ADB
Alignment Camera Mirror : Absent
Athena Narrow Marks Twinscan : Present
Alignment Sensor Type : Athena Narrow Marks OM
Athena Focus Improvements 1 : Present
Max alignment speed : Setting 2
AA processing rack : AACR processing rack
Particle Extraction Mass Flow Meter : Absent
purging configuration : purging CONFIG 3
Bubble Extraction Seal Setting : Not Applicable
Ultra Pure Water flow controller (WICC) : absent
LCW Circuit set-up : Flow Version 1
In situ Wafer Table Stone Cleaning : Absent
Clean Air Configuration : Others
Metroframe Circuit Water Cabinet : Absent
CT Miscellaneous Rack : Present
Clean Air Temperature Control : Driver and ACC
Purge Hoods configuration : Compressed Clean air and Extremely Clean Dry air
Nitrogen Purge Utility Control : Absent
Reticle Cleaning : Absent
Metroframe type : TYPE_I
Inlet restriction for clean air : Inlet restriction at right side
Reticle Stage purged mini environment : Present
Gas Control Unit Type : High Flow (HF)
Wet Imaging Control Cabinet : Not Applicable
Readout location of Pneumatic Facility Unit sensors : Machine Base Diagnostics System (MBDS)
Laminar Bottom Hood : Absent
Extreme Clean Humiditied Air : Absent
Lens Circuit Water Flow : High
Motor Circuit Water Flow : Normal
SPM temp correction for lens axis : Disabled
2 Sided IFM-beams for WS-X (expose) : Not available
2 Sided IFM-beams for WS-X (measure) : Not available
Diff pressure correction for IFM beams : Absent
IFM Laser Configuration : AOM Recombo Laser
Position Control Rack Configuration : Rack Configuration type 3
Position Control Power Rack Configuration : TYPE_3: Stages Power Rack upto E-spec
Number of Motion Controllers : 5 Motion Controllers present
Position Control Motion Control rack : PMCR
Reticle Stage Short Stroke X amp. : PADC 100V/16A
Reticle Stage Short Stroke Y11 amp. : PADC 100V/16A
Reticle Stage Short Stroke Y12 amp. : PADC 100V/16A
Reticle Stage Short Stroke Y21 amp. : PADC 100V/16A
Reticle Stage Short Stroke Y22 amp. : PADC 100V/16A
Wafer Stage Short Stroke 1 XY1 amp. : PADC 100V/16A
Wafer Stage Short Stroke 1 XY2 amp. : PADC 100V/16A
Wafer Stage Short Stroke 1 XY3 amp. : PADC 100V/16A
Wafer Stage Short Stroke 2 XY1 amp. : PADC 100V/16A
Wafer Stage Short Stroke 2 XY2 amp. : PADC 100V/16A
Wafer Stage Short Stroke 2 XY3 amp. : PADC 100V/16A
Reticle Stage Short Stroke Z1 amp. : PADC 100V/16A
Reticle Stage Short Stroke Z2 amp. : PADC 100V/16A
Reticle Stage Short Stroke Z3 amp. : PADC 100V/16A
Wafer Stage Short Stroke 1 Z1 amp. : PADC 100V/16A
Wafer Stage Short Stroke 1 Z2 amp. : PADC 100V/16A
Wafer Stage Short Stroke 1 Z3 amp. : PADC 100V/16A
Wafer Stage Short Stroke 2 Z1 amp. : PADC 100V/16A
Wafer Stage Short Stroke 2 Z2 amp. : PADC 100V/16A
Wafer Stage Short Stroke 2 Z3 amp. : PADC 100V/16A
Reticle Stage Long Stroke Y11 amp. : 450V20A: PAAC AT-pepD
Reticle Stage Long Stroke Y12 amp. : 450V20A: PAAC AT-pepD
Reticle Stage Long Stroke Y21 amp. : 450V20A: PAAC AT-pepD
Reticle Stage Long Stroke Y22 amp. : 450V20A: PAAC AT-pepD
Reticle Balance Mass 1 amp. : 450V20A: PAAC AT-pepD
Reticle Balance Mass 2 amp. : 450V20A: PAAC AT-pepD
Wafer Stage Long Stroke E X amp. : 450V20A: PAAC AT-pepD
Wafer Stage Long Stroke M X amp. : 450V20A: PAAC AT-pepD
Wafer Stage Long Stroke E Y1 amp. : 450V20A: PAAC AT-pepD
Wafer Stage Long Stroke E Y2 amp. : 450V20A: PAAC AT-pepD
Wafer Stage Long Stroke E CS amp. : 450V20A: PAAC AT-pepD
Wafer Stage Long Stroke M Y1 amp. : 450V20A: PAAC AT-pepD
Wafer Stage Long Stroke M Y2 amp. : 450V20A: PAAC AT-pepD
Wafer Stage Long Stroke M CS amp. : 450V20A: PAAC AT-pepD
Wafer Stage Balance Mass 11 amp. : 300V14A: PAAC AT-B ACPA Twin
Wafer Stage Balance Mass 12 amp. : 300V14A: PAAC AT-B ACPA Twin
Wafer Stage Balance Mass 21 amp. : 325V14A: PAAC AT-C
Wafer Stage Balance Mass 22 amp. : 325V14A: PAAC AT-C
Pressure update rate for fringelength correction : Pressure update rate 2 or 4 Hz
TestStream : TestStream disabled
Performance Enhancement Package : None
PEP Image Streaming : Present
Lot Overhead Reduction : LOR2
PDOC quality indicator check : PDOC quality indicator functionality is absent
Combined stage alignment : Disabled
Reduced capture range for TIS scans : Disable reduced range TIS scan scenarios
Extended Zone Alignment : Disabled
Intrafield Higher Order Process Corrections : Disabled
SMASH Reuse Capture Information in Stage Alignment : Coarse capture scans are done on all stage alignment marks.
Allow wafer plane deviation check with Focus Monitoring : Disabled
Parameter indicates how long overlay data will be stored. : Short retention period.
Improved wafer reject mode : Disabled
Automated Lens Heating Calibration : Disabled
Allow different Exp,TIS Align set : Absent
Imaging Fading Control : Disabled
Gridmapper : Disabled
2D grid correction : Disabled
Double TIS scan : Disabled
Symmetrical Reticle Alignment : Disabled
Ast offset correction in TIS LHFB/LOCO (Version 3) : Disabled
Choice of avoidance routing. : Absent
NEXZ-tilt per exposure : The NEXZ-tilt cannot be adjusted per exposure.
Off-axis slit : Projection lens has no off-axis slit.
Improved Edge Field Leveling : Enabled
Enhanced Throughput Reticle Alignment : Present
Wavelength Adjustable : Adjustable
Allow L1L7 Type 1 Optimization : Absent
Lot Alignment Report Encryption : Unencrypted
Stage Alignment Filter : Present
Lot Correction Sequence : Type B
Lens Heating Feedback : Present
Application Specific Lens Heating Calibration and Verification : Present
Improved Contrast Control : Absent
ILIAS lens setup : Absent
Air Gauge Improved Levelling : Absent
Process Dependent Gain Correction : Absent
Enhanced Exposure Overlay : Absent
ALE 1 Use : Lens heating only
Overlay Node : Level 0
E-chuck Flatness Qualification Test : Disabled
TOP HD : Absent
Reticle Align High Precision : Absent
LS spot coverage : Absent
Layout Version Number TIS Plate 1 on Chuck 1 : TIS Plate 1 Layout Version 2
Layout Version Number TIS Plate 1 on Chuck 2 : TIS Plate 1 Layout Version 2
Layout Version Number TIS Plate 2 on Chuck 1 : TIS Plate 2 Layout Version 3
Layout Version Number TIS Plate 2 on Chuck 2 : TIS Plate 2 Layout Version 3
Usage of wavelength data by TIS : Disabled
Usage of Energy Sensor data by TIS : Disabled
Indication what kind of AM controller hardware is present : SUCR
Piezo Active Lens Mounts : Absent
ILIAS Functionality For Lithoguide : Present

```
ILIAS Functionality For Lithoguide                                    : Present
ISIS Functionality For Lithoguide                                     : Absent
SAMOS Stray Light Test For Lithoguide                                 : Present
PUPIL Measurement For Lithoguide                                      : Present
FOCAL Measurement for Lithoguide                                      : Present
Leveling Verification Test for Lithoguide                             : Present
Lithoguide Imaging Recipes                                            : Absent
Dose System Performance Test for Lithoguide                           : Present
ILIAS Sensor Location                                                 : Chuck 2
ILIAS sensor type chuck 2                                             : Multiple scan grid
ILIAS sensor type chuck 1                                             : None
Reticle Level Polarization Sensor                                     : Absent
Assure System Snapshots                                               : Assure System Snapshots not allowed
Insert a delay time before starting a Lot (lens heating).             : Enabled
Save throughput data to the disk                                      : Disabled
Patch strategy                                                        : Patchlevel
Chuck Dedication                                                      : Basic
Application Type                                                      : Scanner Application
Number of RMCS clients                                                : No clients
MDL Viewer                                                            : Site View
ZERO Fiducial                                                         : ILIAS
Machine Architecture                                                  : XT Machine Architecture
XT Architecture Revision                                              : Rev1
Machine Type                                                          : 1250
Machine Specification                                                 : pep-D Specification
Stand-alone Workstation                                               : False
Machine Location                                                      : Customer Site
CP 1A                                                                 : Absent
CP 1B                                                                 : Absent
CP 2                                                                  : Absent
CP 3                                                                  : Absent
CP 4                                                                  : Absent
CP 5                                                                  : Absent
CP 6                                                                  : Absent
Wafer Handler Productivity                                            : Wafer Handler Productivity Level 0
```

```
Report Filename : EMCA.66
Report Path     : TM/Projection/StrayLightMonitoring/EMCA.log/
Machine Type    : 1250B

Testname               : Straylight At Multiple Opaque Squares
Start Time             : Mon, 11 Nov 2019 09:56:07 122383us +0000
Stop Time              : Mon, 11 Nov 2019 09:58:52 843999us +0000
Execution Time         : 00:02:45
Test Run Result        : Finished
Test Status            : Test is Finished
Comment                : w/o unicom
```

Step	Start Time	Stop Time	Status
Prepare machine	09:56:07	09:57:41	Finished
Perform TIS measurements	09:57:41	09:58:27	Finished
Perform Spot sensor measurements	09:58:27	09:58:34	Finished
Create testlog	09:58:34	09:58:46	Finished
Unload reticle	09:58:46	09:58:52	Finished
Calculate stray light	09:58:52	09:58:52	Finished

Execution Time
00:01:34
00:00:46
00:00:06
00:00:12
00:00:05
00:00:00

```
Main Results
  Test Log Name                  : 4623
  Machine Number                 : 4623
  Machine Type                   : 1250B
  Lens Number                    : 0125421a
  ELLE ID                        :
  Measurement Time               : 11/11/2019 09:58
  Comment                        :
  Pupil Shape
    Illumination mode            : Annular
    NA                           :    0.850
    DOE ID                       :   15
    Sigma
      inner                      :    0.690
      outer                      :    0.930
  Reticle ID                     : 45563154P017
  Number of Cycles               :    1
  Attenuator Factor              :    0.200
  Chuck ID                       : CHUCK_ID_1
  TIS Plate ID                   : PLATE_1
  PGA gain                       : PGA_GAIN_20DB
  Number of Samples              :  100
  Defocus                        :    0.000  [um]
  Rema Usage TIS                 : Homed
  Number of Laser Pulses         :   50
  Laser Frequency                : 4000      [Hz]
  Energy                         :   11.25   [mJ]
  Rema Usage Spot Sensor         : Homed
  Dark Current                   :  627      [bits]
  Reference Blocksize            :   33      [um]
  Straylight at ref. blocksize   :    0.80   [%]
  Max. Straylight position
    X                            :   -7.05   [mm]
    Y                            :    6.60   [mm]
```

```
Operator:                                        Machine:4623
              Release:4.1.0                                Date:11/11/2019
                          Time:12:11

  Report Filename : LUSU.99
  Report Path     : TM/Illumination/Performance/LUSU.log/
  Machine Type    : 1250B

  File name of logfile(s) : service_data/LU/LUSU/LUSU.4503.log

  Testname                : Slit Uniformity
  Start Time              : Mon, 11 Nov 2019 12:09:14 489192us +0000
  Stop Time               : Mon, 11 Nov 2019 12:11:31 054057us +0000
  Execution Time          : 00:02:16
  Test Run Result         : Finished
  Test Status             : Test is Finished
  Results Validation      : N.A.
  Measurement Quality     : N.A.
  Comment                 : ANNU3, UIP-off
```

Step	Start Time	Stop Time	Status	Execution Time
Initialize Drivers	12:09:14	12:09:14	Finished	00:00:00
Prepare Machine	12:09:14	12:09:25	Finished	00:00:10
Perform Measurement	12:09:25	12:11:27	Finished	00:02:02
Generate Results	12:11:27	12:11:31	Finished	00:00:03

Scenario Inputs

```
  Selected Scenario        : Manual Slit Uniformity
  Verification Set         : No Verification
  Overrule Inputs          : Yes
  Manual Scenario Selected : Yes


  Measurement mode                                   : Stepping
  Slit Uniformity X Size                             :   26.000   [mm]
  Slit Uniformity Y Size                             :   10.238   [mm]
  Field Uniformity X Size                            :   26.000   [mm]
  Field Uniformity Y Size                            :    7.342   [mm]
  Field Shift X                                      :    0.000   [mm]
  Field Shift Y                                      :    0.000   [mm]
  Steps in X Direction                               :   11
  Steps in Y Direction                               :   51
  Number of pulses                                   :  100
  Number of pre-expose pulses                        :    0
  Attenuator transmission laser                      :    1.00
  Pulse frequency                                    : 4000
  Use the nominal pulse frequency as pulse frequency : Yes
  Pupil shape
    Illumination mode                                : Annular
    NA                                               :    0.850
    DOE ID                                           :   15
    Sigma
      inner                                          :    0.250
      outer                                          :    0.700
  Polarization mode                                  : Unpolarized
  Spot sensor                                        : Non-Leading
  REMA window
    REMA window X centre                             :    0.00000 [m]
    REMA window Y centre                             :    0.00000 [m]
    REMA window X size                               :    0.00000 [m]
    REMA window Y size                               :    0.00000 [m]
  REMA set_ps
    Rema use                                         : Spot
    disable_BBS                                      : No
  Unicom
    Mode                                             : Automatic
    Position                                         :   34.277   [mm]
  Pupicom
    Mode                                             : Automatic
    Angle                                            :   10.5     [deg]
  Beam
    Beam Mode                                        : Automatic
    Beam Positioning
      Position x                                     :   -2.474   [mm]
      Position y                                     :    1.795   [mm]
      Pointing x                                     :    0.384   [mRad]
      Pointing y                                     :    0.722   [mRad]
    Beam Window
      Beam position control window                   :  300       [um]
      Beam pointing control window                   :   50       [uRad]
  UIP on                                             : No


  Main Results
    Slit Uniformity                                                :     3.46
   [%]
    Tilt X                                                         :     0.38
   [%]
    Symmetrical Error                                              :     3.27
   [%]
    UNICOM correctable                                             :     2.95
   [%]
    Selected Chuck                                                 : Spot sensor
WS chuck 2
  Corrected Slit Uniformities
    Slit Uniformity if corrected for Tilt X                        :     3.43
   [%]
    Slit Uniformity if corrected for Symmetrical Error             :     0.18
   [%]
    Slit Uniformity if corrected for Tilt X and Symmetrical Error  :     0.08
   [%]
    Slit Uniformity if corrected for UNICOM                        :     0.51
   [%]
    Slit Uniformity if corrected for UNICOM and Tilt X             :     0.39
   [%]
  Light Source Properties
    Number of Laser Pulses emitted since installation [*10^6]      : 29118
  Illumination Properties
    DOE data file name                                             : annular
    DOE data file version                                          : 2.0.1
  Beam Position and Pointing
    Beam position X                                                :    -2.15
   [mm]
    Beam position Y                                                :     1.44
   [mm]
    Beam pointing X                                                :     0.390
   [mrad]
    Beam pointing Y                                                :     0.723
   [mrad]
    Beam data valid                                                : Yes
    Beam drift during measurement
      Beam position X                                              :    -0.25
   [mm]
      Beam position Y                                              :     0.48
   [mm]
      Beam pointing X                                              :     0.003
   [mrad]
      Beam pointing Y                                              :    -0.015
   [mrad]
    Beam drift during measurement valid                            : Yes
  Field Uniformity Results
    Field Uniformity                                               :     4.35
   [%]
    Tilt Y                                                         :    -0.40
   [%]
  Field Value Statistics
    Average Spot Sensor Light Intensity                            :  2213.66
   [mW/cm2]
    Standard Deviation of the Spot Sensor Light Intensity          :    55.85
   [mW/cm2]
    Average Energy Sensor Light Intensity                          :  2017.53
   [mW/cm2]
    Standard Deviation of the Energy Sensor Light Intensity        :     6.84
   [mW/cm2]
    Average Point Ratio                                            :     1.0416
    Standard Deviation of the Point Ratio                          :     0.0277
  Corrected Intensities
    Average Spot Sensor Light Intensity Corrected to 1 external BP :  2427.20
   [mW/cm2]
    Intensity constants
      ATP Intensity Specification                                  :  2000
   [mW/cm2]
      Number of Bending Points                                     :     3
  Greyfilter Coefficients
    Comment                                                        : Calculated
    a0                                                             :
-0.00000e+00
    a2                                                             :
-7.06051e-02 [1/mm2]
    a4                                                             :
5.16812e-04 [1/mm4]
    a6                                                             :
-5.08379e-06 [1/mm6]
    a8                                                             :
1.71342e-08 [1/mm8]
```

Slit Profile

	X [mm]	Average Ratio [%]	Ratio per run (0..4) [%]	(5..14) [%]	(15..24) [%]
0	-12.94	91.259			
1	-10.35	89.732			
2	-7.76	87.600			
3	-5.18	86.100			
4	-2.59	85.548			
5	0.00	85.369			
6	2.59	85.661			
7	5.18	86.377			
8	7.76	87.885			
9	10.35	89.972			
10	12.94	91.496			