

BioTech, a.s., Služeb 4 , 108 52 Praha 10

vydává na základě provedených zkoušek

Validační protokol

k spektrofotometru

BioTek – EL 800

Specifikace validovaného přístroje:

výrobce : BIO-TEK
seriové číslo: 201083
filtry : 405, 450, 490, 620, 630 nm.
Datum testu: 8. 12. 2008

Specifikace kontrolního zařízení:

výrobce : BIO-TEK
model : kalibrační destička Cat. No. 7260522 s vlnovými délkami
UV 0,3; 0,6; 1,2; 3; 4 nm
Výrobce: BIO-TEK
Model: Universal Test plate: SN: 180735
Datum kalibrace: 11. 11. 2008

Výsledky testů : viz. příloha

Validační měření proběhlo s výsledkem: Přístroj BioTek – EL 800 s/n: 201083
Je validní pro uvedené vlnové délky a přesnost měření jenž je uvedená výše.

Tento validační protokol je platný do 31. 12. 2009

V Praze dne 15. 12. 2008

Ing. Antonín Hlaváček

Vedoucí servisního oddělení

Test Date/Time: 8.12.2008 12:12:43
Reader: 201083
Operator: Hlavac
Comments:

Operator ID: _____

Notes: _____

15:25 08/12/08 SYSTEM SELF TEST

Filter: 405 Gain: 11.64
Air: 53340
Dark: 1056
Delta: 52284

Filter: 450 Gain: 3.51
Air: 54687
Dark: 1060
Delta: 53627

Filter: 490 Gain: 3.20
Air: 54882
Dark: 1061
Delta: 53821

Filter: 630 Gain: 2.19
Air: 54546
Dark: 1060
Delta: 53486

Filter: 620 Gain: 2.53
Air: 54623
Dark: 1060
Delta: 53563

Noise Max: 1052
Noise Min: 1046
Delta: 6

AUTOCAL ANALYSIS

Upper Left Corner: x= 9184 y=10730
Lower Left Corner: x= 9164 y=16218
Lower Right Corner: x= 488 y=16220
Upper Right Corner: x= 504 y=10730
Delta 1: 9184 - 9164= +20
Delta 2: 504 - 488= +16
Delta 3: 10730 -10730= +0
Delta 4: 16220 -16218= +2

SYSTEM TEST PASS

Test Date/Time: 8.12.2008 11:49:36
Reader: 201083
Operator: Hlavac
Comments:
Universal Test Plate: 180735

Universal Test Plate Analysis
Wavelength: 405

Alignment Results

B2= 0.000 PASS B12= 0.000 PASS G1= 0.000 PASS G11= 0.000 PASS

Accuracy Results

	C01	D04	E02	F05	G03	H06
STANDARD	0.142	2.802	0.634	2.129	1.083	1.753
DATA	0.141	2.799	0.636	2.140	1.084	1.757
RESULT	PASS	-----	PASS	-----	PASS	PASS

Repeatability Results

	C01	D04	E02	F05	G03	H06
READ1	0.141	2.799	0.636	2.140	1.084	1.757
READ2	0.141	2.822	0.636	2.137	1.084	1.756
RESULT	PASS	-----	PASS	-----	PASS	PASS

Test Date/Time: 8.12.2008 11:52:34
Reader: 201083
Operator: Hlavac
Comments:
Universal Test Plate: 180735

Universal Test Plate Analysis
Wavelength: 450

Alignment Results

B2= 0.000 PASS B12= 0.000 PASS G1= 0.000 PASS G11= 0.000 PASS

Accuracy Results

	C01	D04	E02	F05	G03	H06
STANDARD	0.139	2.523	0.591	1.909	1.007	1.631
DATA	0.138	2.520	0.591	1.908	1.005	1.628
RESULT	PASS	-----	PASS	PASS	PASS	PASS

Repeatability Results

	C01	D04	E02	F05	G03	H06
READ1	0.138	2.520	0.591	1.908	1.005	1.628
READ2	0.138	2.516	0.591	1.907	1.005	1.628
RESULT	PASS	-----	PASS	PASS	PASS	PASS

Test Date/Time: 8.12.2008 12:02:30
Reader: 201083
Operator: Hlavac
Comments:
Universal Test Plate: 180735

Universal Test Plate Analysis
Wavelength: 490

Alignment Results

B2= 0.000 PASS B12= 0.000 PASS G1= 0.000 PASS G11= 0.000 PASS

Accuracy Results

	C01	D04	E02	F05	G03	H06
STANDARD	0.142	2.486	0.593	1.880	1.016	1.633
DATA	0.140	2.474	0.592	1.874	1.011	1.626
RESULT	PASS	-----	PASS	PASS	PASS	PASS

Repeatability Results

	C01	D04	E02	F05	G03	H06
READ1	0.140	2.474	0.592	1.874	1.011	1.626
READ2	0.140	2.476	0.592	1.875	1.011	1.626
RESULT	PASS	-----	PASS	PASS	PASS	PASS

Test Date/Time: 8.12.2008 11:56:46
Reader: 201083
Operator: Hlavac
Comments:
Universal Test Plate: 180735

Universal Test Plate Analysis
Wavelength: 620

Alignment Results

B2= 0.000 PASS B12= 0.000 PASS G1= 0.000 PASS G11= 0.000 PASS

Accuracy Results

	C01	D04	E02	F05	G03	H06
STANDARD	0.157	2.379	0.600	1.813	1.028	1.642
DATA	0.152	2.379	0.597	1.809	1.022	1.638
RESULT	PASS	-----	PASS	PASS	PASS	PASS

Repeatability Results

	C01	D04	E02	F05	G03	H06
READ1	0.152	2.379	0.597	1.809	1.022	1.638
READ2	0.152	2.378	0.597	1.809	1.022	1.639
RESULT	PASS	-----	PASS	PASS	PASS	PASS

Test Date/Time: 8.12.2008 11:59:15
Reader: 201083
Operator: Hlavac
Comments:
Universal Test Plate: 180735

Universal Test Plate Analysis
Wavelength: 630

Alignment Results

B2= 0.000 PASS B12= 0.000 PASS G1= 0.000 PASS G11= 0.000 PASS

Accuracy Results

	C01	D04	E02	F05	G03	H06
STANDARD	0.158	2.353	0.598	1.794	1.024	1.640
DATA	0.154	2.355	0.596	1.791	1.019	1.633
RESULT	PASS	-----	PASS	PASS	PASS	PASS

Repeatability Results

	C01	D04	E02	F05	G03	H06
READ1	0.154	2.355	0.596	1.791	1.019	1.633
READ2	0.154	2.355	0.596	1.791	1.019	1.633
RESULT	PASS	-----	PASS	PASS	PASS	PASS