

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2011-2-16 23:17:57
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY1
Profile: C:/Windows/system32/spool/drivers/.../16.02.11-5800K-18-120cd-trc.icc
Created: 2011-2-16 23:14
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:	114.82 120.18 117.90
XYZ (normalized):	95.54 100.00 98.10
Luminance:	120.2 Cd/m2
Next Temperature:	5819 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:	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	0	0.08	0.57	1.96	
5	7178	0.49	3.66	2.46	1.88
10	5990	1.90	13.12	0.45	1.83
15	5814	4.13	21.70	0.17	1.79
20	5863	6.48	27.82	0.56	1.82
25	5685	9.80	34.31	0.95	1.83
30	5760	13.67	40.21	0.40	1.81
35	5810	18.14	45.76	0.15	1.81
40	5728	23.26	51.10	0.55	1.80
45	5756	28.60	55.88	1.16	1.81
50	5737	34.56	60.57	0.91	1.81
55	5755	40.89	64.98	1.14	1.82
60	5801	47.91	69.37	0.40	1.81
65	5816	55.25	73.53	0.46	1.81
70	5817	63.02	77.54	0.72	1.82
75	5828	71.57	81.59	0.45	1.81
80	5830	80.51	85.50	0.44	1.81
85	5788	89.05	88.97	0.67	1.87
90	5817	98.84	92.68	0.05	1.86
95	5815	109.64	96.50	0.20	1.81
100	5819	120.18	100.00	0.00	
Average	5802			0.52	1.82
Range				1.72	
Max				1.16	

Tone values = 92.4%

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	0.6 0.2 -2.0	-0.6 -0.2 2.0	2.1
0 0 128	12.4 49.2 -76.9	1.4 -2.8 0.0	3.1
0 0 255	27.9 71.9 -117.2	1.2 -1.7 1.0	2.3
0 128 0	51.5 -51.8 58.9	1.0 1.8 3.2	3.8
0 128 128	53.1 -32.0 -12.4	1.2 0.8 1.8	2.3
0 170 255	68.1 -18.2 -52.1	1.5 -0.1 3.0	3.4
0 255 0	87.4 -75.6 96.6	0.2 -0.0 -2.7	2.7
0 255 170	88.6 -60.6 20.6	0.3 -0.3 -0.2	0.5
0 255 255	90.0 -47.1 -16.6	0.4 -0.0 0.6	0.7
85 85 85	44.1 -0.5 0.6	-0.1 0.5 -0.6	0.8
128 0 0	31.3 48.9 45.2	-0.4 0.8 3.9	4.0
128 0 128	34.7 60.1 -38.8	-0.1 -0.9 -2.6	2.8
128 128 0	59.3 -12.8 69.5	-0.2 2.2 1.9	2.9
128 128 128	60.9 -0.6 0.5	-0.2 0.6 -0.5	0.8
128 128 255	64.4 20.6 -57.8	-0.2 0.3 0.2	0.4
128 255 128	91.6 -45.5 46.6	-0.2 -0.9 -1.3	1.6
170 0 255	48.3 80.4 -82.3	-0.1 -0.7 -1.5	1.7
170 170 170	75.0 0.0 0.3	-0.0 -0.0 -0.3	0.3
170 255 0	92.9 -41.9 104.1	-0.3 0.2 -3.0	3.1
170 255 255	95.5 -20.3 -7.5	-0.3 -0.7 -0.4	0.9
255 0 0	55.0 75.3 80.5	0.0 -0.0 -0.3	0.3
255 0 170	57.3 83.4 -23.9	0.5 -0.8 -2.1	2.3
255 0 255	60.2 90.3 -62.2	0.5 -0.7 -0.5	1.0
255 128 128	73.1 37.9 21.0	-0.1 1.1 -0.7	1.3
255 170 0	80.4 14.3 95.5	-0.0 1.5 -1.0	1.8
255 170 255	83.4 31.8 -26.0	0.1 1.2 0.3	1.2
255 255 0	97.8 -16.5 112.2	-0.2 0.4 -4.2	4.2
255 255 170	98.9 -8.0 37.7	-0.1 0.0 -1.2	1.2
255 255 255	100.0 -0.0 0.0	-0.0 0.0 -0.0	0.0
170 85 85	54.3 30.7 17.3	-0.6 0.0 -1.3	1.4
85 170 85	68.1 -37.8 35.8	0.2 1.2 -0.2	1.3
85 85 170	46.7 16.8 -45.1	0.1 -0.3 -0.2	0.4
85 170 170	69.4 -24.7 -9.1	0.3 0.7 0.4	0.9
170 85 170	56.1 40.6 -29.2	-0.3 -0.6 -0.9	1.1
170 170 85	73.8 -9.3 45.0	-0.1 0.5 -0.7	0.8
Average			1.7
Maximum			4.2

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	92 %
sRGB	100 %
AdobeRGB	76 %
ECI-RGB v1.0	72 %

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	57.4 -15.6 -45.7	22.0
66.9 -24.7 -37.1	65.5 -24.5 -39.0	2.3
79.7 -12.5 -21.8	79.7 -12.8 -22.4	0.7
48.0 74.0 -3.0	49.2 71.6 1.6	5.3
60.8 50.6 -6.7	61.1 51.0 -5.5	1.3
76.4 25.8 -6.9	76.4 26.0 -6.9	0.3
89.0 -5.0 93.0	89.0 -6.1 94.6	2.0
90.3 -4.7 62.6	90.2 -5.2 63.5	1.1
92.2 -3.5 31.1	92.3 -3.8 31.8	0.7
53.1 37.7 28.9	53.4 37.7 30.0	1.1
41.5 22.7 16.8	42.1 22.8 17.3	0.8
31.9 40.0 24.0	32.9 39.8 24.8	1.3
32.5 44.4 -1.8	33.0 44.6 0.1	2.0
51.3 1.3 44.5	51.5 1.5 43.4	1.1
34.6 -36.4 13.9	34.2 -32.6 13.3	3.9
36.0 -26.2 -20.9	36.0 -17.6 -21.4	8.6
20.9 9.6 -23.6	21.1 9.4 -22.8	0.9
89.0 0.0 -1.8	88.9 -0.4 -1.5	0.6
82.8 0.0 -1.7	82.8 -0.2 -1.4	0.4
69.3 0.0 -1.4	69.4 -0.2 -1.0	0.4
54.1 0.0 -1.0	54.3 0.2 -0.1	0.8
36.6 -0.0 -0.5	36.6 0.3 -0.6	0.3
16.0 0.0 0.0	16.5 -0.4 1.1	1.3
24.0 22.0 -46.0	23.6 23.2 -45.9	1.2
40.9 17.9 -36.6	40.8 18.4 -36.2	0.7
63.7 10.3 -23.8	63.7 10.5 -23.5	0.3
47.0 68.0 48.0	47.6 67.2 49.1	1.5
58.5 47.1 37.9	58.9 47.3 39.2	1.4
74.2 22.9 21.4	74.2 22.9 22.1	0.7
50.0 -65.0 27.0	51.2 -46.1 28.8	19.0
62.1 -39.8 21.0	61.7 -41.1 20.6	1.4
77.0 -19.1 11.0	76.8 -19.4 10.8	0.4
71.2 18.8 17.3	71.5 18.6 18.3	1.1
71.2 22.2 73.1	71.5 21.3 73.5	1.0
47.7 71.2 16.2	48.9 69.7 19.7	3.9
38.0 55.4 -20.9	38.5 56.4 -19.3	2.0
73.7 -22.8 67.6	73.9 -23.9 68.2	1.3
52.3 -52.3 -20.2	54.1 -30.2 -16.7	22.4
43.3 -17.0 -48.6	44.1 -6.0 -47.1	11.2
95.0 0.0 -2.0	95.1 -0.6 -1.4	0.9
88.5 -0.4 -3.1	88.5 -0.6 -2.7	0.5
82.0 -0.9 -4.1	81.8 -0.7 -3.7	0.5
67.7 -2.0 -4.4	67.8 -2.3 -4.4	0.3
52.2 -2.5 -3.5	52.2 -2.5 -3.0	0.5
37.5 -3.9 -3.1	37.5 -3.9 -2.6	0.6
26.3 -6.8 -3.4	25.9 -6.1 -3.7	0.8
Average		2.9
Gamut-Volume		92 %

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	114.82 120.18 117.90	85 85 170	22.76 19.35 52.79
0 0 0	0.08 0.08 0.22	85 170 170	37.58 48.15 56.22
12 12 12	0.50 0.49 0.64	170 85 170	40.51 29.06 53.32
25 25 25	1.81 1.90 1.91	170 170 85	48.39 55.31 19.65
38 38 38	3.93 4.13 4.03	0 136 205	26.57 31.11 75.22
51 51 51	6.22 6.48 6.47	0 164 219	33.63 42.36 85.10
63 63 63	9.34 9.80 9.31	131 196 231	59.83 68.03 96.94
76 76 76	13.13 13.67 13.38	212 0 102	39.99 21.11 20.13
89 89 89	17.31 18.14 17.73	220 83 142	51.65 35.14 39.12
102 102 102	22.28 23.26 22.53	227 153 190	70.14 60.59 67.56
114 114 114	27.16 28.60 27.39	245 216 31	79.33 88.25 9.80
127 127 127	32.95 34.56 33.23	243 221 94	83.15 91.52 25.45
140 140 140	38.88 40.89 39.26	239 228 161	89.86 97.32 54.99
153 153 153	45.69 47.91 46.68	183 76 65	34.51 25.45 10.72
165 165 165	52.64 55.25 53.88	121 64 57	18.47 14.96 8.41
178 178 178	59.96 63.02 61.31	117 27 32	14.17 8.85 3.12
191 191 191	68.18 71.57 69.96	119 24 63	15.29 8.98 8.86
204 204 204	76.71 80.51 78.73	122 100 38	22.42 23.47 5.79
216 216 216	84.90 89.05 86.50	0 78 45	5.62 9.73 5.79
229 229 229	94.46 98.84 96.98	0 79 97	8.44 10.97 20.13
242 242 242	104.66 109.64 107.31	37 35 66	4.63 3.99 9.59
0 0 128	5.51 2.09 29.33	214 216 220	84.69 88.86 89.32
0 0 255	19.49 7.69 105.59	194 195 199	70.80 74.20 74.51
0 128 0	12.05 23.54 2.86	152 153 155	45.74 47.93 47.98
0 128 128	17.64 25.60 33.50	110 110 112	25.55 26.70 26.29
0 170 255	39.77 46.71 112.54	68 68 69	10.78 11.24 11.25
0 255 0	44.60 84.58 8.26	30 30 30	2.51 2.65 2.46
0 255 170	54.15 88.14 60.14	41 35 106	7.24 4.99 21.92
0 255 255	64.43 92.35 116.69	82 70 136	17.45 14.37 35.52
85 85 85	15.89 16.73 16.15	140 131 182	41.51 39.30 61.38
128 0 0	14.51 7.97 0.70	209 0 32	35.73 19.37 3.34
128 0 128	20.42 10.19 29.64	219 78 64	45.61 31.82 10.77
128 128 0	26.97 32.58 3.34	228 147 128	63.22 56.05 35.06
128 128 128	33.28 35.02 33.97	0 126 57	12.98 23.32 9.77
128 128 255	47.77 40.92 111.47	48 153 94	23.01 36.08 21.50
128 255 128	65.85 95.59 39.73	138 189 154	50.40 61.48 49.00
170 0 255	44.53 21.33 105.96	208 143 127	56.25 51.21 34.36
170 170 170	55.40 57.99 56.56	229 138 35	56.44 50.82 6.95
170 255 0	69.25 98.67 8.93	212 0 73	38.56 20.66 11.59
170 255 255	90.14 107.02 117.38	144 21 104	22.86 12.46 21.42
255 0 0	49.70 26.89 1.19	147 179 44	42.87 55.55 9.81
255 0 170	58.81 30.25 50.04	0 131 139	18.95 26.75 38.29
255 0 255	69.23 34.51 106.58	0 96 165	15.99 17.14 50.28
255 128 128	68.20 54.04 34.50	235 237 241	100.59 105.66 105.85
255 170 0	70.69 67.97 5.42	211 215 221	83.86 88.04 90.20
255 170 255	90.69 75.99 113.39	187 193 201	68.71 72.17 75.49
255 255 0	94.74 112.39 9.11	140 150 156	42.64 45.39 48.68
255 255 170	104.47 116.07 60.98	98 107 111	22.78 24.43 25.82
170 85 85	33.70 26.52 16.60	62 72 74	10.75 11.82 12.57
85 170 85	30.74 45.56 19.22	36 50 51	4.92 5.69 6.47