

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2009-11-21 20:07:09
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY1
EDID-Name:
EDID-Serial:
Profile: C:/WINXP/System32/spool/.../ugra 21.11.09-5800K-18-120cd-trc.icc
Created: 2009-11-21 20:03
Measurement device: eye-one display 2

Summary

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

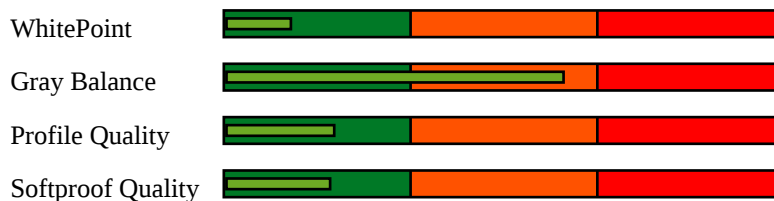
Calibration

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:	114.74 119.85 117.51
XYZ (normalized):	95.73 100.00 98.04
Luminance:	119.9 Cd/m2
Next Temperature:	5796 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.7 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:	2.0 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	13451	0.19	1.46	1.97	
5	6623	0.69	5.17	1.67	1.84
10	5703	2.09	14.06	0.25	1.81
15	5638	4.16	21.84	0.54	1.81
20	5824	6.86	28.70	0.18	1.80
25	5842	9.98	34.65	0.22	1.81
30	5729	13.84	40.49	0.39	1.81
35	5754	18.32	46.02	0.32	1.80
40	5789	23.54	51.43	0.82	1.79
45	5798	28.70	56.04	0.88	1.81
50	5742	34.63	60.69	0.66	1.81
55	5806	40.97	65.11	0.82	1.81
60	5769	47.93	69.47	0.51	1.81
65	5813	54.89	73.41	0.36	1.82
70	5807	63.10	77.67	0.57	1.81
75	5784	71.66	81.72	0.79	1.81
80	5763	80.32	85.51	0.64	1.82
85	5772	89.22	89.13	0.82	1.85
90	5813	98.89	92.80	0.57	1.85
95	5807	108.77	96.31	0.46	1.93
100	5796	119.85	100.00	0.00	
Average	5776			0.52	1.82
Range				1.02	
Max				0.88	

Tone values = 89.3%

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	1.5 0.3 -1.9	-1.5 -0.3 1.9	2.4
0 0 128	15.0 37.4 -69.3	0.7 -0.0 -0.6	0.9
0 0 255	31.4 55.5 -105.9	0.4 1.0 0.1	1.1
0 128 0	50.9 -58.3 44.2	0.5 0.7 2.3	2.4
0 128 128	52.9 -39.4 -12.1	0.7 0.7 0.8	1.2
0 170 255	68.4 -28.0 -48.7	0.8 0.2 2.1	2.3
0 255 0	84.8 -87.7 70.7	1.1 0.6 -0.4	1.3
0 255 170	86.4 -72.7 14.1	1.2 0.5 0.7	1.5
0 255 255	88.3 -58.7 -19.1	1.1 0.1 1.9	2.2
85 85 85	44.4 0.2 0.3	-0.4 -0.2 -0.3	0.5
128 0 0	32.8 54.3 45.0	-0.3 0.3 2.7	2.7
128 0 128	36.7 60.6 -32.6	-0.2 -0.7 -2.2	2.3
128 128 0	59.1 -9.8 55.3	-0.2 0.9 1.3	1.6
128 128 128	60.9 -0.0 0.7	-0.3 0.0 -0.7	0.7
128 128 255	65.2 17.0 -52.7	-0.3 0.4 0.3	0.6
128 255 128	90.2 -52.0 37.8	0.2 0.0 -1.0	1.0
170 0 255	50.9 76.7 -72.9	-0.0 0.0 -0.8	0.8
170 170 170	74.9 -0.3 0.4	0.0 0.3 -0.4	0.5
170 255 0	91.4 -45.1 79.4	0.3 1.1 -1.4	1.8
170 255 255	94.6 -25.6 -9.0	0.1 0.2 0.5	0.6
255 0 0	57.1 82.4 77.0	0.2 0.2 -3.5	3.5
255 0 170	60.3 87.3 -15.6	0.1 -0.7 -2.5	2.6
255 0 255	63.5 90.8 -51.5	-0.0 -0.2 -1.1	1.2
255 128 128	74.3 44.3 22.5	-0.2 0.2 -1.4	1.5
255 170 0	80.6 20.6 78.3	0.1 1.1 -0.9	1.4
255 170 255	84.6 34.7 -21.8	-0.2 0.3 0.1	0.4
255 255 0	97.0 -14.4 87.9	0.2 0.9 -2.4	2.5
255 255 170	98.4 -6.7 33.3	0.1 -0.0 -1.3	1.3
255 255 255	100.0 0.0 -0.0	0.0 0.0 -0.0	0.0
170 85 85	54.8 35.0 17.1	-0.3 0.1 -0.5	0.6
85 170 85	67.4 -41.2 28.8	-0.0 0.3 0.2	0.3
85 85 170	47.4 13.8 -40.7	-0.1 -0.1 -0.6	0.6
85 170 170	69.0 -29.6 -9.3	0.1 0.4 -0.0	0.4
170 85 170	57.1 41.8 -24.6	-0.1 -0.0 -0.8	0.8
170 170 85	73.5 -7.7 38.3	-0.1 0.3 -0.2	0.4
Average			1.3
Maximum			3.5

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	91 %
sRGB	96 %
AdobeRGB	80 %
ECI-RGB v1.0	73 %

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	57.1 -21.2 -46.4	16.3
66.9 -24.7 -37.1	66.6 -25.9 -37.4	1.2
79.7 -12.5 -21.8	79.7 -12.9 -22.2	0.6
48.0 74.0 -3.0	48.6 73.5 -0.6	2.5
60.8 50.6 -6.7	61.0 50.6 -6.2	0.6
76.4 25.8 -6.9	76.4 25.2 -6.5	0.7
89.0 -5.0 93.0	89.2 -6.1 81.7	11.3
90.3 -4.7 62.6	90.4 -5.6 63.9	1.6
92.2 -3.5 31.1	92.3 -4.5 32.3	1.6
53.1 37.7 28.9	53.5 37.6 28.9	0.4
41.5 22.7 16.8	42.1 23.1 17.3	0.8
31.9 40.0 24.0	32.5 39.9 24.2	0.6
32.5 44.5 -1.8	33.2 44.5 -0.8	1.2
51.3 1.3 44.5	51.8 0.5 44.1	1.1
34.6 -36.4 13.9	35.1 -37.3 13.1	1.3
36.0 -26.2 -20.9	36.4 -23.3 -20.3	3.0
20.9 9.6 -23.6	21.6 9.3 -22.8	1.1
89.0 0.0 -1.9	89.0 -0.5 -1.0	1.0
82.8 0.0 -1.7	82.8 -0.4 -1.8	0.4
69.3 0.0 -1.4	69.4 -0.2 -1.2	0.3
54.1 0.0 -1.0	54.4 -0.2 -0.5	0.6
36.6 0.0 -0.5	36.8 0.7 -0.4	0.7
16.0 0.0 0.0	17.1 0.1 0.2	1.1
24.0 22.0 -46.0	24.3 22.0 -45.4	0.6
40.9 17.9 -36.6	41.0 18.1 -36.1	0.5
63.7 10.3 -23.8	64.1 9.8 -23.4	0.7
47.0 68.0 48.0	47.2 68.0 48.8	0.8
58.5 47.1 37.9	58.8 46.6 38.7	1.0
74.2 22.9 21.4	74.3 22.8 21.7	0.3
50.0 -65.0 27.0	51.0 -54.4 27.8	10.7
62.1 -39.8 21.0	62.0 -40.4 20.7	0.7
77.0 -19.1 11.0	77.0 -19.3 11.4	0.4
71.2 18.9 17.3	71.5 18.4 17.5	0.6
71.2 22.1 73.1	71.2 20.6 70.0	3.4
47.7 71.2 16.2	48.0 71.7 18.2	2.0
38.0 55.4 -20.9	38.4 55.7 -19.6	1.4
73.7 -22.8 67.6	73.7 -23.9 65.9	2.0
52.3 -52.3 -20.1	53.7 -37.0 -17.5	15.6
43.3 -17.0 -48.6	43.9 -10.1 -47.5	7.0
95.0 0.0 -2.0	94.9 -0.9 -1.7	0.9
88.5 -0.4 -3.1	88.8 -1.5 -2.6	1.3
82.0 -0.9 -4.1	81.8 -1.2 -4.0	0.3
67.7 -2.0 -4.4	67.7 -2.2 -4.3	0.3
52.2 -2.5 -3.5	52.6 -3.4 -3.1	1.1
37.5 -3.9 -3.1	37.7 -4.2 -3.0	0.5
26.3 -6.8 -3.4	26.9 -6.4 -3.6	0.8
Average		2.2
Gamut-Volume		91 %

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	114.74 119.85 117.51	85 85 170	22.59 19.82 49.76
0 0 0	0.20 0.19 0.34	85 170 170	35.56 47.44 55.59
12 12 12	0.67 0.69 0.79	170 85 170	42.12 29.99 50.36
25 25 25	2.00 2.09 2.02	170 170 85	48.65 54.74 22.71
38 38 38	4.00 4.16 3.99	0 132 212	24.84 30.57 75.49
51 51 51	6.57 6.86 6.77	49 161 224	34.49 43.82 85.46
63 63 63	9.54 9.98 9.85	141 194 235	59.61 67.68 96.52
76 76 76	13.26 13.84 13.41	196 0 106	39.71 20.41 20.83
89 89 89	17.53 18.32 17.80	206 85 146	51.12 34.77 39.51
102 102 102	22.39 23.54 22.76	218 154 192	69.74 60.47 67.11
114 114 114	27.29 28.70 27.79	242 219 0	79.96 88.73 14.13
127 127 127	33.09 34.63 33.48	241 224 73	83.32 91.81 24.70
140 140 140	38.99 40.97 39.79	238 230 153	89.36 97.08 53.82
153 153 153	45.79 47.93 46.57	172 79 62	34.48 25.42 11.01
165 165 165	52.40 54.89 53.71	115 65 55	18.50 14.92 8.36
178 178 178	60.18 63.10 61.55	109 30 30	13.90 8.62 3.10
191 191 191	68.33 71.66 69.56	111 26 65	15.38 9.04 9.28
204 204 204	76.75 80.32 77.97	119 102 25	22.50 23.79 5.60
216 216 216	85.14 89.22 86.53	9 78 42	5.56 10.25 6.13
229 229 229	94.34 98.89 96.64	0 78 99	7.97 11.20 19.94
242 242 242	103.85 108.77 106.34	37 34 69	4.78 4.12 9.89
0 0 128	5.31 2.50 27.28	215 216 220	84.95 89.01 88.77
0 0 255	18.78 8.99 97.68	194 195 199	70.76 74.08 74.91
0 128 0	10.83 22.98 5.12	152 153 156	45.75 47.85 48.05
0 128 128	16.14 25.39 33.00	110 110 112	25.60 26.78 26.55
0 170 255	36.90 47.00 107.87	68 68 69	10.89 11.27 11.19
0 255 0	37.11 78.70 15.54	30 30 30	2.67 2.78 2.70
0 255 170	46.07 82.82 62.68	40 32 111	7.38 5.16 22.37
0 255 255	56.22 87.77 115.49	80 68 142	17.46 14.38 35.77
85 85 85	16.22 16.92 16.45	139 130 186	41.75 39.63 61.97
128 0 0	16.59 8.69 0.89	194 18 28	35.44 18.97 3.26
128 0 128	22.23 11.25 27.85	206 83 60	45.28 31.74 10.84
128 128 0	27.63 32.31 5.85	219 149 125	63.35 56.14 35.31
128 128 128	33.46 34.98 33.77	0 126 48	11.61 23.13 9.77
128 128 255	47.27 41.66 105.45	69 153 88	23.54 36.50 21.52
128 255 128	60.32 91.83 44.52	146 189 151	50.76 61.77 48.43
170 0 255	46.57 23.39 98.56	200 144 125	56.17 51.13 34.80
170 170 170	55.14 57.73 56.22	219 141 0	55.74 50.34 7.45
170 255 0	64.98 94.64 16.76	196 9 74	37.97 19.77 11.61
170 255 255	84.97 104.23 116.79	133 22 108	22.50 12.28 21.55
255 0 0	56.22 29.23 1.79	152 180 0	42.62 55.14 9.97
255 0 170	65.99 33.72 47.18	0 129 141	17.30 26.22 38.29
255 0 255	76.05 38.66 99.17	0 92 171	15.09 16.86 50.49
255 128 128	73.69 55.91 34.67	235 237 242	99.92 104.90 105.59
255 170 0	74.59 68.44 9.87	211 215 222	83.92 88.45 90.49
255 170 255	94.89 78.16 109.58	188 193 202	68.41 71.94 75.60
255 255 0	94.21 109.91 17.39	142 149 157	42.43 45.05 48.18
255 255 170	104.31 114.64 64.48	99 107 112	22.99 24.81 26.25
170 85 85	35.66 27.02 17.04	63 72 75	10.84 11.94 12.84
85 170 85	29.14 44.49 22.07	38 50 52	5.27 6.09 6.87