

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2009-1-31 14:37:32
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY1
EDID-Name:
EDID-Serial:
Profile: C:/WINDOWS/System32/spool/DRIVERS/COLOR/ugra_120cdm.icc
Created: 2009-1-31 14:31
Measurement device: DTP94-LCD mode

Summary

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

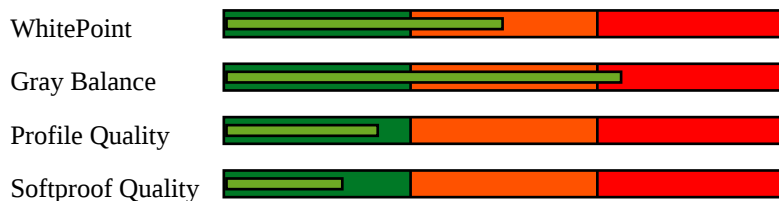
Calibration

White Point	no
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:	112.35 119.54 113.70
XYZ (normalized):	93.99 100.00 95.11
Luminance:	119.5 Cd/m2
Next Temperature:	5821 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	3.0 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:	2.3 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	0.91	2.25	
5	6605	0.63	4.76	1.97	1.83
10	6083	1.89	13.11	1.24	1.83
15	5836	4.01	21.41	0.22	1.81
20	5860	6.63	28.24	1.38	1.80
25	5856	9.69	34.20	1.05	1.82
30	5895	13.44	39.99	0.90	1.82
35	5808	17.79	45.47	0.19	1.82
40	5868	22.68	50.66	0.44	1.82
45	5861	27.87	55.39	0.27	1.83
50	5879	33.75	60.10	0.75	1.82
55	5884	39.91	64.47	0.95	1.83
60	5841	47.00	68.98	0.49	1.83
65	5872	54.15	73.09	0.54	1.83
70	5867	62.14	77.27	0.41	1.83
75	5812	70.66	81.35	0.17	1.83
80	5831	79.28	85.16	0.45	1.83
85	5842	87.91	88.70	1.05	1.86
90	5855	97.98	92.56	0.82	1.85
95	5850	108.74	96.40	0.69	1.78
100	5821	119.54	100.00	0.00	
Average	5864			0.63	1.82
Range				1.38	
Max				1.38	

Tone values = 87.5%

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: Bradford

RGB	Lab	deltaLab	deltaE
0 0 0	0.9 0.4 -2.2	-0.9 -0.4 2.2	2.4
0 0 128	12.8 47.5 -73.7	0.1 -0.9 -1.6	1.9
0 0 255	28.6 69.5 -112.8	-0.9 1.1 -1.2	1.9
0 128 0	50.7 -58.2 46.3	1.2 0.7 4.0	4.3
0 128 128	53.0 -38.4 -11.0	0.6 0.6 -0.2	0.9
0 170 255	68.6 -25.4 -48.5	-0.0 -0.0 0.5	0.5
0 255 0	87.1 -84.1 80.0	-0.4 -2.9 -3.9	4.9
0 255 170	88.3 -69.2 20.3	-0.3 -2.4 -3.7	4.4
0 255 255	89.8 -54.7 -15.5	-0.5 -2.6 -1.5	3.0
85 85 85	43.8 0.1 -0.8	0.2 -0.1 0.8	0.9
128 0 0	32.7 52.0 41.7	-0.2 1.7 4.2	4.6
128 0 128	35.7 61.5 -36.6	0.0 0.7 -0.6	0.9
128 128 0	58.6 -8.9 56.0	0.7 -1.2 3.4	3.7
128 128 128	60.4 0.5 -0.3	0.3 -0.5 0.3	0.7
128 128 255	64.1 20.7 -56.0	-0.2 -0.5 1.2	1.3
128 255 128	91.3 -49.7 42.3	-0.4 -2.7 -2.9	4.0
170 0 255	49.0 81.2 -79.4	-0.1 1.3 1.2	1.8
170 170 170	74.7 -0.4 -0.2	0.3 0.4 0.2	0.5
170 255 0	92.7 -43.6 86.8	-0.3 -1.5 -3.7	4.0
170 255 255	95.2 -23.1 -7.8	-0.5 -1.7 -0.6	1.9
255 0 0	56.2 80.1 73.0	1.1 1.0 -3.0	3.3
255 0 170	58.6 87.6 -21.1	1.1 0.1 0.6	1.2
255 0 255	61.5 93.5 -58.3	0.7 0.5 2.1	2.2
255 128 128	73.0 42.8 19.9	1.1 0.9 0.8	1.7
255 170 0	79.8 19.2 79.0	1.3 0.7 0.7	1.7
255 170 255	83.4 34.7 -25.1	0.6 1.1 2.0	2.4
255 255 0	97.8 -15.8 94.5	0.1 0.5 -4.7	4.7
255 255 170	98.8 -7.7 35.5	0.2 0.1 -2.3	2.3
255 255 255	100.0 0.0 0.0	0.0 0.0 -0.0	0.0
170 85 85	54.2 33.9 15.4	0.4 0.5 0.9	1.1
85 170 85	67.5 -41.3 30.0	0.3 0.1 1.0	1.1
85 85 170	46.3 16.4 -42.9	0.2 -0.5 -0.2	0.6
85 170 170	68.9 -28.5 -9.1	0.2 -0.1 -0.1	0.3
170 85 170	56.1 42.7 -27.0	0.3 0.2 0.1	0.4
170 170 85	73.3 -8.9 38.6	0.4 0.6 1.1	1.3
Average			2.1
Maximum			4.9

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	92 %
sRGB	100 %
AdobeRGB	81 %
ECI-RGB v1.0	73 %

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	57.3 -19.8 -45.1	18.0
66.9 -24.7 -37.1	66.6 -23.8 -38.1	1.3
79.7 -12.5 -21.8	79.8 -11.9 -23.2	1.6
48.0 74.0 -3.0	47.6 72.3 -3.4	1.8
60.8 50.6 -6.7	60.4 50.2 -6.5	0.6
76.4 25.8 -6.9	75.9 25.6 -7.1	0.6
89.0 -5.0 93.0	88.0 -4.1 83.8	9.3
90.3 -4.7 62.6	89.6 -4.6 62.9	0.8
92.2 -3.5 31.1	91.8 -4.0 32.0	1.1
53.1 37.7 28.9	52.8 37.0 28.2	1.0
41.5 22.7 16.8	41.6 22.1 15.9	1.1
31.9 40.0 24.0	32.1 39.2 22.6	1.6
32.5 44.5 -1.8	32.7 43.5 -1.9	1.0
51.3 1.3 44.5	50.7 1.8 42.0	2.6
34.6 -36.4 13.9	33.9 -37.0 12.1	1.9
36.0 -26.2 -20.9	36.1 -22.6 -19.4	3.8
20.9 9.6 -23.6	21.2 10.4 -23.5	0.9
89.0 0.0 -1.9	88.6 0.8 -2.3	1.0
82.8 0.0 -1.7	82.5 0.3 -1.9	0.5
69.3 0.0 -1.4	68.9 0.3 -2.0	0.8
54.1 0.0 -1.0	53.8 0.3 -1.5	0.7
36.6 0.0 -0.5	36.4 0.7 -1.3	1.1
16.0 0.0 0.0	16.5 0.6 -0.7	1.0
24.0 22.0 -46.0	24.2 22.4 -45.2	0.9
40.9 17.9 -36.6	40.6 18.5 -36.1	0.8
63.7 10.3 -23.8	63.2 10.8 -24.4	0.9
47.0 68.0 48.0	46.8 66.6 47.9	1.4
58.5 47.1 37.9	58.0 46.7 37.3	0.9
74.2 22.9 21.4	73.4 23.3 21.0	1.0
50.0 -65.0 27.0	50.5 -53.2 27.0	11.8
62.1 -39.8 21.0	61.4 -39.3 20.5	1.1
77.0 -19.1 11.0	76.4 -19.1 10.7	0.6
71.2 18.9 17.3	70.4 19.5 16.5	1.2
71.2 22.1 73.1	70.1 22.7 70.3	3.0
47.7 71.2 16.2	47.2 70.0 15.2	1.7
38.0 55.4 -20.9	38.0 54.9 -20.4	0.7
73.7 -22.8 67.6	72.9 -22.9 65.2	2.5
52.3 -52.3 -20.1	53.7 -36.0 -16.0	16.8
43.3 -17.0 -48.6	43.9 -9.6 -45.5	8.0
95.0 0.0 -2.0	94.7 0.1 -2.9	1.0
88.5 -0.4 -3.1	88.1 -0.0 -4.0	1.1
82.0 -0.9 -4.1	81.6 -0.5 -4.5	0.6
67.7 -2.0 -4.4	67.1 -1.7 -4.6	0.7
52.2 -2.5 -3.5	51.7 -2.5 -3.8	0.6
37.5 -3.9 -3.1	37.2 -3.0 -4.3	1.4
26.3 -6.8 -3.4	25.9 -5.3 -4.8	2.1
Average		2.5
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	112.35 119.54 113.70	85 85 170	21.60 18.72 48.36
0 0 0	0.13 0.12 0.27	85 170 170	34.87 47.18 53.41
12 12 12	0.62 0.63 0.73	170 85 170	40.17 28.58 49.40
25 25 25	1.80 1.89 1.92	170 170 85	47.02 54.39 21.70
38 38 38	3.78 4.01 3.84	0 135 211	24.61 30.71 71.85
51 51 51	6.33 6.63 6.55	46 163 224	34.27 43.84 83.78
63 63 63	9.20 9.69 9.46	140 196 234	58.91 67.81 95.17
76 76 76	12.70 13.44 13.10	197 0 104	37.28 19.26 20.65
89 89 89	16.76 17.79 16.95	207 86 144	49.13 33.76 37.64
102 102 102	21.34 22.68 21.82	219 155 191	67.59 59.28 64.66
114 114 114	26.15 27.87 26.64	242 216 0	76.87 85.54 12.13
127 127 127	31.80 33.75 32.62	241 221 78	80.50 89.63 23.79
140 140 140	37.63 39.91 38.68	238 228 154	86.72 95.58 51.57
153 153 153	44.27 47.00 45.08	173 78 61	32.85 24.51 10.48
165 165 165	50.90 54.15 52.04	115 65 55	17.54 14.45 8.25
178 178 178	58.34 62.14 59.53	110 29 30	13.31 8.36 3.15
191 191 191	66.49 70.66 67.25	111 27 64	14.57 8.68 9.03
204 204 204	74.66 79.28 75.86	119 100 28	21.30 22.55 5.46
216 216 216	83.00 87.91 84.71	6 77 43	5.04 9.61 5.72
229 229 229	92.32 97.98 94.28	0 79 99	7.67 11.00 18.58
242 242 242	102.40 108.74 104.42	37 35 68	4.63 3.98 9.58
0 0 128	5.22 2.00 26.79	215 216 220	82.95 87.74 86.68
0 0 255	18.61 7.45 97.49	194 195 199	68.94 73.13 71.95
0 128 0	10.45 22.82 4.49	152 153 156	44.18 46.85 46.40
0 128 128	15.88 25.42 31.16	110 110 112	24.52 26.00 25.68
0 170 255	36.94 47.25 104.66	68 68 69	10.46 11.01 10.95
0 255 0	40.47 84.19 12.81	30 30 30	2.50 2.62 2.59
0 255 170	49.05 87.49 57.41	40 36 110	7.19 5.09 21.41
0 255 255	59.01 91.59 110.04	81 70 140	16.84 14.04 34.13
85 85 85	15.41 16.36 15.94	139 131 185	39.94 38.23 59.45
128 0 0	15.84 8.56 1.09	195 14 25	33.91 18.38 3.17
128 0 128	21.05 10.47 28.35	207 81 59	43.32 30.51 10.50
128 128 0	26.74 31.56 5.33	220 148 125	60.69 54.25 33.49
128 128 128	32.31 34.21 32.78	0 125 51	11.16 22.61 9.46
128 128 255	45.93 39.90 104.26	68 152 90	22.63 35.64 20.39
128 255 128	62.08 94.76 40.99	145 188 152	48.82 60.56 46.59
170 0 255	44.47 21.24 100.23	201 143 125	53.65 49.09 33.02
170 170 170	53.50 57.08 54.49	220 139 0	53.78 48.34 6.70
170 255 0	66.90 98.13 14.04	197 7 73	35.70 18.79 11.78
170 255 255	85.79 105.76 112.79	134 25 107	21.57 11.89 20.86
255 0 0	52.87 27.86 1.99	151 178 17	40.99 53.67 9.53
255 0 170	61.78 31.17 47.97	0 130 141	17.00 26.25 35.91
255 0 255	71.78 35.35 100.93	0 95 170	14.72 16.83 46.99
255 128 128	69.01 53.31 33.88	235 237 242	97.84 103.95 103.49
255 170 0	70.86 66.51 8.94	211 215 222	81.25 86.36 87.74
255 170 255	90.20 75.16 108.05	188 193 202	66.85 71.27 73.30
255 255 0	93.61 112.16 14.54	142 150 157	40.80 43.95 45.94
255 255 170	102.39 115.36 60.56	99 107 111	21.80 23.76 24.84
170 85 85	33.89 26.14 16.74	63 72 75	10.45 11.54 12.56
85 170 85	28.53 44.63 20.85	38 50 52	4.88 5.66 6.49