

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2007-11-23 12:56:47
Report-Version: v1.2.1
Monitor-Name: CG211
EDID-Name: CG211
EDID-Serial: 24124057
Profile: /Users/luisblas/Library/ColorSync/Profiles/CG211(24124057)120cd 5800K Ls Gray
Created: 2007-11-23 12:44
Measurement device: eye-one display 2

Summary

The monitor has passed the certification according to the UGRA DACT specifications.

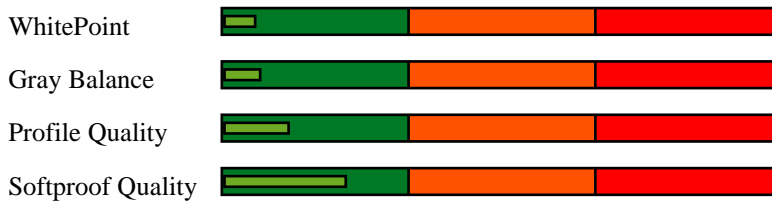
Calibration

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: 113.51 119.03 116.62
XYZ (normalized): 95.36 100.00 97.97
Luminance: 119.0 Cd/m2
Next Temperature: 5830 Kelvin
Assumed Target Whitepoint: 5800 Kelvin
Distance to assumed Target Whitepoint: 0.3 deltaE

Blackpoint

Luminance: 0.6 Cd/m2
Chromaticity: 0.1 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	5783	0.63	4.76	0.07	
5	5843	1.21	9.15	0.23	1.78
10	5813	2.01	13.77	0.08	1.93
15	5864	3.12	18.48	0.14	2.03
20	5848	4.84	23.88	0.15	2.07
25	5860	6.59	28.21	0.18	2.16
30	5879	8.93	32.93	0.32	2.21
35	5873	11.79	37.67	0.27	2.25
40	5846	15.41	42.68	0.10	2.27
45	5869	19.41	47.37	0.29	2.31
50	5869	24.41	52.40	0.28	2.32
55	5873	29.84	57.15	0.30	2.34
60	5858	36.06	61.91	0.19	2.36
65	5845	42.56	66.33	0.11	2.41
70	5851	50.55	71.19	0.19	2.42
75	5847	59.39	76.01	0.15	2.43
80	5842	69.35	80.88	0.10	2.44
85	5835	79.41	85.36	0.11	2.50
90	5841	91.61	90.30	0.20	2.51
95	5827	104.76	95.17	0.04	2.51
100	5830	119.03	100.00	0.00	
Average	5851			0.17	2.28
Range				0.39	

Tone values = 100.0%

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	4.8 0.1 0.0	-0.2 -0.2 -0.2	0.4
0 0 128	13.5 30.5 -60.7	0.1 1.0 -1.5	1.8
0 0 255	30.0 61.3 -112.5	-0.1 -0.1 0.2	0.2
0 128 0	43.5 -49.3 44.6	1.1 -1.3 1.2	2.1
0 128 128	45.9 -34.3 -9.8	0.2 -0.3 -0.2	0.4
0 170 255	63.3 -18.6 -57.7	0.0 -0.3 0.3	0.4
0 255 0	86.6 -88.4 82.3	-0.2 -0.2 -0.2	0.3
0 255 170	87.6 -76.7 27.3	-0.2 -0.1 -0.6	0.7
0 255 255	89.3 -60.3 -16.9	-0.2 0.1 -0.4	0.5
85 85 85	36.2 -0.3 0.0	0.1 0.2 -0.1	0.3
128 0 0	28.0 45.3 33.2	0.6 1.3 1.1	1.8
128 0 128	31.3 51.9 -32.1	0.2 0.8 -0.3	0.9
128 128 0	50.5 -7.9 53.0	0.7 -0.1 0.8	1.0
128 128 128	52.8 -0.3 -0.0	-0.3 0.3 0.0	0.4
128 128 255	58.0 22.7 -65.8	-0.8 1.3 -1.3	2.0
128 255 128	89.5 -61.3 49.0	-0.2 -1.0 1.0	1.5
170 0 255	46.8 75.7 -84.1	0.1 0.4 0.4	0.6
170 170 170	68.1 -0.0 -0.2	0.1 0.0 0.2	0.2
170 255 0	90.9 -52.4 87.4	0.0 0.1 0.2	0.2
170 255 255	93.6 -31.9 -10.0	-0.1 -0.3 -0.3	0.4
255 0 0	58.5 82.1 67.9	-0.3 0.3 -0.4	0.6
255 0 170	60.3 86.2 -10.4	-0.2 0.3 -0.3	0.5
255 0 255	63.3 92.3 -56.5	-0.1 0.4 0.0	0.4
255 128 128	70.9 52.6 26.3	-0.7 1.5 0.9	1.9
255 170 0	77.2 32.1 80.1	0.1 -0.7 0.1	0.8
255 170 255	81.0 43.6 -28.6	-0.5 1.5 -0.7	1.8
255 255 0	97.8 -13.4 95.6	-0.1 -0.4 -0.1	0.4
255 255 170	98.6 -8.0 42.2	0.0 -0.4 1.3	1.3
255 255 255	100.0 -0.0 -0.0	0.0 0.0 -0.0	0.0
170 85 85	47.9 35.4 17.1	-0.0 1.0 0.5	1.2
85 170 85	60.4 -41.6 32.5	0.5 -0.8 1.0	1.4
85 85 170	39.5 14.7 -44.0	-0.1 0.7 -1.1	1.3
85 170 170	62.1 -29.6 -9.3	0.2 -0.7 -0.1	0.7
170 85 170	50.1 42.2 -27.0	-0.2 1.4 -0.7	1.5
170 170 85	66.7 -7.3 40.8	0.3 -0.2 1.4	1.4
Average			0.9
Maximum			2.1

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
55.2 -39.9 -50.7	57.7 -22.0 -46.2	18.6
67.6 -27.1 -36.5	67.5 -26.5 -36.2	0.7
80.8 -13.8 -21.0	80.7 -13.4 -20.8	0.5
47.2 75.9 -3.8	48.4 71.8 -2.3	4.5
60.7 52.2 -7.1	61.1 50.7 -6.7	1.6
77.0 26.2 -7.7	77.2 25.6 -7.6	0.6
89.7 -4.5 94.7	89.4 -3.4 88.6	6.2
91.3 -4.6 63.1	91.3 -4.5 60.9	2.2
93.3 -3.3 30.6	93.2 -3.1 29.7	0.9
53.5 38.4 28.8	53.5 37.5 27.8	1.3
41.4 23.1 16.6	41.5 22.3 16.0	1.0
32.4 40.3 21.9	32.1 39.6 21.0	1.2
32.6 44.6 -1.8	32.4 43.7 -1.7	1.0
51.3 1.9 44.3	51.2 1.4 43.6	0.8
34.0 -40.9 14.5	33.8 -34.9 14.5	6.0
36.2 -30.6 -20.6	36.9 -23.2 -18.7	7.7
21.2 3.4 -23.0	21.1 2.9 -22.1	1.0
89.8 0.3 -3.5	89.7 -0.2 -3.6	0.5
83.6 0.2 -3.7	83.5 0.3 -3.9	0.3
70.2 0.0 -3.7	70.1 0.3 -3.9	0.4
55.1 0.0 -3.1	55.2 -0.4 -2.9	0.5
37.5 0.1 -2.1	37.3 -0.2 -2.2	0.4
16.9 0.4 -0.4	16.8 0.3 -0.3	0.2
24.4 16.2 -47.1	24.6 15.0 -45.9	1.7
41.2 16.0 -36.5	41.3 15.4 -35.7	1.1
64.6 9.3 -23.6	64.6 8.8 -23.4	0.5
47.3 69.0 45.1	47.1 68.3 44.3	1.1
58.9 47.7 37.0	59.2 46.5 35.9	1.7
75.0 23.2 20.3	75.2 22.9 19.6	0.8
48.6 -67.5 28.0	49.5 -50.8 29.2	16.8
62.5 -41.7 22.4	62.0 -40.7 21.3	1.6
77.9 -19.6 11.3	77.6 -19.2 10.7	0.8
72.0 19.1 16.5	72.1 18.5 15.8	0.9
72.2 22.1 73.2	72.1 22.6 72.5	0.9
47.5 72.3 15.3	47.8 70.5 15.7	1.9
37.5 56.5 -21.1	37.4 55.6 -21.4	1.0
74.1 -22.1 69.3	73.6 -21.4 68.2	1.4
52.3 -55.2 -20.1	54.1 -36.8 -16.3	18.9
43.9 -20.9 -49.8	45.3 -12.3 -46.4	9.4
96.0 0.5 -3.3	95.9 0.1 -3.4	0.4
89.5 -0.1 -3.7	89.4 -0.2 -3.5	0.2
83.0 -1.1 -4.3	82.9 -1.0 -4.4	0.2
68.6 -2.7 -4.0	68.6 -2.7 -3.8	0.2
53.0 -5.1 -2.3	53.1 -4.9 -2.4	0.2
37.8 -8.1 -0.9	37.6 -7.7 -0.8	0.5
25.9 -13.3 -2.2	25.8 -13.0 -1.9	0.5
Average		2.6
Gamut-Volume		95 %

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	113.51 119.03 116.62	85 85 170	15.65 13.26 39.83
0 0 0	0.60 0.63 0.61	85 170 170	26.65 36.52 43.38
12 12 12	1.15 1.21 1.18	170 85 170	32.21 22.04 41.05
25 25 25	1.92 2.01 1.96	170 170 85	37.83 42.86 15.18
38 38 38	2.97 3.12 3.07	0 156 222	24.97 31.06 75.90
51 51 51	4.60 4.84 4.73	66 184 231	35.14 45.01 85.48
63 63 63	6.26 6.59 6.46	166 212 240	60.73 69.47 96.35
76 76 76	8.48 8.93 8.76	208 0 123	38.41 20.00 21.36
89 89 89	11.20 11.79 11.57	218 104 164	50.85 34.65 39.82
102 102 102	14.67 15.41 15.10	229 176 208	70.94 61.61 69.59
114 114 114	18.45 19.41 19.04	245 228 0	80.95 88.60 11.40
127 127 127	23.21 24.41 23.97	245 233 107	85.16 93.45 27.49
140 140 140	28.39 29.84 29.34	244 238 181	91.51 98.80 57.85
153 153 153	34.36 36.06 35.46	190 98 79	34.22 25.31 11.38
165 165 165	40.56 42.56 41.77	136 81 69	17.63 14.35 8.36
178 178 178	48.14 50.55 49.59	131 32 36	13.40 8.32 3.46
191 191 191	56.63 59.39 58.35	132 26 79	14.51 8.55 9.06
204 204 204	66.10 69.35 68.03	141 123 35	21.90 23.00 5.43
216 216 216	75.76 79.41 77.92	0 96 50	5.22 9.46 5.25
229 229 229	87.25 91.61 89.71	0 100 120	8.13 11.44 19.37
242 242 242	99.91 104.76 102.58	33 43 84	4.08 3.95 9.32
0 0 128	4.10 2.12 20.33	226 228 234	86.06 90.24 93.66
0 0 255	18.76 8.28 103.50	210 211 218	71.97 75.18 78.80
0 128 0	7.77 16.02 2.72	174 175 182	46.62 48.68 51.49
0 128 128	11.71 18.29 23.07	133 135 140	26.24 27.58 28.95
0 170 255	33.00 38.90 107.45	87 88 92	11.02 11.57 12.16
0 255 0	38.68 82.24 11.70	34 33 34	2.58 2.69 2.68
0 255 170	45.52 85.13 50.15	37 45 133	6.75 5.26 22.80
0 255 255	56.73 89.87 113.85	100 89 161	17.06 14.56 35.62
85 85 85	10.33 10.87 10.64	162 155 202	41.81 40.19 62.57
128 0 0	11.52 6.34 1.15	207 5 30	35.05 18.70 3.97
128 0 128	15.46 8.05 21.45	217 103 78	45.29 31.90 11.99
128 128 0	19.13 22.29 3.31	229 172 152	64.60 57.45 37.99
128 128 128	23.56 24.78 24.29	0 144 62	11.04 21.46 8.42
128 128 255	38.52 31.62 105.95	84 174 112	23.15 36.20 20.96
128 255 128	54.19 89.64 33.81	168 206 175	51.34 62.61 49.80
170 0 255	40.05 19.40 104.33	214 167 151	56.75 51.83 36.70
170 170 170	43.27 45.38 44.67	229 164 11	57.64 51.57 7.16
170 255 0	59.89 92.92 12.69	208 0 90	36.84 19.35 12.31
170 255 255	78.34 100.77 114.67	154 15 126	21.31 11.52 21.39
255 0 0	58.23 30.74 3.32	173 196 28	42.80 54.51 9.08
255 0 170	64.74 33.43 42.08	0 152 162	17.49 26.56 37.67
255 0 255	75.83 38.09 105.91	0 118 190	15.64 17.97 51.43
255 128 128	69.74 49.41 27.53	243 244 250	102.08 106.83 110.31
255 170 0	72.15 60.83 7.46	225 227 233	85.17 89.32 92.70
255 170 255	90.32 69.66 109.87	206 210 217	69.95 73.73 77.87
255 255 0	95.78 111.56 14.31	165 173 178	43.26 46.31 48.97
255 255 170	102.52 114.26 54.37	120 132 133	22.86 25.16 26.12
170 85 85	26.84 19.63 11.74	75 93 90	10.12 11.74 11.77
85 170 85	21.20 33.98 14.05	31 64 60	4.28 5.59 5.90

Uniformity

This informative-only test shows the luminance (in %) and color deviations (in DeltaC) on the entire screen area based on 9 measurements.

Region	Cd/m2	%	Chroma
1	121.40	102%	0.53
2	120.06	101%	0.07
3	119.58	101%	0.13
4	119.95	101%	0.86
5	118.76	100%	0.00
6	119.20	100%	0.17
7	118.87	100%	1.70
8	116.32	98%	1.39
9	116.53	98%	0.53

	Av	Max
Luminance Deviation	1%	2%
Chroma Deviation	1	2