UGRA
Display Analysis & Certification Tool
Report

Basics

Date:	2011-3-17 19:49:21
Report-Version:	v1.3.1
Monitor-Name:	\\.\DISPLAY1
Profile:	C:/Windows/system32/spool/drivers/color/lacie_324i_ugra2.icc
Created:	2011-3-17 19:46
Measurement device:	eye-one pro

Summary

The monitor has passed the certification according to the UGRA DACT specifications.

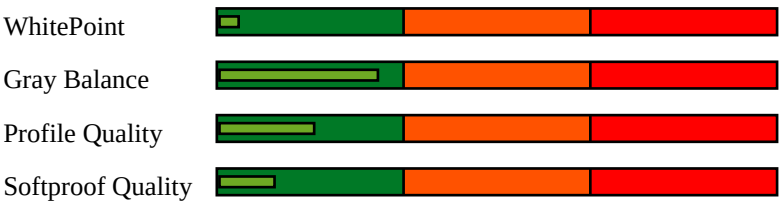
Calibration

White Point	yes
Gray balance	yes
Profile quality	yes

Softproofing

MultiColor, HighBody	yes
Offset/Gravure Paper Type 1/2	yes
Offset on uncoated paper	yes
Newspaper Printing	yes
sRGB	yes
AdobeRGB	yes
ECI-RGB	yes

Diagram



Whitepoint

The whitepoint should be as close as possible to the black body curve and the calibration target.The maximum allowed distance to the target whitepoint is DeltaE 2.0.

XYZ:	133.78 140.40 137.03
XYZ (normalized):	95.28 100.00 97.60
Luminance:	140.4 Cd/m2
Next Temperature:	5819 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.2 deltaE

Blackpoint

The blackpoint is not defined in ISO 12646. Therefore UDACT does only measure but not assess it.

Luminance:	0.2 Cd/m2
Chromaticity:	1.3 Chroma (Lab)

Gray balance

Average and maximum calculation will respect measurements with 1% minimum luminance only. The maximum allowed deviations to comply with this test are an average of DeltaC 1.0 and a range of DeltaC 2.0.

%	Kelvin	Cd/m2	L	Chroma	Gamma
0	11921	0.16	1.00	1.31	
5	6759	0.54	3.45	0.85	2.01
10	5627	2.10	12.57	0.92	1.86
15	5900	4.58	21.06	0.29	1.82
20	5739	7.68	28.04	0.78	1.82
25	5749	11.24	33.99	0.49	1.84
30	5735	16.08	40.33	1.02	1.82
35	5860	20.81	45.39	0.38	1.82
40	5789	26.98	50.94	0.31	1.81
45	5802	32.89	55.51	0.76	1.82
50	5741	39.47	59.99	0.90	1.83
55	5764	47.51	64.83	0.42	1.82
60	5746	55.78	69.27	0.82	1.81
65	5830	64.39	73.46	0.38	1.82
70	5822	74.10	77.74	0.41	1.80
75	5799	83.21	81.44	0.52	1.81
80	5786	94.61	85.70	0.34	1.77
85	5773	103.89	88.92	0.42	1.86
90	5761	115.71	92.76	0.63	1.84
95	5811	128.04	96.49	0.25	1.83
100	5819	140.40	100.00	0.00	
Average	5782			0.53	1.83
Range				1.71	
Max				1.02	

Tone values = 96.7%

Through the calibration of a display tone values can be lost. A display for the printing industry should show at least 95% of the incoming tone values.

Profile Quality

This test displays and measures RGB values and compares them with the transformation of the profile. The maximum allowed deviations to comply with this test are an average of DeltaE 3.0 and a maximum of DeltaE 6.0.

The assumed chromatic adaptation is: Bradford

RGB	Lab	deltaLab	deltaE
0 0 0	1.0 0.3 -1.3	-1.0 -0.3 1.3	1.6
0 0 128	12.7 48.7 -74.5	0.3 1.7 -2.5	3.1
0 0 255	27.4 75.7 -115.6	0.5 0.6 -1.0	1.3
0 128 0	50.2 -85.9 52.2	1.0 -1.3 1.8	2.4
0 128 128	52.3 -57.6 -12.9	0.8 -0.3 0.0	0.8
0 170 255	67.6 -42.7 -50.8	0.3 0.3 -0.3	0.5
0 255 0	85.5 -131.6 81.5	0.2 -0.3 0.1	0.4
0 255 170	86.8 -108.3 15.6	0.2 -0.1 0.1	0.3
0 255 255	88.1 -87.6 -19.5	0.3 -0.1 -0.0	0.3
85 85 85	43.9 -0.6 0.0	0.1 0.6 -0.0	0.6
128 0 0	33.2 66.7 51.6	0.5 1.1 2.6	2.8
128 0 128	36.1 74.5 -35.8	0.7 1.0 -0.8	1.4
128 128 0	59.0 -10.2 65.4	0.3 -1.1 0.8	1.4
128 128 128	60.4 0.8 -0.2	0.3 -0.8 0.2	0.9
128 128 255	63.9 22.4 -56.3	0.1 -0.1 -0.4	0.5
128 255 128	90.4 -71.9 39.8	-0.1 -2.1 0.8	2.3
170 0 255	49.3 96.9 -78.6	0.8 0.9 0.0	1.2
170 170 170	75.1 0.0 -0.1	-0.1 -0.0 0.1	0.1
170 255 0	92.0 -59.5 91.4	-0.0 -1.2 -0.3	1.3
170 255 255	94.4 -34.6 -9.5	-0.1 -1.3 -0.1	1.3
255 0 0	58.2 101.5 87.7	0.9 1.1 0.8	1.6
255 0 170	60.5 107.5 -18.7	1.0 0.9 0.5	1.4
255 0 255	62.8 113.2 -55.6	1.0 0.9 0.3	1.4
255 128 128	74.5 57.5 22.5	0.4 0.6 1.1	1.3
255 170 0	81.4 28.5 90.9	0.2 1.0 -0.0	1.0
255 170 255	84.4 44.5 -22.7	0.2 1.5 -0.4	1.6
255 255 0	97.8 -17.0 100.7	0.0 -0.1 -0.7	0.7
255 255 170	98.9 -8.3 34.3	0.0 -0.3 0.9	1.0
255 255 255	100.0 0.0 -0.0	0.0 -0.0 -0.0	0.0
170 85 85	55.1 45.0 18.5	0.2 0.8 0.2	0.8
85 170 85	67.4 -57.3 31.4	-0.1 -0.9 0.6	1.1
85 85 170	46.5 16.6 -43.7	0.1 1.0 -1.0	1.4
85 170 170	68.6 -41.7 -10.1	0.0 -0.4 -0.4	0.6
170 85 170	57.0 53.2 -26.3	0.0 1.0 -0.6	1.2
170 170 85	73.7 -9.2 41.5	0.0 -0.1 1.0	1.0
Average			1.2
Maximum			3.1

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	100 %
sRGB	100 %
AdobeRGB	99 %
ECI-RGB v1.0	92 %

ISO-Gamut

This test displays and measures Lab values and compares them with the reference. The maximum allowed deviations to comply with this test are an average of DeltaE 4.0 and a minimum Gamut volume of 90% for ISOcoated.

Reference	Lab	deltaLab
55.0 -37.0 -50.0	55.0 -31.3 -48.4	5.9
66.9 -24.7 -37.1	66.8 -25.1 -35.7	1.4
79.7 -12.5 -21.8	79.8 -12.4 -20.8	0.9
48.0 74.0 -3.0	47.9 72.5 -3.2	1.5
60.8 50.6 -6.7	60.7 48.5 -6.2	2.2
76.4 25.8 -6.9	76.5 24.7 -6.7	1.1
89.0 -5.0 93.0	89.0 -4.3 93.1	0.7
90.3 -4.7 62.6	90.4 -3.9 60.7	2.0
92.2 -3.5 31.1	92.3 -2.8 30.4	1.1
53.1 37.7 28.9	52.9 37.7 28.5	0.5
41.5 22.7 16.8	41.5 23.4 16.2	0.8
31.9 40.0 24.0	31.9 38.6 23.2	1.6
32.5 44.4 -1.8	32.4 43.4 -1.7	1.1
51.3 1.3 44.5	51.6 1.5 43.6	1.0
34.6 -36.4 13.9	34.3 -35.5 13.4	1.1
36.0 -26.2 -20.9	35.9 -26.1 -20.2	0.7
20.9 9.6 -23.6	20.6 9.4 -23.1	0.6
89.0 0.0 -1.8	88.9 0.2 -1.5	0.4
82.8 0.0 -1.7	83.0 -0.2 -1.5	0.4
69.3 0.0 -1.4	69.0 0.3 -1.2	0.4
54.1 0.0 -1.0	54.3 -0.2 -1.1	0.3
36.6 -0.0 -0.5	36.4 0.7 -0.6	0.7
16.0 0.0 0.0	16.2 -0.8 -0.4	0.9
24.0 22.0 -46.0	24.1 20.7 -44.8	1.8
40.9 17.9 -36.6	40.8 17.6 -35.4	1.2
63.7 10.3 -23.8	63.6 10.4 -23.2	0.5
47.0 68.0 48.0	46.7 67.4 45.4	2.7
58.5 47.1 37.9	58.3 45.7 37.1	1.6
74.2 22.9 21.4	74.1 22.3 20.8	0.9
50.0 -65.0 27.0	49.3 -63.5 26.1	1.9
62.1 -39.8 21.0	61.9 -37.5 19.7	2.6
77.0 -19.1 11.0	77.1 -18.6 11.2	0.5
71.2 18.8 17.3	71.1 19.1 16.7	0.6
71.2 22.2 73.1	71.2 21.9 71.8	1.3
47.7 71.2 16.2	47.4 69.4 16.1	1.8
38.0 55.4 -20.9	37.9 54.4 -20.2	1.3
73.7 -22.8 67.6	74.0 -23.1 66.2	1.4
52.3 -52.3 -20.2	51.5 -52.1 -19.1	1.4
43.3 -17.0 -48.6	42.9 -16.8 -48.1	0.7
95.0 0.0 -2.0	94.9 0.4 -1.8	0.5
88.5 -0.4 -3.1	88.4 -0.4 -2.6	0.5
82.0 -0.9 -4.1	81.9 -1.1 -3.7	0.4
67.7 -2.0 -4.4	67.4 -1.7 -4.2	0.4
52.2 -2.5 -3.5	52.8 -3.1 -2.6	1.2
37.5 -3.9 -3.1	37.5 -4.5 -2.2	1.2
26.3 -6.8 -3.4	26.4 -5.8 -3.5	1.1
Average		1.2
Gamut-Volume		100 %

Measurement Data

This table lists all RGB measurements. The XYZ values represent the values from the measurement device.

RGB	XYZ	RGB	XYZ
255 255 255	133.78 140.40 137.03	85 85 170	26.14 22.27 59.69
0 0 0	0.16 0.16 0.26	85 170 170	36.67 54.89 64.92
12 12 12	0.49 0.54 0.56	170 85 170	53.82 34.96 60.65
25 25 25	2.04 2.10 2.06	170 170 85	56.47 64.67 24.61
38 38 38	4.36 4.58 4.53	0 129 207	23.94 32.84 85.41
51 51 51	7.41 7.68 7.55	82 159 220	40.77 51.78 97.65
63 63 63	10.69 11.24 10.79	153 193 232	69.94 79.60 110.41
76 76 76	15.23 16.08 15.26	172 40 103	44.77 23.06 25.12
89 89 89	19.85 20.81 20.52	186 97 143	58.18 40.29 45.60
102 102 102	25.68 26.98 26.13	206 159 190	81.33 71.06 78.73
114 114 114	31.55 32.89 32.40	238 217 6	93.64 103.18 11.16
127 127 127	37.92 39.47 38.54	238 222 89	98.33 107.62 31.28
140 140 140	45.32 47.51 45.96	237 228 158	105.61 113.89 65.29
153 153 153	53.50 55.78 54.36	157 85 64	39.40 29.01 12.61
165 165 165	61.18 64.39 62.66	106 68 56	21.03 16.91 9.75
178 178 178	70.42 74.10 72.02	97 38 31	15.45 9.70 3.60
191 191 191	79.57 83.21 81.45	98 36 64	17.03 10.07 10.62
204 204 204	90.34 94.61 92.13	116 101 34	26.21 27.54 6.55
216 216 216	99.18 103.89 100.88	34 74 44	6.30 11.46 6.68
229 229 229	110.66 115.71 112.47	25 76 97	8.65 12.77 22.63
242 242 242	121.89 128.04 124.57	36 35 67	5.20 4.47 11.03
0 0 128	6.37 2.38 32.83	215 216 220	99.02 103.72 103.82
0 0 255	22.70 8.30 118.98	194 195 199	83.22 87.40 87.50
0 128 0	8.10 26.19 3.84	152 153 155	52.78 55.25 55.22
0 128 128	14.70 28.95 38.10	110 110 112	29.78 31.31 31.41
0 170 255	36.94 53.69 127.17	68 68 69	12.44 12.93 12.87
0 255 0	29.22 94.42 13.20	30 30 30	2.83 3.02 3.00
0 255 170	40.29 98.40 71.83	38 37 107	8.34 5.96 25.44
0 255 255	52.30 102.76 134.75	78 71 138	20.04 16.68 40.76
85 85 85	18.32 19.36 18.88	137 132 183	48.13 45.65 71.07
128 0 0	22.66 10.36 0.54	171 43 31	40.42 21.67 4.29
128 0 128	29.00 12.63 34.16	186 92 63	51.52 36.39 12.94
128 128 0	31.92 37.70 4.30	206 153 127	73.25 65.36 41.72
128 128 128	38.56 40.17 39.36	33 120 54	10.85 25.09 10.88
128 128 255	55.18 46.56 125.58	92 148 93	28.14 42.64 25.65
128 255 128	60.82 108.44 50.13	156 186 153	59.66 72.58 56.88
170 0 255	60.33 25.38 120.38	190 147 127	65.07 59.12 40.74
170 170 170	64.71 67.90 66.37	206 144 27	65.73 59.01 8.16
170 255 0	69.16 112.86 13.86	172 42 73	42.50 22.46 13.99
170 255 255	92.76 121.51 136.49	117 39 105	25.40 14.00 24.95
255 0 0	78.25 35.57 1.26	158 176 36	50.45 65.12 11.69
255 0 170	89.16 39.48 58.92	0 125 139	15.28 28.08 42.60
255 0 255	100.97 43.80 121.12	12 92 167	15.53 18.84 57.58
255 128 128	94.74 65.87 40.90	236 237 242	117.45 122.86 123.29
255 170 0	93.95 82.10 7.61	212 215 221	97.38 102.38 104.37
255 170 255	116.94 90.77 128.75	189 193 201	80.11 84.59 88.05
255 255 0	110.40 131.76 14.30	143 149 156	49.21 52.29 55.61
255 255 170	121.89 135.93 74.89	101 107 111	27.10 29.31 30.50
170 85 85	45.78 31.88 19.35	65 72 75	12.39 13.78 14.40
85 170 85	28.99 52.23 24.03	41 50 52	5.99 6.89 7.70