

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2011-6-2 21:58:49
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY2
Profile: C:/Windows/system32/spool/drivers/color/D2342P_ugra.icc
Created: 2011-6-2 21:55
Measurement device: eye-one pro

Summary

The monitor has not passed the certification according to the UGRA DACT specifications.

Calibration

White Point	yes
Gray balance	no
Profile quality	yes

Softproofing

MultiColor, HighBody	no
Offset/Gravure Paper Type 1/2	no
Offset on uncoated paper	no
Newspaper Printing	no
sRGB	no
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:	115.70 121.31 118.36
XYZ (normalized):	95.37 100.00 97.56
Luminance:	121.3 Cd/m2
Next Temperature:	5808 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.1 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:	1.5 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	4543	0.34	2.57	1.45	
5	5230	0.89	6.63	1.12	1.83
10	5686	2.18	14.38	0.73	1.82
15	5889	4.27	22.02	0.54	1.80
20	5874	6.95	28.72	0.36	1.81
25	5810	10.12	34.69	0.32	1.82
30	5803	14.05	40.54	0.10	1.81
35	5776	18.65	46.14	0.30	1.80
40	5791	23.64	51.25	0.27	1.80
45	5775	28.85	55.87	0.26	1.81
50	5784	34.84	60.53	0.16	1.81
55	5810	41.63	65.21	0.05	1.80
60	5815	48.64	69.53	0.09	1.80
65	5796	55.59	73.43	0.17	1.82
70	5812	63.86	77.66	0.15	1.81
75	5789	72.31	81.62	0.43	1.81
80	5794	81.36	85.54	0.12	1.80
85	5808	89.91	88.98	0.19	1.84
90	5794	100.21	92.84	0.14	1.83
95	5790	110.28	96.37	0.17	1.87
100	5808	121.31	100.00	0.00	
Average	5800			0.24	1.82
Range				1.07	
Max				0.73	

Tone values = 93.5%

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: CAT02

RGB	Lab	deltaLab	deltaE
0 0 0	2.6 1.5 0.0	-2.6 -1.5 -0.0	3.0
0 0 128	13.7 49.2 -74.9	0.5 -1.3 -0.3	1.4
0 0 255	28.7 73.8 -114.7	1.0 -1.4 1.0	1.9
0 128 0	51.7 -55.7 57.8	0.7 1.4 1.6	2.3
0 128 128	54.0 -35.1 -9.8	0.4 1.5 -0.1	1.5
0 170 255	69.3 -21.3 -48.1	0.5 1.5 0.5	1.7
0 255 0	87.2 -81.6 92.3	0.4 -0.5 -2.3	2.4
0 255 170	88.8 -66.0 22.1	0.2 0.0 -1.6	1.6
0 255 255	90.2 -51.1 -14.6	0.2 0.2 -0.4	0.5
85 85 85	44.5 -0.1 0.3	-0.5 0.1 -0.3	0.6
128 0 0	31.8 52.7 37.3	-1.0 0.1 5.6	5.7
128 0 128	35.3 64.0 -40.1	-0.6 -1.6 -0.8	1.9
128 128 0	58.8 -11.3 63.9	0.3 0.0 2.3	2.3
128 128 128	60.9 0.1 0.0	-0.2 -0.1 -0.0	0.2
128 128 255	64.5 21.9 -56.5	-0.2 0.1 0.4	0.4
128 255 128	91.6 -49.1 45.3	-0.2 -1.0 -1.1	1.4
170 0 255	48.5 85.1 -82.3	-0.2 -1.4 0.1	1.4
170 170 170	75.1 -0.1 0.2	-0.1 0.1 -0.2	0.2
170 255 0	92.5 -44.4 96.7	0.2 -0.5 -1.6	1.7
170 255 255	95.4 -21.9 -7.4	-0.2 -0.7 -0.0	0.7
255 0 0	54.6 79.9 65.9	0.3 -0.0 -0.4	0.5
255 0 170	57.3 88.6 -26.4	0.4 -1.3 0.1	1.4
255 0 255	60.3 95.5 -62.7	0.4 -1.1 0.9	1.5
255 128 128	72.8 41.1 18.6	0.1 0.5 0.1	0.6
255 170 0	79.6 16.4 85.9	0.6 0.6 -0.2	0.9
255 170 255	83.4 34.3 -26.0	0.1 0.8 0.6	1.0
255 255 0	97.2 -17.4 103.0	0.3 0.2 -2.8	2.9
255 255 170	98.7 -8.5 36.2	0.0 -0.0 -1.0	1.0
255 255 255	100.0 -0.0 0.0	0.0 -0.0 0.0	0.0
170 85 85	54.2 33.0 14.7	-0.5 -0.2 0.1	0.6
85 170 85	68.4 -40.0 34.8	-0.1 0.6 0.0	0.6
85 85 170	47.0 17.6 -43.7	-0.2 -0.2 -0.5	0.5
85 170 170	69.7 -26.5 -7.9	0.0 0.7 -0.3	0.7
170 85 170	56.1 42.9 -29.3	-0.2 -0.5 -0.3	0.7
170 170 85	73.8 -9.6 42.3	-0.2 0.2 0.1	0.3
Average			1.3
Maximum			5.7

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	92 %
sRGB	100 %
AdobeRGB	79 %
ECI-RGB v1.0	71 %

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	58.0 -16.6 -44.3	21.4
66.9 -24.7 -37.1	66.5 -26.3 -37.1	1.6
79.7 -12.5 -21.8	79.7 -12.7 -21.6	0.2
48.0 74.0 -3.0	48.5 75.1 -2.2	1.4
60.8 50.6 -6.7	61.2 51.0 -6.3	0.7
76.4 25.8 -6.9	76.6 25.9 -6.6	0.4
89.0 -5.0 93.0	88.5 -5.3 94.0	1.2
90.3 -4.7 62.6	90.4 -5.1 63.6	1.1
92.2 -3.5 31.1	92.3 -3.7 31.9	0.8
53.1 37.7 28.9	53.6 38.1 28.3	0.9
41.5 22.7 16.8	42.2 22.8 16.4	0.8
31.9 40.0 24.0	32.9 40.7 22.6	1.8
32.5 44.4 -1.8	33.4 44.9 -1.9	1.0
51.3 1.3 44.5	51.8 1.0 43.3	1.4
34.6 -36.4 13.9	35.4 -34.7 14.3	1.9
36.0 -26.2 -20.9	37.2 -19.7 -18.8	6.9
20.9 9.6 -23.6	21.6 9.5 -22.7	1.2
89.0 0.0 -1.8	89.0 0.2 -2.2	0.3
82.8 0.0 -1.7	82.9 0.2 -1.7	0.2
69.3 0.0 -1.4	69.6 -0.1 -1.1	0.4
54.1 0.0 -1.0	54.3 0.4 -1.1	0.5
36.6 -0.0 -0.5	37.0 0.0 -0.7	0.4
16.0 0.0 0.0	17.4 -0.1 0.2	1.4
24.0 22.0 -46.0	24.2 22.3 -45.4	0.7
40.9 17.9 -36.6	41.1 18.4 -36.4	0.6
63.7 10.3 -23.8	63.7 10.8 -24.2	0.6
47.0 68.0 48.0	47.7 68.3 46.5	1.7
58.5 47.1 37.9	58.9 47.2 38.0	0.4
74.2 22.9 21.4	74.5 22.7 21.8	0.5
50.0 -65.0 27.0	51.9 -49.7 29.3	15.6
62.1 -39.8 21.0	62.3 -41.1 21.2	1.3
77.0 -19.1 11.0	77.2 -19.2 11.2	0.4
71.2 18.8 17.3	71.6 18.6 17.4	0.5
71.2 22.2 73.1	71.3 21.9 72.7	0.4
47.7 71.2 16.2	48.4 71.8 16.3	0.9
38.0 55.4 -20.9	38.7 56.3 -20.5	1.2
73.7 -22.8 67.6	73.9 -23.4 67.5	0.6
52.3 -52.3 -20.2	54.9 -32.8 -15.4	20.3
43.3 -17.0 -48.6	45.0 -7.7 -44.6	10.3
95.0 0.0 -2.0	95.0 0.1 -2.1	0.2
88.5 -0.4 -3.1	88.6 -0.2 -3.1	0.2
82.0 -0.9 -4.1	82.1 -1.0 -3.8	0.4
67.7 -2.0 -4.4	68.1 -2.2 -3.9	0.7
52.2 -2.5 -3.5	52.5 -2.8 -3.1	0.6
37.5 -3.9 -3.1	37.8 -4.1 -3.4	0.5
26.3 -6.8 -3.4	26.9 -6.8 -4.0	0.9
Average		2.3
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	115.70 121.31 118.36	85 85 170	23.41 19.83 52.23
0 0 0	0.37 0.34 0.34	85 170 170	37.72 49.18 55.77
12 12 12	0.86 0.89 0.79	170 85 170	41.54 29.23 53.52
25 25 25	2.11 2.18 2.14	170 170 85	48.74 55.89 21.20
38 38 38	4.09 4.27 4.26	0 134 208	27.09 32.16 75.04
51 51 51	6.59 6.95 6.80	7 163 221	34.60 44.36 85.29
63 63 63	9.62 10.12 9.81	133 195 232	60.25 68.67 96.20
76 76 76	13.41 14.05 13.73	207 5 100	40.53 20.60 21.61
89 89 89	17.77 18.65 18.05	215 87 141	52.17 35.53 40.02
102 102 102	22.61 23.64 23.11	224 155 189	71.04 61.55 67.82
114 114 114	27.58 28.85 28.10	247 216 0	79.12 87.65 9.70
127 127 127	33.25 34.84 33.88	245 221 88	84.24 92.81 25.69
140 140 140	39.69 41.63 40.60	241 228 158	90.58 98.16 55.03
153 153 153	46.35 48.64 47.46	180 78 62	35.18 25.89 11.49
165 165 165	53.00 55.59 54.07	119 65 55	18.73 15.19 8.79
178 178 178	60.85 63.86 62.24	115 30 29	14.44 8.93 3.50
191 191 191	68.86 72.31 70.08	116 28 63	15.82 9.30 9.78
204 204 204	77.64 81.36 79.26	122 101 34	22.79 24.02 5.97
216 216 216	85.83 89.91 87.89	0 77 45	5.93 10.52 6.06
229 229 229	95.60 100.21 97.57	0 78 98	8.81 11.82 19.91
242 242 242	105.25 110.28 107.37	36 35 67	4.86 4.20 9.91
0 0 128	6.00 2.35 29.60	214 216 220	85.94 89.95 90.89
0 0 255	20.45 8.02 103.84	194 195 199	71.83 75.16 75.50
0 128 0	11.70 24.04 3.09	152 153 155	46.42 48.70 48.58
0 128 128	17.85 26.84 32.85	110 110 112	25.90 27.03 27.09
0 170 255	40.53 49.07 109.62	68 68 69	11.02 11.55 11.54
0 255 0	42.44 84.92 9.51	30 30 30	2.75 2.88 2.79
0 255 170	52.58 89.42 58.98	38 36 107	7.47 5.26 22.30
0 255 255	63.44 93.86 114.35	80 70 138	17.78 14.69 36.20
85 85 85	16.36 17.17 16.60	138 131 183	41.96 39.68 62.48
128 0 0	15.70 8.29 1.39	205 18 23	36.56 19.63 3.83
128 0 128	21.96 10.59 31.30	216 82 59	46.03 32.19 11.31
128 128 0	27.04 32.25 4.17	226 149 126	64.26 57.15 35.85
128 128 128	33.76 35.36 34.48	0 125 57	12.95 24.25 10.03
128 128 255	48.71 41.41 110.05	58 152 94	23.79 37.29 21.87
128 255 128	64.73 96.60 41.04	142 188 154	51.56 62.92 49.45
170 0 255	46.78 21.64 107.01	206 144 126	56.96 51.94 35.39
170 170 170	55.90 58.67 57.06	228 139 21	56.92 51.03 7.12
170 255 0	67.68 98.39 11.15	207 14 70	38.91 20.36 12.60
170 255 255	89.69 107.83 117.36	139 27 104	23.23 12.70 22.37
255 0 0	51.30 26.64 2.67	151 178 37	43.43 56.10 10.10
255 0 170	61.67 30.51 52.74	0 130 141	19.29 27.98 38.57
255 0 255	72.54 34.90 108.12	0 95 167	16.49 18.12 49.72
255 128 128	69.72 54.00 36.12	235 237 242	101.48 106.25 107.04
255 170 0	70.85 67.10 7.51	211 215 221	84.92 89.09 91.40
255 170 255	92.81 76.63 113.70	187 193 201	69.68 73.48 76.56
255 255 0	93.57 111.78 11.96	141 150 156	43.37 46.24 48.76
255 255 170	104.69 116.81 62.67	98 107 111	23.28 25.06 26.39
170 85 85	34.54 26.62 17.81	62 72 75	10.98 12.11 13.14
85 170 85	30.72 46.50 20.12	36 50 52	5.27 6.15 7.01