

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2007-9-4 16:07:40
Report-Version: v1.2.1
Monitor-Name: \\.\DISPLAY1
Profile: C:/Windows/system32/spool/DRIVERS/COLOR/04.09.07ugra-5800K-18-120cd-tr
Created: 2007-9-4 15:24
Measurement device: DTP94-LCD mode

Summary

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	no
Offset/Gravure Paper Type 1/2	yes
Offset on uncoated paper	yes
Newspaper Printing	yes
Layout	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 .

XYZ:	113.32 118.93 116.42
XYZ (normalized):	95.28 100.00 97.89
Luminance:	118.9 Cd/m2
Next Temperature:	5834 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.3 deltaE

Blackpoint

Luminance:	0.1 Cd/m2
Chromaticity:	1.2 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	14636	0.10	0.76	1.20	
5	6511	0.56	4.25	1.24	1.85
10	6015	1.97	13.57	0.47	1.81
15	5888	3.96	21.32	0.56	1.81
20	5856	6.58	28.20	0.30	1.81
25	5697	9.70	34.31	0.67	1.82
30	5692	13.47	40.12	0.72	1.82
35	5683	17.95	45.76	0.85	1.81
40	5756	22.77	50.86	0.48	1.81
45	5822	27.77	55.43	0.33	1.82
50	5880	34.14	60.52	0.36	1.80
55	5789	40.48	64.99	0.43	1.81
60	5784	47.53	69.44	0.47	1.80
65	5806	54.38	73.37	0.23	1.82
70	5787	62.54	77.63	0.43	1.81
75	5794	70.62	81.50	0.51	1.81
80	5794	79.62	85.48	0.53	1.80
85	5779	88.65	89.18	0.57	1.81
90	5793	98.06	92.77	0.50	1.83
95	5829	108.54	96.52	0.16	1.80
100	5834	118.93	100.00	0.00	
Average	5804			0.45	1.81
Range				1.32	

Tone values = 97.0%

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	0.8 0.3 -1.1	-0.8 -0.3 1.1	1.4
0 0 128	13.3 42.8 -73.1	0.6 -1.7 0.3	1.8
0 0 255	29.2 62.6 -110.9	-0.1 -0.5 0.8	1.0
0 128 0	51.9 -58.1 46.9	-0.2 0.9 0.5	1.1
0 128 128	53.6 -39.4 -11.0	-0.0 0.7 -0.2	0.7
0 170 255	68.7 -27.8 -48.1	0.1 -0.0 1.1	1.1
0 255 0	86.6 -86.9 74.0	-0.2 0.6 -2.4	2.5
0 255 170	87.9 -72.3 16.1	-0.1 0.3 -0.5	0.6
0 255 255	89.3 -58.6 -17.4	-0.2 0.1 0.4	0.5
85 85 85	44.2 0.7 0.8	-0.2 -0.7 -0.8	1.1
128 0 0	32.4 55.1 42.6	0.2 -0.9 1.9	2.1
128 0 128	35.7 62.4 -35.5	0.4 -1.6 -0.3	1.7
128 128 0	59.4 -10.1 56.0	-0.3 1.0 0.4	1.1
128 128 128	60.8 -0.5 0.4	-0.1 0.5 -0.4	0.6
128 128 255	64.5 17.8 -53.8	-0.2 0.2 0.6	0.7
128 255 128	90.7 -51.9 38.5	-0.0 0.1 -0.9	0.9
170 0 255	49.7 80.5 -76.2	-0.1 -1.4 0.6	1.5
170 170 170	75.0 0.5 0.2	-0.0 -0.5 -0.2	0.5
170 255 0	92.2 -44.0 80.9	-0.1 0.2 -2.3	2.4
170 255 255	94.7 -25.0 -8.3	-0.1 -0.4 0.0	0.4
255 0 0	57.2 83.1 70.2	0.3 -1.0 -2.6	2.8
255 0 170	59.7 88.7 -18.9	0.4 -1.7 -0.3	1.8
255 0 255	62.5 93.4 -54.9	0.3 -1.5 0.9	1.7
255 128 128	74.3 44.0 21.3	-0.1 0.3 -0.8	0.9
255 170 0	81.2 20.8 77.6	-0.1 0.5 -1.7	1.7
255 170 255	84.2 35.1 -22.5	-0.1 0.1 0.4	0.4
255 255 0	97.8 -14.1 88.2	-0.1 0.4 -3.0	3.1
255 255 170	98.8 -6.9 33.2	-0.0 0.1 -1.1	1.1
255 255 255	100.0 0.0 -0.0	0.0 0.0 -0.0	0.0
170 85 85	54.8 35.6 17.2	-0.1 -0.7 -1.0	1.2
85 170 85	67.8 -40.7 30.4	-0.2 -0.1 -0.9	0.9
85 85 170	46.9 15.3 -42.0	-0.1 -1.2 0.0	1.2
85 170 170	69.2 -28.8 -9.1	-0.1 -0.4 -0.1	0.5
170 85 170	56.8 43.1 -25.8	-0.1 -1.0 -0.1	1.0
170 170 85	73.8 -7.4 39.2	-0.2 -0.1 -1.0	1.0
Average			1.2
Maximum			3.1

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	57.5 -21.0 -46.5	16.5
66.9 -24.7 -37.1	66.9 -25.0 -37.2	0.3
79.7 -12.5 -21.8	79.7 -12.4 -21.7	0.1
48.0 74.0 -3.0	48.1 74.7 -1.1	2.0
60.8 50.6 -6.7	60.8 51.6 -6.7	1.0
76.4 25.8 -6.9	76.5 26.3 -6.9	0.5
89.0 -5.0 93.0	89.3 -5.1 81.5	11.5
90.3 -4.7 62.6	90.2 -4.5 63.9	1.3
92.2 -3.5 31.1	92.2 -3.5 31.9	0.7
53.1 37.7 28.9	53.2 38.4 29.5	0.9
41.5 22.7 16.8	41.8 23.1 16.2	0.7
31.9 40.0 24.0	32.3 39.9 22.9	1.1
32.5 44.5 -1.8	32.6 45.0 -1.0	1.0
51.3 1.3 44.5	51.4 1.7 43.9	0.8
34.6 -36.4 13.9	34.3 -37.1 13.1	1.0
36.0 -26.2 -20.9	36.1 -23.0 -19.8	3.3
20.9 9.6 -23.6	21.1 9.0 -21.8	1.9
89.0 0.0 -1.9	89.1 0.5 -1.0	1.0
82.8 0.0 -1.7	82.8 0.6 -1.7	0.6
69.3 0.0 -1.4	69.4 0.4 -1.3	0.4
54.1 0.0 -1.0	54.1 0.4 -1.0	0.4
36.6 0.0 -0.5	36.6 0.3 0.8	1.3
16.0 0.0 0.0	16.9 -0.5 0.2	1.0
24.0 22.0 -46.0	24.2 22.1 -45.4	0.6
40.9 17.9 -36.6	41.0 19.1 -36.6	1.2
63.7 10.3 -23.8	63.7 10.3 -23.7	0.1
47.0 68.0 48.0	47.1 69.5 49.0	1.8
58.5 47.1 37.9	58.8 47.6 39.1	1.4
74.2 22.9 21.4	74.3 23.1 22.1	0.7
50.0 -65.0 27.0	51.3 -53.6 28.7	11.6
62.1 -39.8 21.0	62.3 -40.1 21.4	0.6
77.0 -19.1 11.0	77.2 -19.4 11.3	0.5
71.2 18.9 17.3	71.5 18.9 18.0	0.8
71.2 22.1 73.1	71.5 22.2 69.4	3.7
47.7 71.2 16.2	47.5 73.1 17.3	2.1
38.0 55.4 -20.9	37.8 56.3 -20.3	1.1
73.7 -22.8 67.6	73.9 -23.7 66.8	1.2
52.3 -52.3 -20.1	54.4 -37.1 -16.5	15.8
43.3 -17.0 -48.6	44.3 -10.4 -47.5	6.8
95.0 0.0 -2.0	95.0 0.3 -1.9	0.3
88.5 -0.4 -3.1	88.6 -0.2 -2.7	0.5
82.0 -0.9 -4.1	81.9 -0.2 -4.4	0.7
67.7 -2.0 -4.4	67.7 -1.4 -4.3	0.6
52.2 -2.5 -3.5	52.3 -2.2 -3.5	0.3
37.5 -3.9 -3.1	37.5 -3.6 -2.6	0.6
26.3 -6.8 -3.4	26.3 -6.1 -3.8	0.8
Average		2.3
Gamut-Volume		91 %

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	113.32 118.93 116.42	85 85 170	22.22 19.22 49.69
0 0 0	0.11 0.10 0.18	85 170 170	35.61 47.42 55.22
12 12 12	0.55 0.56 0.64	170 85 170	41.64 29.35 50.59
25 25 25	1.86 1.97 1.97	170 170 85	48.70 54.92 22.32
38 38 38	3.80 3.96 3.96	0 133 213	25.01 30.86 75.84
51 51 51	6.29 6.58 6.50	51 162 225	34.81 44.09 85.37
63 63 63	9.32 9.70 9.39	141 195 235	59.17 67.30 94.98
76 76 76	12.91 13.47 12.98	196 0 104	38.94 19.73 20.41
89 89 89	17.23 17.95 17.29	206 85 145	50.72 34.28 39.38
102 102 102	21.78 22.77 22.11	219 154 192	69.61 60.12 67.13
114 114 114	26.54 27.77 27.27	240 218 0	79.72 88.26 14.19
127 127 127	32.43 34.14 33.52	240 222 72	82.32 90.52 24.29
140 140 140	38.71 40.48 39.55	237 229 152	88.53 96.01 53.58
153 153 153	45.45 47.53 46.40	172 78 60	34.04 24.95 10.58
165 165 165	51.85 54.38 53.01	115 65 55	18.00 14.54 8.43
178 178 178	59.63 62.54 60.75	109 30 29	13.59 8.43 3.22
191 191 191	67.53 70.62 69.07	111 26 64	14.86 8.63 8.92
204 204 204	76.14 79.62 77.87	119 101 24	22.08 23.14 5.42
216 216 216	84.75 88.65 86.42	5 77 42	5.23 9.76 5.78
229 229 229	93.72 98.06 95.79	0 78 99	7.73 10.91 19.20
242 242 242	103.36 108.54 106.03	37 34 69	4.54 3.95 9.25
0 0 128	5.13 2.13 27.60	215 216 220	84.59 88.48 88.09
0 0 255	18.20 7.84 98.60	194 195 199	70.28 73.41 74.02
0 128 0	11.31 23.86 4.86	152 153 156	45.48 47.55 47.82
0 128 128	16.40 25.89 32.65	110 110 112	25.07 26.20 26.29
0 170 255	36.84 47.09 106.64	68 68 69	10.62 11.10 10.60
0 255 0	39.22 82.26 15.26	30 30 30	2.55 2.71 2.63
0 255 170	47.86 85.76 62.62	41 34 111	7.27 5.10 22.11
0 255 255	57.41 89.92 114.59	81 69 142	17.50 14.31 35.91
85 85 85	15.93 16.58 15.86	139 130 186	40.83 38.76 61.00
128 0 0	16.28 8.42 1.02	194 15 23	35.26 18.61 3.16
128 0 128	21.47 10.54 28.39	206 82 57	45.03 31.38 10.57
128 128 0	27.60 32.50 5.77	219 149 124	62.74 55.71 34.68
128 128 128	32.78 34.57 33.55	0 126 49	11.77 23.32 9.57
128 128 255	45.93 40.31 104.35	68 153 89	23.54 36.60 21.14
128 255 128	60.52 92.51 44.35	145 189 151	50.35 61.63 48.31
170 0 255	45.72 22.03 99.65	200 144 124	55.68 50.72 34.10
170 170 170	54.81 57.33 55.93	219 140 0	56.20 50.37 7.70
170 255 0	66.26 96.13 16.59	196 5 73	37.26 19.08 11.51
170 255 255	84.59 103.90 115.13	133 23 108	21.86 11.80 21.20
255 0 0	56.02 29.02 2.63	150 179 0	42.40 55.06 9.70
255 0 170	64.76 32.60 48.83	0 130 141	17.69 26.92 38.25
255 0 255	74.38 36.84 100.87	0 94 172	15.18 17.09 50.73
255 128 128	72.83 55.57 35.38	236 237 242	99.67 104.34 105.24
255 170 0	75.01 69.06 10.36	211 215 222	83.07 87.20 89.17
255 170 255	93.19 76.74 108.82	188 193 202	68.21 71.57 75.60
255 255 0	95.26 111.42 17.78	142 149 157	42.20 44.70 47.74
255 255 170	103.98 114.99 64.89	99 107 112	22.73 24.36 26.00
170 85 85	35.36 26.70 16.80	63 72 75	10.65 11.69 12.42
85 170 85	29.33 44.81 21.36	38 50 52	5.01 5.80 6.60