UGRA
Display Analysis & Certification Tool
Report

Basics

Date:	2011-9-15 20:20:52
Report-Version:	v1.3.1
Monitor-Name:	\\.\DISPLAY1
Profile:	C:/Windows/system32/spool/DRIVERS/COLOR/FS2332_UGRA.icc
Created:	2011-9-15 20:14
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:	134.01 140.08 137.68
XYZ (normalized):	95.67 100.00 98.29
Luminance:	140.1 Cd/m2
Next Temperature:	5816 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.7 deltaE

Blackpoint

The blackpoint is not defined in ISO 12646. Therefore UDACT does only measure but not assess it.

Luminance:	0.3 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	5465	0.29	1.90	0.52	
5	6052	0.81	5.24	0.37	1.85
10	5836	2.43	14.02	0.08	1.81
15	5695	4.80	21.68	0.45	1.81
20	5749	8.11	28.88	0.75	1.80
25	5880	11.58	34.53	0.29	1.81
30	5811	16.30	40.63	0.63	1.80
35	5769	21.81	46.41	1.03	1.79
40	5854	27.30	51.25	0.40	1.80
45	5792	33.24	55.82	0.16	1.81
50	5795	40.39	60.64	0.82	1.81
55	5804	47.91	65.12	0.55	1.81
60	5824	55.98	69.44	0.71	1.81
65	5763	64.87	73.75	1.34	1.81
70	5772	74.05	77.79	1.20	1.81
75	5799	84.29	81.93	0.64	1.78
80	5766	94.63	85.78	0.92	1.79
85	5782	105.18	89.43	1.37	1.81
90	5836	116.61	93.12	0.85	1.78
95	5845	128.45	96.70	0.66	1.73
100	5816	140.08	100.00	0.00	
Average	5799			0.68	1.80
Range				1.42	
Max				1.37	

Tone values = 96.6%

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	1.9 -0.2 0.4	-1.9 0.2 -0.4	2.0
0 0 128	11.6 56.6 -80.1	-1.0 2.9 -2.1	3.7
0 0 255	24.3 89.6 -123.7	-0.0 0.2 -0.5	0.5
0 128 0	53.7 -54.0 61.0	-0.3 -0.4 0.5	0.7
0 128 128	55.0 -33.6 -9.8	-0.2 0.0 -0.1	0.3
0 170 255	69.7 -18.9 -48.8	-0.3 0.3 -0.3	0.5
0 255 0	89.3 -82.8 93.1	-0.2 0.5 -0.1	0.5
0 255 170	90.2 -66.6 21.8	-0.2 0.5 -0.2	0.5
0 255 255	91.2 -51.3 -14.7	-0.2 0.5 -0.3	0.6
85 85 85	44.6 -0.5 0.8	-0.7 0.5 -0.8	1.1
128 0 0	30.1 54.1 46.2	-0.2 0.6 2.0	2.1
128 0 128	33.0 67.0 -43.5	-0.2 0.5 -0.8	1.0
128 128 0	60.0 -13.0 70.4	-0.4 0.7 0.0	0.8
128 128 128	61.0 -0.5 0.4	-0.3 0.5 -0.4	0.7
128 128 255	63.5 24.5 -58.6	-0.3 0.2 -0.3	0.4
128 255 128	92.6 -51.3 45.8	-0.2 0.4 0.2	0.5
170 0 255	44.9 93.4 -88.5	0.1 -0.2 -0.2	0.3
170 170 170	75.3 -0.5 0.9	-0.3 0.5 -0.9	1.1
170 255 0	93.9 -46.7 100.3	-0.2 0.6 -0.5	0.8
170 255 255	95.7 -23.0 -7.1	-0.2 0.2 -0.4	0.5
255 0 0	53.8 82.9 80.0	-0.3 -0.3 0.4	0.6
255 0 170	55.7 92.9 -28.3	-0.1 -0.2 -0.9	0.9
255 0 255	57.7 102.6 -66.8	0.1 -0.4 -0.2	0.5
255 128 128	72.8 41.9 20.1	-0.5 0.5 -0.8	1.1
255 170 0	81.0 15.5 94.2	-0.7 0.7 -1.1	1.5
255 170 255	83.1 36.2 -26.3	-0.5 0.6 -0.7	1.0
255 255 0	98.6 -18.9 107.1	-0.2 0.3 -0.6	0.7
255 255 170	99.3 -9.5 36.7	-0.1 0.2 0.0	0.2
255 255 255	100.0 0.0 0.0	0.0 -0.0 -0.0	0.0
170 85 85	53.5 32.6 15.7	-0.4 0.8 -0.5	1.0
85 170 85	69.5 -40.0 36.8	-0.5 0.0 -0.5	0.7
85 85 170	46.5 18.7 -45.2	-0.5 0.7 -1.2	1.4
85 170 170	70.5 -26.4 -7.1	-0.5 0.5 -1.1	1.3
170 85 170	55.1 44.1 -30.5	-0.4 0.7 -1.1	1.4
170 170 85	74.6 -10.8 45.1	-0.6 0.6 -0.7	1.1
Average			0.9
Maximum			3.7

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	92 %
sRGB	100 %
AdobeRGB	79 %
ECI-RGB v1.0	74 %

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	58.8 -15.8 -43.4	22.5
66.9 -24.7 -37.1	67.3 -25.2 -36.5	0.9
79.7 -12.5 -21.8	80.3 -13.2 -20.9	1.3
48.0 74.0 -3.0	48.0 73.7 -2.9	0.3
60.8 50.6 -6.7	60.9 50.0 -6.7	0.6
76.4 25.8 -6.9	76.5 25.5 -7.1	0.4
89.0 -5.0 93.0	89.3 -5.2 93.9	1.0
90.3 -4.7 62.6	90.6 -4.9 63.4	0.9
92.2 -3.5 31.1	92.4 -3.8 31.9	0.9
53.1 37.7 28.9	53.3 37.2 28.8	0.6
41.5 22.7 16.8	41.9 22.4 17.2	0.7
31.9 40.0 24.0	32.6 39.4 23.8	0.9
32.5 44.4 -1.8	33.2 43.9 -1.7	0.9
51.3 1.3 44.5	51.9 0.6 44.8	0.9
34.6 -36.4 13.9	35.3 -32.7 14.4	3.9
36.0 -26.2 -20.9	37.2 -18.9 -18.8	7.7
20.9 9.6 -23.6	21.4 9.0 -23.3	0.8
89.0 0.0 -1.8	89.2 -0.4 -1.3	0.7
82.8 0.0 -1.7	83.0 -0.3 -1.2	0.7
69.3 0.0 -1.4	69.4 -0.7 -0.6	1.0
54.1 0.0 -1.0	54.1 0.2 -1.2	0.3
36.6 -0.0 -0.5	36.8 0.5 -0.6	0.6
16.0 0.0 0.0	17.1 -0.6 0.2	1.3
24.0 22.0 -46.0	24.8 21.7 -45.0	1.3
40.9 17.9 -36.6	41.6 17.0 -35.6	1.5
63.7 10.3 -23.8	64.1 9.8 -23.1	0.9
47.0 68.0 48.0	47.1 67.5 47.2	0.9
58.5 47.1 37.9	58.8 46.0 38.1	1.2
74.2 22.9 21.4	74.3 22.2 21.8	0.9
50.0 -65.0 27.0	51.8 -46.7 29.7	18.6
62.1 -39.8 21.0	62.4 -39.9 21.5	0.6
77.0 -19.1 11.0	77.3 -19.4 11.8	0.9
71.2 18.8 17.3	71.5 18.7 18.1	0.9
71.2 22.2 73.1	71.6 21.7 73.8	0.9
47.7 71.2 16.2	48.0 71.2 16.9	0.7
38.0 55.4 -20.9	38.2 54.9 -20.7	0.5
73.7 -22.8 67.6	74.1 -24.1 67.7	1.3
52.3 -52.3 -20.2	55.3 -30.6 -15.5	22.4
43.3 -17.0 -48.6	45.5 -6.6 -44.8	11.3
95.0 0.0 -2.0	95.1 -0.1 -2.2	0.3
88.5 -0.4 -3.1	88.8 -0.7 -2.4	0.8
82.0 -0.9 -4.1	82.1 -1.0 -3.3	0.8
67.7 -2.0 -4.4	68.0 -2.2 -3.4	1.1
52.2 -2.5 -3.5	52.5 -2.6 -3.3	0.4
37.5 -3.9 -3.1	37.7 -3.8 -3.7	0.6
26.3 -6.8 -3.4	27.0 -7.3 -2.5	1.2
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	134.01 140.08 137.68	85 85 170	26.77 22.20 61.74
0 0 0	0.27 0.29 0.25	85 170 170	45.13 58.43 65.64
12 12 12	0.78 0.81 0.83	170 85 170	46.90 32.35 62.07
25 25 25	2.32 2.43 2.39	170 170 85	57.51 66.42 23.36
38 38 38	4.60 4.80 4.62	0 135 205	32.56 38.12 88.27
51 51 51	7.71 8.11 7.78	6 163 219	41.69 52.60 100.77
63 63 63	11.05 11.58 11.46	133 196 231	70.83 80.69 112.57
76 76 76	15.50 16.30 15.83	207 25 102	45.35 23.11 25.10
89 89 89	20.72 21.81 20.96	215 91 143	59.34 40.56 46.76
102 102 102	26.00 27.30 26.82	224 157 190	81.88 70.89 79.76
114 114 114	31.81 33.24 32.55	246 213 27	94.06 103.92 11.09
127 127 127	38.45 40.39 39.17	244 219 93	98.38 108.00 29.61
140 140 140	45.68 47.91 46.69	240 226 160	105.19 113.83 63.78
153 153 153	53.30 55.98 54.60	180 80 65	39.94 29.54 12.88
165 165 165	61.70 64.87 62.40	119 66 57	21.26 17.28 9.73
178 178 178	70.48 74.05 71.46	115 33 32	16.16 10.10 3.72
191 191 191	80.40 84.29 82.13	117 32 64	17.88 10.59 11.22
204 204 204	90.30 94.63 91.68	122 100 37	26.32 27.81 6.35
216 216 216	100.05 105.18 101.59	0 75 45	7.11 12.15 6.93
229 229 229	111.00 116.61 113.99	0 78 97	10.38 13.70 23.30
242 242 242	122.40 128.45 126.02	36 36 66	5.48 4.74 11.66
0 0 128	6.80 2.18 36.01	214 216 220	99.84 104.57 104.96
0 0 255	23.02 6.87 124.72	194 195 199	83.16 87.10 87.36
0 128 0	15.48 30.39 3.34	152 153 155	53.26 55.97 55.68
0 128 128	22.06 32.29 39.65	110 110 112	29.71 30.96 31.30
0 170 255	48.71 57.42 131.05	68 68 69	12.77 13.24 13.29
0 255 0	52.67 104.45 11.06	30 30 30	3.08 3.26 3.17
0 255 170	63.76 107.70 71.64	39 39 106	8.88 6.28 26.59
0 255 255	75.71 111.28 136.57	80 73 137	20.72 17.32 42.35
85 85 85	19.03 20.01 19.22	139 133 182	48.75 46.30 72.29
128 0 0	16.94 8.59 0.53	205 28 32	40.95 21.99 4.06
128 0 128	23.67 10.62 36.32	216 85 64	52.58 37.07 12.96
128 128 0	32.37 39.13 3.62	226 150 128	73.73 65.67 41.28
128 128 128	39.06 41.02 39.93	0 122 56	15.59 28.04 11.26
128 128 255	55.57 45.82 129.46	56 150 94	28.12 43.34 25.14
128 255 128	76.24 114.88 48.13	141 187 154	59.84 72.92 56.93
170 0 255	51.06 20.85 125.29	206 144 127	65.67 59.70 40.17
170 170 170	64.98 68.22 65.90	228 139 33	66.48 59.68 7.76
170 255 0	80.68 118.51 11.42	208 27 73	44.16 23.09 14.19
170 255 255	104.04 125.43 136.87	140 34 104	25.94 14.23 25.81
255 0 0	59.10 29.68 1.21	150 175 43	50.38 65.30 11.25
255 0 170	69.85 32.77 60.79	0 128 139	23.29 32.80 45.61
255 0 255	81.59 36.10 126.14	0 96 165	19.79 21.33 59.29
255 128 128	81.11 62.34 40.63	235 237 242	117.83 123.11 125.26
255 170 0	84.99 81.05 6.40	211 215 221	98.44 103.28 105.54
255 170 255	107.75 87.48 132.30	187 193 201	80.60 84.75 88.27
255 255 0	111.27 133.90 12.00	141 150 156	50.02 53.16 55.96
255 255 170	122.27 136.90 72.87	98 107 111	26.96 28.88 30.83
170 85 85	38.86 29.90 19.50	62 72 75	12.74 13.95 15.40
85 170 85	37.30 56.04 23.03	36 50 51	6.09 7.16 7.76