UGRA
Display Analysis & Certification Tool
Report

Basics

Date:	2012-6-7 01:50:34
Report-Version:	v1.3.1
Monitor-Name:	\\.\DISPLAY1
Profile:	C:/Windows/system32/spool/drivers/color/test.icc
Created:	2012-6-7 1:48
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 

Gray Balance 

Profile Quality 

Softproof Gamut 

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:	134.09 140.56 136.94
XYZ (normalized):	95.39 100.00 97.42
Luminance:	140.6 Cd/m2
Next Temperature:	5798 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.1 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:	1.2 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	8708	0.24	1.57	1.25	
5	5773	0.77	4.97	0.16	1.89
10	5822	2.33	13.58	0.10	1.83
15	5577	4.79	21.61	0.77	1.81
20	5771	7.91	28.44	0.19	1.81
25	5773	11.52	34.39	0.19	1.82
30	5765	16.10	40.33	0.17	1.81
35	5765	21.36	45.91	0.19	1.81
40	5793	27.17	51.07	0.08	1.80
45	5778	33.12	55.65	0.12	1.82
50	5785	40.20	60.42	0.14	1.82
55	5785	47.75	64.94	0.12	1.81
60	5800	56.15	69.43	0.11	1.80
65	5786	64.21	73.34	0.12	1.83
70	5780	73.65	77.52	0.27	1.82
75	5773	83.43	81.48	0.25	1.82
80	5771	94.06	85.46	0.28	1.81
85	5774	104.23	88.99	0.23	1.85
90	5767	115.73	92.72	0.31	1.85
95	5783	128.08	96.46	0.17	1.83
100	5798	140.56	100.00	0.00	
Average	5771			0.20	1.82
Range				0.82	
Max				0.77	

Tone values = 100.0%

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	1.6 0.2 -1.2	-1.6 -0.2 1.2	2.0
0 0 128	12.2 53.2 -78.2	-0.8 1.6 -0.8	2.0
0 0 255	25.5 83.1 -119.9	0.1 0.0 -0.0	0.1
0 128 0	51.1 -89.6 51.5	0.0 -0.9 1.1	1.4
0 128 128	52.8 -60.2 -12.9	-0.2 -0.2 -0.2	0.3
0 170 255	67.2 -44.4 -51.4	0.1 0.3 -0.3	0.4
0 255 0	85.5 -136.7 79.4	0.3 -0.5 0.3	0.6
0 255 170	86.7 -112.8 15.3	0.2 -0.3 0.1	0.3
0 255 255	87.8 -91.7 -19.8	0.2 0.2 -0.1	0.3
85 85 85	44.3 -0.1 0.2	-0.4 -0.0 0.1	0.4
128 0 0	34.4 68.0 50.9	-0.2 0.2 3.0	3.0
128 0 128	36.7 77.0 -36.2	0.0 0.0 0.2	0.2
128 128 0	59.4 -11.4 64.1	-0.0 0.0 0.6	0.6
128 128 128	60.7 0.0 0.1	-0.2 0.1 0.0	0.2
128 128 255	63.4 23.3 -57.0	-0.0 0.2 -0.3	0.4
128 255 128	90.1 -75.9 40.0	0.1 -0.6 0.3	0.7
170 0 255	49.5 100.6 -78.7	0.1 0.2 -0.3	0.4
170 170 170	74.9 0.2 0.0	-0.0 -0.2 0.1	0.3
170 255 0	91.8 -61.9 89.0	0.3 -0.6 0.1	0.7
170 255 255	93.9 -37.0 -9.5	0.2 -0.2 -0.3	0.4
255 0 0	59.8 103.2 86.3	0.0 0.0 -0.2	0.2
255 0 170	61.7 109.8 -17.2	0.1 0.1 0.1	0.2
255 0 255	63.7 116.4 -54.5	0.1 0.1 -0.3	0.4
255 128 128	75.2 59.2 24.0	0.0 0.0 0.2	0.2
255 170 0	81.9 30.2 89.3	0.1 -0.1 -0.2	0.2
255 170 255	84.5 46.8 -22.3	-0.0 0.5 -0.6	0.8
255 255 0	98.0 -17.4 98.2	0.2 -0.2 -0.2	0.3
255 255 170	98.9 -8.7 35.3	0.1 -0.1 0.1	0.2
255 255 255	100.0 0.0 0.0	-0.0 0.0 -0.0	0.0
170 85 85	55.5 46.3 19.1	-0.1 0.1 0.1	0.2
85 170 85	67.1 -59.7 31.4	0.0 -0.4 0.4	0.6
85 85 170	46.2 18.4 -44.7	-0.1 -0.3 0.0	0.3
85 170 170	68.4 -43.5 -10.6	-0.0 -0.2 0.0	0.2
170 85 170	57.1 54.9 -26.2	-0.1 0.4 -0.1	0.4
170 170 85	73.9 -9.8 42.3	-0.1 0.2 0.1	0.3
Average			0.5
Maximum			3.0

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	100 %
sRGB	100 %
AdobeRGB	99 %
ECI-RGB v1.0	93 %

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	55.5 -33.7 -49.0	3.5
66.9 -24.7 -37.1	67.0 -25.0 -36.5	0.7
79.7 -12.5 -21.8	79.8 -12.8 -21.7	0.3
48.0 74.0 -3.0	48.0 73.9 -3.3	0.3
60.8 50.6 -6.7	61.0 50.4 -6.7	0.2
76.4 25.8 -6.9	76.6 25.3 -6.3	0.8
89.0 -5.0 93.0	89.1 -4.6 91.6	1.5
90.3 -4.7 62.6	90.4 -4.6 62.5	0.1
92.2 -3.5 31.1	92.0 -3.0 31.1	0.5
53.1 37.7 28.9	53.1 37.2 28.5	0.6
41.5 22.7 16.8	41.7 22.5 16.3	0.6
31.9 40.0 24.0	32.2 39.7 24.3	0.5
32.5 44.4 -1.8	32.8 43.9 -2.3	0.8
51.3 1.3 44.5	51.6 1.0 44.8	0.5
34.6 -36.4 13.9	34.7 -36.2 13.9	0.3
36.0 -26.2 -20.9	36.1 -25.3 -21.3	1.0
20.9 9.6 -23.6	21.1 9.6 -24.2	0.6
89.0 0.0 -1.8	88.8 0.1 -1.5	0.3
82.8 0.0 -1.7	82.6 0.2 -1.6	0.3
69.3 0.0 -1.4	69.3 0.0 -1.3	0.1
54.1 0.0 -1.0	54.4 -0.1 -1.0	0.3
36.6 -0.0 -0.5	36.6 0.8 -1.2	1.0
16.0 0.0 0.0	16.7 0.7 0.4	1.1
24.0 22.0 -46.0	24.2 22.8 -46.1	0.9
40.9 17.9 -36.6	41.0 18.4 -36.4	0.6
63.7 10.3 -23.8	63.8 10.5 -23.7	0.2
47.0 68.0 48.0	47.2 68.1 48.4	0.4
58.5 47.1 37.9	58.5 47.3 37.5	0.4
74.2 22.9 21.4	74.2 22.8 21.1	0.3
50.0 -65.0 27.0	50.1 -64.3 26.7	0.8
62.1 -39.8 21.0	62.3 -39.5 20.7	0.5
77.0 -19.1 11.0	77.0 -18.6 11.0	0.4
71.2 18.8 17.3	71.3 18.5 17.2	0.3
71.2 22.2 73.1	71.1 22.1 73.4	0.4
47.7 71.2 16.2	47.6 71.1 15.4	0.9
38.0 55.4 -20.9	38.0 55.4 -21.2	0.3
73.7 -22.8 67.6	73.6 -22.4 68.1	0.7
52.3 -52.3 -20.2	52.4 -51.7 -20.1	0.6
43.3 -17.0 -48.6	43.4 -16.7 -48.7	0.4
95.0 0.0 -2.0	94.9 0.3 -2.0	0.3
88.5 -0.4 -3.1	88.4 -0.5 -3.1	0.2
82.0 -0.9 -4.1	81.8 -0.8 -4.2	0.2
67.7 -2.0 -4.4	67.9 -2.2 -4.1	0.4
52.2 -2.5 -3.5	52.4 -2.7 -3.6	0.3
37.5 -3.9 -3.1	37.8 -3.2 -2.9	0.8
26.3 -6.8 -3.4	26.7 -6.5 -3.4	0.5
Average		0.6
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	134.09 140.56 136.94	85 85 170	26.40 22.03 60.38
0 0 0	0.24 0.24 0.35	85 170 170	35.88 54.55 65.10
12 12 12	0.73 0.77 0.74	170 85 170	54.86 35.11 60.74
25 25 25	2.23 2.33 2.28	170 170 85	56.66 65.11 24.27
38 38 38	4.62 4.79 4.56	0 131 208	24.02 33.64 87.75
51 51 51	7.53 7.91 7.65	85 160 221	41.21 52.20 99.33
63 63 63	10.98 11.52 11.15	154 194 233	69.85 79.58 111.67
76 76 76	15.38 16.10 15.63	170 41 104	45.54 23.19 25.25
89 89 89	20.40 21.36 20.71	185 97 144	59.74 40.76 46.52
102 102 102	25.91 27.17 26.42	206 160 191	82.03 71.35 78.41
114 114 114	31.62 33.12 32.19	237 216 0	93.92 103.57 11.85
127 127 127	38.33 40.20 39.04	237 221 87	98.04 107.62 29.80
140 140 140	45.55 47.75 46.40	236 227 158	104.77 113.02 63.67
153 153 153	53.52 56.15 54.65	155 85 64	39.71 29.38 12.76
165 165 165	61.26 64.21 62.42	105 68 57	21.07 17.12 9.84
178 178 178	70.22 73.65 71.41	96 38 31	15.95 9.90 3.49
191 191 191	79.59 83.43 80.91	97 37 65	17.49 10.31 11.10
204 204 204	89.75 94.06 91.20	116 101 34	26.11 27.55 6.21
216 216 216	99.49 104.23 101.18	35 74 44	6.44 11.78 6.74
229 229 229	110.57 115.73 112.39	27 76 98	8.87 12.90 23.49
242 242 242	122.20 128.08 124.45	36 36 68	5.43 4.65 11.75
0 0 128	6.68 2.29 35.12	215 216 220	99.07 103.75 103.68
0 0 255	22.59 7.38 120.86	194 195 199	82.43 86.26 86.47
0 128 0	8.15 27.30 4.31	152 153 156	53.36 55.90 55.89
0 128 128	14.68 29.64 38.86	110 111 113	29.90 31.37 31.32
0 170 255	35.86 52.92 126.96	68 68 70	12.63 13.09 13.24
0 255 0	27.79 94.35 14.13	30 30 30	3.05 3.15 3.00
0 255 170	38.66 98.20 71.88	39 38 108	8.69 6.02 26.45
0 255 255	50.21 101.96 134.36	78 72 139	20.45 16.85 41.92
85 85 85	18.80 19.75 19.13	137 133 184	48.48 45.91 71.87
128 0 0	24.30 11.14 0.78	169 43 30	41.46 22.19 3.87
128 0 128	30.51 13.07 35.26	184 91 63	52.57 36.64 12.88
128 128 0	32.16 38.36 4.72	205 153 128	73.97 65.72 41.58
128 128 128	38.82 40.69 39.53	37 120 54	11.31 26.10 11.20
128 128 255	54.72 45.76 125.24	94 148 93	28.06 43.23 25.37
128 255 128	58.55 107.78 49.44	157 186 153	59.64 72.46 56.89
170 0 255	62.52 25.60 121.01	189 147 127	65.35 59.60 40.56
170 170 170	64.56 67.57 65.77	204 143 24	65.78 58.90 7.59
170 255 0	67.86 112.61 14.84	170 42 74	43.56 22.71 14.47
170 255 255	90.37 120.23 134.77	116 40 106	25.86 14.11 25.75
255 0 0	83.35 37.99 1.65	159 175 33	50.21 64.41 10.71
255 0 170	94.04 41.49 59.60	16 125 140	16.10 29.15 44.97
255 0 255	105.67 45.25 121.75	18 93 168	16.03 19.38 59.26
255 128 128	97.93 67.44 40.61	236 237 242	117.41 122.77 123.42
255 170 0	96.71 83.50 8.38	212 215 222	97.57 102.52 105.12
255 170 255	119.19 91.13 128.32	189 193 202	80.17 84.38 88.40
255 255 0	111.04 132.53 15.64	144 150 157	49.94 53.23 56.34
255 255 170	121.97 136.27 73.63	101 107 112	26.86 28.88 30.74
170 85 85	47.16 32.52 19.42	66 72 75	12.88 14.05 15.00
85 170 85	28.12 51.87 23.78	41 50 52	6.03 7.01 7.81