

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2009-5-5 23:04:26
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY1
EDID-Name:
EDID-Serial:
Profile: C:/WINDOWS/System32/spool/.../05.05.09-6500K-sRGB-120cd-trc.icc
Created: 2009-5-5 22:57
Measurement device: DTP94-LCD mode

Summary

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

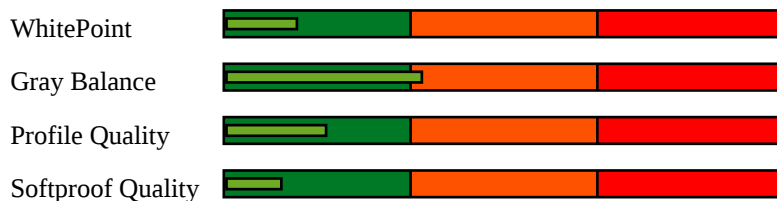
Calibration

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:	114.42 119.90 131.23
XYZ (normalized):	95.43 100.00 109.45
Luminance:	119.9 Cd/m2
Next Temperature:	6495 Kelvin
Assumed Target Whitepoint:	6500 Kelvin
Distance to assumed Target Whitepoint:	0.8 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:	1.4 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	13102	0.20	1.51	1.36	
5	7560	0.70	5.27	1.27	1.83
10	6895	1.30	9.67	0.76	2.04
15	6756	2.40	15.50	0.63	2.11
20	6652	4.20	21.95	0.69	2.12
25	6626	6.30	27.45	1.40	2.16
30	6614	8.80	32.57	0.39	2.19
35	6614	12.10	38.01	0.44	2.20
40	6614	16.10	43.40	0.48	2.20
45	6550	20.10	47.96	0.31	2.25
50	6558	25.20	52.97	0.34	2.26
55	6473	31.60	58.37	1.22	2.26
60	6526	38.70	63.57	1.56	2.24
65	6589	45.50	67.98	1.53	2.27
70	6542	54.30	73.08	0.81	2.24
75	6503	63.00	77.60	0.52	2.23
80	6503	72.60	82.14	0.54	2.24
85	6503	82.40	86.37	0.57	2.29
90	6542	95.10	91.38	0.98	2.23
95	6605	107.10	95.72	1.09	2.21
100	6495	119.90	100.00	0.00	
Average	6587			0.75	2.19
Range				2.11	
Max				1.56	

Tone values = 94.5%

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 -0.0 -1.4	-1.5 0.0 1.4	2.0
0 0 128	11.4 42.5 -68.1	-0.5 1.3 -1.1	1.8
0 0 255	29.0 74.5 -116.2	-0.2 -1.4 0.9	1.7
0 128 0	44.8 -73.1 48.9	0.4 0.5 1.0	1.2
0 128 128	46.7 -48.6 -11.5	0.2 0.4 0.3	0.5
0 170 255	64.6 -30.0 -56.8	-0.2 1.1 -0.2	1.2
0 255 0	86.0 -124.0 84.2	0.1 3.0 -1.2	3.2
0 255 170	87.2 -105.4 24.5	0.1 2.6 -0.8	2.7
0 255 255	88.9 -83.0 -18.3	0.1 2.5 -0.4	2.6
85 85 85	36.3 -0.1 -0.5	-0.2 0.1 0.5	0.6
128 0 0	28.4 58.7 44.1	-0.0 1.3 2.8	3.1
128 0 128	31.5 66.4 -34.4	0.0 0.3 0.4	0.5
128 128 0	51.8 -10.1 60.3	0.4 0.1 0.4	0.6
128 128 128	53.5 -0.0 -0.3	0.1 0.0 0.3	0.4
128 128 255	58.2 27.9 -66.9	-0.0 -0.4 0.5	0.7
128 255 128	89.4 -81.9 49.2	0.1 1.8 -0.5	1.9
170 0 255	47.3 92.2 -84.1	-0.0 -0.3 0.4	0.4
170 170 170	69.8 -0.8 -0.3	-0.2 0.8 0.3	0.9
170 255 0	91.0 -66.7 92.6	0.1 1.1 -1.8	2.1
170 255 255	93.6 -40.4 -10.8	0.0 0.4 0.1	0.4
255 0 0	58.2 99.8 90.4	-0.2 0.3 0.4	0.5
255 0 170	60.3 105.2 -12.8	-0.2 -0.5 1.2	1.3
255 0 255	63.3 111.3 -57.3	-0.1 -0.2 0.7	0.7
255 128 128	70.9 64.7 28.8	-0.1 0.2 0.0	0.2
255 170 0	78.2 36.5 91.9	-0.1 0.3 -1.5	1.5
255 170 255	81.7 52.3 -27.7	-0.3 0.5 -0.3	0.6
255 255 0	97.7 -16.8 103.2	-0.0 0.1 -2.0	2.0
255 255 170	98.6 -10.2 42.6	0.0 0.5 -0.0	0.5
255 255 255	100.0 0.0 -0.0	0.0 0.0 0.0	0.0
170 85 85	48.7 47.1 20.2	-0.2 -0.2 0.4	0.5
85 170 85	62.2 -59.5 35.4	-0.2 1.5 -0.3	1.6
85 85 170	39.6 19.8 -48.5	-0.3 -0.2 0.6	0.7
85 170 170	63.6 -42.1 -10.7	-0.2 1.0 0.3	1.1
170 85 170	50.8 55.3 -29.4	-0.2 -0.2 0.6	0.7
170 170 85	68.5 -10.3 46.0	-0.2 0.9 -0.3	1.0
Average			1.2
Maximum			3.2

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	98 %
sRGB	100 %
AdobeRGB	98 %
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	56.1 -28.9 -48.9	8.2
66.9 -24.7 -37.1	67.1 -24.5 -37.9	0.9
79.7 -12.5 -21.8	79.6 -12.9 -22.3	0.6
48.0 74.0 -3.0	48.5 73.8 -2.5	0.8
60.8 50.6 -6.7	61.2 51.2 -6.5	0.8
76.4 25.8 -6.9	76.8 25.6 -7.3	0.6
89.0 -5.0 93.0	89.1 -5.7 94.3	1.5
90.3 -4.7 62.6	90.5 -5.8 63.2	1.2
92.2 -3.5 31.1	92.5 -4.6 31.2	1.2
53.1 37.7 28.9	53.3 37.3 28.7	0.5
41.5 22.7 16.8	41.8 21.8 16.3	1.0
31.9 40.0 24.0	32.5 38.9 24.4	1.3
32.5 44.5 -1.8	32.9 44.2 -1.6	0.5
51.3 1.3 44.5	51.5 1.0 44.3	0.4
34.6 -36.4 13.9	35.0 -37.5 14.5	1.3
36.0 -26.2 -20.9	35.8 -25.9 -21.5	0.7
20.9 9.6 -23.6	21.4 9.2 -23.4	0.7
89.0 0.0 -1.9	89.2 0.7 -2.3	0.8
82.8 0.0 -1.7	82.9 0.1 -2.3	0.7
69.3 0.0 -1.4	69.4 -1.4 -1.7	1.5
54.1 0.0 -1.0	54.1 -0.1 -1.1	0.2
36.6 0.0 -0.5	36.9 0.1 -1.0	0.6
16.0 0.0 0.0	16.3 -0.3 -0.1	0.5
24.0 22.0 -46.0	24.3 22.0 -45.8	0.4
40.9 17.9 -36.6	41.1 17.3 -36.2	0.8
63.7 10.3 -23.8	64.0 9.6 -23.9	0.8
47.0 68.0 48.0	47.5 68.1 48.4	0.6
58.5 47.1 37.9	58.9 48.4 38.4	1.4
74.2 22.9 21.4	74.6 23.5 22.0	1.0
50.0 -65.0 27.0	49.8 -66.0 27.1	1.0
62.1 -39.8 21.0	62.4 -40.5 21.1	0.7
77.0 -19.1 11.0	77.1 -20.7 11.8	1.9
71.2 18.9 17.3	71.6 18.6 17.8	0.7
71.2 22.1 73.1	71.6 22.0 74.2	1.2
47.7 71.2 16.2	48.4 70.8 16.7	0.9
38.0 55.4 -20.9	38.1 54.4 -20.8	1.0
73.7 -22.8 67.6	73.8 -23.6 68.4	1.2
52.3 -52.3 -20.1	53.1 -49.6 -18.5	3.3
43.3 -17.0 -48.6	43.4 -15.7 -48.7	1.3
95.0 0.0 -2.0	95.3 -1.3 -2.0	1.3
88.5 -0.4 -3.1	88.7 -1.0 -3.9	1.0
82.0 -0.9 -4.1	82.0 0.1 -5.6	1.8
67.7 -2.0 -4.4	67.8 -3.1 -5.0	1.3
52.2 -2.5 -3.5	52.5 -3.4 -3.4	1.0
37.5 -3.9 -3.1	37.9 -5.9 -3.2	2.1
26.3 -6.8 -3.4	26.7 -8.4 -3.5	1.6
Average		1.2
Gamut-Volume		98 %

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	114.42 119.90 131.23	85 85 170	17.59 13.70 49.77
0 0 0	0.19 0.20 0.33	85 170 170	25.92 39.30 53.15
12 12 12	0.67 0.70 0.87	170 85 170	37.72 22.90 50.00
25 25 25	1.24 1.30 1.50	170 170 85	39.04 45.90 15.94
38 38 38	2.29 2.40 2.72	0 147 216	23.29 29.80 85.52
51 51 51	3.96 4.20 4.61	95 174 227	36.65 45.10 97.93
63 63 63	5.88 6.30 6.79	167 204 236	60.12 67.90 107.74
76 76 76	8.37 8.80 9.74	190 51 123	39.28 20.10 24.37
89 89 89	11.51 12.10 13.40	202 115 161	51.58 35.00 45.00
102 102 102	15.31 16.10 17.82	217 174 202	70.60 61.20 77.07
114 114 114	19.12 20.10 22.06	242 224 16	77.88 87.90 10.02
127 127 127	24.04 25.20 27.82	242 228 109	81.82 91.70 28.01
140 140 140	29.88 31.60 33.99	241 234 175	88.73 97.40 61.71
153 153 153	36.48 38.70 41.74	175 104 82	33.57 25.00 12.25
165 165 165	42.88 45.50 49.50	127 86 73	17.74 14.60 9.50
178 178 178	51.49 54.30 59.25	119 50 42	13.45 8.50 3.43
191 191 191	60.30 63.00 69.36	120 47 81	14.96 8.80 10.48
204 204 204	69.49 72.60 79.93	136 121 47	21.82 23.30 5.98
216 216 216	78.87 82.40 90.72	41 93 58	5.44 10.20 6.39
229 229 229	90.19 95.10 103.77	26 94 116	7.63 10.90 22.29
242 242 242	101.55 107.10 117.88	48 47 84	4.82 4.10 11.17
0 0 128	4.86 1.90 25.44	223 223 227	85.90 89.50 101.69
0 0 255	22.77 8.50 120.52	205 206 209	71.18 74.40 84.77
0 128 0	5.75 17.30 2.62	168 169 171	45.25 47.90 54.24
0 128 128	10.61 19.30 28.05	129 129 131	25.28 26.50 29.76
0 170 255	33.36 41.70 123.51	86 86 87	10.91 11.40 12.88
0 255 0	26.68 81.60 11.37	40 40 40	2.47 2.60 2.86
0 255 170	35.61 85.00 58.34	51 48 126	7.76 5.30 25.35
0 255 255	48.80 90.10 129.25	97 89 155	17.80 14.60 40.24
85 85 85	10.49 11.00 12.25	155 150 196	41.97 39.70 69.85
128 0 0	13.73 6.40 0.45	189 56 42	35.08 18.90 3.81
128 0 128	18.67 8.20 26.03	202 111 81	45.20 31.50 12.28
128 128 0	19.48 23.60 2.75	218 169 146	63.52 56.50 39.58
128 128 128	24.62 25.80 28.48	30 139 70	9.17 22.00 10.34
128 128 255	42.35 32.50 122.12	107 165 112	23.62 37.00 24.05
128 255 128	45.55 89.90 37.10	170 198 169	50.06 62.00 53.71
170 0 255	48.31 20.30 119.36	203 164 145	55.76 51.10 38.73
170 170 170	46.08 48.60 53.49	217 161 38	55.71 50.60 7.15
170 255 0	52.91 93.50 11.53	191 54 92	37.72 19.90 13.96
170 255 255	75.57 102.10 130.79	139 50 124	22.03 12.10 24.61
255 0 0	64.88 29.90 1.05	173 190 50	41.83 55.10 10.06
255 0 170	74.11 33.20 50.04	0 144 157	15.09 25.90 42.83
255 0 255	87.24 38.20 121.01	0 111 181	14.68 16.80 56.94
255 128 128	75.34 49.20 29.21	240 241 244	100.36 105.90 119.59
255 170 0	75.64 62.70 5.46	220 222 228	83.99 88.40 103.00
255 170 255	98.28 71.50 124.46	201 204 211	69.42 72.40 87.29
255 255 0	92.09 111.50 12.08	160 166 172	42.31 45.30 54.84
255 255 170	100.73 114.80 60.44	120 126 130	22.95 24.80 29.51
170 85 85	30.80 20.30 12.54	82 90 93	10.75 12.10 14.61
85 170 85	18.88 36.70 15.68	53 65 67	5.02 6.00 7.50