UGRA
Display Analysis & Certification Tool
Report

Basics

Date:	2012-7-18 01:58:09
Report-Version:	v1.3.1
Monitor-Name:	\\.\DISPLAY1
Profile:	C:/Windows/system32/spool/drivers/color/nec-spectraview241-udact3.icc
Created:	2012-7-18 1:54
Measurement device:	eye-one pro

Summary

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

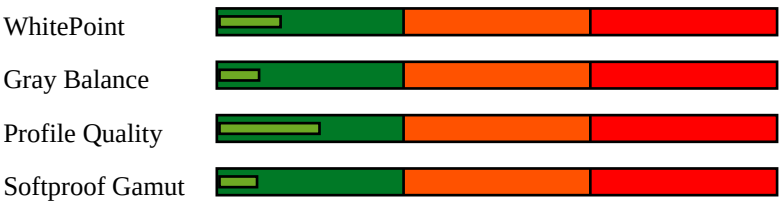
Calibration

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:	131.82 138.39 133.71
XYZ (normalized):	95.25 100.00 96.62
Luminance:	138.4 Cd/m2
Next Temperature:	5770 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:	0.2 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	11452	0.25	1.62	1.62	
5	6391	0.83	5.41	0.87	1.84
10	5734	2.36	13.84	0.10	1.83
15	5745	4.68	21.51	0.13	1.82
20	5742	7.80	28.48	0.21	1.81
25	5757	11.34	34.39	0.13	1.82
30	5760	15.70	40.16	0.19	1.82
35	5760	20.88	45.75	0.13	1.81
40	5762	26.55	50.91	0.07	1.81
45	5754	32.44	55.52	0.19	1.82
50	5780	39.22	60.20	0.14	1.83
55	5786	46.74	64.78	0.18	1.82
60	5785	55.01	69.29	0.13	1.81
65	5801	62.97	73.22	0.26	1.83
70	5790	72.82	77.65	0.18	1.80
75	5795	81.90	81.39	0.21	1.83
80	5792	92.31	85.35	0.21	1.82
85	5793	102.65	89.01	0.23	1.84
90	5787	114.12	92.78	0.17	1.83
95	5784	126.34	96.53	0.22	1.79
100	5770	138.39	100.00	0.00	
Average	5772			0.16	1.82
Range				0.43	
Max				0.26	

Tone values = 100.0%

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 -0.3 -1.6	-1.6 0.3 1.6	2.3
0 0 128	12.2 51.5 -76.7	-0.6 2.2 -1.7	2.9
0 0 255	26.0 81.2 -118.7	-0.0 0.3 -0.4	0.5
0 128 0	50.8 -86.0 51.3	0.3 -1.2 1.3	1.8
0 128 128	52.6 -58.4 -12.3	0.1 0.1 -0.4	0.4
0 170 255	67.6 -43.2 -50.7	-0.0 0.4 -0.4	0.6
0 255 0	85.9 -131.9 79.7	-0.0 -0.4 0.1	0.4
0 255 170	87.1 -109.2 16.0	-0.1 0.2 -0.6	0.7
0 255 255	88.3 -88.8 -19.0	-0.1 0.4 -0.4	0.6
85 85 85	44.0 0.1 -0.1	-0.3 0.0 0.1	0.3
128 0 0	33.6 66.3 49.6	-0.0 1.1 3.1	3.2
128 0 128	36.3 75.5 -36.7	0.1 0.4 0.3	0.5
128 128 0	59.0 -11.0 63.6	0.2 -0.6 0.7	0.9
128 128 128	60.5 -0.1 -0.0	-0.1 -0.1 0.1	0.2
128 128 255	63.5 22.7 -56.9	-0.2 0.3 -0.3	0.5
128 255 128	90.4 -74.4 40.4	-0.1 -0.5 0.1	0.5
170 0 255	49.1 99.7 -79.8	0.2 -0.1 0.5	0.6
170 170 170	74.9 -0.2 -0.3	-0.1 -0.1 0.1	0.2
170 255 0	92.0 -60.9 89.1	0.1 -0.5 -0.3	0.6
170 255 255	94.1 -36.1 -9.6	0.0 -0.3 -0.1	0.3
255 0 0	59.3 102.3 84.3	0.1 0.1 -0.1	0.1
255 0 170	61.3 109.1 -18.5	0.1 -0.2 0.3	0.4
255 0 255	63.2 115.7 -55.8	0.2 -0.3 0.5	0.6
255 128 128	75.0 58.3 23.3	-0.0 0.2 0.5	0.6
255 170 0	81.7 29.9 88.6	0.2 -0.6 -0.3	0.6
255 170 255	84.4 46.1 -23.0	-0.0 0.3 0.0	0.3
255 255 0	98.0 -17.0 98.1	0.1 -0.4 -0.6	0.7
255 255 170	99.0 -8.5 34.6	0.0 -0.2 0.3	0.3
255 255 255	100.0 0.0 0.0	0.0 0.0 -0.0	0.0
170 85 85	55.3 45.4 18.1	-0.2 0.4 0.4	0.6
85 170 85	67.4 -58.1 31.6	-0.1 -0.8 0.3	0.8
85 85 170	46.3 18.1 -44.7	-0.3 0.3 -0.5	0.6
85 170 170	68.6 -42.1 -10.5	-0.1 -0.4 -0.1	0.5
170 85 170	56.9 54.3 -27.1	-0.2 0.5 -0.1	0.5
170 170 85	73.9 -9.7 41.7	-0.0 -0.2 0.5	0.6
Average			0.7
Maximum			3.2

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	100 %
sRGB	100 %
AdobeRGB	98 %
ECI-RGB v1.0	91 %

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	55.7 -32.5 -48.4	4.8
66.9 -24.7 -37.1	67.0 -24.7 -36.8	0.3
79.7 -12.5 -21.8	79.6 -12.1 -21.9	0.5
48.0 74.0 -3.0	48.1 73.5 -3.5	0.7
60.8 50.6 -6.7	60.9 50.6 -6.9	0.2
76.4 25.8 -6.9	76.3 26.1 -7.0	0.4
89.0 -5.0 93.0	88.9 -4.7 91.2	1.8
90.3 -4.7 62.6	90.4 -4.9 62.1	0.5
92.2 -3.5 31.1	92.1 -2.8 30.7	0.8
53.1 37.7 28.9	53.4 36.9 28.3	1.1
41.5 22.7 16.8	42.0 22.6 16.6	0.5
31.9 40.0 24.0	32.5 39.3 23.6	0.9
32.5 44.4 -1.8	33.0 43.6 -1.5	1.0
51.3 1.3 44.5	51.5 1.6 44.5	0.4
34.6 -36.4 13.9	34.9 -35.9 13.7	0.6
36.0 -26.2 -20.9	36.4 -25.8 -20.2	0.8
20.9 9.6 -23.6	21.6 9.9 -23.2	0.8
89.0 0.0 -1.8	88.9 -0.1 -2.0	0.1
82.8 0.0 -1.7	82.7 0.4 -1.9	0.4
69.3 0.0 -1.4	69.3 0.3 -1.6	0.4
54.1 0.0 -1.0	54.4 0.4 -1.1	0.5
36.6 -0.0 -0.5	37.0 0.4 -0.7	0.6
16.0 0.0 0.0	17.1 0.1 0.4	1.2
24.0 22.0 -46.0	24.7 21.5 -44.8	1.5
40.9 17.9 -36.6	41.2 17.5 -36.3	0.6
63.7 10.3 -23.8	63.8 10.5 -23.5	0.3
47.0 68.0 48.0	47.2 67.4 46.6	1.5
58.5 47.1 37.9	58.6 46.7 36.9	1.0
74.2 22.9 21.4	74.1 22.9 20.6	0.8
50.0 -65.0 27.0	49.9 -63.8 26.7	1.3
62.1 -39.8 21.0	62.1 -38.7 20.6	1.1
77.0 -19.1 11.0	77.0 -19.3 11.1	0.3
71.2 18.8 17.3	71.2 18.7 16.8	0.5
71.2 22.2 73.1	71.0 22.9 72.6	0.9
47.7 71.2 16.2	48.0 70.7 15.9	0.7
38.0 55.4 -20.9	38.3 54.5 -20.8	1.0
73.7 -22.8 67.6	73.6 -22.6 67.3	0.3
52.3 -52.3 -20.2	52.4 -52.2 -19.5	0.7
43.3 -17.0 -48.6	43.6 -18.1 -47.5	1.5
95.0 0.0 -2.0	95.0 0.1 -2.4	0.5
88.5 -0.4 -3.1	88.6 -0.8 -3.0	0.5
82.0 -0.9 -4.1	81.8 -0.8 -4.2	0.2
67.7 -2.0 -4.4	67.8 -2.2 -4.5	0.3
52.2 -2.5 -3.5	52.3 -2.0 -3.6	0.5
37.5 -3.9 -3.1	37.7 -3.0 -3.3	0.9
26.3 -6.8 -3.4	26.8 -6.0 -3.3	1.0
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	131.82 138.39 133.71	85 85 170	25.93 21.76 59.11
0 0 0	0.23 0.25 0.38	85 170 170	36.00 54.13 63.90
12 12 12	0.78 0.83 0.87	170 85 170	53.34 34.31 59.98
25 25 25	2.25 2.36 2.27	170 170 85	55.75 64.05 24.08
38 38 38	4.47 4.68 4.52	0 131 208	24.02 33.40 85.27
51 51 51	7.46 7.80 7.54	83 160 221	40.47 51.26 97.35
63 63 63	10.82 11.34 10.97	154 193 232	68.68 78.03 109.05
76 76 76	14.99 15.70 15.20	172 40 104	44.79 22.93 24.89
89 89 89	19.92 20.88 20.19	187 97 144	58.78 40.07 45.54
102 102 102	25.31 26.55 25.65	207 159 190	80.40 69.53 76.74
114 114 114	30.96 32.44 31.35	237 216 0	91.99 101.58 11.65
127 127 127	37.31 39.22 37.88	237 221 87	96.31 106.01 29.47
140 140 140	44.54 46.74 45.33	237 227 158	103.45 111.55 62.83
153 153 153	52.35 55.01 53.21	157 86 64	39.42 29.29 12.78
165 165 165	59.94 62.97 61.13	107 69 57	21.08 17.13 9.70
178 178 178	69.29 72.82 70.50	98 38 31	15.89 9.94 3.63
191 191 191	77.94 81.90 79.38	99 37 64	17.38 10.32 10.69
204 204 204	87.83 92.31 89.37	117 102 33	25.81 27.08 6.13
216 216 216	97.72 102.65 99.53	34 75 44	6.43 11.70 6.71
229 229 229	108.66 114.12 110.54	26 77 98	8.77 12.89 22.57
242 242 242	120.18 126.34 122.07	37 36 68	5.53 4.75 11.42
0 0 128	6.32 2.23 33.08	215 216 220	97.66 102.52 102.30
0 0 255	22.06 7.42 117.25	195 195 199	81.39 85.16 85.05
0 128 0	8.33 26.57 4.17	153 153 156	52.62 55.06 54.99
0 128 128	14.59 29.00 37.22	111 111 113	29.62 30.95 30.72
0 170 255	36.05 52.81 123.94	69 69 70	12.68 13.22 13.06
0 255 0	29.28 94.18 14.06	30 30 30	3.06 3.21 3.03
0 255 170	39.84 97.95 70.27	39 38 108	8.61 6.14 25.55
0 255 255	51.23 101.77 131.31	78 73 139	20.07 16.75 41.12
85 85 85	18.31 19.20 18.61	138 133 183	47.70 45.28 70.12
128 0 0	22.73 10.51 0.76	171 43 30	40.55 21.83 4.10
128 0 128	29.10 12.57 34.30	186 92 63	51.66 36.20 12.86
128 128 0	31.21 37.12 4.57	206 153 128	72.64 64.53 40.92
128 128 128	37.81 39.75 38.42	34 120 54	11.09 25.51 10.83
128 128 255	53.62 45.17 122.41	93 148 93	27.65 42.38 24.68
128 255 128	58.80 106.97 48.40	156 186 153	58.33 71.36 55.47
170 0 255	60.25 24.75 118.95	190 147 127	64.08 58.38 39.77
170 170 170	63.44 66.70 64.80	206 143 23	64.87 57.73 7.61
170 255 0	67.69 111.45 14.62	173 42 74	43.31 22.76 14.18
170 255 255	89.86 119.05 132.53	118 40 106	25.50 14.10 25.16
255 0 0	80.35 36.72 1.73	159 175 33	49.43 63.54 10.79
255 0 170	91.01 40.17 58.81	5 126 140	15.74 28.78 43.39
255 0 255	102.16 43.80 119.81	14 94 167	15.52 19.18 56.81
255 128 128	95.23 65.98 39.97	236 237 242	115.64 121.25 121.68
255 170 0	94.43 81.69 8.30	212 215 221	96.15 101.40 102.96
255 170 255	116.54 89.61 126.52	189 193 201	78.72 82.99 86.27
255 255 0	109.57 130.52 15.37	144 150 157	48.93 52.20 55.23
255 255 170	120.41 134.44 72.96	102 107 112	26.49 28.32 29.95
170 85 85	45.67 31.70 19.25	66 72 75	12.60 13.72 14.68
85 170 85	28.39 51.52 23.34	41 50 52	6.04 6.97 7.65