

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2009-10-19 23:22:25
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY1
Profile: C:/Windows/system32/spool/.../1ugra_19.10.09-5800K-18-120cd-lut.icc
Created: 2009-10-19 23:16
Measurement device: DTP94-LCD mode

Summary

WARNING: You are using a LookUpTable-Profile. Some applications do not support LUT-Profiles correctly. The monitor has passed the certification according to the UGRA DACT specifications.

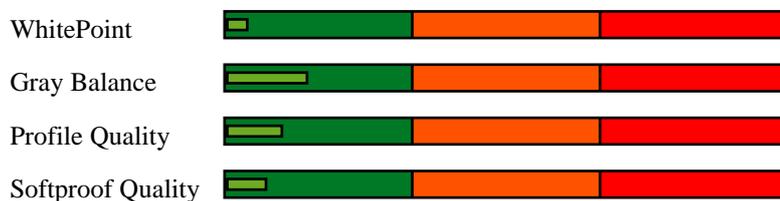
Calibration

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:	113.98 119.52 116.89
XYZ (normalized):	95.37 100.00 97.80
Luminance:	119.5 Cd/m2
Next Temperature:	5821 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.2 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:	1.9 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	17281	0.17	1.28	1.93	
5	6646	0.71	5.37	1.50	1.81
10	5973	2.03	13.82	0.64	1.81
15	5836	4.10	21.69	0.58	1.80
20	5829	6.84	28.70	0.43	1.79
25	5832	9.87	34.51	0.25	1.81
30	5826	13.75	40.42	0.05	1.81
35	5812	18.17	45.91	0.14	1.80
40	5826	23.21	51.17	0.10	1.80
45	5839	28.28	55.75	0.19	1.81
50	5849	34.25	60.48	0.19	1.81
55	5830	40.67	64.98	0.11	1.81
60	5815	47.75	69.43	0.17	1.80
65	5821	54.65	73.37	0.05	1.82
70	5830	62.66	77.54	0.10	1.81
75	5803	70.93	81.48	0.25	1.82
80	5816	80.14	85.53	0.10	1.80
85	5811	88.81	89.07	0.11	1.83
90	5802	98.85	92.89	0.19	1.81
95	5802	108.90	96.46	0.23	1.84
100	5821	119.52	100.00	0.00	
Average	5830			0.20	1.81
Range				0.86	
Max				0.64	

Tone values = 98.7%

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	1.3 0.1 -1.9	-0.1 -0.2 0.3	0.3
0 0 128	13.9 47.0 -74.8	0.3 -1.4 1.0	1.8
0 0 255	28.9 72.8 -114.9	-0.0 -0.2 0.0	0.2
0 128 0	50.8 -85.4 51.9	-0.1 1.4 -0.0	1.4
0 128 128	52.9 -57.7 -12.5	0.4 0.3 0.0	0.5
0 170 255	68.1 -43.0 -50.4	-0.0 0.1 0.2	0.2
0 255 0	85.4 -130.0 80.4	0.2 -0.2 0.2	0.4
0 255 170	86.9 -107.9 16.5	0.1 0.2 0.0	0.2
0 255 255	88.4 -87.6 -18.7	-0.0 0.5 -0.8	0.9
85 85 85	44.2 0.0 -0.1	0.1 0.3 -0.1	0.3
128 0 0	33.7 66.3 50.6	-0.2 -0.2 -0.1	0.3
128 0 128	36.9 73.7 -36.2	0.3 0.2 -0.3	0.5
128 128 0	59.0 -11.0 64.4	0.3 1.4 0.0	1.4
128 128 128	60.8 -0.1 -0.1	0.1 0.1 0.1	0.2
128 128 255	64.4 21.2 -55.8	0.1 -0.2 0.4	0.5
128 255 128	90.2 -72.6 39.9	-0.0 0.7 0.3	0.7
170 0 255	50.5 95.5 -78.2	-0.0 0.0 0.3	0.3
170 170 170	75.0 0.0 -0.1	0.1 -0.0 0.2	0.2
170 255 0	91.8 -59.8 90.1	-0.0 0.0 -0.2	0.2
170 255 255	94.4 -35.7 -9.2	-0.1 0.1 -0.2	0.2
255 0 0	59.2 101.7 85.7	0.1 0.1 0.2	0.3
255 0 170	61.6 107.2 -18.3	0.2 -0.1 0.4	0.5
255 0 255	64.1 112.5 -55.3	0.0 0.1 0.6	0.6
255 128 128	75.1 57.3 23.0	0.1 -0.2 0.1	0.2
255 170 0	81.4 29.9 89.8	-0.0 -0.0 -0.4	0.4
255 170 255	84.7 44.8 -22.5	0.0 0.4 -0.1	0.4
255 255 0	97.7 -16.9 99.2	0.1 0.3 -0.2	0.3
255 255 170	98.8 -8.5 34.8	-0.0 0.4 -0.1	0.4
255 255 255	100.0 0.0 0.0	0.0 -0.0 0.0	0.0
170 85 85	55.4 44.8 18.1	0.3 0.5 -0.1	0.7
85 170 85	67.3 -57.0 31.3	0.2 0.8 -0.1	0.8
85 85 170	47.0 17.1 -43.9	0.4 -0.2 0.2	0.5
85 170 170	68.8 -41.3 -10.2	0.2 0.1 0.1	0.2
170 85 170	57.4 52.9 -26.4	0.4 -0.3 0.2	0.6
170 170 85	73.6 -9.2 41.6	0.2 0.6 -0.1	0.6
Average			0.5
Maximum			1.8

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	99 %
sRGB	100 %
AdobeRGB	99 %
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	55.3 -30.9 -48.9	6.2
66.9 -24.7 -37.1	66.7 -25.0 -37.0	0.3
79.7 -12.5 -21.8	79.5 -12.1 -21.9	0.5
48.0 74.0 -3.0	47.6 74.4 -2.8	0.6
60.8 50.6 -6.7	60.5 50.7 -6.4	0.5
76.4 25.8 -6.9	76.2 25.5 -6.8	0.3
89.0 -5.0 93.0	89.0 -4.7 92.5	0.6
90.3 -4.7 62.6	90.4 -4.4 63.0	0.6
92.2 -3.5 31.1	92.2 -3.5 30.9	0.2
53.1 37.7 28.9	52.7 37.0 29.2	0.9
41.5 22.7 16.8	41.4 22.3 17.0	0.5
31.9 40.0 24.0	31.7 39.3 25.8	1.9
32.5 44.4 -1.8	32.2 43.7 -0.6	1.4
51.3 1.3 44.5	51.0 -0.2 46.1	2.2
34.6 -36.4 13.9	34.4 -37.0 14.6	1.0
36.0 -26.2 -20.9	35.7 -26.9 -20.2	1.0
20.9 9.6 -23.6	20.8 9.0 -23.0	0.9
89.0 0.0 -1.8	89.0 0.1 -1.5	0.3
82.8 0.0 -1.7	82.7 -0.1 -1.7	0.1
69.3 0.0 -1.4	69.2 0.3 -1.3	0.4
54.1 0.0 -1.0	54.2 -0.5 -0.6	0.6
36.6 -0.0 -0.5	36.7 -0.4 -0.4	0.4
16.0 0.0 0.0	16.3 -0.1 0.4	0.5
24.0 22.0 -46.0	23.5 22.2 -45.8	0.6
40.9 17.9 -36.6	40.4 18.3 -36.5	0.6
63.7 10.3 -23.8	63.6 10.2 -23.7	0.2
47.0 68.0 48.0	46.7 67.5 49.5	1.6
58.5 47.1 37.9	58.3 46.3 38.4	1.0
74.2 22.9 21.4	74.0 23.0 21.2	0.3
50.0 -65.0 27.0	49.9 -67.2 28.2	2.6
62.1 -39.8 21.0	62.0 -40.1 21.0	0.3
77.0 -19.1 11.0	76.8 -19.0 11.2	0.3
71.2 18.8 17.3	71.0 18.7 17.1	0.4
71.2 22.2 73.1	71.1 21.9 73.5	0.6
47.7 71.2 16.2	47.3 71.4 16.2	0.5
38.0 55.4 -20.9	37.6 55.6 -20.6	0.6
73.7 -22.8 67.6	73.5 -23.4 68.8	1.4
52.3 -52.3 -20.2	52.0 -51.6 -19.7	1.0
43.3 -17.0 -48.6	42.9 -16.2 -49.0	1.0
95.0 0.0 -2.0	95.1 0.0 -1.7	0.3
88.5 -0.4 -3.1	88.5 -0.6 -2.5	0.7
82.0 -0.9 -4.1	81.9 -0.7 -3.9	0.3
67.7 -2.0 -4.4	67.7 -2.2 -4.1	0.4
52.2 -2.5 -3.5	52.2 -2.6 -3.1	0.4
37.5 -3.9 -3.1	37.4 -3.9 -2.7	0.5
26.3 -6.8 -3.4	26.5 -7.6 -2.8	1.0
Average		0.8
Gamut-Volume		99 %

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	113.98 119.52 116.89	85 85 170	22.89 19.42 52.01
0 0 0	0.17 0.17 0.31	85 170 170	31.58 47.00 55.86
12 12 12	0.68 0.71 0.81	170 85 170	46.30 30.19 52.52
25 25 25	1.94 2.03 2.06	170 170 85	47.97 54.89 20.85
38 38 38	3.94 4.10 4.08	0 128 208	20.89 28.41 74.44
51 51 51	6.56 6.84 6.76	80 158 221	34.73 43.97 84.88
63 63 63	9.43 9.87 9.72	152 192 232	59.18 67.13 95.02
76 76 76	13.12 13.75 13.47	172 35 101	38.30 19.34 20.92
89 89 89	17.35 18.17 17.79	186 94 142	50.15 34.06 38.89
102 102 102	22.15 23.21 22.75	206 158 190	69.09 59.93 66.76
114 114 114	26.92 28.28 27.66	238 218 0	79.65 87.99 9.76
127 127 127	32.63 34.25 33.62	238 222 86	83.41 91.51 25.15
140 140 140	38.75 40.67 39.78	236 228 158	89.21 96.57 54.80
153 153 153	45.50 47.75 46.58	155 84 61	33.03 24.45 10.36
165 165 165	52.13 54.65 53.48	105 67 54	17.61 14.32 8.02
178 178 178	59.76 62.66 61.39	96 36 27	13.11 8.14 2.63
191 191 191	67.77 70.93 69.37	97 34 61	14.40 8.47 8.64
204 204 204	76.41 80.14 78.26	114 101 29	21.32 22.80 4.79
216 216 216	84.70 88.81 86.70	31 74 41	5.27 9.81 5.45
229 229 229	94.30 98.85 96.39	22 75 96	7.21 10.76 19.14
242 242 242	103.86 108.90 106.13	34 34 65	4.45 3.85 9.45
0 0 128	5.77 2.28 29.64	215 216 220	84.55 88.56 88.82
0 0 255	20.03 7.73 104.37	194 195 199	70.30 73.70 74.25
0 128 0	7.22 22.86 3.50	152 152 155	45.27 47.31 47.48
0 128 128	12.98 25.37 33.08	109 110 111	25.11 26.45 26.26
0 170 255	31.95 46.42 109.11	67 68 68	10.66 11.23 11.12
0 255 0	25.19 80.06 11.63	29 29 28	2.44 2.57 2.46
0 255 170	34.62 84.07 60.49	36 34 106	6.98 4.85 21.66
0 255 255	44.95 88.12 114.46	76 69 137	16.91 13.91 35.07
85 85 85	15.97 16.74 16.41	136 131 183	40.87 38.79 60.98
128 0 0	19.67 9.11 0.60	170 41 26	34.34 18.38 2.98
128 0 128	25.41 11.28 30.42	185 91 60	44.02 30.91 10.55
128 128 0	27.01 32.12 3.85	206 152 126	62.50 55.43 35.11
128 128 128	33.04 34.67 34.02	28 121 51	9.13 22.04 8.97
128 128 255	47.34 40.34 107.77	90 148 91	23.36 36.32 21.13
128 255 128	51.22 91.86 42.42	155 186 152	50.23 61.25 48.03
170 0 255	52.94 22.82 105.35	189 146 125	54.97 50.05 34.24
170 170 170	55.02 57.68 56.55	205 144 22	55.70 49.99 6.42
170 255 0	58.40 95.52 12.17	172 38 71	36.68 19.01 11.82
170 255 255	78.56 103.50 115.96	117 35 103	21.58 11.69 21.21
255 0 0	68.86 31.57 1.37	157 176 30	42.12 54.55 8.82
255 0 170	78.28 35.12 51.79	0 124 139	13.46 24.41 37.49
255 0 255	88.73 39.13 106.31	9 90 167	13.38 16.06 49.99
255 128 128	81.87 57.08 35.24	236 237 242	100.12 104.90 105.33
255 170 0	80.84 69.92 6.79	212 215 221	83.17 87.46 89.12
255 170 255	100.69 78.01 110.55	189 193 201	68.37 71.93 75.25
255 255 0	93.84 111.79 12.71	143 149 156	42.15 44.94 47.74
255 255 170	103.52 115.55 63.24	100 106 110	22.67 24.37 25.75
170 85 85	39.37 27.50 16.97	64 71 73	10.59 11.67 12.41
85 170 85	24.69 44.29 20.42	39 49 50	4.95 5.88 6.41