

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2010-7-19 12:00:35
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY2
Profile: C:/Windows/.../19.07.10-6500K-22-120cd-trc Adobe RGB Intelli.icc
Created: 2010-7-19 11:52
Measurement device: DTP94-LCD mode (Wide Gamut S-IPS (generic))

Summary

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

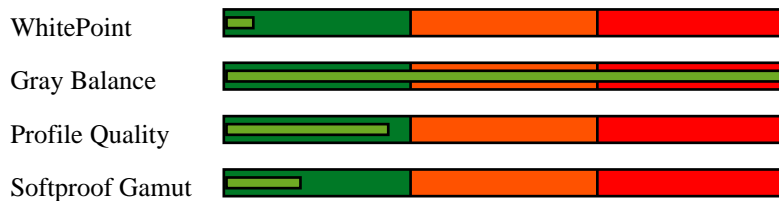
Calibration

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:	113.51 119.67 132.07
XYZ (normalized):	94.85 100.00 110.36
Luminance:	119.7 Cd/m2
Next Temperature:	6621 Kelvin
Assumed Target Whitepoint:	6600 Kelvin
Distance to assumed Target Whitepoint:	0.3 deltaE

Blackpoint

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

Luminance:	0.3 Cd/m2
Chromaticity:	2.2 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	15690	0.31	2.32	2.24	
5	9112	0.51	3.85	1.59	2.17
10	7227	1.02	7.67	0.97	2.25
15	6658	2.13	14.30	0.45	2.23
20	6434	3.75	20.59	0.70	2.22
25	6544	5.68	26.00	1.25	2.23
30	6583	8.52	32.08	0.71	2.22
35	6613	12.08	38.01	0.31	2.21
40	6560	16.04	43.36	0.30	2.22
45	6684	20.40	48.32	0.32	2.23
50	6630	25.88	53.63	0.40	2.22
55	6575	31.86	58.62	0.70	2.22
60	6630	38.67	63.60	0.46	2.22
65	6575	45.76	68.20	0.79	2.24
70	6630	54.60	73.30	0.52	2.20
75	6613	63.24	77.78	0.54	2.24
80	6613	72.88	82.33	0.57	2.25
85	6613	83.75	86.99	0.59	2.22
90	6613	95.01	91.41	0.62	2.23
95	6621	106.78	95.68	0.00	2.23
100	6621	119.67	100.00	0.00	
Average	6601			0.51	2.22
Range				1.85	
Max				1.25	

Tone values = 73.5%

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	2.3 -0.4 -2.3	-2.3 0.4 2.3	3.2
0 0 128	12.7 38.1 -64.6	0.6 -1.3 -1.0	1.7
0 0 255	31.6 64.2 -110.0	0.8 -3.1 1.3	3.5
0 128 0	42.9 -72.8 45.4	0.6 -1.3 2.6	2.9
0 128 128	45.6 -47.9 -13.2	0.2 -0.2 -0.1	0.3
0 170 255	63.4 -28.6 -58.4	0.4 -1.0 1.0	1.5
0 255 0	82.0 -123.7 79.4	0.7 0.9 0.1	1.2
0 255 170	83.8 -103.2 18.2	0.5 0.5 0.6	0.9
0 255 255	86.2 -80.2 -22.9	0.3 0.5 0.7	0.9
85 85 85	36.1 0.3 0.3	-0.3 -0.3 -0.3	0.5
128 0 0	30.4 56.2 44.1	1.1 -3.2 4.0	5.2
128 0 128	33.9 61.6 -30.4	0.9 -3.4 1.3	3.8
128 128 0	52.0 -8.3 59.0	0.3 -0.9 0.7	1.2
128 128 128	54.2 0.0 0.4	-0.2 -0.0 -0.4	0.4
128 128 255	60.1 23.6 -63.5	-0.5 0.4 -0.2	0.7
128 255 128	86.7 -77.1 44.4	0.3 -0.8 0.4	1.0
170 0 255	52.5 78.3 -75.5	-0.6 1.1 -0.3	1.3
170 170 170	70.1 0.4 -0.3	0.1 -0.4 0.3	0.5
170 255 0	88.6 -62.0 89.2	0.5 -0.5 -0.9	1.2
170 255 255	92.4 -37.4 -13.1	0.1 -0.5 0.7	0.9
255 0 0	63.1 85.0 87.1	-0.5 2.7 -3.9	4.7
255 0 170	65.9 88.2 -4.2	-0.9 3.3 -1.2	3.6
255 0 255	69.4 92.6 -46.9	-1.1 3.8 -1.2	4.2
255 128 128	74.0 56.5 32.2	-0.3 1.7 -0.7	1.9
255 170 0	79.5 33.6 90.9	0.3 -0.2 -2.2	2.2
255 170 255	83.9 46.1 -24.6	-0.1 1.0 0.4	1.1
255 255 0	96.7 -15.3 101.6	0.4 -0.0 -2.7	2.7
255 255 170	98.1 -8.8 40.4	0.2 0.1 0.5	0.6
255 255 255	100.0 0.0 -0.0	0.0 0.0 0.0	0.0
170 85 85	51.3 41.0 24.7	-0.7 2.4 -1.1	2.7
85 170 85	59.9 -56.5 32.2	0.6 -1.6 1.3	2.1
85 85 170	40.7 17.1 -46.9	-0.7 0.9 -0.6	1.2
85 170 170	62.2 -39.2 -13.4	0.3 -1.6 0.9	1.9
170 85 170	54.1 48.0 -24.6	-0.9 2.2 -1.0	2.6
170 170 85	68.2 -8.2 45.4	0.3 -0.5 0.4	0.7
Average			1.9
Maximum			5.2

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	99 %
sRGB	99 %
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	55.6 -29.5 -48.7	7.6
66.9 -24.7 -37.1	66.5 -23.1 -37.6	1.7
79.7 -12.5 -21.8	79.6 -11.8 -22.2	0.9
48.0 74.0 -3.0	48.4 72.7 -2.1	1.6
60.8 50.6 -6.7	61.4 48.5 -5.9	2.3
76.4 25.8 -6.9	76.4 25.6 -7.0	0.2
89.0 -5.0 93.0	88.9 -4.9 95.0	2.1
90.3 -4.7 62.6	90.5 -5.4 63.0	0.8
92.2 -3.5 31.1	92.3 -3.4 30.2	0.9
53.1 37.7 28.9	53.7 36.1 29.6	1.8
41.5 22.7 16.8	41.9 22.1 17.3	0.9
31.9 40.0 24.0	33.0 36.6 25.2	3.7
32.5 44.4 -1.8	33.4 41.7 -0.8	3.1
51.3 1.3 44.5	51.4 1.2 44.2	0.3
34.6 -36.4 13.9	34.7 -35.0 13.4	1.5
36.0 -26.2 -20.9	36.5 -25.6 -20.3	1.0
20.9 9.6 -23.6	22.0 7.5 -21.9	2.9
89.0 0.0 -1.8	89.1 0.3 -2.0	0.4
82.8 0.0 -1.7	82.7 -1.1 -1.8	1.1
69.3 0.0 -1.4	69.5 -0.1 -1.3	0.3
54.1 0.0 -1.0	54.3 0.5 -1.5	0.8
36.6 -0.0 -0.5	37.1 0.7 -0.5	0.8
16.0 0.0 0.0	17.3 0.4 0.9	1.7
24.0 22.0 -46.0	25.3 20.2 -44.9	2.4
40.9 17.9 -36.6	41.3 16.8 -36.3	1.3
63.7 10.3 -23.8	63.9 9.4 -23.3	1.1
47.0 68.0 48.0	48.2 63.7 50.2	5.0
58.5 47.1 37.9	58.8 45.5 38.6	1.8
74.2 22.9 21.4	74.1 21.9 21.5	1.0
50.0 -65.0 27.0	49.4 -63.2 25.6	2.4
62.1 -39.8 21.0	61.8 -39.8 21.0	0.3
77.0 -19.1 11.0	76.9 -19.2 10.4	0.6
71.2 18.8 17.3	71.3 17.2 16.8	1.7
71.2 22.2 73.1	71.1 21.6 74.2	1.2
47.7 71.2 16.2	48.4 68.6 16.9	2.8
38.0 55.4 -20.9	39.0 51.7 -20.1	3.9
73.7 -22.8 67.6	73.6 -22.8 67.4	0.2
52.3 -52.3 -20.2	52.5 -49.8 -19.9	2.6
43.3 -17.0 -48.6	43.6 -17.0 -48.4	0.4
95.0 0.0 -2.0	94.8 0.3 -2.6	0.7
88.5 -0.4 -3.1	88.7 -1.7 -2.6	1.4
82.0 -0.9 -4.1	81.7 -0.9 -5.1	1.0
67.7 -2.0 -4.4	67.6 -2.0 -5.2	0.8
52.2 -2.5 -3.5	52.1 -1.9 -4.0	0.7
37.5 -3.9 -3.1	37.7 -4.1 -3.4	0.4
26.3 -6.8 -3.4	26.5 -5.3 -3.9	1.6
Average		1.6
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	113.51 119.67 132.07	85 85 170	17.88 14.47 50.36
0 0 0	0.29 0.31 0.53	85 170 170	24.99 37.20 53.70
12 12 12	0.47 0.51 0.69	170 85 170	39.69 26.38 51.21
25 25 25	0.96 1.02 1.20	170 170 85	38.94 45.32 16.11
38 38 38	2.00 2.13 2.33	0 149 215	22.63 29.24 84.60
51 51 51	3.55 3.75 4.01	98 175 227	36.09 44.14 96.46
63 63 63	5.49 5.68 6.39	166 204 236	60.03 67.63 108.12
76 76 76	8.16 8.52 9.49	187 0 121	38.44 19.86 24.14
89 89 89	11.42 12.08 13.25	199 104 159	50.37 35.08 44.89
102 102 102	15.21 16.04 17.54	215 169 201	69.14 60.19 76.09
114 114 114	19.35 20.40 22.71	241 225 0	77.04 87.23 9.70
127 127 127	24.63 25.88 28.73	241 229 107	81.28 91.54 28.38
140 140 140	30.41 31.86 35.28	240 234 173	88.15 96.63 62.83
153 153 153	36.79 38.67 42.93	172 97 82	33.43 25.34 12.25
165 165 165	43.68 45.76 50.67	125 83 74	17.70 14.61 9.27
178 178 178	51.96 54.60 60.62	117 44 45	13.35 8.76 3.45
191 191 191	59.79 63.24 69.38	118 39 82	14.83 9.07 10.59
204 204 204	68.91 72.88 79.96	134 120 49	21.55 23.14 6.00
216 216 216	79.18 83.75 91.87	47 96 61	5.51 10.03 6.60
229 229 229	89.83 95.01 104.23	35 97 116	7.95 11.35 22.51
242 242 242	101.28 106.78 117.84	51 49 85	4.86 4.29 11.08
0 0 128	4.90 2.12 24.73	222 223 226	84.74 89.04 101.45
0 0 255	22.87 9.78 118.13	204 205 208	69.61 73.85 84.07
0 128 0	4.99 15.75 2.68	167 168 170	45.56 48.03 54.39
0 128 128	10.02 18.29 28.10	128 128 130	25.40 26.60 30.49
0 170 255	32.36 40.04 123.74	87 87 88	10.98 11.47 12.88
0 255 0	22.18 72.30 10.70	44 44 44	2.71 2.84 2.98
0 255 170	31.85 77.07 59.45	54 48 126	7.99 5.66 25.99
0 255 255	45.57 83.56 130.12	96 87 154	17.84 14.78 41.02
85 85 85	10.33 10.86 11.85	153 147 194	41.41 39.44 69.26
128 0 0	14.60 7.27 0.74	186 26 44	34.34 19.45 3.72
128 0 128	19.72 9.49 26.36	199 101 81	43.65 31.28 12.22
128 128 0	19.83 23.74 3.04	215 164 144	61.34 55.45 39.57
128 128 128	25.12 26.49 28.98	43 143 72	9.18 21.53 10.66
128 128 255	43.50 34.98 122.71	109 168 111	23.01 36.21 23.64
128 255 128	42.88 83.34 37.70	169 200 168	49.88 61.46 55.15
170 0 255	51.21 25.45 120.90	201 160 144	54.22 50.48 39.36
170 170 170	46.55 48.92 54.31	215 156 38	54.09 49.56 6.96
170 255 0	50.09 87.23 11.42	187 11 92	36.62 19.75 13.92
170 255 255	73.90 98.58 131.86	136 34 123	22.09 12.62 25.27
255 0 0	67.18 36.27 2.11	172 192 50	41.33 54.54 10.35
255 0 170	77.04 41.03 51.29	0 147 156	14.55 25.20 43.39
255 0 255	90.95 47.61 122.17	0 112 180	14.60 16.99 57.34
255 128 128	77.31 54.56 30.83	239 240 244	99.35 104.38 119.95
255 170 0	76.27 65.15 6.30	219 222 227	82.79 88.10 101.42
255 170 255	99.70 76.42 126.69	199 203 210	67.79 71.65 86.35
255 255 0	89.57 108.34 12.17	159 165 171	42.12 44.96 55.05
255 255 170	99.39 113.01 62.41	119 125 129	22.70 24.31 29.59
170 85 85	31.91 22.79 12.61	83 91 93	10.77 11.92 14.63
85 170 85	17.40 33.60 15.49	56 67 69	5.19 5.93 7.61