

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2008-2-27 9:54:13
Report-Version: v1.2.2
Monitor-Name: \\.\DISPLAY1
Profile: C:/Windows/system32/.../Dell2408-27.02.08-5800K-18-120cd-trc.icc
Created: 2008-2-27 9:47
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:	115.15 120.59 117.80
XYZ (normalized):	95.49 100.00 97.68
Luminance:	120.6 Cd/m2
Next Temperature:	5802 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.2 deltaE

Blackpoint

Luminance:	0.1 Cd/m2
Chromaticity:	0.3 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	7321	0.11	0.82	0.33	
5	5845	0.57	4.27	0.06	1.86
10	5870	1.89	13.03	0.55	1.84
15	6031	4.06	21.46	0.99	1.80
20	5912	6.73	28.33	0.56	1.80
25	5827	9.95	34.50	0.52	1.81
30	5867	13.72	40.21	0.58	1.81
35	5765	18.29	45.86	0.21	1.80
40	5858	23.44	51.20	0.35	1.79
45	5884	28.67	55.86	0.76	1.81
50	5829	34.60	60.51	0.40	1.81
55	5788	41.21	65.10	0.23	1.80
60	5795	48.19	69.44	0.42	1.79
65	5844	55.16	73.38	0.38	1.82
70	5858	63.68	77.76	0.51	1.79
75	5849	72.24	81.79	0.40	1.78
80	5819	80.96	85.57	0.67	1.80
85	5827	90.15	89.28	1.09	1.82
90	5846	100.28	93.08	0.91	1.78
95	5793	110.67	96.73	0.21	1.70
100	5802	120.59	100.00	0.00	
Average	5845			0.51	1.80
Range				1.56	

Tone values = 89.2%

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 -0.0 -0.3	-0.8 0.0 0.3	0.9
0 0 128	15.6 39.9 -72.2	1.3 -2.4 1.5	3.1
0 0 255	33.1 56.0 -108.4	0.6 0.7 1.4	1.7
0 128 0	50.0 -87.2 52.6	-0.2 1.1 0.2	1.2
0 128 128	52.4 -58.4 -14.2	0.1 1.3 0.3	1.3
0 170 255	68.4 -46.1 -50.9	-0.2 3.0 0.2	3.0
0 255 0	83.8 -130.9 81.2	-0.3 0.7 -1.3	1.5
0 255 170	85.5 -107.5 13.4	-0.1 1.1 -0.0	1.1
0 255 255	87.6 -88.3 -21.1	-0.1 1.9 0.1	2.0
85 85 85	44.0 0.2 -0.4	0.0 -0.2 0.4	0.5
128 0 0	34.5 65.5 54.0	0.3 -1.2 1.7	2.1
128 0 128	38.4 70.8 -33.3	0.6 -2.6 0.2	2.7
128 128 0	59.0 -11.0 66.0	-0.4 1.4 0.1	1.4
128 128 128	60.9 -0.4 0.2	-0.2 0.4 -0.2	0.5
128 128 255	65.6 17.3 -54.7	-0.2 1.1 0.1	1.1
128 255 128	89.0 -71.4 38.9	-0.2 0.0 -0.1	0.2
170 0 255	53.4 86.6 -73.6	0.4 -1.3 1.1	1.7
170 170 170	75.2 -1.0 0.2	-0.3 1.0 -0.2	1.0
170 255 0	90.6 -58.3 91.5	-0.2 0.8 -1.2	1.4
170 255 255	94.0 -35.7 -10.2	-0.1 0.7 0.0	0.7
255 0 0	60.4 99.6 92.1	0.3 -2.4 -1.9	3.1
255 0 170	63.3 103.2 -14.5	0.6 -3.0 0.2	3.1
255 0 255	66.7 105.2 -51.0	0.5 -2.1 1.0	2.4
255 128 128	75.9 56.2 25.1	-0.1 -0.5 -0.2	0.5
255 170 0	82.0 29.3 92.8	-0.5 0.6 -1.1	1.4
255 170 255	85.9 41.9 -21.2	-0.3 0.8 -0.2	0.9
255 255 0	97.1 -14.4 101.8	-0.2 -0.2 -1.8	1.8
255 255 170	98.4 -6.7 34.9	-0.0 -0.5 -0.2	0.6
255 255 255	100.0 0.0 0.0	0.0 -0.0 -0.0	0.0
170 85 85	55.8 44.8 19.2	0.1 -0.9 0.5	1.0
85 170 85	66.8 -57.7 30.9	-0.6 1.5 -0.3	1.7
85 85 170	47.4 15.1 -43.7	0.3 -0.6 0.7	1.0
85 170 170	68.7 -42.8 -11.0	-0.4 1.6 -0.3	1.7
170 85 170	58.2 51.1 -25.4	0.3 -1.2 0.7	1.4
170 170 85	73.7 -9.1 42.2	-0.5 1.2 -0.2	1.3
Average			1.5
Maximum			3.1

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 -33.2 -49.6	3.9
66.9 -24.7 -37.1	67.2 -26.6 -36.4	2.0
79.7 -12.5 -21.8	80.1 -12.9 -22.4	0.9
48.0 74.0 -3.0	47.9 76.1 -3.6	2.2
60.8 50.6 -6.7	60.8 51.5 -6.7	0.9
76.4 25.8 -6.9	76.5 26.0 -7.1	0.3
89.0 -5.0 93.0	89.8 -4.8 95.0	2.2
90.3 -4.7 62.6	91.0 -4.1 63.7	1.5
92.2 -3.5 31.1	92.9 -3.5 32.0	1.1
53.1 37.7 28.9	53.0 38.3 28.8	0.6
41.5 22.7 16.8	41.7 23.3 16.2	0.8
31.9 40.0 24.0	32.2 40.4 23.4	0.8
32.5 44.5 -1.8	32.7 45.2 -1.7	0.8
51.3 1.3 44.5	51.8 0.2 44.2	1.2
34.6 -36.4 13.9	34.9 -36.6 13.7	0.4
36.0 -26.2 -20.9	36.0 -26.7 -21.6	0.9
20.9 9.6 -23.6	21.4 9.6 -23.8	0.5
89.0 0.0 -1.9	89.4 -1.0 -1.1	1.3
82.8 0.0 -1.7	83.1 -0.6 -2.1	0.8
69.3 0.0 -1.4	69.5 0.0 -1.6	0.3
54.1 0.0 -1.0	54.5 -0.3 -1.0	0.5
36.6 0.0 -0.5	36.9 0.7 -0.7	0.7
16.0 0.0 0.0	16.6 -0.1 -0.0	0.6
24.0 22.0 -46.0	23.8 23.1 -47.2	1.7
40.9 17.9 -36.6	40.9 18.3 -36.6	0.4
63.7 10.3 -23.8	64.1 10.1 -24.1	0.5
47.0 68.0 48.0	47.0 68.8 47.6	0.8
58.5 47.1 37.9	58.8 47.8 38.1	0.8
74.2 22.9 21.4	74.5 22.9 21.2	0.4
50.0 -65.0 27.0	50.7 -66.2 27.2	1.4
62.1 -39.8 21.0	62.7 -40.8 21.2	1.2
77.0 -19.1 11.0	77.5 -20.0 11.2	1.1
71.2 18.9 17.3	71.4 19.7 16.9	0.9
71.2 22.1 73.1	71.8 21.2 73.5	1.1
47.7 71.2 16.2	47.7 72.7 16.0	1.5
38.0 55.4 -20.9	37.8 57.1 -22.1	2.1
73.7 -22.8 67.6	74.3 -23.8 68.1	1.3
52.3 -52.3 -20.1	52.3 -53.9 -20.3	1.6
43.3 -17.0 -48.6	43.3 -18.3 -49.2	1.4
95.0 0.0 -2.0	95.6 -0.4 -1.9	0.7
88.5 -0.4 -3.1	89.0 -1.3 -2.3	1.3
82.0 -0.9 -4.1	82.2 -1.2 -4.0	0.4
67.7 -2.0 -4.4	68.0 -2.1 -4.0	0.5
52.2 -2.5 -3.5	52.6 -2.3 -3.6	0.4
37.5 -3.9 -3.1	37.9 -4.3 -3.2	0.6
26.3 -6.8 -3.4	27.0 -7.4 -2.8	1.1
Average		1.1
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	115.15 120.59 117.80	85 85 170	23.08 19.98 52.91
0 0 0	0.10 0.11 0.13	85 170 170	31.36 47.22 56.83
12 12 12	0.54 0.57 0.56	170 85 170	47.42 31.50 53.27
25 25 25	1.78 1.89 1.83	170 170 85	48.60 55.49 20.78
38 38 38	3.81 4.06 4.00	0 128 207	20.81 28.90 76.33
51 51 51	6.37 6.73 6.61	82 158 220	35.16 45.07 85.84
63 63 63	9.44 9.95 9.65	153 192 232	60.63 69.02 98.21
76 76 76	13.13 13.72 13.63	172 26 103	39.69 19.79 21.80
89 89 89	17.48 18.29 17.77	186 91 143	51.45 34.75 39.84
102 102 102	22.31 23.44 23.01	206 156 190	70.63 61.05 68.23
114 114 114	27.18 28.67 28.06	238 221 9	82.32 90.81 9.44
127 127 127	32.92 34.60 33.74	238 225 89	86.01 94.05 25.61
140 140 140	39.32 41.21 40.08	237 230 159	91.88 99.38 55.46
153 153 153	46.15 48.19 47.27	156 83 64	34.24 25.06 10.82
165 165 165	52.52 55.16 54.03	106 67 57	18.30 14.73 8.53
178 178 178	60.60 63.68 62.47	97 35 32	13.84 8.52 3.16
191 191 191	68.85 72.24 70.95	98 32 64	15.20 8.81 9.31
204 204 204	76.98 80.96 78.71	116 103 35	22.49 23.89 5.56
216 216 216	85.52 90.15 87.39	34 76 44	5.57 10.20 5.91
229 229 229	95.21 100.28 97.73	25 76 97	7.42 10.99 20.24
242 242 242	105.61 110.67 107.79	36 34 67	4.75 4.08 10.15
0 0 128	5.85 2.68 30.15	215 216 220	85.84 90.47 89.94
0 0 255	20.54 10.01 106.57	194 195 199	71.59 75.22 76.13
0 128 0	6.76 22.31 3.19	152 153 155	46.20 48.35 48.75
0 128 128	12.64 24.97 33.85	110 110 112	25.85 27.13 27.17
0 170 255	31.88 47.46 111.88	68 68 69	10.99 11.41 11.41
0 255 0	23.55 77.01 10.38	30 30 30	2.55 2.67 2.61
0 255 170	33.40 81.48 61.83	38 32 107	7.32 5.02 22.99
0 255 255	44.05 86.90 117.06	77 68 138	17.51 14.42 36.15
85 85 85	15.97 16.68 16.49	136 130 183	41.98 39.85 62.87
128 0 0	20.41 9.64 0.44	170 36 31	35.51 18.84 3.39
128 0 128	26.54 12.39 30.44	186 89 63	45.84 31.85 11.05
128 128 0	27.23 32.36 3.57	206 152 128	64.15 56.92 36.08
128 128 128	33.49 35.20 34.26	34 124 54	9.79 22.99 9.81
128 128 255	48.33 42.60 110.20	92 151 93	24.21 37.71 21.95
128 255 128	50.28 89.63 41.86	156 188 153	51.59 63.25 49.62
170 0 255	54.92 26.18 106.98	190 146 127	56.71 51.23 35.20
170 170 170	55.61 58.68 57.09	205 145 28	57.23 51.62 6.79
170 255 0	57.43 93.15 10.92	172 32 74	38.09 19.60 12.28
170 255 255	78.51 103.36 117.55	117 30 105	22.35 11.93 22.39
255 0 0	71.08 33.47 1.03	158 180 36	43.63 56.49 9.56
255 0 170	80.88 37.94 51.39	0 126 139	13.45 24.96 38.75
255 0 255	91.76 43.48 107.39	12 90 166	13.43 16.50 51.20
255 128 128	84.03 59.22 34.97	236 237 242	102.24 107.29 107.99
255 170 0	82.64 71.76 6.28	212 215 221	84.88 89.58 90.80
255 170 255	103.31 81.77 112.81	189 193 201	69.43 73.22 76.71
255 255 0	94.60 110.79 11.33	143 149 156	43.15 45.89 48.64
255 255 170	104.65 115.37 62.82	101 106 111	23.32 24.95 26.66
170 85 85	40.33 28.21 16.87	65 72 75	11.00 12.15 13.11
85 170 85	24.29 43.94 20.39	41 50 51	5.21 6.15 6.68