

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2010-4-18 19:13:38
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY2
Profile: C:/Windows/system32/.../20100418-PA241W-5000K-L-120cd-trc.icc
Created: 2010-4-18 19:06
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	yes
Profile quality	no

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:	114.28 118.68 99.53
XYZ (normalized):	96.30 100.00 83.86
Luminance:	118.7 Cd/m2
Next Temperature:	5069 Kelvin
Assumed Target Whitepoint:	5100 Kelvin
Distance to assumed Target Whitepoint:	0.5 deltaE

Blackpoint

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

Luminance:	0.4 Cd/m2
Chromaticity:	3.6 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	10022	0.38	2.87	3.64	
5	5784	1.01	7.71	2.05	1.76
10	5304	1.70	12.17	0.91	1.97
15	5110	2.68	16.79	0.19	2.09
20	5034	4.04	21.61	0.44	2.18
25	5082	5.59	25.90	0.39	2.27
30	5108	7.70	30.62	0.21	2.32
35	5051	10.42	35.56	0.11	2.36
40	5036	13.77	40.58	0.31	2.39
45	5068	17.50	45.29	0.26	2.43
50	5051	22.12	50.26	0.14	2.45
55	5103	27.54	55.28	0.39	2.47
60	5072	33.84	60.35	0.39	2.48
65	5061	40.34	64.96	0.38	2.53
70	5042	48.60	70.14	0.33	2.52
75	5075	57.42	75.07	0.14	2.53
80	5079	67.57	80.14	0.47	2.55
85	5042	77.92	84.82	0.38	2.61
90	5074	90.09	89.82	0.20	2.64
95	5029	103.96	94.99	0.55	2.59
100	5069	118.68	100.00	0.00	
Average	5078			0.33	2.38
Range				1.31	
Max				0.91	

Tone values = 98.6%

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.

RGB	Lab	deltaLab	deltaE
0 0 0	2.9 -0.3 -3.6	-2.9 0.3 3.6	4.6
0 0 128	16.2 19.8 -55.4	-2.0 0.2 -2.5	3.2
0 0 255	38.1 36.9 -98.7	-1.3 -1.9 -2.7	3.6
0 128 0	40.0 -70.4 39.5	-0.6 -2.7 4.5	5.3
0 128 128	42.8 -52.4 -12.9	-0.5 0.7 -0.2	0.9
0 170 255	62.8 -36.8 -58.7	-0.5 -0.4 -1.3	1.5
0 255 0	81.6 -126.4 74.7	-0.5 -1.7 2.3	2.9
0 255 170	83.4 -113.1 22.5	-0.5 1.0 -1.0	1.5
0 255 255	86.5 -93.2 -22.2	-0.4 2.6 -0.8	2.8
85 85 85	34.0 0.0 -0.0	-0.7 -0.0 0.0	0.7
128 0 0	29.7 53.5 39.4	-0.5 -0.2 6.3	6.3
128 0 128	33.6 52.8 -26.0	-0.3 -0.0 0.5	0.6
128 128 0	48.5 -4.2 52.3	-0.4 -1.1 3.6	3.8
128 128 128	50.7 -0.0 -0.0	-0.5 0.0 0.0	0.5
128 128 255	58.4 13.8 -65.8	-0.1 2.1 -0.0	2.1
128 255 128	85.7 -84.8 48.1	-0.6 -0.5 -1.5	1.6
170 0 255	52.5 65.6 -74.9	0.5 0.6 0.8	1.1
170 170 170	66.9 -0.1 0.2	-0.3 0.1 -0.2	0.3
170 255 0	87.5 -64.0 83.4	-0.4 -1.7 2.1	2.7
170 255 255	91.9 -47.8 -13.4	-0.4 1.2 -0.5	1.4
255 0 0	62.9 96.4 84.2	0.4 -2.9 1.8	3.4
255 0 170	65.6 95.1 1.4	0.4 -2.2 0.5	2.3
255 0 255	69.8 94.1 -45.6	0.6 -1.6 0.9	1.9
255 128 128	72.4 68.4 36.7	0.1 -1.6 -0.7	1.8
255 170 0	77.7 46.6 86.6	0.3 -1.4 1.9	2.4
255 170 255	83.0 51.1 -25.2	0.2 -0.6 0.3	0.7
255 255 0	96.1 -9.6 95.9	0.2 0.5 2.2	2.3
255 255 170	97.5 -6.5 45.9	0.1 0.8 -1.0	1.3
255 255 255	100.0 0.0 0.0	-0.0 0.0 0.0	0.0
170 85 85	48.3 45.9 24.2	-0.3 -0.7 -0.6	0.9
85 170 85	57.1 -56.7 32.1	-0.6 -0.7 -0.9	1.2
85 85 170	39.0 8.9 -44.2	-0.5 1.5 -0.2	1.6
85 170 170	59.6 -45.2 -12.0	-0.5 0.8 -0.5	1.1
170 85 170	51.4 47.2 -23.3	-0.2 -0.1 0.2	0.3
170 170 85	64.9 -4.6 45.4	-0.4 -0.5 -1.7	1.8
Average			2.0
Maximum			6.3

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	100 %
sRGB	93 %
AdobeRGB	92 %
ECI-RGB v1.0	92 %

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	55.5 -36.6 -49.6	0.8
66.9 -24.7 -37.1	67.3 -26.6 -37.2	1.9
79.7 -12.5 -21.8	79.9 -13.1 -21.6	0.6
48.0 74.0 -3.0	48.4 74.0 -3.0	0.4
60.8 50.6 -6.7	61.0 50.9 -6.4	0.5
76.4 25.8 -6.9	76.5 25.8 -6.6	0.4
89.0 -5.0 93.0	88.9 -4.3 90.0	3.1
90.3 -4.7 62.6	90.5 -4.8 65.1	2.5
92.2 -3.5 31.1	92.2 -3.6 31.8	0.7
53.1 37.7 28.9	53.5 38.7 29.8	1.4
41.5 22.7 16.8	41.9 22.9 16.5	0.5
31.9 40.0 24.0	32.7 39.3 24.0	1.0
32.5 44.4 -1.8	33.2 44.4 -1.5	0.8
51.3 1.3 44.5	51.6 2.0 46.2	1.9
34.6 -36.4 13.9	35.5 -34.9 14.2	1.8
36.0 -26.2 -20.9	36.6 -26.5 -20.8	0.8
20.9 9.6 -23.6	22.5 8.3 -22.5	2.3
89.0 0.0 -1.8	88.9 -0.5 -2.0	0.5
82.8 0.0 -1.7	82.9 0.1 -1.4	0.3
69.3 0.0 -1.4	69.6 -0.3 -1.3	0.4
54.1 0.0 -1.0	54.6 -0.4 -1.3	0.7
36.6 -0.0 -0.5	37.1 0.4 -0.4	0.6
16.0 0.0 0.0	17.9 -0.2 0.0	1.9
24.0 22.0 -46.0	24.9 20.4 -45.6	1.9
40.9 17.9 -36.6	41.4 17.0 -36.5	1.0
63.7 10.3 -23.8	63.8 9.9 -24.3	0.7
47.0 68.0 48.0	46.8 68.6 49.7	1.8
58.5 47.1 37.9	58.5 47.7 39.2	1.4
74.2 22.9 21.4	74.4 23.3 21.9	0.7
50.0 -65.0 27.0	50.8 -63.9 27.6	1.5
62.1 -39.8 21.0	62.6 -39.8 21.5	0.7
77.0 -19.1 11.0	77.2 -19.3 11.1	0.4
71.2 18.8 17.3	71.3 18.7 17.5	0.3
71.2 22.2 73.1	71.3 23.0 77.0	4.0
47.7 71.2 16.2	47.5 72.2 16.0	1.1
38.0 55.4 -20.9	38.1 55.4 -21.8	0.8
73.7 -22.8 67.6	73.9 -22.4 70.8	3.2
52.3 -52.3 -20.2	52.8 -53.4 -19.7	1.3
43.3 -17.0 -48.6	44.1 -19.5 -48.7	2.6
95.0 0.0 -2.0	95.1 0.4 -2.4	0.6
88.5 -0.4 -3.1	88.6 -0.9 -3.3	0.6
82.0 -0.9 -4.1	82.1 -0.9 -4.1	0.2
67.7 -2.0 -4.4	67.9 -2.2 -4.6	0.4
52.2 -2.5 -3.5	52.6 -2.5 -4.0	0.6
37.5 -3.9 -3.1	37.9 -3.6 -3.6	0.6
26.3 -6.8 -3.4	27.3 -6.3 -3.3	1.1
Average		1.2
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	114.28 118.68 99.53	85 85 170	13.66 12.66 33.39
0 0 0	0.35 0.38 0.55	85 170 170	20.25 32.88 35.89
12 12 12	0.97 1.01 0.98	170 85 170	35.27 23.29 33.78
25 25 25	1.63 1.70 1.51	170 170 85	37.22 40.27 10.37
38 38 38	2.58 2.68 2.27	4 152 221	18.46 27.85 64.25
51 51 51	3.88 4.04 3.33	117 180 231	33.70 43.96 73.49
63 63 63	5.36 5.59 4.64	180 208 239	58.78 67.15 81.28
76 76 76	7.41 7.70 6.51	191 0 131	39.68 20.26 18.45
89 89 89	10.04 10.42 8.71	203 111 168	51.26 34.67 33.50
102 102 102	13.26 13.77 11.44	219 177 207	69.91 60.12 56.91
114 114 114	16.82 17.50 14.60	239 234 0	82.01 87.77 9.38
127 127 127	21.32 22.12 18.51	240 237 115	85.43 91.70 20.73
140 140 140	26.42 27.54 23.10	240 239 181	90.41 96.19 46.06
153 153 153	32.50 33.84 28.22	178 108 88	35.27 25.44 9.05
165 165 165	38.78 40.34 33.60	132 91 79	18.51 14.78 7.23
178 178 178	46.83 48.60 40.50	123 45 43	14.14 8.78 2.68
191 191 191	55.31 57.42 48.28	125 34 88	15.43 9.06 8.00
204 204 204	64.88 67.57 56.42	142 132 47	23.04 23.47 4.34
216 216 216	75.07 77.92 64.92	49 105 62	5.97 10.38 5.16
229 229 229	86.65 90.09 75.43	41 102 125	7.38 11.10 17.24
242 242 242	100.42 103.96 86.86	53 44 92	4.84 4.34 8.73
0 0 128	3.68 2.55 16.93	226 227 230	84.30 87.82 76.16
0 0 255	18.27 12.13 88.00	211 211 214	70.90 73.56 63.27
0 128 0	4.55 13.34 2.31	176 177 179	45.76 47.64 41.00
0 128 128	7.45 15.46 18.54	138 138 140	25.66 26.73 23.17
0 170 255	25.58 37.27 91.49	93 93 94	11.02 11.39 9.68
0 255 0	23.20 70.70 10.20	41 41 41	2.84 2.96 2.48
0 255 170	28.68 74.78 41.12	59 32 135	7.01 5.22 19.47
0 255 255	38.81 81.87 97.80	107 87 164	16.95 14.38 30.87
85 85 85	9.18 9.52 7.99	164 153 202	40.58 38.66 52.77
128 0 0	14.35 7.24 0.76	188 34 41	35.69 18.81 2.51
128 0 128	17.35 9.29 17.27	201 113 86	45.79 31.40 8.86
128 128 0	18.70 20.36 2.54	218 176 154	64.33 56.16 29.93
128 128 128	21.70 22.55 18.91	50 155 76	10.24 22.65 8.35
128 128 255	34.38 31.34 90.84	120 178 120	24.44 36.96 18.49
128 255 128	40.35 80.03 25.68	179 207 177	51.19 61.65 41.70
170 0 255	43.10 24.46 89.30	205 171 153	56.36 50.62 29.32
170 170 170	41.74 43.37 36.26	216 171 32	57.98 50.44 4.95
170 255 0	50.81 84.20 10.69	190 14 99	37.75 19.40 10.14
170 255 255	66.55 95.63 98.78	144 16 133	22.03 12.06 18.97
255 0 0	75.85 37.24 1.75	179 203 48	44.37 55.22 7.45
255 0 170	81.41 41.19 33.58	28 154 165	13.16 24.75 32.90
255 0 255	91.47 48.08 90.20	40 114 189	12.64 16.52 43.87
255 128 128	82.97 52.53 19.35	242 242 246	100.66 104.28 90.75
255 170 0	83.36 62.42 5.26	224 226 231	83.26 86.99 77.01
255 170 255	99.96 73.87 93.60	207 209 216	68.72 71.80 64.70
255 255 0	96.71 106.88 11.49	169 173 180	42.50 44.94 41.35
255 255 170	102.74 111.16 41.89	129 134 139	23.03 24.54 22.72
170 85 85	30.74 20.15 8.09	90 97 101	10.94 11.90 11.17
85 170 85	15.70 29.66 10.31	58 70 72	5.35 6.16 5.87