

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2011-2-28 23:05:12
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY4
Profile: C:/Windows/system32/spool/.../FULL-6500K-22-140cd-lut.icc
Created: 2011-2-28 22:58
Measurement device: DTP94-LCD mode (Wide Gamut S-IPS (generic))

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.

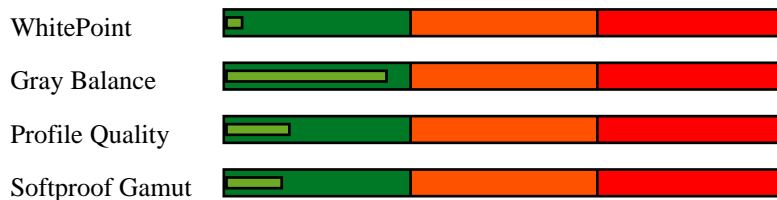
Calibration

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:	130.72 137.44 149.36
XYZ (normalized):	95.11 100.00 108.67
Luminance:	137.4 Cd/m2
Next Temperature:	6482 Kelvin
Assumed Target Whitepoint:	6500 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:	1.7 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	21643	0.22	1.42	1.69	
5	11202	0.39	2.56	1.71	2.25
10	7230	1.06	6.94	1.25	2.22
15	6484	2.25	13.46	1.02	2.22
20	6661	4.12	20.04	0.47	2.21
25	6434	6.55	26.06	0.52	2.22
30	6362	9.54	31.68	0.73	2.23
35	6562	13.42	37.41	0.30	2.23
40	6547	18.09	43.00	0.30	2.23
45	6513	23.34	48.24	0.73	2.22
50	6436	29.62	53.55	0.35	2.22
55	6566	36.54	58.59	0.57	2.23
60	6415	44.53	63.67	0.38	2.22
65	6563	52.52	68.18	0.55	2.24
70	6502	62.41	73.16	0.20	2.22
75	6510	72.83	77.87	0.19	2.21
80	6500	84.09	82.47	0.19	2.20
85	6524	95.10	86.60	0.75	2.29
90	6550	108.30	91.14	0.51	2.25
95	6459	122.42	95.61	0.52	2.23
100	6482	137.44	100.00	0.00	
Average	6504			0.46	2.23
Range				1.73	
Max				1.02	

Tone values = 98.2%

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	1.4 -0.5 -1.7	0.0 -0.1 0.2	0.2
0 0 128	11.5 41.6 -67.9	0.2 -1.0 1.7	2.0
0 0 255	28.8 72.6 -115.2	0.0 0.2 -0.3	0.3
0 128 0	44.4 -78.2 47.4	-0.4 1.6 -0.3	1.7
0 128 128	46.4 -52.7 -11.9	0.6 0.6 -0.6	1.1
0 170 255	64.0 -33.7 -57.4	-0.2 0.1 0.0	0.2
0 255 0	84.9 -131.9 81.8	0.2 -0.4 0.2	0.5
0 255 170	86.1 -111.9 21.9	-0.1 -0.1 0.2	0.2
0 255 255	87.8 -88.0 -20.1	0.0 -0.0 -0.3	0.3
85 85 85	35.9 -0.9 0.1	0.5 1.7 -0.4	1.8
128 0 0	30.0 59.0 45.3	-0.8 -1.0 -1.1	1.7
128 0 128	32.9 65.9 -32.0	0.7 0.7 -0.5	1.1
128 128 0	52.3 -9.0 59.6	0.6 0.6 0.3	1.0
128 128 128	54.0 0.3 0.0	0.2 -0.3 -0.0	0.3
128 128 255	58.6 27.0 -65.8	0.1 -1.1 0.8	1.3
128 255 128	88.7 -84.3 47.3	-0.3 0.6 -0.5	0.9
170 0 255	48.4 91.3 -82.0	-0.2 -0.1 0.0	0.2
170 170 170	70.1 -0.7 -0.2	0.2 0.6 0.2	0.7
170 255 0	90.4 -67.7 90.4	-0.1 -0.3 -0.2	0.4
170 255 255	93.2 -41.7 -11.4	-0.2 -0.0 -0.1	0.3
255 0 0	60.0 99.6 88.2	0.2 0.2 0.4	0.5
255 0 170	62.0 104.5 -9.9	-0.1 -0.3 0.2	0.4
255 0 255	64.8 110.8 -54.1	0.2 0.2 0.4	0.5
255 128 128	72.3 65.6 29.9	-0.3 -0.9 -0.5	1.1
255 170 0	79.0 37.6 90.8	-0.1 -0.1 -0.4	0.5
255 170 255	82.4 52.3 -26.5	-0.2 0.3 -0.0	0.3
255 255 0	97.6 -16.1 101.6	0.2 -0.6 -0.2	0.6
255 255 170	98.7 -9.1 41.7	-0.2 -0.0 0.1	0.2
255 255 255	100.0 0.0 0.0	0.0 -0.0 0.0	0.0
170 85 85	49.4 47.7 22.2	1.0 1.0 -0.3	1.4
85 170 85	61.7 -62.8 35.2	0.5 1.3 -0.9	1.7
85 85 170	39.2 20.4 -49.1	1.1 0.1 0.2	1.1
85 170 170	63.2 -45.2 -11.5	0.4 1.0 -0.0	1.1
170 85 170	51.6 56.8 -28.2	0.7 -0.9 0.5	1.3
170 170 85	68.8 -9.5 46.5	0.3 0.0 -0.7	0.8
Average			0.8
Maximum			2.0

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	100 %
sRGB	100 %
AdobeRGB	100 %
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	55.5 -32.6 -48.5	4.7
66.9 -24.7 -37.1	66.7 -24.6 -37.5	0.4
79.7 -12.5 -21.8	79.5 -11.4 -22.3	1.3
48.0 74.0 -3.0	46.9 74.6 -3.8	1.5
60.8 50.6 -6.7	60.4 51.8 -6.8	1.3
76.4 25.8 -6.9	76.3 25.6 -6.9	0.2
89.0 -5.0 93.0	89.1 -4.5 93.3	0.6
90.3 -4.7 62.6	90.5 -4.5 63.0	0.5
92.2 -3.5 31.1	92.3 -3.2 31.2	0.3
53.1 37.7 28.9	52.3 37.9 30.0	1.3
41.5 22.7 16.8	40.9 22.4 17.4	0.9
31.9 40.0 24.0	30.9 39.6 26.4	2.7
32.5 44.4 -1.8	31.4 44.2 -0.6	1.6
51.3 1.3 44.5	50.5 0.5 46.6	2.4
34.6 -36.4 13.9	33.9 -38.3 14.7	2.2
36.0 -26.2 -20.9	35.4 -28.9 -20.1	2.9
20.9 9.6 -23.6	20.3 8.4 -22.9	1.5
89.0 0.0 -1.8	89.0 -0.7 -1.5	0.8
82.8 0.0 -1.7	82.8 -0.1 -1.9	0.2
69.3 0.0 -1.4	69.0 -0.2 -1.9	0.6
54.1 0.0 -1.0	54.0 0.5 -0.5	0.7
36.6 -0.0 -0.5	36.4 -0.9 -0.4	0.9
16.0 0.0 0.0	15.7 1.3 0.5	1.5
24.0 22.0 -46.0	22.7 20.9 -46.3	1.7
40.9 17.9 -36.6	40.1 17.2 -36.1	1.1
63.7 10.3 -23.8	63.6 10.6 -23.8	0.3
47.0 68.0 48.0	46.2 67.9 50.1	2.3
58.5 47.1 37.9	57.8 47.4 39.0	1.4
74.2 22.9 21.4	74.0 22.4 21.4	0.6
50.0 -65.0 27.0	49.3 -67.5 28.1	2.8
62.1 -39.8 21.0	61.8 -40.6 21.1	0.8
77.0 -19.1 11.0	76.6 -18.3 10.3	1.1
71.2 18.8 17.3	70.9 19.4 17.3	0.6
71.2 22.2 73.1	71.0 22.5 74.5	1.5
47.7 71.2 16.2	46.6 71.4 16.5	1.2
38.0 55.4 -20.9	36.8 55.1 -20.6	1.2
73.7 -22.8 67.6	73.2 -22.5 68.4	1.0
52.3 -52.3 -20.2	51.8 -52.8 -19.1	1.2
43.3 -17.0 -48.6	42.7 -17.6 -48.2	1.0
95.0 0.0 -2.0	94.9 0.3 -2.2	0.3
88.5 -0.4 -3.1	88.5 -1.5 -2.9	1.2
82.0 -0.9 -4.1	82.0 -0.5 -4.3	0.4
67.7 -2.0 -4.4	67.4 -2.4 -4.4	0.5
52.2 -2.5 -3.5	51.9 -2.0 -3.2	0.7
37.5 -3.9 -3.1	37.0 -4.3 -2.9	0.6
26.3 -6.8 -3.4	26.2 -6.8 -3.0	0.4
Average		1.2
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	130.72 137.44 149.36	85 85 170	19.78 15.30 56.32
0 0 0	0.19 0.22 0.39	85 170 170	28.27 44.42 60.59
12 12 12	0.34 0.39 0.57	170 85 170	44.88 27.12 57.08
25 25 25	1.01 1.06 1.27	170 170 85	45.43 53.19 18.13
38 38 38	2.18 2.25 2.53	0 147 215	25.01 33.40 95.10
51 51 51	3.91 4.12 4.58	101 173 226	41.17 51.00 109.42
63 63 63	6.28 6.55 7.16	169 203 236	69.17 77.56 122.36
76 76 76	9.17 9.54 10.37	182 44 119	42.64 21.32 26.71
89 89 89	12.74 13.42 14.71	197 111 158	57.57 38.78 49.87
102 102 102	17.15 18.09 19.74	215 172 200	79.52 69.08 85.83
114 114 114	22.33 23.34 25.71	241 224 22	89.84 100.84 11.89
127 127 127	28.27 29.62 32.15	241 228 108	94.38 105.17 32.11
140 140 140	34.58 36.54 39.88	240 233 173	101.88 111.12 69.83
153 153 153	42.43 44.53 48.07	169 101 79	37.14 27.43 12.63
165 165 165	49.75 52.52 57.38	122 85 71	19.56 15.98 9.83
178 178 178	59.26 62.41 67.85	113 49 39	14.30 8.82 3.05
191 191 191	69.20 72.83 79.34	114 46 78	15.88 9.21 10.54
204 204 204	80.00 84.09 91.67	131 119 43	23.68 25.53 5.71
216 216 216	89.99 95.10 103.16	44 93 57	5.66 10.97 6.66
229 229 229	102.82 108.30 118.50	31 94 113	8.12 12.25 24.06
242 242 242	116.80 122.42 133.26	48 49 83	5.00 4.30 11.72
0 0 128	5.50 2.19 28.88	222 223 226	96.55 101.92 113.57
0 0 255	25.17 9.55 134.22	204 205 208	80.84 84.97 95.35
0 128 0	5.83 19.43 3.11	167 167 170	51.48 54.13 61.07
0 128 128	11.28 21.80 31.82	128 128 129	28.85 30.18 33.20
0 170 255	36.09 46.77 139.55	86 86 87	11.93 12.69 13.99
0 255 0	26.78 90.60 13.23	43 42 41	2.73 2.80 2.96
0 255 170	37.02 94.76 67.53	48 49 123	7.87 5.38 27.11
0 255 255	51.90 100.46 147.20	94 88 152	19.33 15.86 43.97
85 85 85	11.58 12.33 13.36	153 148 194	47.58 44.80 78.33
128 0 0	17.12 8.17 0.67	181 52 39	38.07 20.29 3.55
128 0 128	22.63 10.23 29.69	195 107 78	49.32 34.51 12.84
128 128 0	23.09 27.68 3.42	214 167 144	70.69 63.46 44.62
128 128 128	28.76 30.15 32.74	42 138 68	9.92 24.66 10.99
128 128 255	48.55 37.78 137.98	109 164 110	26.31 41.53 26.63
128 255 128	49.86 101.18 43.04	170 197 168	57.32 69.87 61.93
170 0 255	56.69 24.36 135.42	200 161 143	62.78 57.25 43.48
170 170 170	53.14 56.17 61.32	214 159 37	62.67 56.76 7.72
170 255 0	58.93 105.64 13.78	182 48 89	40.46 20.85 14.44
170 255 255	84.41 115.68 148.33	132 48 120	23.89 12.86 26.27
255 0 0	78.32 36.80 1.71	172 188 49	47.29 61.98 11.09
255 0 170	88.55 40.60 56.91	8 142 154	15.52 28.02 46.96
255 0 255	103.41 46.17 136.49	18 110 178	15.79 18.59 62.61
255 128 128	90.32 59.11 34.37	239 240 244	114.77 120.33 135.21
255 170 0	89.15 73.61 6.92	219 222 227	94.90 100.60 114.57
255 170 255	114.50 83.77 141.80	200 203 210	78.75 82.88 97.04
255 255 0	105.55 127.48 14.52	159 164 170	47.93 51.21 60.78
255 255 170	116.15 131.77 70.22	119 124 128	25.81 27.59 32.49
170 85 85	36.42 24.04 13.93	83 90 92	11.90 13.18 15.71
85 170 85	20.32 41.34 17.52	55 66 67	5.66 6.63 8.10