

03100450

04.10.2013

02261
1000-A
S-Nr. 077

LEED Optics Test Report

Serial number: ER-LEED..0366.....

Customer: Charles University Prag

Filament Activation and Degassing

Filament Typ: ☐ LaB₆ ☒ Ir ☐ W

Activation Time: 3,0h Filament Current: 2,35A

Anode Current (@ E=500eV; U_{Weh}=0V; U_{Anode}=500V): 430µA / sample: 20,8µA

Focus Conditions:

Energy Range: 20 - 1000eV

Filament Current [A]: 2,35A

Energy	0 eV (offset)	100 eV	300 eV	500 eV
Wehnelt Voltage	-5	-5	-5	-5
Anode Voltage	416	416	416	416
L _{1/3} Voltage	4	220	649	1077
L ₂ Voltage	85	149 ¹⁴⁹	275	402
Suppressor Voltage	0	20	60	100

Energy	50 eV	100 eV	300 eV	500 eV
Beam Current [µA]	0,9	1,3	3,8	5,9

Alternativ Focus Conditions:

Energy Range:

Filament Current [A]:

Remark:

Energy	0 eV (offset)			
Wehnelt Voltage				
Anode Voltage				
L _{1/3} Voltage				
L ₂ Voltage				
Suppressor Voltage				

Energy				
Beam Current [μ A]				

1000eV Focus Conditions:

Filament Current: *2.35 A*

Anode Current: *90 μ A*

Wehnelt Voltage: *-11V*

Anode Voltage: *610V*

L_{1/3} Voltage: *2000V*

L₂ Voltage: *961V*

Beam Current: *9.1 μ A*

Screen Status:

Recommended Screen Voltage: *5 to 74V*

tested up to: *104V*

Homogeneity: *perfect*

Defects: *one very small spot (see image)*