

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2009-11-21 22:19:15
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY1
Profile: C:/Windows/system32/spool/.../21.11.09-6500K-22-120cd-trc.icc
Created: 2009-11-21 10:50
Measurement device: DTP94-LCD mode (Wide Gamut S-IPS (generic))

Summary

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

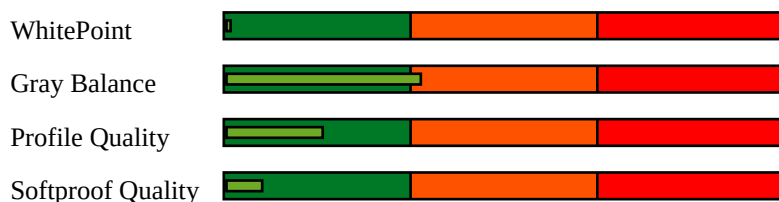
Calibration

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:	112.18 117.97 126.64
XYZ (normalized):	95.10 100.00 107.35
Luminance:	118.0 Cd/m2
Next Temperature:	6399 Kelvin
Assumed Target Whitepoint:	6400 Kelvin
Distance to assumed Target Whitepoint:	0.0 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:	1.5 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	16603	0.17	1.33	1.47	
5	10010	0.31	2.34	1.58	2.26
10	6765	0.92	7.08	0.88	2.22
15	6598	1.94	13.49	0.50	2.22
20	6429	3.50	19.91	0.41	2.22
25	6393	5.50	25.74	0.37	2.24
30	6379	8.44	32.16	0.93	2.22
35	6375	11.86	37.94	0.97	2.21
40	6399	15.96	43.55	0.29	2.19
45	6414	20.33	48.55	0.20	2.21
50	6373	25.43	53.56	1.13	2.21
55	6406	31.80	58.94	0.11	2.20
60	6397	38.55	63.90	0.96	2.21
65	6402	45.54	68.46	0.19	2.21
70	6407	53.75	73.26	0.19	2.21
75	6379	62.31	77.77	1.14	2.20
80	6436	72.37	82.57	0.30	2.19
85	6396	82.34	86.90	0.21	2.21
90	6377	93.75	91.45	0.18	2.19
95	6353	105.96	95.92	0.49	2.15
100	6399	117.97	100.00	0.00	
Average	6406			0.48	2.21
Range				2.10	
Max				1.14	

Tone values = 98.7%

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	1.3 -0.2 -1.5	-1.3 0.2 1.5	2.0
0 0 128	11.8 41.5 -67.7	-0.7 1.2 -1.7	2.3
0 0 255	29.4 71.6 -114.4	-0.5 -0.7 -0.6	1.1
0 128 0	44.3 -78.6 47.1	0.7 -0.4 1.8	2.0
0 128 128	46.6 -53.0 -12.1	0.2 -0.1 0.0	0.2
0 170 255	64.4 -34.4 -56.6	-0.2 -0.1 -0.5	0.6
0 255 0	85.0 -133.0 81.4	0.2 2.1 -0.4	2.1
0 255 170	86.3 -112.9 22.3	0.0 1.8 -0.9	2.0
0 255 255	88.0 -88.8 -19.6	0.0 0.9 -0.5	1.0
85 85 85	36.2 -0.6 0.5	-0.4 0.6 -0.5	0.9
128 0 0	29.6 60.0 45.3	0.1 0.9 3.0	3.1
128 0 128	32.5 66.7 -32.7	0.1 0.3 0.2	0.4
128 128 0	52.2 -8.6 59.6	0.4 -1.1 0.8	1.4
128 128 128	54.0 1.0 -0.5	-0.0 -1.0 0.5	1.1
128 128 255	58.7 27.4 -65.5	-0.3 -1.3 -0.2	1.3
128 255 128	88.7 -84.6 46.6	0.1 0.4 0.3	0.5
170 0 255	48.7 92.4 -81.4	-0.2 -0.9 0.0	1.0
170 170 170	70.3 0.1 -0.1	-0.2 -0.1 0.1	0.2
170 255 0	90.6 -67.8 90.2	0.1 0.4 -0.8	0.9
170 255 255	93.4 -41.5 -11.1	-0.1 -0.6 -0.2	0.6
255 0 0	59.7 101.3 90.0	0.1 -0.3 -0.3	0.5
255 0 170	61.7 105.8 -10.7	0.1 -0.5 0.9	1.1
255 0 255	64.6 112.0 -54.4	0.1 -1.0 0.6	1.1
255 128 128	71.9 66.7 29.0	0.2 -0.7 1.0	1.2
255 170 0	78.8 38.1 90.9	0.3 -0.1 -0.8	0.8
255 170 255	82.4 52.7 -26.3	-0.1 0.2 -0.1	0.2
255 255 0	97.5 -16.9 101.2	0.2 0.9 -1.1	1.4
255 255 170	98.6 -10.0 41.4	0.0 0.8 0.2	0.8
255 255 255	100.0 0.0 0.0	0.0 -0.0 0.0	0.0
170 85 85	49.4 49.7 22.2	-0.0 -0.4 0.2	0.4
85 170 85	61.8 -62.5 35.2	0.0 -0.3 -0.2	0.4
85 85 170	39.4 20.8 -48.6	-0.2 -1.3 -0.3	1.3
85 170 170	63.4 -45.1 -11.3	-0.0 -0.2 -0.1	0.2
170 85 170	51.6 57.4 -28.1	-0.1 -0.4 0.0	0.4
170 170 85	68.9 -9.2 46.4	-0.0 0.0 -0.1	0.1
Average			1.0
Maximum			3.1

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	55.7 -32.2 -49.0	4.9
66.9 -24.7 -37.1	66.9 -24.5 -36.9	0.4
79.7 -12.5 -21.8	79.9 -12.7 -21.2	0.6
48.0 74.0 -3.0	47.8 73.6 -3.9	1.0
60.8 50.6 -6.7	61.0 49.7 -6.6	0.9
76.4 25.8 -6.9	76.5 25.1 -7.3	0.8
89.0 -5.0 93.0	89.0 -4.8 94.2	1.2
90.3 -4.7 62.6	90.5 -5.0 62.8	0.4
92.2 -3.5 31.1	92.3 -3.7 30.9	0.3
53.1 37.7 28.9	53.2 37.8 29.3	0.4
41.5 22.7 16.8	41.4 22.7 16.5	0.3
31.9 40.0 24.0	31.7 39.6 23.1	0.9
32.5 44.4 -1.8	32.8 44.5 -1.2	0.7
51.3 1.3 44.5	51.2 0.3 43.9	1.2
34.6 -36.4 13.9	34.7 -34.8 13.4	1.7
36.0 -26.2 -20.9	36.4 -26.4 -20.4	0.6
20.9 9.6 -23.6	21.2 9.9 -22.8	1.0
89.0 0.0 -1.8	89.3 0.2 -1.7	0.4
82.8 0.0 -1.7	82.9 -0.3 -1.8	0.4
69.3 0.0 -1.4	69.5 -0.0 -1.3	0.3
54.1 0.0 -1.0	54.1 1.0 -1.4	1.0
36.6 -0.0 -0.5	37.0 -0.4 -0.2	0.6
16.0 0.0 0.0	16.4 0.2 -0.4	0.6
24.0 22.0 -46.0	24.2 22.9 -45.5	1.0
40.9 17.9 -36.6	40.9 18.5 -35.9	0.9
63.7 10.3 -23.8	63.8 10.6 -23.5	0.4
47.0 68.0 48.0	46.8 67.7 47.2	0.9
58.5 47.1 37.9	58.5 47.0 37.4	0.5
74.2 22.9 21.4	74.4 22.6 20.9	0.6
50.0 -65.0 27.0	50.2 -64.9 26.5	0.6
62.1 -39.8 21.0	62.1 -39.8 20.8	0.2
77.0 -19.1 11.0	76.7 -18.0 10.2	1.4
71.2 18.8 17.3	71.3 18.8 17.1	0.1
71.2 22.2 73.1	71.4 22.0 73.5	0.5
47.7 71.2 16.2	47.9 71.4 16.5	0.4
38.0 55.4 -20.9	37.8 55.1 -21.4	0.6
73.7 -22.8 67.6	73.4 -22.4 67.8	0.5
52.3 -52.3 -20.2	52.6 -53.0 -19.4	1.0
43.3 -17.0 -48.6	43.6 -16.3 -48.3	0.8
95.0 0.0 -2.0	95.1 0.1 -1.8	0.3
88.5 -0.4 -3.1	88.6 -1.1 -2.8	0.8
82.0 -0.9 -4.1	81.9 -1.4 -4.4	0.6
67.7 -2.0 -4.4	67.6 -1.9 -4.8	0.5
52.2 -2.5 -3.5	52.2 -1.9 -3.7	0.7
37.5 -3.9 -3.1	37.7 -3.8 -2.6	0.6
26.3 -6.8 -3.4	26.9 -7.3 -2.7	1.1
Average		0.8
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	112.18 117.97 126.64	85 85 170	17.17 13.30 47.78
0 0 0	0.16 0.17 0.31	85 170 170	24.41 38.34 51.45
12 12 12	0.30 0.31 0.46	170 85 170	38.67 23.27 48.31
25 25 25	0.85 0.92 1.00	170 170 85	39.26 45.79 15.49
38 38 38	1.84 1.94 2.14	0 146 215	21.57 28.79 81.67
51 51 51	3.35 3.50 3.81	102 173 226	35.48 44.05 92.38
63 63 63	5.26 5.50 5.95	168 203 236	59.25 67.22 102.82
76 76 76	7.94 8.44 8.88	184 52 122	37.57 19.14 23.67
89 89 89	11.17 11.86 12.49	197 114 159	49.63 34.12 43.06
102 102 102	15.22 15.96 17.21	214 173 201	68.47 59.69 73.70
114 114 114	19.36 20.33 21.92	240 224 13	76.91 86.37 9.74
127 127 127	24.43 25.43 27.64	240 228 108	80.87 90.26 27.37
140 140 140	30.26 31.80 34.21	239 233 173	87.24 95.41 59.55
153 153 153	36.41 38.55 40.91	171 103 82	33.05 24.51 11.54
165 165 165	43.36 45.54 49.00	124 86 74	17.26 14.07 8.88
178 178 178	51.16 53.75 57.85	115 52 46	12.85 7.99 3.31
191 191 191	59.71 62.31 67.51	117 50 82	14.68 8.61 9.91
204 204 204	68.70 72.37 77.89	133 120 50	21.00 22.62 5.76
216 216 216	78.40 82.34 88.53	49 93 61	5.48 9.87 6.33
229 229 229	89.18 93.75 100.36	39 95 116	7.66 11.10 21.52
242 242 242	100.72 105.96 112.88	52 50 85	4.69 3.96 10.44
0 0 128	4.74 1.91 24.63	222 223 226	84.02 88.16 97.24
0 0 255	21.65 8.39 114.14	204 205 208	69.38 73.05 80.95
0 128 0	4.96 16.62 2.68	167 168 170	45.01 47.29 52.08
0 128 128	9.72 18.85 27.31	128 128 130	25.00 26.01 28.88
0 170 255	30.98 40.63 118.06	87 87 88	10.67 11.28 12.20
0 255 0	22.97 78.16 11.51	44 44 44	2.46 2.57 2.82
0 255 170	31.68 81.78 57.21	55 51 125	7.59 5.15 24.19
0 255 255	44.32 86.58 124.27	97 89 154	17.46 14.21 38.34
85 85 85	10.13 10.75 11.34	153 148 194	41.12 38.75 66.50
128 0 0	14.58 6.83 0.51	183 57 45	33.49 17.98 3.67
128 0 128	19.26 8.59 25.18	196 109 81	43.32 30.49 11.94
128 128 0	19.90 23.71 2.91	214 168 145	61.71 55.32 38.95
128 128 128	24.89 25.92 28.18	48 139 72	9.33 21.99 10.42
128 128 255	41.85 32.57 116.85	110 164 111	23.08 36.04 23.11
128 255 128	42.85 87.00 37.19	170 197 168	49.48 60.17 52.84
170 0 255	49.44 21.19 114.78	200 162 144	54.33 49.76 37.49
170 170 170	46.29 48.65 52.38	213 160 41	54.40 49.43 7.01
170 255 0	50.95 91.09 11.91	185 55 92	36.54 19.08 13.16
170 255 255	72.89 99.81 125.99	135 52 123	21.46 11.69 23.78
255 0 0	67.44 31.19 1.25	172 189 51	40.96 53.49 9.74
255 0 170	76.09 34.46 48.52	12 143 156	13.78 24.86 41.27
255 0 255	88.86 39.31 115.57	27 110 180	14.25 16.60 54.75
255 128 128	77.29 50.05 29.30	239 240 244	98.85 103.76 114.48
255 170 0	76.60 62.93 5.80	219 222 227	81.94 86.62 97.33
255 170 255	98.48 71.95 119.98	199 203 210	67.07 71.02 82.21
255 255 0	90.06 109.23 12.45	159 164 171	41.56 44.25 52.37
255 255 170	99.21 113.11 59.80	119 125 129	22.51 24.03 28.29
170 85 85	31.82 20.61 11.81	84 90 93	10.68 11.76 13.69
85 170 85	17.62 35.64 14.95	57 67 69	5.07 5.98 7.10