

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2012-11-27 12:04:23
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY1
Profile: C:/Windows/system32/spool/drivers/color/sv271-ugra.icc
Created: 2012-11-27 12:01
Measurement device: eye-one pro

Summary

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

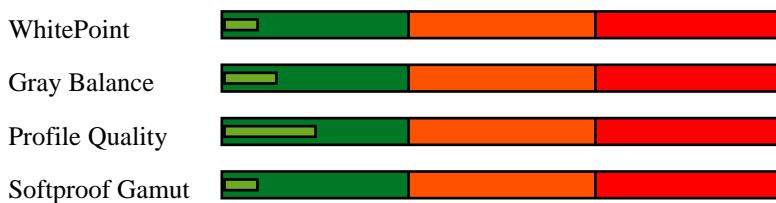
Calibration

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:	134.60 140.85 136.88
XYZ (normalized):	95.56 100.00 97.18
Luminance:	140.9 Cd/m2
Next Temperature:	5768 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.4 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	0	0.12	0.78	2.14	
5	7221	0.62	4.00	1.59	1.89
10	5933	2.27	13.32	0.42	1.83
15	5830	4.74	21.45	0.21	1.81
20	5828	7.84	28.29	0.23	1.81
25	5816	11.49	34.30	0.23	1.82
30	5771	16.06	40.25	0.20	1.81
35	5805	21.22	45.73	0.21	1.81
40	5782	27.19	51.04	0.13	1.80
45	5784	33.16	55.63	0.17	1.82
50	5776	40.40	60.50	0.09	1.81
55	5775	48.01	65.03	0.16	1.81
60	5758	56.57	69.59	0.28	1.79
65	5769	64.41	73.37	0.26	1.82
70	5774	74.03	77.61	0.19	1.81
75	5777	83.87	81.59	0.17	1.80
80	5761	94.91	85.70	0.12	1.77
85	5780	104.41	88.98	0.12	1.84
90	5784	116.51	92.89	0.21	1.81
95	5779	128.68	96.56	0.11	1.76
100	5768	140.85	100.00	0.00	
Average	5792			0.19	1.81
Range				0.56	
Max				0.42	

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	0.8 -0.1 -2.1	-0.8 0.1 2.1	2.3
0 0 128	11.5 54.9 -78.8	-0.4 1.6 -1.2	2.0
0 0 255	24.9 85.3 -120.8	0.1 0.2 -0.1	0.2
0 128 0	51.1 -89.7 51.5	0.3 -0.8 1.3	1.6
0 128 128	52.8 -60.3 -12.8	0.0 0.1 -0.3	0.3
0 170 255	67.3 -44.4 -51.3	-0.0 0.7 -0.4	0.8
0 255 0	85.8 -136.6 79.7	0.1 -0.1 0.1	0.2
0 255 170	86.9 -112.8 15.8	0.0 0.3 -0.4	0.5
0 255 255	88.0 -91.5 -19.5	-0.0 0.6 -0.5	0.7
85 85 85	44.0 -0.2 -0.2	-0.2 0.2 0.1	0.3
128 0 0	34.1 67.5 51.1	0.1 0.7 2.9	3.0
128 0 128	36.7 76.8 -36.5	-0.1 0.5 0.1	0.6
128 128 0	59.4 -11.3 64.6	0.2 -0.5 0.4	0.6
128 128 128	60.9 -0.0 0.0	-0.1 -0.0 0.1	0.2
128 128 255	63.6 23.2 -56.8	-0.2 0.4 -0.4	0.6
128 255 128	90.4 -75.6 40.0	-0.1 -0.5 0.1	0.5
170 0 255	49.2 101.5 -79.6	0.2 0.0 0.3	0.3
170 170 170	75.0 -0.0 -0.0	-0.1 0.0 0.1	0.2
170 255 0	92.1 -62.2 89.4	0.1 -0.3 -0.2	0.4
170 255 255	94.1 -36.8 -9.5	-0.0 -0.1 -0.2	0.3
255 0 0	59.8 102.8 86.4	0.0 0.1 -0.1	0.2
255 0 170	61.5 110.0 -17.9	0.1 -0.0 0.5	0.5
255 0 255	63.5 117.0 -55.5	0.2 -0.1 0.4	0.4
255 128 128	75.4 58.5 23.5	-0.1 0.2 0.5	0.5
255 170 0	82.0 30.0 89.7	0.1 -0.4 -0.5	0.6
255 170 255	84.5 46.8 -22.9	-0.0 0.4 -0.1	0.4
255 255 0	98.2 -17.5 98.7	0.1 -0.3 -0.5	0.6
255 255 170	99.1 -8.9 35.0	0.0 -0.1 0.3	0.3
255 255 255	100.0 0.0 0.0	0.0 0.0 0.0	0.0
170 85 85	55.6 46.2 18.6	-0.2 0.4 0.4	0.6
85 170 85	67.3 -59.8 31.4	-0.1 -0.5 0.3	0.6
85 85 170	46.2 18.3 -44.8	-0.3 0.3 -0.4	0.6
85 170 170	68.5 -43.4 -10.7	-0.1 -0.3 0.0	0.3
170 85 170	57.1 55.2 -26.7	-0.2 0.5 0.0	0.5
170 170 85	74.0 -9.6 41.9	-0.0 -0.1 0.5	0.5
Average			0.6
Maximum			3.0

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	55.6 -33.7 -48.8	3.6
66.9 -24.7 -37.1	67.0 -24.8 -36.9	0.3
79.7 -12.5 -21.8	80.0 -12.5 -21.6	0.3
48.0 74.0 -3.0	48.1 73.3 -3.0	0.7
60.8 50.6 -6.7	61.0 50.5 -7.0	0.3
76.4 25.8 -6.9	76.5 26.0 -7.4	0.5
89.0 -5.0 93.0	88.9 -4.2 91.7	1.5
90.3 -4.7 62.6	90.3 -4.3 62.2	0.5
92.2 -3.5 31.1	92.2 -3.4 30.8	0.4
53.1 37.7 28.9	53.2 37.7 28.2	0.7
41.5 22.7 16.8	41.7 22.3 16.0	0.9
31.9 40.0 24.0	32.2 38.7 23.2	1.5
32.5 44.4 -1.8	33.0 43.8 -1.7	0.8
51.3 1.3 44.5	51.4 1.3 43.9	0.7
34.6 -36.4 13.9	34.8 -34.8 13.9	1.6
36.0 -26.2 -20.9	36.4 -26.2 -20.4	0.7
20.9 9.6 -23.6	21.5 10.2 -23.7	0.8
89.0 0.0 -1.8	89.0 0.1 -1.9	0.1
82.8 0.0 -1.7	82.8 0.1 -2.0	0.3
69.3 0.0 -1.4	69.5 0.1 -1.6	0.4
54.1 0.0 -1.0	54.2 0.2 -1.1	0.2
36.6 -0.0 -0.5	37.1 0.2 -0.2	0.6
16.0 0.0 0.0	16.5 -0.0 -0.4	0.7
24.0 22.0 -46.0	24.7 21.3 -45.0	1.4
40.9 17.9 -36.6	41.2 17.3 -35.8	1.0
63.7 10.3 -23.8	63.8 9.8 -24.0	0.6
47.0 68.0 48.0	47.2 67.5 47.2	0.9
58.5 47.1 37.9	58.5 47.2 36.8	1.0
74.2 22.9 21.4	74.4 22.7 21.3	0.3
50.0 -65.0 27.0	49.9 -63.9 26.8	1.1
62.1 -39.8 21.0	62.3 -39.5 20.8	0.5
77.0 -19.1 11.0	77.2 -19.1 10.7	0.3
71.2 18.8 17.3	71.3 18.8 17.1	0.2
71.2 22.2 73.1	71.3 22.5 73.0	0.4
47.7 71.2 16.2	47.8 70.6 15.3	1.2
38.0 55.4 -20.9	38.1 54.9 -21.4	0.7
73.7 -22.8 67.6	73.7 -23.0 67.5	0.2
52.3 -52.3 -20.2	52.4 -52.9 -19.8	0.7
43.3 -17.0 -48.6	43.6 -17.8 -48.2	0.9
95.0 0.0 -2.0	95.1 0.1 -2.2	0.3
88.5 -0.4 -3.1	88.6 -0.3 -3.4	0.3
82.0 -0.9 -4.1	82.0 -0.7 -4.2	0.2
67.7 -2.0 -4.4	67.7 -2.0 -4.9	0.5
52.2 -2.5 -3.5	52.5 -3.1 -3.2	0.7
37.5 -3.9 -3.1	37.9 -3.4 -3.1	0.6
26.3 -6.8 -3.4	26.5 -6.7 -3.7	0.4
Average		0.7
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	134.60 140.85 136.88	85 85 170	26.45 22.07 60.46
0 0 0	0.12 0.12 0.31	85 170 170	36.18 54.81 65.37
12 12 12	0.59 0.62 0.75	170 85 170	55.18 35.20 61.30
25 25 25	2.16 2.27 2.25	170 170 85	57.14 65.39 24.58
38 38 38	4.51 4.74 4.63	0 131 208	24.16 33.79 87.60
51 51 51	7.47 7.84 7.67	85 160 221	41.46 52.34 100.10
63 63 63	10.97 11.49 11.25	154 194 232	70.66 80.21 112.06
76 76 76	15.37 16.06 15.67	170 41 103	45.71 23.42 25.24
89 89 89	20.24 21.22 20.70	185 97 144	60.15 40.98 46.97
102 102 102	25.95 27.19 26.43	205 159 191	82.53 71.28 79.61
114 114 114	31.64 33.16 32.23	237 215 0	94.11 103.27 11.66
127 127 127	38.62 40.40 39.34	237 220 87	98.49 107.68 29.95
140 140 140	45.82 48.01 46.60	236 227 158	105.63 113.99 64.52
153 153 153	54.18 56.57 55.10	155 85 64	40.10 29.49 12.93
165 165 165	61.45 64.41 62.41	105 68 57	21.14 17.18 9.96
178 178 178	70.65 74.03 71.84	96 38 31	15.84 9.95 3.70
191 191 191	80.18 83.87 81.73	98 37 64	17.74 10.49 11.02
204 204 204	90.77 94.91 92.25	116 101 34	26.19 27.48 6.40
216 216 216	99.75 104.41 101.66	36 74 44	6.64 11.84 6.77
229 229 229	111.19 116.51 113.29	27 77 98	8.95 13.15 23.25
242 242 242	122.92 128.68 125.22	37 36 68	5.65 4.80 11.82
0 0 128	6.52 2.14 34.56	215 216 220	99.97 104.49 104.74
0 0 255	22.48 7.10 120.51	194 195 199	83.36 87.11 87.64
0 128 0	8.17 27.29 4.28	152 153 156	54.05 56.47 56.67
0 128 128	14.75 29.74 38.82	110 110 112	29.88 31.19 31.16
0 170 255	36.14 53.23 127.14	69 69 69	12.94 13.50 13.20
0 255 0	28.39 95.38 14.22	30 30 30	2.97 3.11 3.09
0 255 170	39.16 98.98 71.73	39 39 108	8.76 6.24 26.21
0 255 255	50.86 102.79 134.37	78 73 138	20.46 17.07 41.69
85 85 85	18.59 19.50 19.06	136 133 184	48.46 46.09 72.41
128 0 0	23.97 11.01 0.72	169 43 30	41.33 22.22 4.06
128 0 128	30.68 13.17 35.61	184 91 63	52.87 36.83 13.19
128 128 0	32.37 38.49 4.62	205 153 127	74.66 66.27 41.68
128 128 128	39.21 41.03 39.86	37 119 54	11.30 25.92 11.07
128 128 255	55.23 46.21 125.48	94 148 93	28.26 43.42 25.38
128 255 128	59.57 108.89 49.93	156 186 153	59.97 72.96 57.46
170 0 255	62.50 25.32 121.74	189 147 126	65.80 59.78 40.68
170 170 170	64.95 67.98 66.08	204 143 24	66.67 59.42 7.81
170 255 0	68.70 113.72 14.87	170 42 74	43.82 22.99 14.66
170 255 255	91.43 121.18 135.65	116 40 106	25.89 14.19 25.95
255 0 0	83.34 38.09 1.62	158 175 33	50.44 64.83 11.03
255 0 170	94.05 41.35 60.06	14 125 140	15.92 29.20 44.66
255 0 255	105.82 45.04 122.83	18 94 168	15.94 19.52 58.94
255 128 128	98.45 68.11 41.33	236 237 242	118.58 123.95 124.71
255 170 0	97.13 83.82 8.26	212 215 222	98.66 103.32 106.14
255 170 255	119.67 91.40 129.43	189 193 201	80.99 85.05 88.99
255 255 0	111.89 133.34 15.54	143 149 157	49.96 53.02 56.88
255 255 170	122.79 137.01 74.30	101 107 111	26.90 28.99 30.49
170 85 85	47.39 32.69 19.73	66 72 75	12.98 14.17 15.18
85 170 85	28.44 52.31 23.93	41 50 52	5.97 6.96 7.82