

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2010-11-4 2:55:59
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY1
Profile: C:/Windows/system32/spool/drivers/color/UGRA_contrast.icm
Created: 2010-11-4 2:52
Measurement device: eye-one pro

Summary

The monitor has passed the certification according to the UGRA DACT specifications.

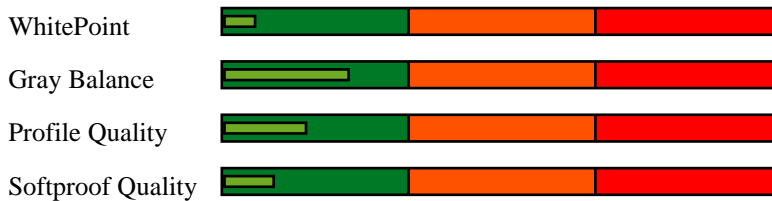
Calibration

White Point	yes
Gray balance	yes
Profile quality	yes

Softproofing

MultiColor, HighBody	yes
Offset/Gravure Paper Type 1/2	yes
Offset on uncoated paper	yes
Newspaper Printing	yes
sRGB	yes
AdobeRGB	yes
ECI-RGB	yes

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:	132.25 138.42 135.36
XYZ (normalized):	95.54 100.00 97.79
Luminance:	138.4 Cd/m2
Next Temperature:	5802 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:	0.2 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	11402	0.24	1.60	1.49	
5	7321	0.75	4.93	1.75	1.87
10	6316	2.26	13.44	1.26	1.84
15	6102	4.59	21.27	0.96	1.82
20	5978	7.68	28.25	0.68	1.82
25	5941	11.17	34.13	0.63	1.83
30	5903	15.71	40.17	0.66	1.82
35	5873	20.76	45.63	0.66	1.82
40	5869	26.56	50.90	0.63	1.81
45	5868	32.45	55.52	0.69	1.83
50	5848	39.46	60.35	0.60	1.82
55	5846	47.02	64.94	0.77	1.82
60	5837	55.20	69.38	0.68	1.81
65	5845	63.23	73.34	0.64	1.83
70	5822	72.46	77.49	0.40	1.82
75	5812	82.41	81.59	0.28	1.81
80	5811	92.95	85.58	0.47	1.80
85	5807	103.03	89.13	0.55	1.84
90	5809	114.60	92.92	0.42	1.81
95	5802	126.65	96.61	0.35	1.77
100	5802	138.42	100.00	0.00	
Average	5889			0.60	1.82
Range				1.34	
Max				1.26	

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: Bradford

RGB	Lab	deltaLab	deltaE
0 0 0	1.6 -0.7 -1.4	-0.0 0.7 1.4	1.5
0 0 128	13.9 45.3 -74.2	0.4 0.8 -0.6	1.1
0 0 255	29.1 70.5 -114.2	-0.2 1.4 -0.5	1.5
0 128 0	50.5 -89.0 51.0	0.4 -0.2 1.4	1.4
0 128 128	52.7 -60.7 -12.1	-0.0 1.0 -1.4	1.7
0 170 255	67.8 -46.0 -50.7	-0.3 1.3 -0.7	1.5
0 255 0	85.1 -136.2 79.4	-0.3 0.2 0.7	0.8
0 255 170	86.5 -112.8 15.7	-0.3 1.0 -1.2	1.6
0 255 255	88.0 -91.9 -19.7	-0.4 1.1 -0.7	1.4
85 85 85	44.1 -0.6 -0.1	0.0 0.8 0.2	0.8
128 0 0	34.2 66.0 51.0	0.5 1.0 2.4	2.6
128 0 128	37.3 73.0 -35.2	0.5 1.0 0.3	1.1
128 128 0	59.0 -10.9 64.2	0.3 0.4 1.1	1.2
128 128 128	60.7 -0.7 -0.0	-0.0 1.0 0.1	1.0
128 128 255	64.3 20.3 -56.1	-0.3 1.4 -0.1	1.4
128 255 128	89.8 -75.6 40.3	-0.2 0.7 -0.6	1.0
170 0 255	50.8 94.0 -77.1	0.3 1.5 0.6	1.7
170 170 170	75.0 -0.4 0.0	-0.1 0.8 0.1	0.8
170 255 0	91.5 -60.9 89.4	-0.1 0.3 0.8	0.8
170 255 255	94.1 -37.2 -9.7	-0.2 0.8 -0.2	0.9
255 0 0	60.4 101.6 87.5	-0.1 0.4 0.9	1.0
255 0 170	62.5 106.5 -16.2	0.1 0.8 0.2	0.8
255 0 255	64.9 111.5 -53.2	0.1 1.0 0.2	1.0
255 128 128	75.7 58.1 24.4	-0.2 0.7 0.2	0.7
255 170 0	81.8 31.2 90.2	0.0 -0.4 0.7	0.8
255 170 255	85.1 45.1 -22.0	-0.3 1.1 -0.3	1.2
255 255 0	97.8 -15.8 99.1	-0.2 -0.0 0.6	0.6
255 255 170	98.9 -8.0 35.1	-0.2 0.3 0.1	0.4
255 255 255	100.0 0.0 -0.0	-0.2 0.5 0.1	0.5
170 85 85	55.7 45.3 19.0	0.0 0.9 0.3	0.9
85 170 85	66.9 -59.6 31.6	-0.1 0.8 -0.4	0.9
85 85 170	46.9 15.9 -44.0	-0.1 1.1 -0.1	1.1
85 170 170	68.4 -44.0 -10.3	-0.1 1.0 -0.7	1.3
170 85 170	57.7 52.8 -25.7	-0.0 1.2 -0.1	1.2
170 170 85	73.7 -9.4 41.9	-0.1 0.8 0.4	0.9
Average			1.1
Maximum			2.6

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	100 %
sRGB	100 %
AdobeRGB	99 %
ECI-RGB v1.0	94 %

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	55.4 -34.7 -48.1	3.0
66.9 -24.7 -37.1	67.1 -25.7 -36.6	1.1
79.7 -12.5 -21.8	80.1 -13.5 -22.0	1.1
48.0 74.0 -3.0	47.5 73.6 -3.8	1.0
60.8 50.6 -6.7	60.8 49.7 -6.7	0.9
76.4 25.8 -6.9	76.6 24.8 -7.0	1.0
89.0 -5.0 93.0	89.1 -5.4 92.1	1.0
90.3 -4.7 62.6	90.6 -5.2 62.0	0.8
92.2 -3.5 31.1	92.4 -4.2 30.9	0.8
53.1 37.7 28.9	53.1 36.9 28.2	1.1
41.5 22.7 16.8	41.5 21.8 16.4	1.0
31.9 40.0 24.0	31.5 39.0 23.1	1.4
32.5 44.5 -1.8	32.3 44.1 -2.0	0.5
51.3 1.3 44.5	51.1 0.7 44.0	0.8
34.6 -36.4 13.9	34.3 -36.8 13.3	0.7
36.0 -26.2 -20.9	36.0 -27.4 -20.7	1.2
20.9 9.6 -23.6	20.8 8.7 -23.5	0.9
89.0 0.0 -1.9	89.2 -0.7 -2.2	0.8
82.8 0.0 -1.7	83.0 -1.1 -1.6	1.1
69.3 0.0 -1.4	69.4 -0.9 -1.6	0.9
54.1 0.0 -1.0	54.1 -1.0 -1.4	1.0
36.6 0.0 -0.5	36.5 -1.0 -1.1	1.2
16.0 0.0 0.0	15.7 -1.9 -0.4	1.9
24.0 22.0 -46.0	23.6 20.9 -46.3	1.2
40.9 17.9 -36.6	40.7 17.1 -36.7	0.8
63.7 10.3 -23.8	63.8 8.9 -23.5	1.4
47.0 68.0 48.0	46.9 67.2 46.6	1.6
58.5 47.1 37.9	58.5 46.5 37.1	1.0
74.2 22.9 21.4	74.3 22.4 20.8	0.8
50.0 -65.0 27.0	50.0 -65.7 26.8	0.7
62.1 -39.8 21.0	62.2 -40.6 21.1	0.8
77.0 -19.1 11.0	77.2 -20.2 11.0	1.1
71.2 18.9 17.3	71.3 17.7 16.8	1.2
71.2 22.1 73.1	71.3 21.9 72.2	0.9
47.7 71.2 16.2	47.6 70.4 15.7	1.0
38.0 55.4 -20.9	37.9 54.3 -21.0	1.0
73.7 -22.8 67.6	73.7 -23.6 66.8	1.1
52.3 -52.3 -20.1	52.3 -53.1 -19.6	1.0
43.3 -17.0 -48.6	43.6 -18.1 -48.1	1.2
95.0 0.0 -2.0	95.3 -0.9 -2.1	1.0
88.5 -0.4 -3.1	88.9 -1.8 -3.0	1.5
82.0 -0.9 -4.1	82.3 -2.0 -4.2	1.2
67.7 -2.0 -4.4	67.8 -2.6 -4.9	0.8
52.2 -2.5 -3.5	52.5 -3.7 -3.4	1.2
37.5 -3.9 -3.1	37.3 -4.1 -3.5	0.5
26.3 -6.8 -3.4	26.2 -7.1 -3.9	0.6
Average		1.1
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	132.25 138.42 135.36	85 85 170	26.09 22.35 60.09
0 0 0	0.21 0.24 0.36	85 170 170	35.30 53.76 63.96
12 12 12	0.70 0.75 0.88	170 85 170	54.18 35.37 60.52
25 25 25	2.12 2.26 2.35	170 170 85	55.72 63.71 24.06
38 38 38	4.34 4.59 4.65	0 129 207	23.35 32.96 85.13
51 51 51	7.29 7.68 7.67	85 159 221	40.52 51.48 98.56
63 63 63	10.60 11.17 11.07	154 194 233	69.19 79.10 111.85
76 76 76	14.89 15.71 15.43	169 36 103	44.09 22.39 24.82
89 89 89	19.69 20.76 20.29	184 95 143	58.19 39.85 45.72
102 102 102	25.21 26.56 25.98	205 159 191	80.79 70.37 78.50
114 114 114	30.79 32.45 31.73	236 218 4	92.22 102.12 11.49
127 127 127	37.50 39.46 38.54	237 223 89	97.01 106.80 30.18
140 140 140	44.64 47.02 45.81	236 229 159	103.79 112.64 64.04
153 153 153	52.46 55.20 53.80	155 85 64	39.04 28.93 12.75
165 165 165	60.11 63.23 61.77	105 68 56	20.49 16.75 9.63
178 178 178	69.03 72.46 70.75	95 36 30	15.02 9.33 3.46
191 191 191	78.59 82.41 80.46	97 34 63	16.85 9.85 10.51
204 204 204	88.56 92.95 90.57	115 101 33	25.19 26.60 6.15
216 216 216	98.14 103.03 100.27	34 74 43	6.11 11.31 6.62
229 229 229	109.24 114.60 111.73	26 76 97	8.46 12.65 22.77
242 242 242	120.80 126.65 123.44	35 34 66	5.16 4.48 11.18
0 0 128	6.52 2.65 33.91	215 217 221	98.41 103.38 104.73
0 0 255	22.87 9.06 120.16	194 196 199	81.59 85.99 86.51
0 128 0	7.78 26.11 4.12	152 153 156	52.41 55.22 55.71
0 128 128	14.33 29.08 37.59	109 110 112	28.91 30.52 30.85
0 170 255	35.74 53.22 126.08	67 68 69	12.10 12.82 12.99
0 255 0	27.15 91.87 13.67	28 29 28	2.60 2.83 2.82
0 255 170	37.88 96.12 70.07	37 35 107	8.00 5.66 25.48
0 255 255	49.77 100.84 133.11	77 70 138	19.61 16.35 41.21
85 85 85	18.27 19.25 18.90	136 132 183	47.32 45.34 70.93
128 0 0	23.27 10.89 0.73	168 41 30	40.00 21.50 4.04
128 0 128	29.72 13.35 34.91	184 91 63	51.60 36.18 12.94
128 128 0	31.30 37.10 4.47	205 153 128	72.96 64.92 41.56
128 128 128	38.06 40.08 39.22	36 121 54	10.90 25.62 11.00
128 128 255	54.45 46.68 125.28	93 149 92	27.31 42.50 24.76
128 255 128	57.37 105.29 48.08	156 187 153	58.48 71.77 56.58
170 0 255	61.37 26.88 121.16	188 147 127	64.02 58.67 40.44
170 170 170	63.61 66.79 65.30	204 144 26	65.06 58.29 7.95
170 255 0	66.62 109.67 14.16	170 39 73	42.63 22.35 14.14
170 255 255	89.40 118.83 134.23	116 37 105	25.11 13.83 25.20
255 0 0	82.55 38.30 1.61	158 177 35	49.26 63.70 11.15
255 0 170	92.81 42.22 59.41	14 125 140	15.59 28.66 43.85
255 0 255	104.58 46.81 121.91	17 92 167	15.68 19.22 58.18
255 128 128	97.08 67.47 40.49	236 238 242	116.39 122.46 123.63
255 170 0	95.58 81.88 7.91	212 216 222	96.80 102.41 105.20
255 170 255	118.20 91.40 128.20	189 194 202	79.56 84.33 88.74
255 255 0	109.76 129.61 14.81	143 149 157	48.90 52.17 56.37
255 255 170	120.78 134.12 73.00	101 107 111	26.32 28.55 30.37
170 85 85	46.38 32.28 19.42	65 71 74	12.23 13.47 14.72
85 170 85	27.51 50.68 23.12	40 49 51	5.72 6.71 7.65