

Iowa State University
Chemical Instrumentation Facility
1234 Hach Hall
Ames, IA 50011

Cary Validation Report

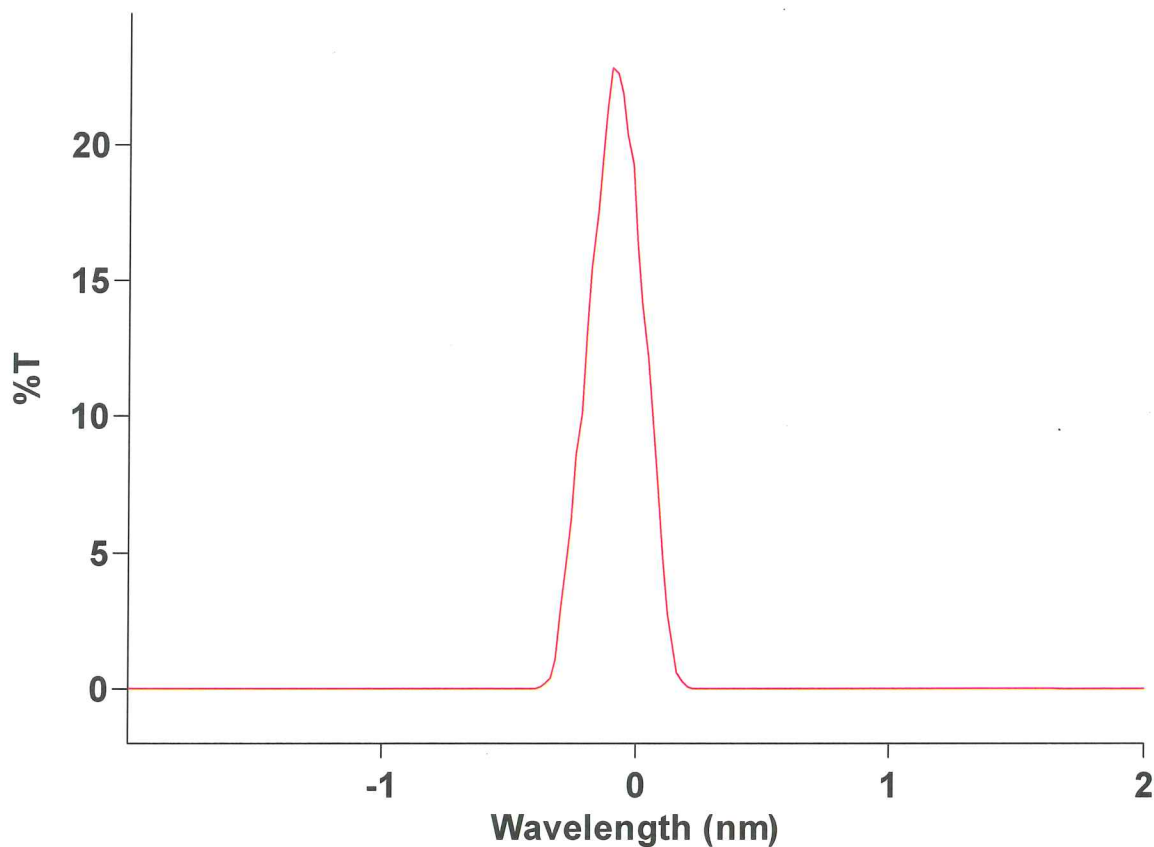
Report time 9/6/2012 10:46:10 AM
Method:
Report C:\Varian\CARYWI~1\9_6_2012 10;46;10 AM.RVO
Software Version: 4.20(468)
Instrument Cary 100

Wavelength Accuracy Test - Deuterium Emission Method

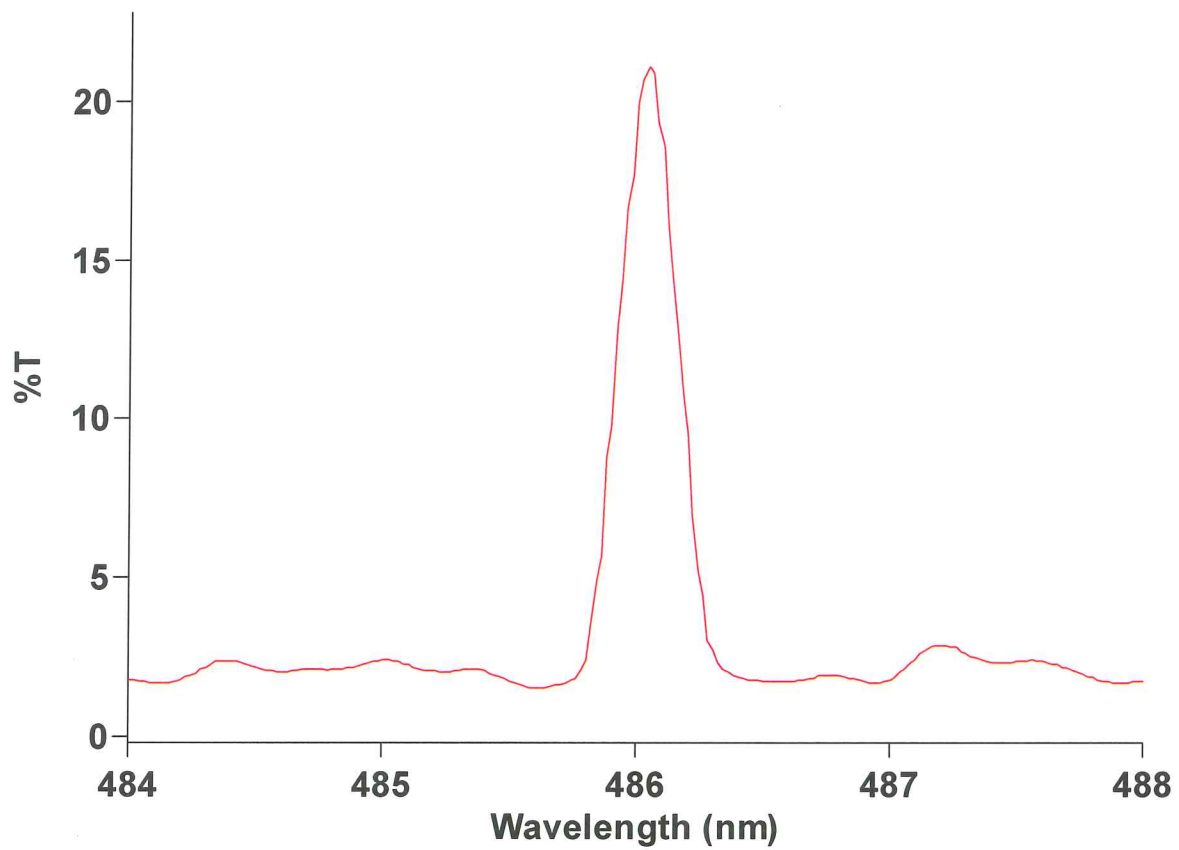
9/6/2012 10:46:19 AM

Instrument Settings

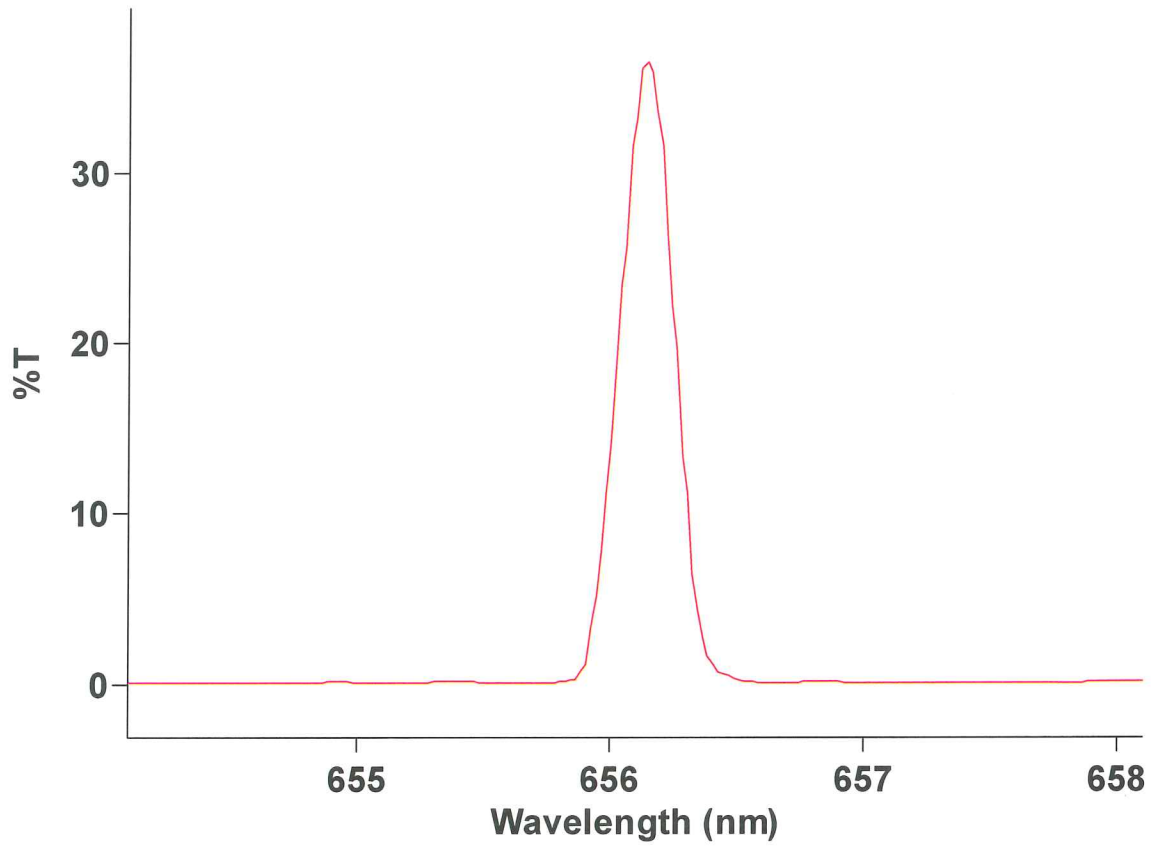
UV/Vis SBW : 0.20 nm
Ave Time : 0.200 sec
UV/Vis Interval : 0.020 nm
Tolerance for > 190 nm : +/-0.20 nm
Tolerance for Zero Order : +/-0.70 nm



0.000 line found at -0.100 PASSED
Tolerance for 0.00 nm ± 0.700000



486.000 line found at 486.040 PASSED
Tolerance for 486.00 nm ± 0.200000



656.100 line found at 656.140 PASSED
Tolerance for 656.10 nm ± 0.200000

Wavelength Accuracy Test - Deuterium Emission Method PASSED

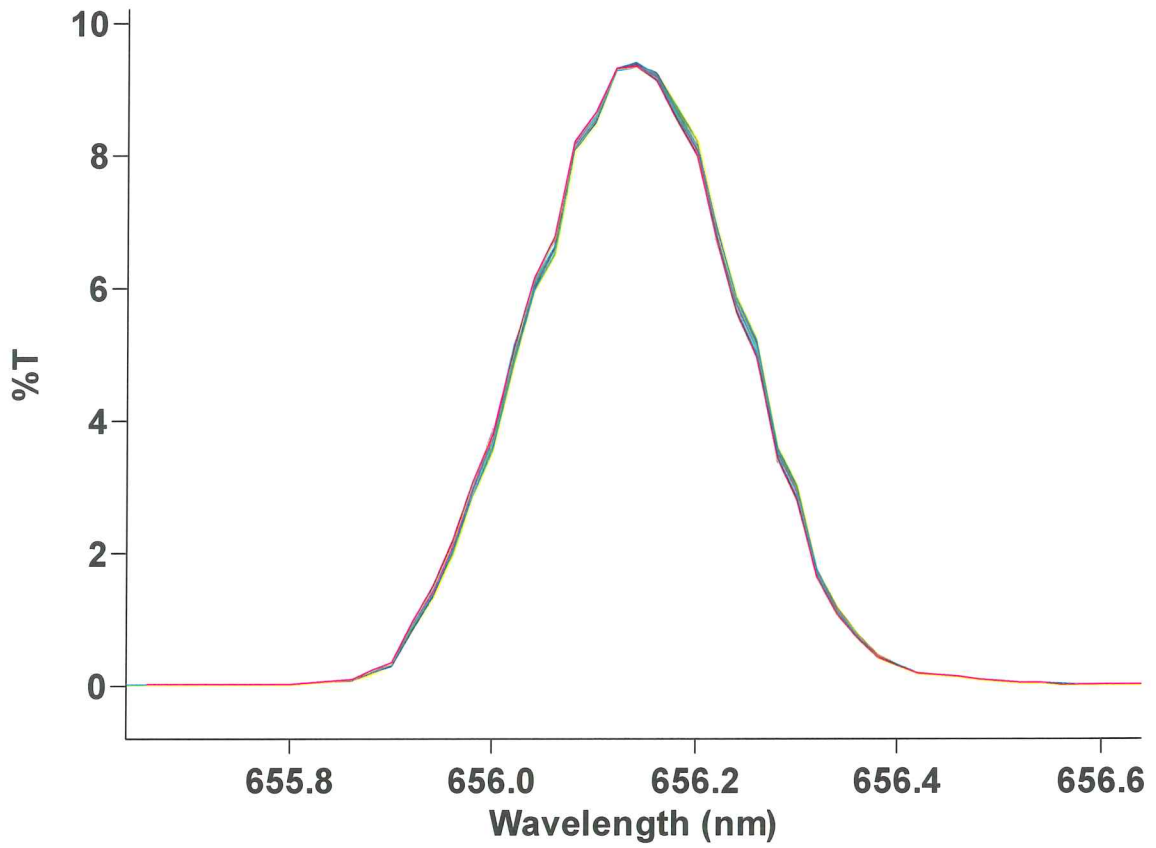
Wavelength Reproducibility Test

9/6/2012 10:50:38 AM

Instrument Settings

SBW :	0.20 nm
Ave Time :	0.200 sec
Interval :	0.020 nm
Tolerance (nm) <	0.080
UV/Vis Standard Deviation <	0.020

Gain for the scans 137



656.10 Line found from 656.131 to 656.149
Deviation = 0.0173 PASSED
Standard Deviation = 00.0084 PASSED

Wavelength Reproducibility Test PASSED

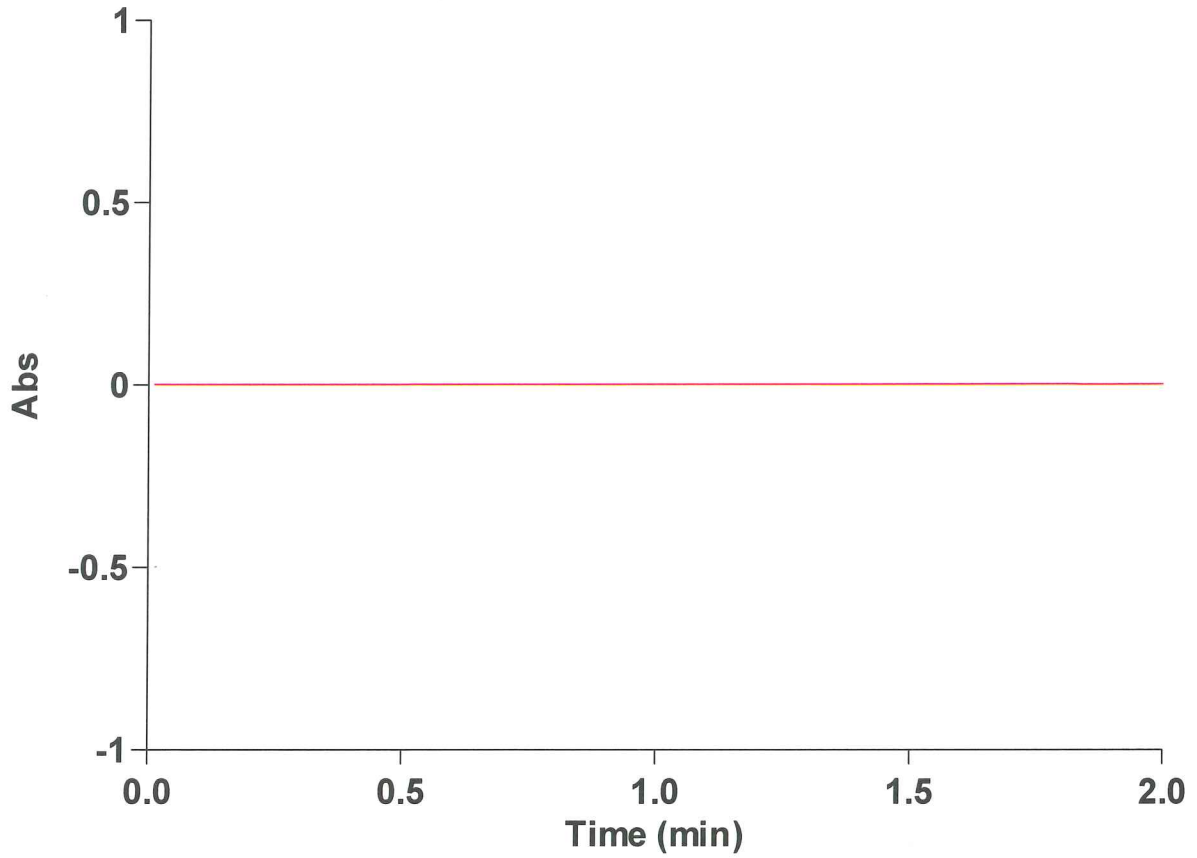
Photometric Noise Test

9/6/2012 10:54:31 AM

Instrument Settings

UVVIS SBW : 2.00 nm
Ave Time : 1.000 sec

UV Wavelength : 500.00 nm
0.0 Abs Test: Mean = 0.000071 Abs
Tolerance < 0.00008500



RMS noise reading 0.00002400 PASSED

Photometric Noise Test PASSED

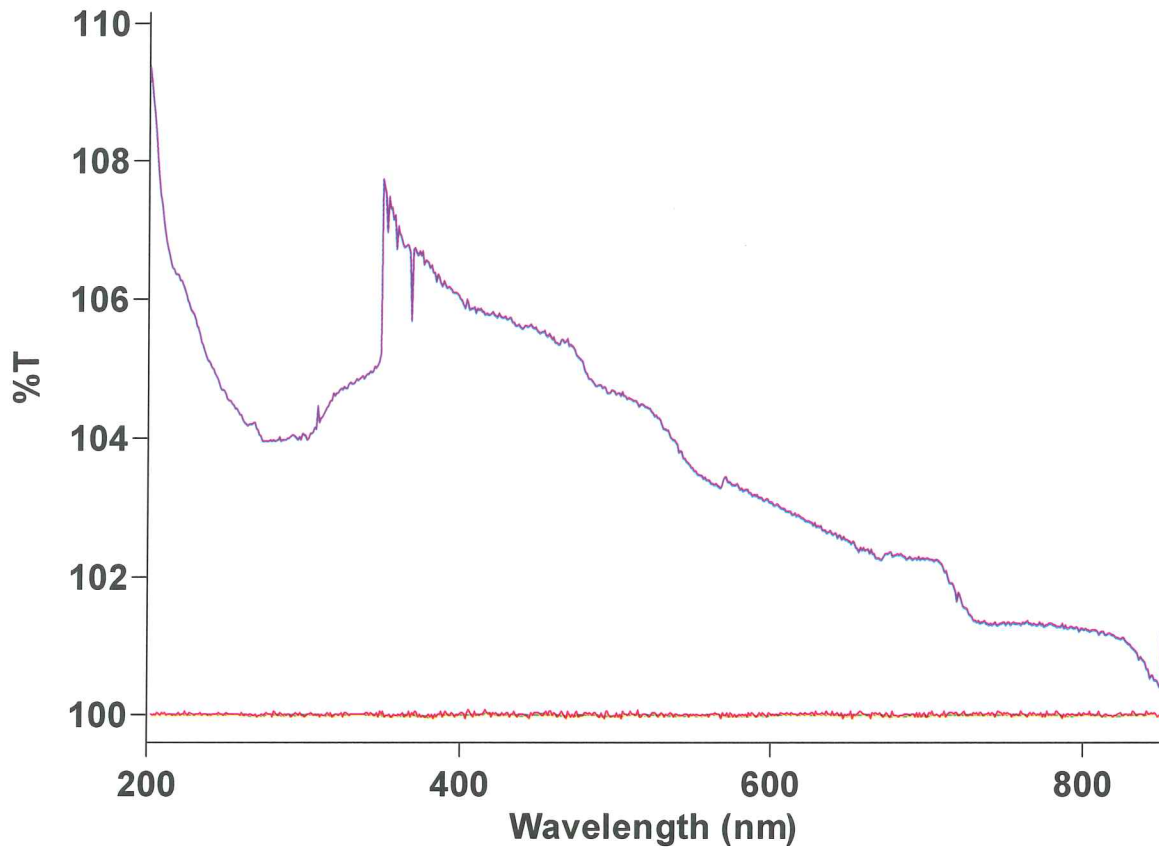
Baseline Flatness Test

9/6/2012 10:58:30 AM

Instrument Settings

SBW :	4.00 nm
Ave Time :	0.100 sec
Interval :	1.00 nm
Scan range :	200.00 - 850.00 nm
Corrected Baseline	220.00 - 700.00 nm, Tolerance ± 2.0000 %T
Corrected Baseline	200.00 - 850.00 nm, Tolerance ± 0.0010 Abs

Corrected Baseline	220.00 - 700.00 nm, %T from 99.97 to 100.02 PASSED
Baseline Correction in %T	0.0263
Corrected Baseline	200.00 - 850.00 nm, Abs from -0.0001 to 0.0001 PASSED
Baseline Correction in Abs	0.0001



Baseline Flatness Test PASSED

Summary of Test Results

Wavelength Accuracy Test - Deuterium Emission Method..PASSED
Wavelength Reproducibility Test.....PASSED
Photometric Noise Test.....PASSED
Baseline Flatness Test.....PASSED

Operator Signature : _____

Date : _____

Supervisor Signature : _____

Date : _____