

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2009-2-11 13:26:00
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY1
EDID-Name:
EDID-Serial:
Profile: C:/WINDOWS/System32/spool/DRIVERS/COLOR/2408ugra.icc
Created: 2009-2-11 13:20
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:	134.44 140.54 137.16
XYZ (normalized):	95.66 100.00 97.60
Luminance:	140.5 Cd/m2
Next Temperature:	5780 Kelvin
Assumed Target Whitepoint:	5800 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:	0.1 Cd/m2
Chromaticity:	0.5 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	8265	0.13	0.84	0.51	
5	5855	0.64	4.11	0.18	1.88
10	6049	2.18	12.93	0.67	1.83
15	5846	4.58	21.05	0.26	1.82
20	5829	7.94	28.51	0.80	1.80
25	5811	11.64	34.56	0.20	1.81
30	5854	16.00	40.22	0.37	1.81
35	5791	21.08	45.63	0.38	1.81
40	5792	27.15	51.06	0.35	1.80
45	5794	33.24	55.74	0.89	1.82
50	5794	39.82	60.19	0.09	1.82
55	5811	47.21	64.64	0.35	1.83
60	5777	55.64	69.18	0.62	1.81
65	5827	63.57	73.04	0.38	1.84
70	5804	73.11	77.29	0.27	1.83
75	5752	83.57	81.55	0.30	1.82
80	5784	94.00	85.45	0.05	1.80
85	5785	103.06	88.61	0.32	1.90
90	5719	115.42	92.63	0.80	1.91
95	5783	128.10	96.47	0.64	1.87
100	5780	140.54	100.00	0.00	
Average	5810			0.41	1.83
Range				1.51	
Max				0.89	

Tone values = 93.9%

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	0.8 -0.0 -0.5	-0.8 0.0 0.5	1.0
0 0 128	14.7 42.2 -73.0	0.9 -1.1 0.3	1.4
0 0 255	31.7 60.9 -110.3	0.1 1.3 0.3	1.3
0 128 0	49.6 -88.1 50.7	0.4 0.8 1.5	1.7
0 128 128	51.7 -58.6 -14.7	0.6 0.6 0.7	1.1
0 170 255	67.4 -44.7 -52.3	0.3 1.2 0.9	1.6
0 255 0	83.6 -133.0 79.1	0.2 1.0 -0.2	1.0
0 255 170	85.2 -109.1 12.7	0.3 1.0 0.5	1.1
0 255 255	87.1 -89.0 -21.8	0.2 1.3 0.6	1.5
85 85 85	44.0 -0.4 -0.3	-0.0 0.4 0.3	0.5
128 0 0	34.9 64.2 53.8	0.1 0.1 1.9	2.0
128 0 128	38.4 70.3 -32.5	0.3 -0.8 -0.7	1.1
128 128 0	58.8 -10.9 64.2	0.1 0.8 1.3	1.5
128 128 128	60.5 -0.1 -0.1	0.2 0.1 0.1	0.2
128 128 255	64.8 18.8 -55.5	0.0 0.6 0.4	0.7
128 255 128	88.8 -72.5 38.4	0.2 0.2 0.3	0.4
170 0 255	53.1 87.9 -73.6	-0.0 0.1 0.1	0.1
170 170 170	74.8 -0.1 -0.3	0.2 0.1 0.3	0.4
170 255 0	90.5 -59.0 89.5	0.2 0.5 -0.2	0.6
170 255 255	93.6 -35.7 -10.7	0.1 0.4 0.3	0.5
255 0 0	61.4 97.5 91.7	-0.3 -0.4 -2.0	2.0
255 0 170	64.0 101.9 -12.9	-0.0 -0.8 -1.2	1.5
255 0 255	67.0 105.0 -49.8	-0.2 -0.0 -0.4	0.4
255 128 128	76.2 55.9 26.1	-0.2 0.0 -0.9	0.9
255 170 0	82.1 29.5 91.5	-0.3 0.1 -0.5	0.6
255 170 255	85.7 42.9 -21.1	-0.2 0.5 -0.3	0.6
255 255 0	97.3 -14.9 100.1	-0.0 -0.3 -1.1	1.1
255 255 170	98.5 -7.1 34.9	0.1 -0.5 -0.1	0.5
255 255 255	100.0 0.0 0.0	0.0 -0.0 -0.0	0.0
170 85 85	56.1 43.8 19.8	-0.1 0.2 0.1	0.3
85 170 85	66.2 -57.5 29.6	0.1 0.6 0.8	1.0
85 85 170	47.1 15.1 -43.6	0.2 0.2 0.1	0.3
85 170 170	67.8 -42.2 -11.9	0.2 0.5 0.5	0.7
170 85 170	58.3 50.7 -24.7	0.0 0.0 -0.1	0.1
170 170 85	73.3 -8.5 41.3	0.1 0.2 0.7	0.7
Average			0.9
Maximum			2.0

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	100 %
sRGB	99 %
AdobeRGB	98 %
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	54.9 -33.1 -49.8	3.9
66.9 -24.7 -37.1	66.7 -25.3 -37.1	0.6
79.7 -12.5 -21.8	79.6 -13.4 -21.3	0.9
48.0 74.0 -3.0	48.0 74.5 -2.7	0.5
60.8 50.6 -6.7	60.7 51.1 -6.5	0.6
76.4 25.8 -6.9	76.4 25.7 -6.3	0.7
89.0 -5.0 93.0	89.1 -5.0 93.2	0.2
90.3 -4.7 62.6	90.4 -4.9 62.5	0.2
92.2 -3.5 31.1	92.0 -3.2 31.5	0.5
53.1 37.7 28.9	53.1 37.6 28.3	0.6
41.5 22.7 16.8	41.9 22.7 16.5	0.4
31.9 40.0 24.0	32.4 40.3 24.1	0.6
32.5 44.5 -1.8	32.9 44.9 -1.6	0.6
51.3 1.3 44.5	51.5 0.9 44.4	0.5
34.6 -36.4 13.9	34.8 -36.8 13.3	0.7
36.0 -26.2 -20.9	35.7 -26.8 -20.9	0.6
20.9 9.6 -23.6	20.8 9.8 -23.7	0.3
89.0 0.0 -1.9	88.6 0.0 -2.2	0.6
82.8 0.0 -1.7	82.8 -0.1 -1.4	0.3
69.3 0.0 -1.4	69.1 0.1 -1.6	0.4
54.1 0.0 -1.0	54.2 0.1 -0.6	0.4
36.6 0.0 -0.5	36.7 0.0 -0.5	0.1
16.0 0.0 0.0	16.2 -0.2 -0.2	0.4
24.0 22.0 -46.0	23.7 21.7 -45.7	0.5
40.9 17.9 -36.6	40.8 17.6 -36.0	0.6
63.7 10.3 -23.8	63.3 10.4 -24.0	0.5
47.0 68.0 48.0	47.0 67.8 47.9	0.3
58.5 47.1 37.9	58.7 47.4 37.7	0.4
74.2 22.9 21.4	74.1 23.5 21.7	0.7
50.0 -65.0 27.0	49.9 -65.8 26.0	1.3
62.1 -39.8 21.0	62.2 -40.4 20.9	0.6
77.0 -19.1 11.0	76.6 -19.1 10.2	0.9
71.2 18.9 17.3	71.2 19.3 17.2	0.4
71.2 22.1 73.1	71.5 22.2 73.2	0.3
47.7 71.2 16.2	47.9 71.1 16.0	0.3
38.0 55.4 -20.9	38.1 55.5 -20.2	0.8
73.7 -22.8 67.6	73.6 -23.8 66.6	1.3
52.3 -52.3 -20.1	51.8 -53.2 -20.5	1.1
43.3 -17.0 -48.6	42.8 -17.6 -49.4	1.1
95.0 0.0 -2.0	95.1 -0.4 -1.7	0.5
88.5 -0.4 -3.1	88.2 -0.4 -2.8	0.5
82.0 -0.9 -4.1	82.0 -0.9 -3.9	0.2
67.7 -2.0 -4.4	67.4 -2.7 -4.3	0.8
52.2 -2.5 -3.5	52.4 -3.2 -2.9	1.0
37.5 -3.9 -3.1	37.6 -3.5 -3.9	0.8
26.3 -6.8 -3.4	26.6 -7.9 -2.8	1.3
Average		0.7
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	134.44 140.54 137.16	85 85 170	26.58 22.97 60.88
0 0 0	0.12 0.13 0.17	85 170 170	35.70 53.47 65.64
12 12 12	0.61 0.64 0.64	170 85 170	55.34 36.89 61.41
25 25 25	2.07 2.18 2.20	170 170 85	56.33 63.88 24.34
38 38 38	4.38 4.58 4.52	0 129 207	23.61 32.76 87.50
51 51 51	7.51 7.94 7.65	84 159 220	40.71 51.55 99.51
63 63 63	11.10 11.64 11.37	153 193 232	69.32 79.12 110.71
76 76 76	15.26 16.00 15.76	171 27 104	45.90 23.25 24.98
89 89 89	20.22 21.08 20.73	185 91 144	59.67 40.37 45.96
102 102 102	25.89 27.15 26.40	206 157 190	81.94 70.84 77.90
114 114 114	31.56 33.24 32.08	237 219 0	93.88 103.52 11.18
127 127 127	38.07 39.82 38.92	237 224 88	98.28 107.81 29.93
140 140 140	45.02 47.21 46.09	236 229 158	105.02 113.13 63.33
153 153 153	53.45 55.64 54.71	156 83 64	39.84 29.29 12.83
165 165 165	60.73 63.57 62.45	106 67 56	21.36 17.28 9.90
178 178 178	69.95 73.11 71.71	97 35 32	16.26 10.02 3.59
191 191 191	79.95 83.57 81.12	98 32 64	17.88 10.42 10.93
204 204 204	89.89 94.00 91.77	116 102 34	26.13 27.51 6.30
216 216 216	98.73 103.06 100.97	35 76 44	6.46 11.84 6.97
229 229 229	110.37 115.42 111.21	26 76 97	8.51 12.62 22.91
242 242 242	122.14 128.10 124.32	36 34 67	5.36 4.56 11.40
0 0 128	6.62 2.87 34.39	215 216 220	98.64 103.01 104.29
0 0 255	23.58 10.72 122.89	194 195 199	83.09 86.87 86.90
0 128 0	7.59 25.47 3.95	152 153 155	53.22 55.53 56.02
0 128 128	14.24 28.27 38.89	110 110 112	29.86 31.18 30.89
0 170 255	36.23 53.30 129.54	68 68 69	12.62 13.18 13.06
0 255 0	26.73 89.11 12.86	30 30 30	2.88 3.02 2.97
0 255 170	37.99 93.95 72.08	38 34 107	8.31 5.82 25.65
0 255 255	50.25 99.72 136.01	78 69 138	20.15 16.70 41.37
85 85 85	18.54 19.47 19.15	137 130 183	47.78 45.12 71.35
128 0 0	23.96 11.55 0.60	169 35 31	41.09 21.99 3.90
128 0 128	30.81 14.46 34.84	185 88 63	53.13 36.97 12.97
128 128 0	31.56 37.36 4.45	206 152 127	74.23 65.44 40.90
128 128 128	38.52 40.32 39.40	35 123 54	10.99 25.85 11.36
128 128 255	55.56 48.21 127.34	93 151 92	27.78 43.06 25.12
128 255 128	57.68 103.63 48.81	156 187 153	58.87 71.57 57.11
170 0 255	64.04 30.14 123.43	189 146 127	65.64 59.37 40.46
170 170 170	64.33 67.30 66.07	205 144 26	66.82 59.70 7.88
170 255 0	66.74 108.46 13.59	171 32 74	44.06 23.01 14.41
170 255 255	90.72 119.27 136.53	117 32 105	26.04 14.19 25.19
255 0 0	84.19 40.62 1.38	158 179 35	49.89 64.50 11.31
255 0 170	95.36 45.39 59.21	10 126 139	15.39 28.39 44.38
255 0 255	107.73 51.25 123.85	15 91 167	15.41 18.76 58.89
255 128 128	98.61 69.65 40.21	236 237 242	118.04 123.60 123.93
255 170 0	97.01 84.00 7.80	212 215 221	97.40 101.98 104.23
255 170 255	120.55 94.63 130.44	189 193 201	80.63 84.69 88.39
255 255 0	110.79 129.84 14.11	143 149 156	49.09 52.39 55.75
255 255 170	122.16 134.71 73.30	101 107 111	26.70 28.80 30.21
170 85 85	47.31 33.39 19.66	65 72 75	12.72 13.88 15.30
85 170 85	27.65 49.99 23.82	41 50 51	5.89 7.00 7.61