

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2009-5-14 23:05:40
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY1
EDID-Name: DELL 2709W
EDID-Serial: TR0708C406PS
Profile: C:/Windows/system32/spool/.../14.05.09-6500K-22-120cd-lut.icc
Created: 2009-5-14 22:55
Measurement device: DTP94-LCD mode

Summary

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

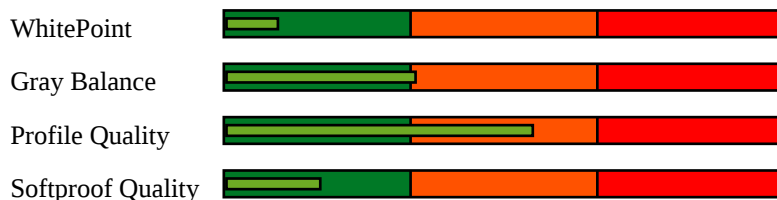
Calibration

White Point	yes
Gray balance	no
Profile quality	no

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:	115.10 121.00 132.80
XYZ (normalized):	95.12 100.00 109.76
Luminance:	121.0 Cd/m2
Next Temperature:	6550 Kelvin
Assumed Target Whitepoint:	6500 Kelvin
Distance to assumed Target Whitepoint:	0.6 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:	0.3 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	9391	0.10	0.75	0.34	
5	7560	0.30	2.24	0.53	2.13
10	6575	0.80	5.97	0.30	2.24
15	6366	2.00	13.55	0.44	2.20
20	6534	3.60	19.94	0.40	2.21
25	6495	5.60	25.65	0.20	2.23
30	6623	8.40	31.67	0.44	2.22
35	6558	12.00	37.69	0.30	2.21
40	6614	16.20	43.34	0.29	2.20
45	6558	20.70	48.40	0.36	2.21
50	6542	26.40	53.83	0.38	2.21
55	6433	32.60	58.92	0.61	2.20
60	6534	39.70	64.01	0.88	2.20
65	6542	46.60	68.40	0.46	2.23
70	6503	54.80	73.08	0.82	2.22
75	6495	63.90	77.76	0.46	2.22
80	6495	73.90	82.42	0.48	2.21
85	6495	83.80	86.63	0.50	2.26
90	6495	95.30	91.13	0.52	2.27
95	6495	107.70	95.58	0.54	2.27
100	6550	121.00	100.00	0.00	
Average	6518			0.45	2.22
Range				1.65	
Max				0.88	

Tone values = 94.0%

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	0.7 -0.1 -0.3	0.0 0.0 0.3	0.3
0 0 128	12.4 40.3 -67.1	2.2 -8.6 4.5	9.9
0 0 255	32.9 59.8 -109.5	-0.1 0.7 0.3	0.7
0 128 0	44.4 -79.7 48.6	-0.9 4.0 -0.6	4.2
0 128 128	46.4 -52.2 -13.3	2.5 -1.6 2.3	3.7
0 170 255	64.7 -34.8 -57.0	-0.2 2.4 0.2	2.4
0 255 0	83.7 -130.0 82.0	0.2 -0.3 0.5	0.6
0 255 170	85.1 -108.5 19.5	-0.5 0.2 0.2	0.6
0 255 255	87.4 -86.0 -21.6	0.2 0.0 0.5	0.6
85 85 85	35.8 0.2 -0.2	0.7 -0.4 0.3	0.9
128 0 0	30.5 58.4 49.3	-0.7 -1.0 -1.3	1.8
128 0 128	34.0 64.6 -30.5	0.8 -2.7 0.5	2.9
128 128 0	52.7 -10.4 61.5	0.4 3.9 0.8	4.0
128 128 128	54.3 0.3 0.1	-0.2 -0.4 -0.1	0.4
128 128 255	60.3 23.3 -63.3	0.1 0.8 0.9	1.2
128 255 128	87.7 -81.6 45.7	-0.6 1.1 -0.7	1.5
170 0 255	51.5 83.7 -77.3	-0.3 0.2 0.1	0.4
170 170 170	70.2 0.4 0.1	0.1 -0.5 0.0	0.5
170 255 0	89.6 -65.7 91.5	-0.1 -0.5 -0.1	0.6
170 255 255	93.0 -39.7 -12.0	-0.4 -0.8 0.0	0.9
255 0 0	60.7 97.1 94.8	0.0 0.1 0.0	0.1
255 0 170	63.1 101.6 -7.6	0.2 -2.1 1.0	2.3
255 0 255	66.9 103.8 -51.0	-0.1 0.7 -0.2	0.8
255 128 128	72.8 63.2 31.2	-0.2 -2.0 0.1	2.0
255 170 0	79.3 35.9 93.7	-0.3 -0.3 -0.3	0.5
255 170 255	83.4 49.3 -25.0	-0.6 -0.1 -0.7	0.9
255 255 0	97.0 -15.1 103.1	0.1 -0.3 0.3	0.4
255 255 170	98.1 -8.1 41.2	-0.5 0.7 0.1	0.9
255 255 255	100.0 0.0 0.0	0.0 -0.0 0.0	0.0
170 85 85	50.0 47.7 23.3	1.2 -1.6 0.5	2.0
85 170 85	61.3 -62.3 34.3	1.2 2.1 -0.1	2.4
85 85 170	39.9 19.5 -48.2	2.7 -3.1 3.2	5.2
85 170 170	63.2 -44.1 -12.1	1.1 1.2 1.2	2.0
170 85 170	52.6 55.3 -26.9	1.5 -3.1 2.3	4.1
170 170 85	68.7 -9.2 46.6	0.6 0.2 -0.1	0.6
Average			1.8
Maximum			9.9

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	99 %
sRGB	99 %
AdobeRGB	99 %
ECI-RGB v1.0	94 %

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	54.6 -29.8 -49.8	7.2
66.9 -24.7 -37.1	66.1 -25.7 -39.0	2.3
79.7 -12.5 -21.8	79.7 -12.4 -21.6	0.2
48.0 74.0 -3.0	46.6 77.3 -5.6	4.4
60.8 50.6 -6.7	59.8 52.9 -8.2	2.9
76.4 25.8 -6.9	76.4 27.2 -7.1	1.4
89.0 -5.0 93.0	88.5 -3.6 92.2	1.7
90.3 -4.7 62.6	90.5 -5.0 62.3	0.4
92.2 -3.5 31.1	92.3 -3.7 30.9	0.3
53.1 37.7 28.9	52.1 38.4 28.5	1.3
41.5 22.7 16.8	40.6 24.0 16.8	1.6
31.9 40.0 24.0	31.2 40.9 25.5	1.9
32.5 44.5 -1.8	31.3 47.2 -2.0	3.0
51.3 1.3 44.5	50.5 0.6 45.2	1.2
34.6 -36.4 13.9	33.6 -37.3 14.6	1.5
36.0 -26.2 -20.9	33.4 -24.8 -23.1	3.7
20.9 9.6 -23.6	19.3 12.8 -24.7	3.7
89.0 0.0 -1.9	88.9 1.1 -2.1	1.2
82.8 0.0 -1.7	82.8 0.2 -1.8	0.2
69.3 0.0 -1.4	69.3 0.6 -1.4	0.6
54.1 0.0 -1.0	54.4 0.2 -0.9	0.4
36.6 0.0 -0.5	36.0 0.4 -0.9	0.8
16.0 0.0 0.0	16.3 1.1 0.5	1.2
24.0 22.0 -46.0	20.7 28.9 -50.4	8.8
40.9 17.9 -36.6	38.6 20.7 -39.2	4.5
63.7 10.3 -23.8	63.1 11.1 -24.9	1.5
47.0 68.0 48.0	46.3 68.8 48.1	1.0
58.5 47.1 37.9	57.8 48.3 38.4	1.5
74.2 22.9 21.4	74.3 23.8 21.6	0.9
50.0 -65.0 27.0	48.8 -68.4 28.1	3.8
62.1 -39.8 21.0	61.3 -40.8 20.1	1.5
77.0 -19.1 11.0	76.9 -18.2 10.7	1.0
71.2 18.9 17.3	71.1 19.6 17.3	0.7
71.2 22.1 73.1	70.9 21.4 73.4	0.9
47.7 71.2 16.2	46.4 73.5 14.4	3.2
38.0 55.4 -20.9	36.7 59.7 -22.8	4.9
73.7 -22.8 67.6	72.8 -22.8 67.7	0.9
52.3 -52.3 -20.1	50.1 -50.4 -20.4	2.9
43.3 -17.0 -48.6	40.0 -11.2 -52.4	7.7
95.0 0.0 -2.0	95.0 0.2 -2.0	0.2
88.5 -0.4 -3.1	88.4 -0.0 -3.5	0.5
82.0 -0.9 -4.1	82.1 -0.2 -4.3	0.8
67.7 -2.0 -4.4	67.8 -1.5 -4.5	0.5
52.2 -2.5 -3.5	52.2 -1.6 -4.1	1.1
37.5 -3.9 -3.1	37.0 -3.3 -3.6	0.8
26.3 -6.8 -3.4	26.1 -6.7 -3.5	0.3
Average		2.0
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	115.10 121.00 132.80	85 85 170	17.87 14.00 50.48
0 0 0	0.09 0.10 0.14	85 170 170	25.13 39.00 54.41
12 12 12	0.29 0.30 0.37	170 85 170	40.38 24.90 51.08
25 25 25	0.77 0.80 0.89	170 170 85	39.93 46.70 16.01
38 38 38	1.90 2.00 2.14	0 143 213	21.94 28.40 84.26
51 51 51	3.40 3.60 3.91	94 171 226	35.23 43.90 97.89
63 63 63	5.34 5.60 6.13	167 203 236	60.86 68.70 108.16
76 76 76	8.01 8.40 9.35	182 25 122	38.05 18.50 24.59
89 89 89	11.45 12.00 13.25	195 105 159	50.08 33.30 44.70
102 102 102	15.41 16.20 17.93	215 170 201	71.03 61.00 76.88
114 114 114	19.75 20.70 22.85	241 223 32	77.88 87.00 10.52
127 127 127	25.04 26.40 28.81	241 230 110	82.70 92.50 29.00
140 140 140	31.11 32.60 35.37	240 235 174	89.41 97.90 62.44
153 153 153	37.53 39.70 43.07	168 98 81	32.55 23.90 11.64
165 165 165	44.19 46.60 50.85	122 82 72	17.22 13.80 8.75
178 178 178	52.45 54.80 60.33	114 46 42	12.97 7.90 2.93
191 191 191	60.98 63.90 69.94	115 39 80	14.36 8.00 9.77
204 204 204	70.52 73.90 80.88	130 118 46	20.89 22.50 5.42
216 216 216	79.97 83.80 91.72	45 92 57	4.97 9.50 5.83
229 229 229	90.94 95.30 104.31	29 89 112	6.75 9.60 21.15
242 242 242	102.77 107.70 117.88	49 44 83	4.44 3.50 10.48
0 0 128	5.07 2.10 26.17	222 222 226	85.99 89.60 101.81
0 0 255	23.38 10.60 121.90	204 205 208	71.34 74.80 84.73
0 128 0	4.98 17.10 2.56	167 167 170	46.12 48.20 54.45
0 128 128	10.07 19.20 29.27	128 128 130	25.85 27.10 30.44
0 170 255	32.48 42.30 125.70	85 85 86	10.43 10.90 12.31
0 255 0	22.79 77.00 10.84	43 42 42	2.53 2.60 2.77
0 255 170	32.36 80.90 60.72	48 37 123	6.95 4.10 24.60
0 255 255	45.96 87.40 132.30	91 81 152	16.56 12.90 39.53
85 85 85	10.30 10.80 11.92	151 145 194	41.40 38.70 69.90
128 0 0	15.26 7.40 0.32	181 45 44	34.00 18.00 3.56
128 0 128	20.62 9.60 26.58	195 103 80	43.65 30.30 11.64
128 128 0	20.34 24.80 2.83	215 166 145	63.43 56.40 39.94
128 128 128	25.67 26.90 29.44	39 137 67	8.34 21.20 9.43
128 128 255	44.14 35.60 123.68	107 163 110	22.64 35.90 23.80
128 255 128	43.38 86.60 38.17	170 198 168	50.99 62.10 55.20
170 0 255	52.18 24.60 121.61	200 160 144	55.64 50.70 38.93
170 170 170	47.43 49.70 54.40	212 157 42	54.48 49.80 7.13
170 255 0	51.09 90.70 11.17	182 35 92	36.06 18.20 13.65
170 255 255	75.20 101.50 132.75	132 35 122	21.94 11.20 24.59
255 0 0	68.87 33.20 1.03	170 188 50	40.77 53.70 9.80
255 0 170	78.72 37.20 50.15	0 137 150	12.93 22.90 40.25
255 0 255	92.19 43.90 122.15	7 100 176	13.23 14.30 55.13
255 128 128	79.34 53.00 30.24	239 240 244	101.19 106.10 120.18
255 170 0	78.18 65.50 5.52	219 221 227	84.17 88.30 102.60
255 170 255	101.67 76.10 126.63	200 203 210	69.76 73.20 86.51
255 255 0	91.62 110.20 11.75	159 164 171	43.11 45.70 54.90
255 255 170	101.17 114.20 61.81	119 124 129	23.13 24.60 29.88
170 85 85	32.72 21.70 12.35	82 89 92	10.62 11.60 14.26
85 170 85	17.67 35.90 15.73	55 66 68	4.97 5.80 7.30