

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2009-1-8 16:56:44
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY1
EDID-Name: L227W
EDID-Serial:
Profile: C:/WINDOWS/System32/spool/DRIVERS/COLOR/p26w_5_ugra1.icc
Created: 2009-1-8 16:51
Measurement device: DTP94-LCD mode

Summary

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

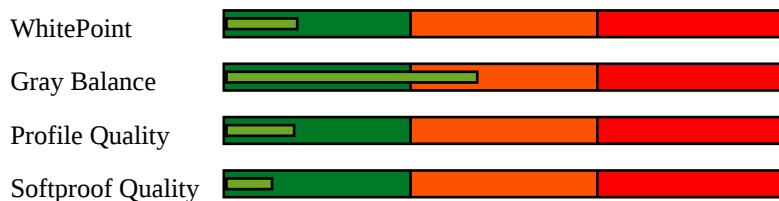
Calibration

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:	114.53 119.81 119.92
XYZ (normalized):	95.59 100.00 100.09
Luminance:	119.8 Cd/m2
Next Temperature:	5920 Kelvin
Assumed Target Whitepoint:	5900 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:	0.1 Cd/m2
Chromaticity:	1.3 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	13279	0.15	1.13	1.28	
5	6570	0.63	4.75	0.78	1.85
10	5850	2.02	13.74	0.25	1.81
15	5900	4.05	21.51	0.09	1.81
20	5791	6.79	28.56	0.49	1.80
25	5764	9.80	34.35	0.68	1.82
30	5843	13.78	40.41	0.88	1.81
35	5871	18.38	46.10	0.87	1.80
40	5877	23.23	51.14	0.25	1.80
45	5937	27.99	55.44	1.10	1.84
50	5819	33.99	60.22	0.70	1.83
55	5834	40.99	65.13	1.14	1.81
60	5852	47.98	69.50	0.56	1.80
65	5881	55.29	73.64	1.19	1.82
70	5875	62.98	77.62	0.50	1.82
75	5897	71.67	81.74	0.82	1.81
80	5866	79.96	85.37	0.57	1.83
85	5862	88.46	88.84	0.52	1.88
90	5861	98.65	92.72	0.67	1.88
95	5856	109.03	96.41	0.75	1.92
100	5920	119.81	100.00	0.00	
Average	5861			0.63	1.83
Range				1.42	
Max				1.19	

Tone values = 92.0%

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	1.1 -0.1 -1.3	-1.1 0.1 1.3	1.7
0 0 128	12.9 49.9 -76.1	0.4 0.3 -1.1	1.2
0 0 255	28.3 76.1 -117.2	-0.1 -0.3 0.4	0.5
0 128 0	51.2 -81.8 54.9	0.2 -0.7 1.1	1.3
0 128 128	53.2 -55.3 -11.4	0.1 0.6 -1.1	1.3
0 170 255	68.8 -40.4 -50.5	-0.5 1.0 -0.4	1.2
0 255 0	86.2 -124.7 85.3	-0.1 -0.1 -0.6	0.6
0 255 170	87.4 -102.9 17.9	-0.0 0.5 -1.3	1.4
0 255 255	88.8 -82.5 -19.1	-0.1 -0.1 0.1	0.1
85 85 85	44.5 -0.8 0.9	-0.5 0.8 -0.9	1.3
128 0 0	33.1 66.1 51.9	0.1 0.4 2.2	2.2
128 0 128	36.1 74.5 -37.5	0.3 -0.1 -0.0	0.3
128 128 0	59.1 -10.9 67.3	0.2 -0.5 0.6	0.8
128 128 128	60.6 -0.2 0.8	0.1 0.2 -0.8	0.8
128 128 255	64.2 22.2 -57.2	-0.2 0.2 0.1	0.3
128 255 128	90.5 -71.1 43.0	-0.1 0.1 -1.2	1.2
170 0 255	49.7 96.9 -80.4	0.1 -0.4 0.6	0.8
170 170 170	75.3 -0.7 0.8	-0.4 0.7 -0.8	1.1
170 255 0	92.1 -58.6 94.8	-0.1 -0.2 -0.8	0.9
170 255 255	94.5 -33.8 -9.4	-0.0 -0.4 0.1	0.4
255 0 0	58.5 100.8 90.6	-0.1 -0.2 -1.1	1.1
255 0 170	60.8 107.3 -20.1	0.1 -0.7 0.5	0.9
255 0 255	63.3 112.6 -56.9	0.0 -0.1 0.1	0.2
255 128 128	74.6 56.3 24.2	0.0 0.1 -0.9	0.9
255 170 0	81.6 27.8 93.8	-0.2 0.4 -0.9	1.0
255 170 255	84.7 43.7 -23.2	-0.4 1.2 -0.4	1.3
255 255 0	97.9 -17.2 104.1	-0.0 0.0 -1.3	1.3
255 255 170	98.8 -8.5 36.1	0.0 -0.1 -0.4	0.4
255 255 255	100.0 0.0 0.0	-0.0 0.0 -0.0	0.0
170 85 85	55.3 43.7 18.9	-0.3 0.7 -0.6	0.9
85 170 85	67.8 -56.2 33.5	-0.4 0.3 -0.7	0.9
85 85 170	47.0 16.9 -44.0	-0.4 0.8 -0.9	1.3
85 170 170	69.2 -40.5 -9.4	-0.4 0.5 -0.9	1.1
170 85 170	57.2 52.4 -26.9	-0.3 0.6 -0.7	0.9
170 170 85	74.1 -10.0 43.8	-0.3 0.6 -0.6	0.9
Average			0.9
Maximum			2.2

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	99 %
sRGB	100 %
AdobeRGB	99 %
ECI-RGB v1.0	91 %

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	56.0 -30.5 -47.2	7.1
66.9 -24.7 -37.1	67.1 -25.2 -36.3	0.9
79.7 -12.5 -21.8	79.9 -13.1 -20.6	1.3
48.0 74.0 -3.0	48.2 73.8 -3.3	0.4
60.8 50.6 -6.7	60.9 50.5 -6.0	0.8
76.4 25.8 -6.9	76.7 25.2 -6.3	0.9
89.0 -5.0 93.0	89.0 -4.8 93.6	0.7
90.3 -4.7 62.6	90.4 -4.6 62.6	0.1
92.2 -3.5 31.1	92.2 -3.4 31.9	0.7
53.1 37.7 28.9	53.4 37.2 29.9	1.2
41.5 22.7 16.8	41.7 22.5 16.7	0.2
31.9 40.0 24.0	32.2 40.4 23.5	0.7
32.5 44.5 -1.8	33.0 43.6 -1.0	1.2
51.3 1.3 44.5	51.2 0.5 43.8	1.0
34.6 -36.4 13.9	35.2 -35.7 13.8	0.9
36.0 -26.2 -20.9	36.4 -26.2 -20.2	0.8
20.9 9.6 -23.6	21.5 8.8 -22.7	1.4
89.0 0.0 -1.9	88.8 0.4 -1.4	0.6
82.8 0.0 -1.7	82.9 -0.6 -1.2	0.8
69.3 0.0 -1.4	69.5 -0.1 -0.5	0.9
54.1 0.0 -1.0	54.1 -0.0 -0.5	0.5
36.6 0.0 -0.5	36.8 0.4 -0.0	0.7
16.0 0.0 0.0	16.9 0.4 0.3	1.0
24.0 22.0 -46.0	24.3 21.3 -45.4	1.0
40.9 17.9 -36.6	41.0 17.7 -35.4	1.2
63.7 10.3 -23.8	63.7 10.6 -23.6	0.3
47.0 68.0 48.0	47.3 67.9 48.1	0.3
58.5 47.1 37.9	58.6 47.3 38.1	0.3
74.2 22.9 21.4	74.3 22.6 22.2	0.8
50.0 -65.0 27.0	49.6 -63.5 26.9	1.5
62.1 -39.8 21.0	62.1 -39.2 21.1	0.6
77.0 -19.1 11.0	77.1 -19.5 11.9	1.0
71.2 18.9 17.3	71.2 18.6 17.9	0.7
71.2 22.1 73.1	71.5 21.3 73.6	1.0
47.7 71.2 16.2	48.0 70.8 17.3	1.1
38.0 55.4 -20.9	37.7 54.8 -21.5	0.8
73.7 -22.8 67.6	73.8 -23.0 67.7	0.3
52.3 -52.3 -20.1	52.3 -49.2 -19.0	3.3
43.3 -17.0 -48.6	43.4 -17.0 -48.1	0.5
95.0 0.0 -2.0	94.9 0.2 -1.5	0.6
88.5 -0.4 -3.1	88.4 -0.1 -2.6	0.6
82.0 -0.9 -4.1	82.1 -1.2 -3.4	0.8
67.7 -2.0 -4.4	67.7 -2.1 -3.7	0.7
52.2 -2.5 -3.5	52.5 -2.8 -2.5	1.1
37.5 -3.9 -3.1	37.8 -3.9 -2.6	0.7
26.3 -6.8 -3.4	26.8 -7.6 -2.6	1.2
Average		1.0
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	114.53 119.81 119.92	85 85 170	23.11 19.53 53.57
0 0 0	0.14 0.15 0.25	85 170 170	32.55 47.81 57.10
12 12 12	0.60 0.63 0.69	170 85 170	46.07 30.04 53.99
25 25 25	1.94 2.02 2.02	170 170 85	48.39 55.72 20.51
38 38 38	3.87 4.05 4.04	0 130 206	21.84 29.31 75.62
51 51 51	6.52 6.79 6.69	78 159 220	35.43 44.63 86.91
63 63 63	9.43 9.80 9.64	151 193 231	59.81 68.09 96.45
76 76 76	13.11 13.78 13.47	175 39 103	39.09 19.95 22.35
89 89 89	17.47 18.38 18.04	189 96 143	50.80 34.60 40.01
102 102 102	22.24 23.23 23.13	208 159 190	70.17 60.94 68.75
114 114 114	26.51 27.99 27.63	238 217 19	79.58 88.01 9.53
127 127 127	32.56 33.99 33.51	238 222 91	83.47 91.72 26.04
140 140 140	39.04 40.99 40.10	237 228 159	89.56 96.81 55.23
153 153 153	45.90 47.98 47.49	159 85 64	34.14 25.31 10.84
165 165 165	52.55 55.29 54.35	107 68 57	17.98 14.59 8.50
178 178 178	60.18 62.98 62.46	99 37 32	13.68 8.42 3.19
191 191 191	68.25 71.67 70.93	100 36 64	15.05 8.92 9.44
204 204 204	76.45 79.96 79.25	116 101 36	21.76 23.07 5.51
216 216 216	84.73 88.46 87.91	32 75 45	5.72 10.30 6.11
229 229 229	94.32 98.65 97.69	22 76 97	7.66 11.18 20.21
242 242 242	104.24 109.03 107.87	36 35 67	4.75 4.12 10.06
0 0 128	5.76 2.11 30.08	215 216 220	84.81 88.45 90.53
0 0 255	20.80 7.66 109.56	194 195 199	70.75 74.26 75.87
0 128 0	7.83 23.34 3.17	152 153 155	45.81 47.96 48.46
0 128 128	13.62 25.68 33.36	110 110 112	25.31 26.47 26.82
0 170 255	34.10 47.82 114.39	68 68 69	10.83 11.27 11.28
0 255 0	27.41 81.98 10.42	30 30 30	2.63 2.73 2.69
0 255 170	36.97 85.35 61.26	38 37 107	7.38 5.20 22.84
0 255 255	47.99 89.43 119.34	78 71 137	17.42 14.40 35.97
85 85 85	16.11 17.02 16.59	137 132 183	41.48 39.10 62.80
128 0 0	19.11 8.79 0.44	174 42 31	35.29 18.93 3.45
128 0 128	24.91 10.83 31.19	189 91 64	44.92 31.32 11.12
128 128 0	27.09 32.21 3.40	208 153 128	62.99 56.00 35.58
128 128 128	32.87 34.45 33.88	27 120 55	9.46 21.73 9.45
128 128 255	47.97 40.30 112.43	89 148 93	23.86 36.64 21.81
128 255 128	52.48 92.80 41.14	154 186 153	50.68 61.90 49.04
170 0 255	52.75 22.23 109.65	191 147 127	55.50 50.56 34.77
170 170 170	55.57 58.45 57.59	207 144 30	56.29 50.79 6.75
170 255 0	59.65 96.62 10.77	176 41 73	37.56 19.71 12.22
170 255 255	80.30 104.08 119.68	119 38 105	21.70 11.85 22.42
255 0 0	66.93 30.67 0.93	157 176 39	42.83 55.23 9.58
255 0 170	76.79 34.12 53.60	0 125 139	14.16 24.75 38.24
255 0 255	87.30 38.13 109.50	0 92 166	13.77 16.52 51.25
255 128 128	80.45 56.35 34.63	236 237 242	100.42 104.83 107.39
255 170 0	80.08 70.35 5.94	212 215 221	83.52 87.35 91.20
255 170 255	100.75 78.43 114.90	189 193 201	68.85 72.52 77.00
255 255 0	94.03 112.36 11.07	143 149 156	42.47 45.10 48.68
255 255 170	103.79 115.75 63.26	101 107 111	22.98 24.68 26.30
170 85 85	39.03 27.48 16.94	65 72 75	10.93 12.00 13.01
85 170 85	25.54 45.27 20.22	40 50 51	5.10 6.03 6.68