UGRA
Display Analysis & Certification Tool
Report

Basics

Date:	2008-9-2 14:50:25
Report-Version:	v1.3.1
Monitor-Name:	\\.\DISPLAY1
Profile:	C:/Windows/system32/spool/.../02.09.08-5800K-18-120cd-ugra.icc
Created:	2008-9-2 14:44
Measurement device:	DTP94-LCD mode

Summary

The monitor has not passed the certification according to the UGRA DACT specifications.

Calibration

White Point	yes
Gray balance	no
Profile quality	yes

Softproofing

MultiColor, HighBody	no
Offset/Gravure Paper Type 1/2	no
Offset on uncoated paper	no
Newspaper Printing	no
sRGB	no
AdobeRGB	no
ECI-RGB	no

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:	112.05 117.52 114.25
XYZ (normalized):	95.35 100.00 97.22
Luminance:	117.5 Cd/m2
Next Temperature:	5792 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:	0.1 Cd/m2
Chromaticity:	0.5 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	7936	0.11	0.85	0.47	
5	5968	0.55	4.23	0.24	1.87
10	5932	1.83	12.97	0.60	1.83
15	5902	3.79	20.92	0.68	1.82
20	5773	6.50	28.20	0.11	1.81
25	5624	9.56	34.26	0.78	1.82
30	5770	13.44	40.31	0.25	1.81
35	5847	17.61	45.61	0.31	1.81
40	5761	22.73	51.08	0.27	1.80
45	5826	27.95	55.87	0.37	1.80
50	5824	33.51	60.35	0.28	1.81
55	5815	39.66	64.76	1.03	1.81
60	5802	46.88	69.39	0.25	1.80
65	5810	53.58	73.28	0.15	1.83
70	5831	61.37	77.41	0.57	1.81
75	5805	69.60	81.41	0.17	1.82
80	5800	79.14	85.68	0.33	1.78
85	5763	87.72	89.23	0.45	1.82
90	5815	97.13	92.86	0.26	1.81
95	5783	106.99	96.43	0.15	1.83
100	5792	117.52	100.00	0.00	
Average	5804			0.37	1.82
Range				1.44	
Max				1.03	

Tone values = 93.9%
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	0.8 -0.0 -0.5	-0.8 0.0 0.5	1.0
0 0 128	16.1 37.6 -71.1	0.6 -1.2 0.3	1.4
0 0 255	33.9 52.8 -106.6	-0.4 2.2 -0.5	2.3
0 128 0	49.5 -81.1 51.9	-0.0 0.5 0.9	1.0
0 128 128	51.9 -54.4 -14.1	0.2 0.5 0.1	0.6
0 170 255	67.8 -41.7 -51.4	0.1 0.9 0.4	1.0
0 255 0	83.1 -121.5 80.4	0.0 -0.4 -0.5	0.7
0 255 170	84.9 -99.7 12.7	0.1 -0.5 0.4	0.6
0 255 255	87.1 -81.8 -21.4	-0.0 0.4 0.1	0.4
85 85 85	44.0 -0.3 -0.2	-0.1 0.3 0.2	0.4
128 0 0	35.0 61.0 51.1	0.2 -0.4 2.7	2.7
128 0 128	39.0 65.8 -32.3	0.4 -1.2 -0.1	1.3
128 128 0	58.7 -10.2 64.2	-0.1 1.0 1.1	1.5
128 128 128	60.7 -0.3 0.1	0.0 0.3 -0.1	0.3
128 128 255	65.6 16.5 -54.3	-0.3 1.1 -0.2	1.2
128 255 128	88.4 -66.8 38.4	0.1 -0.5 0.1	0.5
170 0 255	54.2 80.8 -72.0	-0.0 0.4 0.1	0.5
170 170 170	74.8 0.1 -0.5	0.2 -0.1 0.5	0.6
170 255 0	90.1 -54.5 89.9	0.1 0.1 -0.2	0.2
170 255 255	93.6 -33.3 -10.5	0.1 0.2 0.1	0.2
255 0 0	61.4 92.5 84.3	0.2 -0.9 -0.5	1.0
255 0 170	64.3 95.9 -13.6	0.3 -1.2 0.0	1.3
255 0 255	67.7 97.9 -49.2	0.1 -0.1 0.1	0.2
255 128 128	76.2 52.4 25.4	-0.1 0.2 -0.4	0.4
255 170 0	81.8 28.1 90.1	-0.0 0.1 -0.2	0.2
255 170 255	85.9 39.9 -21.0	-0.1 0.6 -0.1	0.6
255 255 0	96.8 -13.5 99.8	0.1 -0.4 -0.9	0.9
255 255 170	98.3 -6.3 34.3	0.1 -0.6 0.2	0.6
255 255 255	100.0 0.0 -0.0	0.0 0.0 0.0	0.0
170 85 85	56.2 41.2 19.4	0.0 0.2 0.4	0.4
85 170 85	65.8 -53.0 29.8	0.1 0.0 0.5	0.5
85 85 170	47.6 13.8 -43.1	-0.0 0.1 0.2	0.2
85 170 170	67.8 -38.7 -12.0	0.1 -0.2 0.5	0.6
170 85 170	58.7 47.2 -24.6	0.1 0.1 0.3	0.4
170 170 85	73.1 -7.7 41.1	0.1 0.1 0.6	0.6
Average			0.8
Maximum			2.7

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	99 %
sRGB	98 %
AdobeRGB	97 %
ECI-RGB v1.0	90 %

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	55.7 -31.6 -48.6	5.6
66.9 -24.7 -37.1	66.7 -24.3 -37.8	0.9
79.7 -12.5 -21.8	79.7 -12.6 -22.1	0.4
48.0 74.0 -3.0	47.7 75.0 -3.2	1.1
60.8 50.6 -6.7	60.8 50.8 -7.2	0.5
76.4 25.8 -6.9	76.4 26.7 -7.0	0.9
89.0 -5.0 93.0	89.0 -5.2 92.9	0.3
90.3 -4.7 62.6	90.3 -4.9 62.6	0.3
92.2 -3.5 31.1	92.2 -3.9 31.4	0.5
53.1 37.7 28.9	53.1 37.7 28.8	0.1
41.5 22.7 16.8	41.9 23.0 18.2	1.5
31.9 40.0 24.0	31.9 40.9 23.9	1.0
32.5 44.5 -1.8	32.3 45.7 -1.8	1.2
51.3 1.3 44.5	51.4 1.5 44.2	0.4
34.6 -36.4 13.9	34.7 -37.1 13.5	0.8
36.0 -26.2 -20.9	35.9 -26.8 -20.6	0.7
20.9 9.6 -23.6	20.5 9.4 -23.9	0.5
89.0 0.0 -1.9	89.2 -0.0 -1.7	0.3
82.8 0.0 -1.7	82.8 -0.4 -1.6	0.4
69.3 0.0 -1.4	69.3 -0.2 -1.0	0.4
54.1 0.0 -1.0	54.3 0.3 -1.0	0.3
36.6 0.0 -0.5	36.7 0.2 -0.3	0.3
16.0 0.0 0.0	16.1 -0.6 -0.0	0.6
24.0 22.0 -46.0	23.7 22.8 -46.2	0.9
40.9 17.9 -36.6	40.8 18.2 -36.7	0.3
63.7 10.3 -23.8	63.6 10.6 -24.2	0.5
47.0 68.0 48.0	46.9 68.9 47.4	1.1
58.5 47.1 37.9	58.6 47.4 37.8	0.3
74.2 22.9 21.4	74.2 23.2 21.5	0.3
50.0 -65.0 27.0	50.1 -66.2 27.5	1.3
62.1 -39.8 21.0	62.2 -40.3 20.7	0.6
77.0 -19.1 11.0	77.1 -19.6 10.9	0.5
71.2 18.9 17.3	71.0 19.2 17.2	0.4
71.2 22.1 73.1	71.2 22.5 72.6	0.6
47.7 71.2 16.2	47.4 72.1 16.0	1.0
38.0 55.4 -20.9	37.7 56.3 -21.3	1.0
73.7 -22.8 67.6	73.8 -23.6 67.0	1.0
52.3 -52.3 -20.1	52.4 -50.3 -20.5	2.0
43.3 -17.0 -48.6	43.2 -17.5 -48.7	0.5
95.0 0.0 -2.0	95.1 -0.3 -2.0	0.3
88.5 -0.4 -3.1	88.7 -0.7 -2.9	0.5
82.0 -0.9 -4.1	81.9 -1.3 -4.1	0.5
67.7 -2.0 -4.4	67.5 -1.7 -4.4	0.3
52.2 -2.5 -3.5	52.5 -2.5 -3.3	0.3
37.5 -3.9 -3.1	37.6 -3.4 -3.5	0.6
26.3 -6.8 -3.4	26.2 -7.2 -3.8	0.6
Average		0.7
Gamut-Volume		99 %

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	112.05 117.52 114.25	85 85 170	22.36 19.67 51.15
0 0 0	0.10 0.11 0.14	85 170 170	30.64 44.68 54.72
12 12 12	0.52 0.55 0.55	170 85 170	45.49 31.31 51.78
25 25 25	1.75 1.83 1.84	170 170 85	46.89 53.00 20.16
38 38 38	3.63 3.79 3.80	0 130 207	20.67 28.36 73.11
51 51 51	6.20 6.50 6.29	80 159 221	34.26 43.15 84.02
63 63 63	9.19 9.56 9.14	152 193 232	58.41 66.48 93.79
76 76 76	12.85 13.44 13.09	174 11 103	38.06 19.14 20.79
89 89 89	16.74 17.61 17.21	188 87 143	49.78 33.85 39.01
102 102 102	21.73 22.73 22.08	208 155 190	68.93 59.32 65.86
114 114 114	26.68 27.95 27.41	237 220 0	77.94 86.34 9.38
127 127 127	31.87 33.51 32.63	237 225 88	81.61 89.85 24.76
140 140 140	38.05 39.66 39.18	236 230 158	87.52 94.99 53.14
153 153 153	44.75 46.88 45.77	158 81 64	33.29 24.51 10.53
165 165 165	51.04 53.58 52.18	107 66 56	17.87 14.46 7.77
178 178 178	58.59 61.37 60.27	98 32 31	13.31 8.11 2.90
191 191 191	66.28 69.60 67.69	99 28 64	14.60 8.39 8.86
204 204 204	75.30 79.14 76.76	116 102 34	21.78 22.86 5.25
216 216 216	83.57 87.72 84.67	32 77 44	5.31 9.85 5.72
229 229 229	92.47 97.13 94.57	23 77 97	7.18 10.70 19.09
242 242 242	102.11 106.99 104.02	36 34 67	4.32 3.71 9.38
0 0 128	5.64 2.71 28.98	215 216 220	83.73 87.77 87.72
0 0 255	19.90 10.14 102.51	194 195 199	69.21 72.73 72.67
0 128 0	7.00 21.24 3.08	152 153 155	44.48 46.72 46.38
0 128 128	12.61 23.90 32.30	110 110 112	25.00 26.13 26.04
0 170 255	31.41 45.20 107.50	68 68 69	10.51 10.99 10.80
0 255 0	24.44 73.40 9.97	30 30 30	2.35 2.50 2.44
0 255 170	33.98 77.95 59.61	39 32 107	7.01 4.84 21.63
0 255 255	44.25 83.40 112.56	78 67 138	16.93 13.98 35.03
85 85 85	15.49 16.30 15.93	137 129 183	40.26 38.10 60.18
128 0 0	19.44 9.73 0.71	173 26 30	34.51 18.28 3.30
128 0 128	25.18 12.44 29.48	188 85 63	44.17 30.78 10.70
128 128 0	26.43 31.18 3.70	207 151 127	61.99 54.94 34.38
128 128 128	32.28 33.96 32.97	28 125 54	9.18 21.78 9.08
128 128 255	46.65 41.46 106.18	90 153 93	23.21 36.09 21.13
128 255 128	49.72 85.90 40.19	155 189 153	49.60 60.72 47.64
170 0 255	52.51 26.42 103.40	191 145 126	54.34 49.31 33.44
170 170 170	53.74 56.30 55.31	206 143 25	55.29 49.36 6.57
170 255 0	56.74 89.63 10.93	175 20 73	36.43 18.79 11.70
170 255 255	76.67 99.57 113.20	119 25 105	21.45 11.55 21.20
255 0 0	67.70 33.88 1.78	157 181 35	41.87 54.24 9.39
255 0 170	77.23 38.44 50.59	0 128 140	13.68 24.39 37.89
255 0 255	87.57 43.95 104.01	9 91 167	13.13 16.05 49.18
255 128 128	80.54 58.36 34.12	236 237 242	98.27 103.21 103.51
255 170 0	79.44 69.58 6.71	212 215 221	82.17 86.51 88.18
255 170 255	99.27 79.66 109.06	189 193 201	66.82 70.64 73.79
255 255 0	92.10 107.39 11.66	143 149 156	41.37 43.90 46.64
255 255 170	101.71 111.99 61.26	101 107 111	22.52 24.19 25.52
170 85 85	38.66 27.97 16.59	65 72 75	10.62 11.61 12.61
85 170 85	23.77 41.34 19.48	40 50 52	4.80 5.66 6.39