UGRA
Display Analysis & Certification Tool
Report

Basics

Date:	2011-2-3 4:02:49
Report-Version:	v1.3.1
Monitor-Name:	\\.\DISPLAY1
Profile:	C:/Windows/system32/spool/drivers/color/nec-pa301w-ugra.icc
Created:	2011-2-3 3:59
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:	134.34 140.90 138.47
XYZ (normalized):	95.34 100.00 98.27
Luminance:	140.9 Cd/m2
Next Temperature:	5849 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:	0.3 Cd/m2
Chromaticity:	1.6 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	12116	0.25	1.62	1.62	
5	7508	0.68	4.35	1.62	1.95
10	5936	2.42	13.94	0.45	1.82
15	5839	4.62	21.12	0.64	1.83
20	5809	7.80	28.22	0.56	1.82
25	5816	11.27	33.99	0.19	1.84
30	5875	15.95	40.12	0.69	1.82
35	5848	21.17	45.67	0.50	1.81
40	5778	26.97	50.85	0.44	1.82
45	5849	32.90	55.43	0.40	1.83
50	5801	40.05	60.27	0.52	1.83
55	5810	47.34	64.64	0.41	1.83
60	5855	56.11	69.34	0.24	1.81
65	5824	63.70	73.03	0.19	1.85
70	5837	73.62	77.43	0.62	1.84
75	5834	83.56	81.46	0.90	1.84
80	5855	94.13	85.41	0.19	1.82
85	5835	104.27	88.92	0.57	1.88
90	5815	115.31	92.50	0.40	1.91
95	5866	127.24	96.12	0.27	2.00
100	5849	140.90	100.00	0.00	
Average	5839			0.43	1.85
Range				1.59	
Max				0.90	

Tone values = 98.3%

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 -0.5 -1.6	-1.6 0.5 1.6	2.3
0 0 128	14.0 44.5 -73.6	-0.1 1.5 -1.6	2.2
0 0 255	29.2 69.7 -113.6	0.1 -0.1 -0.1	0.2
0 128 0	50.5 -87.2 51.4	0.4 -0.9 1.2	1.6
0 128 128	52.6 -59.4 -12.4	0.2 0.3 -0.7	0.8
0 170 255	68.0 -44.5 -50.9	0.0 -0.0 0.1	0.1
0 255 0	85.2 -133.3 79.6	-0.0 0.1 -0.1	0.1
0 255 170	86.7 -110.5 16.0	-0.1 0.7 -1.1	1.3
0 255 255	88.2 -89.6 -19.9	-0.1 0.2 0.1	0.2
85 85 85	44.0 0.2 -0.3	0.0 -0.2 0.3	0.3
128 0 0	33.8 66.7 51.1	0.2 1.0 2.9	3.1
128 0 128	37.0 73.5 -34.9	0.4 0.5 -0.4	0.7
128 128 0	58.9 -10.3 64.1	0.3 -0.3 0.8	0.9
128 128 128	60.6 -0.1 0.4	0.1 0.1 -0.4	0.4
128 128 255	64.3 20.9 -56.2	-0.0 -0.1 0.3	0.3
128 255 128	90.0 -74.3 40.3	-0.1 0.2 -0.7	0.7
170 0 255	50.6 94.6 -77.4	0.4 0.0 0.8	0.9
170 170 170	74.9 -0.4 0.5	0.1 0.4 -0.5	0.7
170 255 0	91.5 -60.5 89.3	0.0 0.4 -0.2	0.5
170 255 255	94.1 -36.7 -9.7	0.0 0.3 -0.1	0.3
255 0 0	59.5 102.2 86.8	0.1 0.2 0.2	0.3
255 0 170	61.9 107.2 -16.4	0.3 -0.0 -0.4	0.5
255 0 255	64.4 112.1 -53.8	0.3 -0.2 0.3	0.5
255 128 128	75.1 58.3 24.2	0.1 0.0 -0.3	0.3
255 170 0	81.5 30.9 89.6	0.1 -0.4 -0.2	0.5
255 170 255	84.8 45.4 -22.4	0.0 0.1 -0.0	0.2
255 255 0	97.6 -15.9 98.9	0.0 -0.1 -0.7	0.7
255 255 170	98.8 -8.2 35.4	-0.0 0.2 -0.6	0.7
255 255 255	100.0 0.0 0.0	0.0 0.0 0.0	0.0
170 85 85	55.3 45.7 18.2	0.2 0.3 0.6	0.7
85 170 85	67.0 -58.1 31.0	-0.0 -0.2 0.2	0.3
85 85 170	46.8 16.3 -43.3	0.0 0.1 -0.7	0.7
85 170 170	68.5 -42.9 -10.0	-0.0 0.1 -0.8	0.8
170 85 170	57.2 53.1 -25.8	0.3 0.4 -0.3	0.5
170 170 85	73.6 -9.1 41.6	0.1 0.4 0.3	0.5
Average			0.7
Maximum			3.1

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	100 %
sRGB	100 %
AdobeRGB	99 %
ECI-RGB v1.0	93 %

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	55.2 -32.1 -49.4	5.0
66.9 -24.7 -37.1	66.8 -24.6 -36.6	0.5
79.7 -12.5 -21.8	79.8 -13.0 -21.2	0.7
48.0 74.0 -3.0	47.7 73.6 -2.7	0.5
60.8 50.6 -6.7	60.6 49.7 -6.3	1.0
76.4 25.8 -6.9	76.4 25.2 -6.1	1.0
89.0 -5.0 93.0	88.8 -5.3 91.9	1.2
90.3 -4.7 62.6	89.9 -4.5 62.0	0.8
92.2 -3.5 31.1	91.9 -4.1 31.2	0.7
53.1 37.7 28.9	52.9 37.8 28.6	0.3
41.5 22.7 16.8	41.4 23.2 16.8	0.5
31.9 40.0 24.0	31.9 40.3 23.1	0.9
32.5 44.4 -1.8	32.5 44.7 -1.7	0.3
51.3 1.3 44.5	51.1 1.1 44.3	0.3
34.6 -36.4 13.9	34.6 -35.4 13.7	1.1
36.0 -26.2 -20.9	35.9 -26.3 -20.2	0.7
20.9 9.6 -23.6	21.0 9.5 -23.1	0.5
89.0 0.0 -1.8	88.9 -0.4 -1.3	0.7
82.8 0.0 -1.7	82.6 -0.3 -1.9	0.4
69.3 0.0 -1.4	69.2 -0.5 -1.1	0.6
54.1 0.0 -1.0	53.9 -0.3 -0.9	0.3
36.6 -0.0 -0.5	36.4 0.6 -1.3	1.0
16.0 0.0 0.0	16.5 1.7 -0.6	1.8
24.0 22.0 -46.0	24.2 21.8 -45.2	0.9
40.9 17.9 -36.6	40.7 18.4 -36.3	0.6
63.7 10.3 -23.8	63.3 10.9 -23.5	0.7
47.0 68.0 48.0	46.6 67.7 47.0	1.2
58.5 47.1 37.9	58.4 46.6 37.6	0.5
74.2 22.9 21.4	74.1 22.8 21.8	0.5
50.0 -65.0 27.0	49.9 -64.4 26.7	0.7
62.1 -39.8 21.0	61.9 -39.1 21.4	0.8
77.0 -19.1 11.0	76.9 -19.1 10.8	0.2
71.2 18.8 17.3	70.9 19.0 17.4	0.4
71.2 22.2 73.1	70.8 23.0 73.0	0.9
47.7 71.2 16.2	47.5 70.5 15.8	0.8
38.0 55.4 -20.9	37.7 55.0 -20.6	0.6
73.7 -22.8 67.6	73.6 -23.1 67.3	0.4
52.3 -52.3 -20.2	52.2 -52.1 -19.7	0.5
43.3 -17.0 -48.6	43.2 -17.1 -48.0	0.7
95.0 0.0 -2.0	94.6 -0.4 -2.4	0.7
88.5 -0.4 -3.1	88.5 -1.0 -2.6	0.8
82.0 -0.9 -4.1	81.9 -1.5 -3.8	0.7
67.7 -2.0 -4.4	67.3 -1.6 -4.7	0.6
52.2 -2.5 -3.5	52.3 -2.8 -2.9	0.7
37.5 -3.9 -3.1	37.4 -3.8 -3.9	0.7
26.3 -6.8 -3.4	26.3 -6.2 -3.7	0.7
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	134.34 140.90 138.47	85 85 170	26.55 22.68 60.48
0 0 0	0.23 0.25 0.39	85 170 170	36.36 54.98 65.30
12 12 12	0.61 0.68 0.78	170 85 170	54.32 35.33 61.07
25 25 25	2.29 2.42 2.38	170 170 85	56.40 64.54 24.61
38 38 38	4.45 4.62 4.62	0 129 208	24.30 33.40 88.64
51 51 51	7.50 7.80 7.73	84 158 221	41.19 51.96 100.11
63 63 63	10.78 11.27 11.07	154 193 232	69.90 79.77 112.10
76 76 76	15.30 15.95 15.93	171 38 103	45.05 22.94 24.90
89 89 89	20.27 21.17 20.98	185 96 143	58.82 40.32 46.10
102 102 102	25.75 26.97 26.22	206 159 190	81.68 71.08 78.48
114 114 114	31.27 32.90 32.14	237 218 0	92.79 103.01 11.62
127 127 127	38.14 40.05 38.91	237 222 87	96.96 106.56 30.01
140 140 140	45.30 47.34 46.49	236 229 158	103.85 112.95 63.96
153 153 153	53.40 56.11 55.03	156 85 64	39.61 29.15 12.70
165 165 165	60.78 63.70 62.40	106 68 56	21.02 16.93 9.62
178 178 178	69.96 73.62 71.75	97 37 31	15.82 9.72 3.65
191 191 191	79.30 83.56 81.18	98 35 64	17.45 10.16 10.82
204 204 204	89.63 94.13 92.41	116 102 33	25.62 27.04 6.19
216 216 216	99.17 104.27 101.73	35 75 44	6.50 11.75 6.83
229 229 229	110.20 115.31 113.10	26 76 97	8.66 12.80 22.83
242 242 242	121.10 127.24 125.05	36 35 67	5.40 4.64 11.43
0 0 128	6.62 2.72 34.30	215 216 220	99.25 104.32 104.72
0 0 255	23.33 9.33 122.32	194 195 199	82.52 86.67 88.03
0 128 0	8.13 26.63 4.15	152 153 155	53.13 55.94 56.19
0 128 128	14.75 29.54 38.59	110 110 112	29.39 30.90 31.07
0 170 255	37.12 54.55 129.94	68 68 69	12.47 12.97 13.30
0 255 0	28.41 93.80 13.92	30 30 30	3.06 3.09 3.14
0 255 170	39.54 98.51 71.84	39 36 108	8.60 6.05 26.12
0 255 255	51.88 103.31 137.24	78 70 138	20.22 16.64 41.79
85 85 85	18.59 19.45 19.27	137 131 183	47.93 45.21 71.31
128 0 0	23.35 10.77 0.68	169 42 30	40.36 21.55 3.97
128 0 128	29.99 13.36 35.13	185 92 63	52.22 36.61 12.90
128 128 0	31.78 37.59 4.56	206 153 127	73.74 65.54 41.16
128 128 128	38.66 40.60 39.52	35 121 54	11.21 25.99 11.21
128 128 255	55.56 47.42 128.09	93 149 92	27.79 42.81 24.82
128 255 128	59.02 107.56 49.35	156 186 153	59.26 72.35 57.45
170 0 255	62.36 27.11 123.80	189 147 126	64.69 58.81 40.16
170 170 170	64.32 67.71 65.92	205 144 24	65.56 58.36 7.63
170 255 0	67.85 111.83 14.56	171 41 73	43.18 22.61 14.34
170 255 255	91.32 121.25 137.43	117 37 105	25.46 13.91 25.32
255 0 0	82.05 37.57 1.57	158 177 34	49.90 64.52 11.09
255 0 170	93.10 41.88 59.79	10 125 140	15.99 29.10 44.88
255 0 255	105.27 46.70 124.24	16 91 167	15.80 19.18 58.55
255 128 128	97.27 67.44 40.75	236 237 242	116.35 122.22 124.67
255 170 0	96.04 82.57 8.13	212 215 221	97.59 102.94 105.56
255 170 255	119.41 92.25 131.03	189 193 201	79.98 84.66 88.95
255 255 0	110.86 131.37 15.12	143 149 156	49.30 52.28 56.51
255 255 170	122.04 136.04 73.89	101 107 111	26.69 28.75 30.38
170 85 85	46.53 32.23 19.88	65 72 75	12.50 13.75 15.27
85 170 85	28.43 51.72 24.10	41 50 52	5.93 6.88 7.80