

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2008-5-14 16:37:24
Report-Version: v1.2.2
Monitor-Name: \\.\DISPLAY1
Profile: C:/WINDOWS/System32/spool/DRIVERS/COLOR/UGRA.icc
Created: 2008-5-14 16:24
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	yes
Offset/Gravure Paper Type 1/2	yes
Offset on uncoated paper	yes
Newspaper Printing	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:	113.89 119.50 117.05
XYZ (normalized):	95.31 100.00 97.95
Luminance:	119.5 Cd/m2
Next Temperature:	5835 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.3 deltaE

Blackpoint

Luminance:	0.2 Cd/m2
Chromaticity:	0.8 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	7660	0.20	1.51	0.82	
5	6414	0.70	5.29	1.34	1.82
10	6140	2.10	14.16	0.93	1.79
15	6041	4.20	22.00	1.08	1.78
20	5927	6.90	28.84	0.43	1.79
25	5986	9.80	34.40	0.97	1.81
30	5927	14.10	40.90	0.54	1.79
35	5841	18.40	46.17	1.02	1.78
40	5790	23.20	51.17	0.59	1.79
45	5883	28.70	56.10	0.37	1.79
50	5833	34.70	60.81	0.42	1.79
55	5837	41.00	65.21	0.44	1.79
60	5787	48.40	69.83	0.44	1.78
65	5833	55.10	73.62	0.48	1.81
70	5881	63.10	77.76	0.45	1.80
75	5881	71.40	81.70	0.46	1.79
80	5787	80.50	85.69	0.52	1.79
85	5835	88.50	88.95	0.00	1.85
90	5787	98.50	92.76	0.56	1.87
95	5835	109.40	96.64	0.00	1.72
100	5835	119.50	100.00	0.00	
Average	5877			0.51	1.80
Range				1.62	

Tone values = 85.1%

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	1.5 0.1 -0.8	-1.5 -0.1 0.8	1.7
0 0 128	16.6 36.5 -70.4	0.5 -2.1 1.1	2.4
0 0 255	34.2 50.9 -105.4	-0.1 1.1 0.6	1.3
0 128 0	49.5 -80.4 50.1	-0.3 1.1 -1.1	1.6
0 128 128	52.0 -53.5 -15.1	-0.1 0.4 0.7	0.8
0 170 255	68.1 -41.9 -50.8	-0.3 1.4 0.3	1.4
0 255 0	82.7 -120.6 77.4	-0.1 0.8 -3.2	3.3
0 255 170	84.5 -98.9 11.6	0.1 0.4 -0.1	0.4
0 255 255	86.7 -81.4 -22.1	0.0 1.1 0.3	1.2
85 85 85	44.6 1.0 -0.5	-0.6 -1.0 0.5	1.3
128 0 0	35.7 60.7 51.6	-0.1 -1.6 2.5	3.0
128 0 128	39.7 65.3 -31.6	0.1 -2.6 0.7	2.7
128 128 0	59.0 -9.4 63.3	-0.4 0.6 -1.1	1.3
128 128 128	61.0 0.3 -0.3	-0.3 -0.3 0.3	0.5
128 128 255	65.9 16.6 -53.7	-0.5 0.2 0.3	0.6
128 255 128	88.3 -65.1 37.0	-0.1 -0.8 -0.6	1.0
170 0 255	54.6 79.8 -70.6	0.2 -1.4 1.0	1.7
170 170 170	75.2 -0.8 0.1	-0.3 0.8 -0.1	0.8
170 255 0	89.9 -53.5 87.9	0.0 0.5 -3.4	3.4
170 255 255	93.5 -32.3 -10.7	0.0 -0.2 0.1	0.2
255 0 0	61.7 91.4 84.2	0.4 -2.1 -0.4	2.2
255 0 170	64.8 94.5 -12.3	0.5 -2.5 0.6	2.7
255 0 255	68.1 96.0 -47.8	0.4 -1.3 1.1	1.7
255 128 128	76.5 51.7 24.9	-0.1 -0.2 0.5	0.5
255 170 0	82.2 26.8 89.0	-0.2 1.0 -2.4	2.7
255 170 255	86.4 39.0 -20.1	-0.3 0.5 0.0	0.5
255 255 0	96.7 -13.6 97.7	0.1 0.3 -3.6	3.6
255 255 170	98.2 -6.1 34.0	0.2 -0.5 -0.5	0.7
255 255 255	100.0 0.0 -0.0	0.0 0.0 -0.0	0.0
170 85 85	56.6 40.6 19.1	-0.1 -0.1 0.9	0.9
85 170 85	66.3 -51.7 29.1	-0.6 -0.2 -0.4	0.8
85 85 170	48.1 13.9 -41.8	-0.3 -0.6 -0.3	0.7
85 170 170	68.4 -38.7 -11.1	-0.6 0.4 -0.6	0.9
170 85 170	59.1 46.4 -23.5	-0.1 -0.4 0.4	0.5
170 170 85	73.5 -7.8 40.3	-0.3 0.5 0.2	0.6
Average			1.4
Maximum			3.6

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	56.2 -31.3 -49.3	5.9
66.9 -24.7 -37.1	67.6 -25.8 -36.9	1.3
79.7 -12.5 -21.8	79.8 -12.2 -22.1	0.5
48.0 74.0 -3.0	48.2 75.3 -3.3	1.4
60.8 50.6 -6.7	60.9 50.7 -7.4	0.7
76.4 25.8 -6.9	76.8 25.0 -7.1	0.9
89.0 -5.0 93.0	89.0 -5.6 91.0	2.1
90.3 -4.7 62.6	90.5 -5.4 63.2	1.0
92.2 -3.5 31.1	92.1 -3.5 30.7	0.5
53.1 37.7 28.9	53.7 37.4 28.3	1.0
41.5 22.7 16.8	42.3 23.9 16.4	1.4
31.9 40.0 24.0	32.9 40.3 23.1	1.4
32.5 44.5 -1.8	33.4 45.8 -2.3	1.6
51.3 1.3 44.5	52.0 1.3 43.9	1.0
34.6 -36.4 13.9	35.7 -36.8 14.0	1.2
36.0 -26.2 -20.9	36.4 -25.5 -21.3	0.9
20.9 9.6 -23.6	21.8 10.7 -24.3	1.6
89.0 0.0 -1.9	88.9 0.3 -2.0	0.3
82.8 0.0 -1.7	82.7 0.7 -2.2	0.8
69.3 0.0 -1.4	69.8 -0.5 -1.0	0.8
54.1 0.0 -1.0	54.5 0.8 -1.4	1.0
36.6 0.0 -0.5	37.5 -1.0 -0.9	1.4
16.0 0.0 0.0	17.6 -0.6 0.1	1.7
24.0 22.0 -46.0	24.9 21.4 -45.1	1.4
40.9 17.9 -36.6	41.3 18.7 -36.2	1.0
63.7 10.3 -23.8	64.1 10.4 -24.1	0.6
47.0 68.0 48.0	47.1 69.5 46.5	2.1
58.5 47.1 37.9	58.8 47.4 37.1	0.9
74.2 22.9 21.4	74.3 22.8 21.0	0.4
50.0 -65.0 27.0	51.1 -65.6 27.6	1.3
62.1 -39.8 21.0	63.1 -39.8 21.6	1.1
77.0 -19.1 11.0	77.1 -18.7 10.6	0.6
71.2 18.9 17.3	71.6 18.1 16.6	1.0
71.2 22.1 73.1	71.6 21.6 74.2	1.3
47.7 71.2 16.2	47.6 73.4 14.8	2.6
38.0 55.4 -20.9	38.1 56.6 -20.8	1.2
73.7 -22.8 67.6	74.2 -23.6 68.6	1.4
52.3 -52.3 -20.1	52.9 -51.1 -20.2	1.4
43.3 -17.0 -48.6	43.8 -18.8 -48.9	1.8
95.0 0.0 -2.0	95.2 -1.2 -2.1	1.2
88.5 -0.4 -3.1	88.7 -0.8 -3.4	0.5
82.0 -0.9 -4.1	82.1 -0.4 -4.6	0.7
67.7 -2.0 -4.4	68.1 -2.0 -4.5	0.4
52.2 -2.5 -3.5	52.8 -1.6 -3.3	1.1
37.5 -3.9 -3.1	38.0 -3.8 -3.8	0.9
26.3 -6.8 -3.4	27.2 -6.3 -4.3	1.4
Average		1.2
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	113.89 119.50 117.05	85 85 170	23.16 20.40 51.76
0 0 0	0.19 0.20 0.26	85 170 170	31.81 46.30 56.10
12 12 12	0.68 0.70 0.78	170 85 170	46.62 32.40 52.68
25 25 25	2.00 2.10 2.17	170 170 85	48.26 54.60 21.52
38 38 38	4.02 4.20 4.31	0 130 209	21.68 29.50 77.08
51 51 51	6.54 6.90 6.80	80 160 222	35.57 45.30 86.91
63 63 63	9.36 9.80 9.92	152 193 233	59.74 67.80 96.22
76 76 76	13.36 14.10 13.89	175 0 104	39.48 19.90 21.85
89 89 89	17.69 18.40 18.35	188 85 144	50.83 34.60 40.39
102 102 102	22.24 23.20 22.79	208 154 191	69.97 61.00 68.38
114 114 114	27.35 28.70 28.36	237 221 0	79.04 87.90 10.28
127 127 127	32.98 34.70 33.79	237 225 84	83.00 91.80 25.20
140 140 140	39.19 41.00 40.40	236 230 157	88.86 96.30 54.99
153 153 153	46.14 48.40 46.98	158 80 63	34.54 25.60 11.37
165 165 165	52.36 55.10 53.65	107 65 56	18.69 15.00 8.69
178 178 178	59.95 63.10 61.99	98 31 31	14.17 8.80 3.37
191 191 191	67.84 71.40 70.14	100 26 64	15.67 9.10 9.83
204 204 204	76.73 80.50 78.15	116 103 32	22.70 23.90 5.70
216 216 216	84.35 88.50 86.68	32 78 43	5.80 10.60 6.16
229 229 229	93.89 98.50 95.62	23 77 98	7.70 11.20 20.40
242 242 242	104.27 109.40 107.15	36 33 68	4.97 4.20 10.55
0 0 128	5.88 2.90 29.89	215 216 220	84.47 88.40 89.45
0 0 255	20.19 10.50 103.92	194 195 199	70.53 73.60 74.91
0 128 0	7.19 21.60 3.45	152 153 155	45.97 48.40 48.40
0 128 128	13.06 24.40 33.89	110 110 112	25.76 26.80 27.20
0 170 255	32.25 46.40 109.96	68 68 69	11.01 11.70 11.80
0 255 0	24.60 73.70 11.04	30 30 30	2.73 2.90 2.82
0 255 170	34.32 78.40 61.50	39 31 108	7.58 5.40 22.78
0 255 255	44.69 84.00 115.50	78 66 139	17.75 14.60 36.19
85 85 85	16.40 17.00 16.90	137 129 184	41.76 39.60 62.64
128 0 0	20.32 10.30 0.79	173 21 30	35.44 18.70 3.58
128 0 128	26.33 13.20 30.68	188 84 62	45.14 31.50 11.35
128 128 0	27.40 32.10 4.07	207 150 127	62.85 55.90 35.67
128 128 128	33.46 35.00 34.49	28 127 52	9.99 23.20 9.86
128 128 255	48.09 42.70 108.75	90 154 91	24.56 37.90 21.95
128 255 128	50.98 87.00 42.15	155 189 152	50.88 61.90 49.26
170 0 255	53.67 27.30 104.74	191 145 126	55.91 51.20 35.51
170 170 170	55.04 58.10 56.74	207 142 19	56.48 50.90 6.49
170 255 0	57.63 90.60 11.85	175 11 74	37.76 19.30 12.61
170 255 255	78.34 101.10 116.18	119 21 106	22.26 12.00 21.81
255 0 0	68.95 34.90 1.90	157 181 27	43.04 55.80 9.30
255 0 170	78.72 39.70 51.24	0 129 140	14.20 25.40 39.28
255 0 255	88.92 45.30 105.46	4 91 168	13.60 16.80 51.55
255 128 128	82.12 59.90 35.73	236 237 242	99.79 105.40 106.65
255 170 0	80.76 71.50 7.34	212 215 222	83.53 88.00 91.15
255 170 255	101.47 82.00 111.50	189 193 201	68.82 72.30 76.66
255 255 0	93.05 108.70 12.65	143 149 156	42.85 45.60 48.90
255 255 170	103.25 113.60 62.96	101 107 111	23.50 25.00 26.58
170 85 85	39.65 28.90 17.46	65 72 75	11.01 12.10 13.34
85 170 85	24.99 42.80 20.82	40 50 52	5.36 6.20 7.17