

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2010-5-18 15:34:47
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY1
Profile: C:/Windows/system32/spool/drivers/color/ugra.icm
Created: 2010-5-18 15:31
Measurement device: eye-one pro

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:	133.30 139.81 135.79
XYZ (normalized):	95.34 100.00 97.13
Luminance:	139.8 Cd/m2
Next Temperature:	5788 Kelvin
Assumed Target Whitepoint:	5800 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:	0.4 Cd/m2
Chromaticity:	2.0 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	9443	0.36	2.30	2.04	
5	6942	1.00	6.48	2.54	1.78
10	6277	2.52	14.42	1.67	1.80
15	5906	4.91	21.99	0.72	1.80
20	5870	8.01	28.72	0.43	1.80
25	5777	11.65	34.67	0.06	1.82
30	5736	16.36	40.74	0.32	1.80
35	5750	21.59	46.24	0.21	1.80
40	5742	27.47	51.44	0.32	1.79
45	5757	33.52	56.06	0.58	1.81
50	5750	40.11	60.50	0.38	1.82
55	5733	47.83	65.13	0.69	1.81
60	5751	56.24	69.63	0.78	1.80
65	5760	63.93	73.37	0.68	1.84
70	5751	73.01	77.41	0.62	1.84
75	5747	82.70	81.38	0.52	1.84
80	5729	93.30	85.37	0.92	1.84
85	5742	103.33	88.88	0.93	1.90
90	5768	114.79	92.62	0.54	1.91
95	5778	126.72	96.26	0.23	1.95
100	5788	139.81	100.00	0.00	
Average	5795			0.56	1.83
Range				2.58	
Max				1.67	

Tone values = 99.6%

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.

The assumed chromatic adaptation is: CAT02

RGB	Lab	deltaLab	deltaE
0 0 0	2.3 0.2 -2.1	-0.3 -0.2 2.0	2.1
0 0 128	14.1 47.3 -76.2	0.3 -0.7 1.4	1.6
0 0 255	28.2 72.8 -115.5	0.5 0.3 0.5	0.7
0 128 0	51.4 -87.3 52.9	-0.2 0.1 -0.7	0.7
0 128 128	53.1 -58.7 -12.9	-0.1 0.3 -0.1	0.3
0 170 255	67.9 -44.2 -50.7	0.0 0.7 -0.3	0.7
0 255 0	85.3 -132.0 81.4	0.1 -1.0 -1.3	1.6
0 255 170	86.7 -109.0 15.7	-0.0 -0.6 -0.6	0.8
0 255 255	88.1 -88.9 -19.4	0.0 -0.0 -0.4	0.4
85 85 85	44.5 0.1 0.1	-0.3 -0.1 -0.1	0.3
128 0 0	34.3 67.1 50.3	-0.1 -0.0 1.8	1.8
128 0 128	37.1 74.7 -35.9	0.1 -0.3 0.2	0.4
128 128 0	59.5 -11.0 66.0	-0.2 -0.1 -1.3	1.3
128 128 128	61.0 0.0 0.2	-0.2 -0.1 -0.3	0.4
128 128 255	64.2 21.0 -55.7	-0.1 0.7 -0.6	0.9
128 255 128	90.1 -73.3 40.4	-0.1 -1.0 -0.4	1.1
170 0 255	50.3 96.3 -77.5	0.3 0.2 -0.1	0.3
170 170 170	75.0 -0.2 0.5	-0.1 0.1 -0.6	0.6
170 255 0	91.7 -59.7 90.9	-0.0 -1.0 -1.1	1.5
170 255 255	94.1 -36.0 -9.3	-0.0 -0.3 -0.5	0.6
255 0 0	59.2 101.9 85.6	0.2 0.4 1.6	1.7
255 0 170	61.5 107.4 -17.8	0.3 0.4 0.3	0.6
255 0 255	63.9 112.6 -54.2	0.3 0.8 -0.2	0.8
255 128 128	75.1 57.4 23.8	-0.1 0.8 0.0	0.8
255 170 0	81.7 29.4 90.3	-0.1 0.5 -0.2	0.6
255 170 255	84.5 44.8 -22.3	0.0 1.0 -0.5	1.1
255 255 0	97.6 -16.5 99.5	0.0 -0.2 -0.4	0.5
255 255 170	98.7 -8.2 35.2	0.0 -0.2 -0.2	0.3
255 255 255	100.0 0.0 0.0	-0.2 -0.1 -0.1	0.2
170 85 85	55.7 45.2 18.3	-0.3 0.5 0.3	0.6
85 170 85	67.5 -57.5 31.7	-0.4 -0.9 -0.3	1.0
85 85 170	47.2 16.6 -43.8	-0.4 0.4 -0.5	0.7
85 170 170	68.9 -42.2 -10.2	-0.3 -0.3 -0.5	0.7
170 85 170	57.5 53.0 -25.9	-0.2 0.8 -0.5	0.9
170 170 85	74.0 -9.1 42.2	-0.3 -0.1 -0.1	0.3
Average			0.8
Maximum			2.1

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	100 %
sRGB	100 %
AdobeRGB	99 %
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	55.9 -33.2 -48.8	4.1
66.9 -24.7 -37.1	67.3 -25.3 -36.5	0.9
79.7 -12.5 -21.8	80.0 -12.2 -21.0	0.8
48.0 74.0 -3.0	47.9 74.2 -3.8	0.8
60.8 50.6 -6.7	61.1 50.2 -6.4	0.5
76.4 25.8 -6.9	76.7 25.3 -6.6	0.6
89.0 -5.0 93.0	89.2 -4.7 93.2	0.4
90.3 -4.7 62.6	90.4 -4.4 62.6	0.3
92.2 -3.5 31.1	92.5 -4.0 31.7	0.8
53.1 37.7 28.9	53.5 37.3 29.5	0.8
41.5 22.7 16.8	41.9 22.5 17.0	0.4
31.9 40.0 24.0	32.0 40.8 23.6	0.9
32.5 44.5 -1.8	32.6 44.8 -1.9	0.4
51.3 1.3 44.5	51.7 1.6 45.0	0.7
34.6 -36.4 13.9	35.0 -37.5 13.9	1.1
36.0 -26.2 -20.9	36.3 -26.6 -21.3	0.7
20.9 9.6 -23.6	20.8 9.6 -24.5	0.9
89.0 0.0 -1.9	88.8 -0.2 -1.4	0.5
82.8 0.0 -1.7	82.7 0.3 -1.3	0.5
69.3 0.0 -1.4	69.5 -0.8 -0.5	1.2
54.1 0.0 -1.0	54.4 0.2 -0.9	0.3
36.6 0.0 -0.5	36.9 0.2 -0.2	0.5
16.0 0.0 0.0	15.7 -0.4 -1.5	1.6
24.0 22.0 -46.0	23.7 22.6 -47.4	1.5
40.9 17.9 -36.6	40.8 18.2 -36.7	0.4
63.7 10.3 -23.8	63.8 10.2 -23.0	0.8
47.0 68.0 48.0	46.9 67.9 47.5	0.5
58.5 47.1 37.9	58.4 46.6 38.3	0.7
74.2 22.9 21.4	74.3 22.2 22.1	1.0
50.0 -65.0 27.0	50.3 -65.1 27.6	0.7
62.1 -39.8 21.0	62.4 -39.5 21.3	0.5
77.0 -19.1 11.0	77.0 -18.9 11.2	0.2
71.2 18.9 17.3	71.3 18.5 17.8	0.6
71.2 22.1 73.1	71.5 21.6 73.6	0.7
47.7 71.2 16.2	47.7 71.6 15.7	0.7
38.0 55.4 -20.9	38.1 56.4 -21.5	1.2
73.7 -22.8 67.6	73.8 -22.5 68.5	1.0
52.3 -52.3 -20.1	52.8 -53.2 -19.6	1.2
43.3 -17.0 -48.6	43.8 -18.1 -48.5	1.2
95.0 0.0 -2.0	95.3 -0.8 -1.7	0.9
88.5 -0.4 -3.1	88.8 -0.4 -2.6	0.6
82.0 -0.9 -4.1	82.0 -1.2 -3.5	0.7
67.7 -2.0 -4.4	68.1 -2.4 -3.7	0.9
52.2 -2.5 -3.5	52.6 -2.0 -3.4	0.6
37.5 -3.9 -3.1	37.8 -3.7 -3.2	0.4
26.3 -6.8 -3.4	26.5 -7.6 -3.2	0.8
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	133.30 139.81 135.79	85 85 170	26.85 22.99 60.25
0 0 0	0.35 0.36 0.52	85 170 170	36.74 55.16 65.10
12 12 12	0.97 1.00 1.19	170 85 170	54.59 35.68 60.40
25 25 25	2.41 2.52 2.69	170 170 85	56.72 64.77 24.55
38 38 38	4.70 4.91 4.92	0 129 207	24.41 34.07 87.20
51 51 51	7.64 8.01 7.91	83 159 221	41.33 52.55 99.15
63 63 63	11.11 11.65 11.30	154 193 232	70.12 79.68 110.03
76 76 76	15.60 16.36 15.73	171 38 103	45.34 23.08 25.15
89 89 89	20.62 21.59 20.88	186 96 143	59.61 40.84 45.94
102 102 102	26.21 27.47 26.47	206 159 191	81.83 71.24 78.21
114 114 114	31.86 33.52 32.17	238 217 1	93.65 103.27 11.94
127 127 127	38.22 40.11 38.62	238 222 88	97.68 107.08 30.23
140 140 140	45.52 47.83 45.79	237 229 158	104.75 113.73 63.71
153 153 153	53.45 56.24 53.89	156 85 63	40.01 29.64 12.55
165 165 165	60.77 63.93 61.41	105 68 56	21.16 17.20 9.67
178 178 178	69.49 73.01 70.16	96 36 30	15.94 9.74 3.54
191 191 191	78.81 82.70 79.59	97 35 63	17.46 10.19 10.68
204 204 204	88.79 93.30 89.24	116 101 33	26.26 27.51 6.33
216 216 216	98.27 103.33 98.96	33 74 43	6.37 11.87 6.87
229 229 229	109.25 114.79 110.68	24 75 97	8.76 12.98 23.42
242 242 242	120.73 126.72 122.69	35 34 66	5.30 4.55 11.55
0 0 128	6.92 2.81 35.61	215 216 220	98.22 103.14 102.50
0 0 255	22.78 8.95 119.08	195 195 199	82.36 86.14 85.54
0 128 0	8.48 27.41 4.37	152 153 155	53.03 55.99 54.92
0 128 128	15.08 29.87 39.04	110 110 112	29.87 31.25 31.01
0 170 255	36.60 53.97 126.16	68 68 68	12.68 13.26 12.95
0 255 0	28.54 93.06 14.02	28 28 28	2.71 2.87 3.01
0 255 170	39.64 97.55 71.50	37 35 107	8.39 5.85 26.35
0 255 255	51.32 102.05 133.21	77 70 138	20.12 16.64 41.26
85 85 85	18.91 19.82 19.22	137 132 183	48.18 45.81 70.22
128 0 0	23.88 11.07 0.81	170 42 29	40.68 21.76 3.90
128 0 128	30.37 13.49 35.16	185 91 62	51.95 36.43 12.50
128 128 0	32.23 38.25 4.60	206 153 127	73.47 65.58 40.59
128 128 128	38.95 40.85 39.50	34 120 53	11.16 26.06 11.08
128 128 255	54.88 47.02 123.54	92 148 92	27.94 43.08 25.07
128 255 128	59.12 106.75 49.23	156 186 153	59.16 72.05 56.42
170 0 255	61.90 26.77 119.33	190 147 126	65.04 59.33 39.84
170 170 170	64.33 67.57 65.01	205 144 25	65.86 59.17 8.00
170 255 0	68.07 111.14 14.72	172 40 73	43.70 22.75 14.20
170 255 255	90.77 120.04 133.81	117 37 105	26.11 14.16 25.63
255 0 0	80.74 37.01 1.60	158 176 34	50.21 64.40 11.11
255 0 170	91.64 41.19 58.82	5 125 139	16.03 29.54 44.80
255 0 255	103.26 45.77 119.73	12 91 167	15.98 19.69 59.01
255 128 128	96.02 66.97 40.33	236 238 242	117.29 123.54 123.09
255 170 0	94.93 82.32 8.35	213 215 222	98.08 103.08 104.40
255 170 255	117.35 91.03 126.89	189 193 201	79.89 84.43 87.18
255 255 0	109.69 130.21 15.60	143 149 156	49.90 53.32 55.77
255 255 170	120.71 134.44 73.02	101 106 111	27.09 28.95 30.59
170 85 85	46.85 32.66 19.86	65 71 74	12.74 14.00 15.01
85 170 85	28.94 52.14 24.11	40 49 50	5.82 6.91 7.61