

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2007-8-31 10:53:19
Report-Version: v1.2.1
Monitor-Name: CE240W
EDID-Name: CE240W
EDID-Serial: 27661037
Profile: /Users/luisblas/Library/ColorSync/Profiles/CE240W(27661037)120cd 5800K 1,8
Created: 2007-8-31 10:15
Measurement device: eye-one monitor

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: 116.20 122.16 118.21
XYZ (normalized): 95.13 100.00 96.77
Luminance: 122.2 Cd/m2
Next Temperature: 5791 Kelvin
Assumed Target Whitepoint: 5800 Kelvin
Distance to assumed Target Whitepoint: 0.7 deltaE

Blackpoint

Luminance: 0.1 Cd/m2
Chromaticity: 1.4 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	0	0.06	0.48	1.38	
5	6403	0.50	3.73	1.51	1.88
10	6101	1.57	11.19	0.88	1.91
15	6001	3.34	18.95	0.79	1.91
20	6030	5.70	25.76	1.15	1.90
25	5871	8.68	32.04	0.38	1.92
30	5883	12.44	38.17	0.52	1.90
35	5878	16.91	44.01	0.50	1.88
40	5888	21.96	49.47	0.58	1.87
45	5874	27.08	54.20	0.59	1.88
50	5904	33.22	59.16	0.75	1.88
55	5926	39.66	63.73	0.98	1.88
60	5890	46.81	68.25	0.83	1.87
65	5903	53.98	72.35	0.97	1.88
70	5879	62.22	76.64	0.81	1.88
75	5867	70.92	80.77	0.74	1.88
80	5834	80.34	84.88	0.39	1.88
85	5828	89.52	88.58	0.36	1.91
90	5821	99.80	92.44	0.30	1.91
95	5829	110.81	96.29	0.39	1.87
100	5791	122.16	100.00	0.00	
Average	5895			0.63	1.89
Range				1.15	

Tone values = 92.5%

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: CAT02

RGB	Lab	deltaLab	deltaE
0 0 0	0.5 0.5 -1.3	-0.5 -0.5 1.3	1.5
0 0 128	13.1 40.0 -72.5	1.2 -1.4 -0.6	1.9
0 0 255	29.6 58.4 -110.6	0.2 0.1 0.2	0.3
0 128 0	50.6 -54.5 47.5	1.4 -1.0 2.5	3.0
0 128 128	52.6 -37.2 -11.2	1.4 -0.9 0.3	1.7
0 170 255	68.2 -26.3 -49.3	1.1 -1.8 2.3	3.2
0 255 0	86.9 -82.7 76.8	-0.2 -1.1 -1.3	1.7
0 255 170	88.2 -69.4 18.0	0.0 -0.8 -1.3	1.5
0 255 255	89.7 -56.6 -16.7	-0.0 -0.9 0.3	1.0
85 85 85	42.4 -0.3 -0.5	1.7 0.3 0.5	1.8
128 0 0	31.0 53.6 41.7	0.9 1.7 4.5	4.9
128 0 128	34.5 60.3 -36.3	1.2 0.6 -0.9	1.6
128 128 0	57.9 -9.3 56.2	1.3 0.7 3.0	3.3
128 128 128	59.6 -0.4 -0.1	1.2 0.4 0.1	1.2
128 128 255	63.5 17.3 -55.9	1.0 -0.3 2.1	2.3
128 255 128	90.9 -51.0 40.0	0.1 0.5 -0.8	0.9
170 0 255	48.7 77.6 -78.5	0.6 0.6 1.1	1.4
170 170 170	73.8 0.5 -1.4	1.2 -0.5 1.4	1.9
170 255 0	92.2 -43.7 83.3	0.0 1.1 -0.7	1.3
170 255 255	94.9 -25.7 -8.2	0.1 0.6 0.1	0.6
255 0 0	56.4 82.9 70.4	0.1 0.6 0.4	0.7
255 0 170	58.9 87.6 -19.0	0.3 0.2 -2.2	2.2
255 0 255	61.9 91.6 -56.4	0.2 0.4 0.1	0.4
255 128 128	73.2 45.2 20.8	0.5 -0.6 -0.5	1.0
255 170 0	80.3 22.0 79.0	0.3 -0.2 0.4	0.6
255 170 255	83.5 35.2 -23.6	0.4 -0.4 0.6	0.9
255 255 0	97.8 -13.2 90.7	-0.2 0.3 -1.4	1.4
255 255 170	98.8 -6.7 34.6	-0.1 0.2 -1.7	1.7
255 255 255	100.0 -0.0 0.0	0.0 -0.0 0.0	0.0
170 85 85	53.1 35.0 16.1	1.2 0.1 -0.1	1.2
85 170 85	66.8 -40.1 30.9	1.1 0.3 -0.1	1.1
85 85 170	45.4 14.5 -44.2	1.6 -1.1 1.7	2.6
85 170 170	68.3 -28.7 -9.9	1.1 -0.2 1.0	1.5
170 85 170	55.2 42.2 -28.2	1.3 -0.4 1.3	1.8
170 170 85	72.7 -7.6 39.4	1.0 0.5 -0.0	1.1
Average			1.6
Maximum			4.9

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	56.7 -19.4 -47.6	20.7
67.6 -27.1 -36.5	66.5 -26.1 -38.2	2.3
80.8 -13.8 -21.0	79.9 -13.6 -22.6	1.9
47.2 75.9 -3.8	47.1 73.5 -1.2	3.5
60.7 52.2 -7.1	59.6 53.0 -8.0	1.6
77.0 26.2 -7.7	76.2 26.1 -8.1	0.9
89.7 -4.5 94.7	89.7 -4.3 84.2	10.5
91.3 -4.6 63.1	91.2 -5.3 64.4	1.5
93.3 -3.3 30.6	93.2 -3.5 31.2	0.7
53.5 38.4 28.8	52.3 38.2 29.1	1.2
41.4 23.1 16.6	39.8 23.3 16.4	1.6
32.4 40.3 21.9	31.0 40.0 21.1	1.7
32.6 44.6 -1.8	31.2 44.1 -0.5	1.9
51.3 1.9 44.3	50.0 1.2 42.8	2.1
34.0 -40.9 14.5	32.5 -35.1 14.7	5.9
36.2 -30.6 -20.6	34.9 -21.1 -20.3	9.6
21.2 3.4 -23.0	19.0 4.9 -23.6	2.7
89.8 0.3 -3.5	89.5 -0.1 -3.8	0.6
83.6 0.2 -3.7	83.0 0.1 -4.2	0.8
70.2 0.0 -3.7	69.1 -0.1 -4.8	1.6
55.1 0.0 -3.1	53.9 -0.5 -3.5	1.4
37.5 0.1 -2.1	35.5 -0.2 -2.4	2.0
16.9 0.4 -0.4	15.0 0.3 -1.9	2.4
24.4 16.2 -47.1	22.1 18.6 -48.9	3.8
41.2 16.0 -36.5	39.4 17.2 -38.3	2.8
64.6 9.3 -23.6	63.4 9.4 -25.0	1.8
47.3 69.0 45.1	46.6 68.1 44.8	1.1
58.9 47.7 37.0	58.1 47.6 37.5	1.0
75.0 23.2 20.3	74.3 23.6 20.3	0.8
48.6 -67.5 28.0	49.2 -49.9 30.4	17.8
62.5 -41.7 22.4	61.4 -42.2 22.3	1.3
77.9 -19.6 11.3	77.1 -20.0 11.2	0.9
72.0 19.1 16.5	71.1 18.9 16.4	0.9
72.2 22.1 73.2	71.8 21.9 71.2	2.1
47.5 72.3 15.3	46.8 71.4 17.0	2.1
37.5 56.5 -21.1	36.3 56.6 -21.1	1.2
74.1 -22.1 69.3	73.2 -22.8 67.8	1.9
52.3 -55.2 -20.1	53.4 -34.6 -17.2	20.8
43.9 -20.9 -49.8	43.7 -8.9 -49.2	12.0
96.0 0.5 -3.3	95.8 0.2 -4.1	0.9
89.5 -0.1 -3.7	89.2 -0.4 -3.9	0.4
83.0 -1.1 -4.3	82.4 -1.5 -4.4	0.7
68.6 -2.7 -4.0	67.5 -2.7 -5.3	1.7
53.0 -5.1 -2.3	51.7 -5.4 -2.9	1.5
37.8 -8.1 -0.9	35.8 -7.7 -1.9	2.3
25.9 -13.3 -2.2	23.3 -12.0 -3.6	3.2
Average		3.5
Gamut-Volume		93 %

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	116.20 122.16 118.21	85 85 170	21.17 18.44 49.73
0 0 0	0.08 0.06 0.16	85 170 170	35.26 47.14 55.29
12 12 12	0.50 0.50 0.58	170 85 170	40.10 28.33 50.70
25 25 25	1.50 1.57 1.61	170 170 85	47.97 54.25 21.69
38 38 38	3.18 3.34 3.36	0 133 213	25.17 30.78 76.39
51 51 51	5.43 5.70 5.78	45 164 225	34.76 44.65 86.70
63 63 63	8.21 8.68 8.45	142 198 236	60.38 69.42 97.93
76 76 76	11.82 12.44 12.24	198 0 103	38.16 19.41 19.69
89 89 89	16.06 16.91 16.59	210 84 145	50.58 33.66 39.19
102 102 102	20.84 21.96 21.55	222 156 195	70.80 61.32 68.92
114 114 114	25.74 27.08 26.59	243 221 0	83.26 91.63 14.21
127 127 127	31.47 33.22 32.59	242 227 79	86.56 95.63 26.02
140 140 140	37.60 39.66 39.14	241 233 159	93.51 101.36 57.31
153 153 153	44.47 46.81 46.06	175 80 63	33.68 24.63 10.36
165 165 165	51.27 53.98 53.22	115 65 55	16.85 13.48 7.55
178 178 178	59.13 62.22 61.13	111 32 33	13.04 7.97 3.19
191 191 191	67.40 70.92 69.53	112 28 64	14.06 8.15 8.13
204 204 204	76.28 80.34 78.11	119 101 28	21.17 22.31 5.35
216 216 216	85.00 89.52 86.95	0 77 40	4.82 8.95 4.87
229 229 229	94.86 99.80 97.00	0 79 98	7.52 10.44 18.56
242 242 242	105.31 110.81 107.82	31 37 68	3.69 3.43 8.73
0 0 128	4.97 2.21 27.18	217 219 227	87.48 91.88 94.53
0 0 255	18.16 8.44 99.73	196 198 206	72.40 75.92 78.92
0 128 0	11.24 23.02 4.54	153 155 163	46.01 48.32 51.45
0 128 128	16.35 25.43 32.00	111 113 118	25.35 26.72 28.13
0 170 255	37.49 47.57 108.42	69 70 73	10.19 10.72 11.21
0 255 0	42.02 85.01 15.25	31 31 32	2.23 2.32 2.49
0 255 170	50.54 88.71 62.46	33 37 112	6.22 4.53 22.18
0 255 255	60.26 93.27 116.44	80 70 141	16.25 13.54 35.34
85 85 85	14.78 15.58 15.29	141 133 188	41.16 39.42 62.56
128 0 0	15.31 7.92 0.92	197 21 31	35.24 18.77 3.78
128 0 128	20.37 10.13 27.64	209 84 62	45.08 31.31 10.91
128 128 0	26.69 31.26 5.41	223 152 130	64.76 57.28 36.79
128 128 128	32.04 33.82 32.77	0 122 46	11.21 21.71 8.22
128 128 255	45.38 40.05 105.97	62 154 88	22.64 36.23 20.32
128 255 128	62.68 95.27 44.51	146 192 153	51.32 63.19 49.30
170 0 255	44.41 21.91 101.28	203 146 128	56.45 51.40 35.44
170 170 170	54.10 56.64 56.24	223 144 0	58.10 52.22 7.74
170 255 0	68.07 98.60 16.53	198 11 74	36.78 19.03 11.27
170 255 255	86.54 107.02 116.97	135 21 106	21.03 11.16 20.32
255 0 0	56.06 28.91 2.48	151 180 7	42.68 55.09 9.54
255 0 170	64.46 32.64 48.03	0 129 140	17.70 26.44 37.84
255 0 255	74.25 37.31 102.31	0 95 174	15.37 17.10 51.90
255 128 128	72.85 54.95 34.81	239 240 249	104.24 109.32 112.57
255 170 0	75.83 69.12 9.98	215 218 226	86.66 91.20 94.00
255 170 255	93.94 77.36 109.88	191 197 205	70.45 74.72 78.03
255 255 0	98.26 114.28 17.65	143 152 159	42.48 45.58 49.05
255 255 170	106.77 118.00 64.65	97 110 111	21.89 24.31 25.28
170 85 85	33.93 25.59 16.21	59 74 72	9.33 10.89 11.19
85 170 85	29.01 44.33 20.72	28 51 49	3.67 4.79 5.37

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	121.00	95%	0.26
2	132.49	104%	0.19
3	132.80	104%	0.47
4	118.03	93%	0.49
5	127.16	100%	0.00
6	127.61	100%	0.27
7	106.64	84%	1.06
8	111.23	87%	0.99
9	111.75	88%	1.19

	Av	Max
Luminance Deviation	7%	16%
Chroma Deviation	1	1