UGRA
Display Analysis & Certification Tool
Report

Basics

Date:	2011-3-24 21:24:03
Report-Version:	v1.3.1
Monitor-Name:	\\.\DISPLAY1
Profile:	C:/Windows/system32/spool/drivers/.../24.03.11-5800K-18-120cd-trc.icc
Created:	2011-3-24 21:20
Measurement device:	eye-one pro

Summary

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

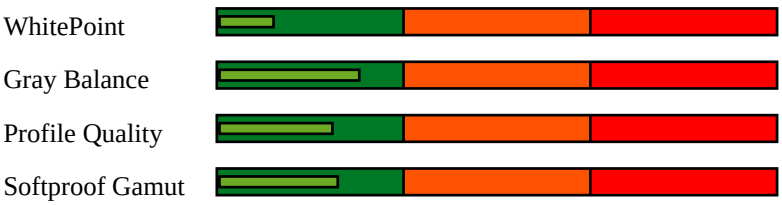
Calibration

White Point	yes
Gray balance	yes
Profile quality	yes

Softproofing

MultiColor, HighBody	no
Offset/Gravure Paper Type 1/2	yes
Offset on uncoated paper	yes
Newspaper Printing	yes
sRGB	yes
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:	115.08 120.95 117.26
XYZ (normalized):	95.15 100.00 96.94
Luminance:	121.0 Cd/m2
Next Temperature:	5798 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.6 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:	2.1 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	84192	0.14	1.05	2.08	
5	7966	0.49	3.66	2.39	1.94
10	5687	1.97	13.41	0.36	1.83
15	5856	3.99	21.21	0.63	1.82
20	5743	6.80	28.43	0.44	1.80
25	5846	9.75	34.12	0.49	1.82
30	5803	13.71	40.14	0.23	1.82
35	5782	18.29	45.80	0.09	1.81
40	5796	23.01	50.72	0.69	1.81
45	5775	28.18	55.38	0.82	1.82
50	5810	33.99	59.98	0.27	1.84
55	5822	40.67	64.66	0.97	1.82
60	5840	48.00	69.25	0.89	1.80
65	5756	55.13	73.27	0.49	1.83
70	5804	63.11	77.39	0.10	1.83
75	5782	71.46	81.34	0.50	1.83
80	5788	80.88	85.44	0.10	1.81
85	5821	88.72	88.61	0.64	1.89
90	5771	99.19	92.58	0.35	1.88
95	5807	109.80	96.32	0.28	1.86
100	5798	120.95	100.00	0.00	
Average	5794			0.44	1.83
Range				1.22	
Max				0.97	

Tone values = 95.6%

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	1.0 -0.5 -2.1	-1.0 0.5 2.1	2.4
0 0 128	15.9 39.6 -71.0	0.2 0.5 -1.2	1.3
0 0 255	32.5 60.8 -109.3	0.1 -0.1 0.2	0.2
0 128 0	51.6 -52.2 58.6	0.5 -0.5 2.0	2.1
0 128 128	54.0 -34.1 -9.0	0.4 0.5 -0.9	1.1
0 170 255	70.1 -21.4 -47.1	0.1 0.1 0.1	0.2
0 255 0	86.7 -79.5 91.3	0.3 -0.2 0.3	0.5
0 255 170	88.4 -64.6 20.8	0.3 0.0 -0.3	0.4
0 255 255	90.5 -51.0 -14.6	-0.0 0.3 -0.3	0.4
85 85 85	43.9 0.2 -0.5	0.1 -0.2 0.5	0.5
128 0 0	30.5 52.0 39.4	0.3 0.9 3.5	3.7
128 0 128	34.9 59.2 -40.1	0.5 0.3 -0.0	0.6
128 128 0	58.3 -9.9 65.7	0.5 -0.2 1.5	1.6
128 128 128	60.5 -0.3 0.3	0.2 0.3 -0.3	0.5
128 128 255	65.1 19.3 -55.3	-0.1 0.0 -0.0	0.1
128 255 128	91.1 -48.6 44.9	-0.0 0.1 -0.6	0.6
170 0 255	49.6 77.6 -80.8	0.2 0.0 0.6	0.6
170 170 170	74.7 0.1 -0.3	0.2 -0.1 0.3	0.4
170 255 0	91.8 -42.4 96.5	0.3 -0.4 0.2	0.5
170 255 255	95.0 -22.2 -7.7	0.2 -0.4 0.3	0.5
255 0 0	54.7 79.9 65.5	-0.0 0.1 0.1	0.2
255 0 170	58.1 85.5 -26.0	0.1 -0.3 0.1	0.4
255 0 255	61.6 90.2 -60.9	0.1 -0.2 0.3	0.3
255 128 128	72.8 41.7 18.9	0.1 -0.1 -0.2	0.2
255 170 0	79.5 18.9 86.6	0.4 -0.6 0.0	0.7
255 170 255	83.8 33.8 -25.3	0.1 -0.0 0.2	0.2
255 255 0	96.8 -14.7 102.0	0.3 -0.6 -0.4	0.8
255 255 170	98.3 -7.0 34.8	0.2 -0.6 0.4	0.7
255 255 255	100.0 0.0 0.0	0.0 0.0 -0.0	0.0
170 85 85	53.5 32.7 14.0	0.1 0.0 0.7	0.7
85 170 85	67.7 -37.8 34.3	0.3 -0.4 0.6	0.7
85 85 170	47.4 15.5 -43.4	0.1 -0.2 -0.1	0.2
85 170 170	69.5 -25.7 -8.2	0.3 -0.0 0.1	0.3
170 85 170	56.1 40.6 -29.3	0.1 0.1 0.1	0.2
170 170 85	73.1 -8.2 41.7	0.3 -0.2 0.8	0.8
Average			0.7
Maximum			3.7

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	92 %
sRGB	99 %
AdobeRGB	77 %
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	58.1 -15.9 -44.4	22.0
66.9 -24.7 -37.1	66.4 -24.5 -37.5	0.7
79.7 -12.5 -21.8	79.3 -12.0 -22.3	0.9
48.0 74.0 -3.0	48.2 73.2 -2.6	0.9
60.8 50.6 -6.7	61.1 49.8 -6.9	0.9
76.4 25.8 -6.9	76.2 25.8 -7.3	0.4
89.0 -5.0 93.0	88.8 -4.6 93.3	0.5
90.3 -4.7 62.6	90.0 -3.9 61.8	1.2
92.2 -3.5 31.1	92.0 -2.6 30.6	1.0
53.1 37.7 28.9	52.8 37.8 27.3	1.7
41.5 22.7 16.8	41.6 22.8 17.3	0.6
31.9 40.0 24.0	32.1 40.1 23.4	0.6
32.5 44.4 -1.8	32.6 44.9 -2.6	0.9
51.3 1.3 44.5	51.0 1.3 43.7	0.8
34.6 -36.4 13.9	34.8 -32.6 14.1	3.9
36.0 -26.2 -20.9	37.0 -19.1 -18.9	7.4
20.9 9.6 -23.6	21.4 9.9 -23.9	0.6
89.0 0.0 -1.8	88.5 0.0 -2.4	0.7
82.8 0.0 -1.7	82.7 0.0 -1.6	0.1
69.3 0.0 -1.4	69.2 0.2 -1.5	0.3
54.1 0.0 -1.0	53.8 1.1 -1.9	1.5
36.6 -0.0 -0.5	36.6 -0.0 -1.4	0.9
16.0 0.0 0.0	16.2 0.6 -0.5	0.8
24.0 22.0 -46.0	24.3 21.6 -45.3	0.8
40.9 17.9 -36.6	40.8 17.2 -36.0	0.9
63.7 10.3 -23.8	63.7 10.1 -23.7	0.2
47.0 68.0 48.0	47.0 68.0 48.1	0.1
58.5 47.1 37.9	58.5 46.9 36.6	1.3
74.2 22.9 21.4	73.8 23.9 21.0	1.1
50.0 -65.0 27.0	51.5 -46.9 29.4	18.3
62.1 -39.8 21.0	62.0 -39.3 20.6	0.7
77.0 -19.1 11.0	77.0 -18.6 10.4	0.8
71.2 18.8 17.3	70.7 20.3 16.3	1.9
71.2 22.2 73.1	70.7 23.1 71.9	1.6
47.7 71.2 16.2	47.7 71.4 14.8	1.5
38.0 55.4 -20.9	37.7 55.4 -20.6	0.5
73.7 -22.8 67.6	73.4 -22.1 67.0	0.9
52.3 -52.3 -20.2	55.0 -30.9 -15.9	22.0
43.3 -17.0 -48.6	45.1 -6.9 -45.3	10.7
95.0 0.0 -2.0	94.8 -0.0 -2.5	0.5
88.5 -0.4 -3.1	88.4 -0.6 -3.1	0.3
82.0 -0.9 -4.1	81.7 -1.0 -4.3	0.3
67.7 -2.0 -4.4	67.3 -0.9 -5.2	1.4
52.2 -2.5 -3.5	52.0 -1.6 -4.1	1.1
37.5 -3.9 -3.1	37.5 -4.9 -3.1	1.1
26.3 -6.8 -3.4	26.4 -6.8 -4.0	0.6
Average		2.6
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	115.08 120.95 117.26	85 85 170	23.05 19.97 52.29
0 0 0	0.12 0.14 0.29	85 170 170	37.45 48.67 55.18
12 12 12	0.48 0.49 0.65	170 85 170	40.49 29.04 53.33
25 25 25	1.89 1.97 1.90	170 170 85	47.90 54.47 20.31
38 38 38	3.82 3.99 3.96	0 132 208	27.17 32.12 75.04
51 51 51	6.51 6.80 6.60	15 161 221	34.66 43.92 85.02
63 63 63	9.31 9.75 9.60	133 194 232	59.44 67.53 95.37
76 76 76	13.07 13.71 13.35	208 0 100	39.16 20.12 21.44
89 89 89	17.42 18.29 17.71	216 86 141	51.19 35.17 40.16
102 102 102	22.02 23.01 22.55	224 154 189	69.92 60.64 67.56
114 114 114	27.00 28.18 27.57	245 219 13	80.00 88.47 9.41
127 127 127	32.27 33.99 32.88	243 223 90	83.81 91.81 25.70
140 140 140	38.92 40.67 40.04	240 229 159	90.26 97.34 55.06
153 153 153	45.85 48.00 47.26	180 79 62	33.90 24.93 11.20
165 165 165	52.65 55.13 53.38	119 65 55	18.06 14.65 8.06
178 178 178	60.07 63.11 61.28	115 30 29	13.69 8.45 3.09
191 191 191	68.22 71.46 69.51	117 27 62	15.08 8.78 9.52
204 204 204	76.97 80.88 78.29	121 102 35	21.97 23.14 5.35
216 216 216	84.61 88.72 86.78	0 77 45	5.89 10.18 5.76
229 229 229	94.59 99.19 96.07	0 78 98	8.74 11.67 19.67
242 242 242	104.58 109.80 106.83	37 34 67	4.78 4.09 10.13
0 0 128	5.90 2.75 29.50	214 216 220	84.31 88.53 89.25
0 0 255	20.86 9.63 105.79	194 195 199	71.03 74.59 74.34
0 128 0	12.12 23.91 2.69	152 153 155	45.68 47.90 47.86
0 128 128	17.99 26.83 31.97	110 110 112	25.42 26.38 26.80
0 170 255	41.34 50.23 109.87	68 68 69	10.75 11.29 11.47
0 255 0	42.46 83.87 8.68	30 30 30	2.50 2.59 2.58
0 255 170	52.36 88.49 58.79	40 33 107	7.35 5.21 22.27
0 255 255	63.70 94.38 114.21	81 68 137	17.13 14.34 35.27
85 85 85	15.86 16.63 16.33	139 130 183	41.45 39.47 61.55
128 0 0	14.49 7.58 1.01	205 19 23	35.31 18.89 3.30
128 0 128	20.35 10.21 30.73	216 83 60	44.99 31.49 11.32
128 128 0	26.71 31.52 3.41	226 149 126	63.15 55.72 35.14
128 128 128	32.87 34.64 33.33	0 126 57	13.14 23.90 9.53
128 128 255	48.24 41.96 109.31	55 153 95	23.84 36.83 21.48
128 255 128	63.66 95.10 39.56	141 189 154	51.19 62.35 49.29
170 0 255	45.31 22.32 107.40	206 144 126	55.77 50.19 34.64
170 170 170	55.07 57.81 56.38	227 141 24	56.10 49.89 6.72
170 255 0	67.08 96.59 9.90	208 11 70	37.58 19.57 12.66
170 255 255	88.15 106.50 115.71	140 23 103	21.86 11.89 21.36
255 0 0	51.30 26.67 2.70	149 180 40	42.91 55.08 9.44
255 0 170	61.29 31.15 53.58	0 129 141	19.61 27.95 38.71
255 0 255	72.12 36.22 108.72	0 93 167	16.49 17.99 50.20
255 128 128	69.63 53.77 35.53	235 237 242	100.47 105.53 106.30
255 170 0	71.51 66.67 6.73	211 215 221	83.67 88.19 89.96
255 170 255	92.78 77.00 112.85	187 193 201	68.53 72.40 75.67
255 255 0	93.74 110.40 11.06	141 149 156	42.40 44.78 48.22
255 255 170	103.94 115.19 62.35	99 107 111	22.85 24.35 26.17
170 85 85	33.41 25.77 17.39	62 72 75	10.64 11.91 12.74
85 170 85	30.43 45.38 19.28	36 50 52	5.05 5.92 6.70