

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2008-6-11 15:57:49
Report-Version: v1.2.2
Monitor-Name: \\.\DISPLAY1
Profile: C:/.../samsung_2493hm_UGRA2_11.06.08-5800K-18-120cd-trc.icc
Created: 2008-6-11 15:48
Measurement device: eye-one display 2 (Intelli Proof 260 excellence)

Summary

The monitor has not passed the certification according to the UGRA DACT specifications.

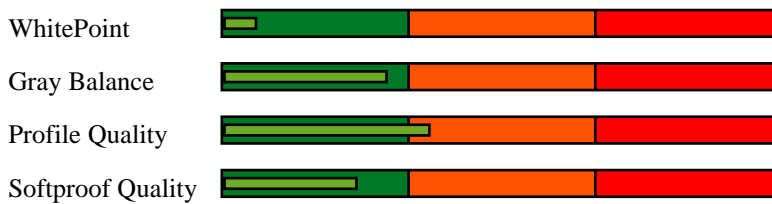
Calibration

White Point	yes
Gray balance	yes
Profile quality	no

Softproofing

MultiColor, HighBody	no
Offset/Gravure Paper Type 1/2	no
Offset on uncoated paper	no
Newspaper Printing	no

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:	114.88 120.21 117.49
XYZ (normalized):	95.57 100.00 97.73
Luminance:	120.2 Cd/m2
Next Temperature:	5797 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.3 deltaE

Blackpoint

Luminance:	0.2 Cd/m2
Chromaticity:	1.9 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	18600	0.16	1.22	1.92	
5	6899	0.64	4.84	1.47	1.85
10	5841	1.92	13.22	0.44	1.84
15	5748	4.10	21.62	0.42	1.81
20	5745	6.74	28.40	0.58	1.81
25	6055	9.86	34.39	1.15	1.81
30	5864	13.69	40.23	1.01	1.82
35	5782	18.08	45.69	0.11	1.81
40	5768	22.91	50.75	0.28	1.82
45	5797	28.03	55.39	0.18	1.83
50	5824	34.31	60.38	0.25	1.82
55	5863	40.91	64.99	1.17	1.82
60	5806	47.72	69.25	0.21	1.82
65	5802	54.68	73.21	0.67	1.84
70	5784	63.00	77.52	0.36	1.82
75	5819	71.89	81.73	0.89	1.81
80	5808	80.32	85.41	0.32	1.82
85	5794	88.91	88.90	0.18	1.86
90	5789	98.00	92.36	0.33	1.96
95	5805	109.05	96.29	1.01	1.99
100	5797	120.21	100.00	0.00	
Average	5815			0.50	1.84
Range				1.75	

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.

RGB	Lab	deltaLab	deltaE
0 0 0	1.2 0.2 -1.9	-1.2 -0.2 1.9	2.3
0 0 128	11.1 61.1 -75.2	0.4 -4.5 -1.0	4.6
0 0 255	25.7 91.7 -115.0	-0.1 -6.0 -0.3	6.0
0 128 0	50.9 -67.4 41.7	0.9 5.1 3.1	6.1
0 128 128	52.2 -39.8 -13.4	1.0 1.0 1.5	2.1
0 170 255	67.3 -21.3 -50.3	0.6 -1.7 2.3	2.9
0 255 0	85.6 -100.6 69.1	0.8 6.4 -1.4	6.6
0 255 170	86.7 -79.7 14.8	0.9 4.0 -0.6	4.1
0 255 255	87.9 -59.1 -19.7	0.8 0.5 1.7	2.0
85 85 85	43.9 -0.1 0.0	0.1 0.1 -0.0	0.1
128 0 0	33.6 52.9 42.2	-0.3 -0.1 5.2	5.2
128 0 128	36.3 66.7 -32.8	-0.3 -2.1 -2.3	3.2
128 128 0	59.3 -14.5 52.2	0.2 2.3 2.9	3.7
128 128 128	60.7 0.1 -0.0	0.0 -0.1 0.0	0.1
128 128 255	63.7 27.1 -55.0	-0.2 -2.9 1.2	3.2
128 255 128	90.4 -58.9 37.4	0.3 2.9 -1.2	3.2
170 0 255	49.0 92.6 -75.7	-0.3 -4.0 -0.5	4.0
170 170 170	75.1 -0.8 0.3	-0.1 0.8 -0.3	0.9
170 255 0	92.0 -53.7 77.4	0.4 4.2 -1.7	4.6
170 255 255	94.3 -25.4 -9.4	0.2 0.2 0.6	0.7
255 0 0	58.9 80.5 77.8	-0.4 -0.7 -5.4	5.4
255 0 170	60.6 90.8 -14.1	-0.1 -1.9 -3.3	3.8
255 0 255	62.9 100.5 -52.1	-0.3 -2.9 -1.0	3.1
255 128 128	74.8 43.8 23.3	-0.1 -0.2 -1.5	1.6
255 170 0	82.0 16.0 77.0	-0.3 2.1 -1.4	2.5
255 170 255	84.5 38.1 -21.8	-0.3 -0.5 0.2	0.6
255 255 0	98.1 -20.6 86.9	0.1 2.3 -3.6	4.3
255 255 170	98.9 -10.6 34.2	0.1 1.4 -2.3	2.7
255 255 255	100.0 0.0 0.0	0.0 0.0 0.0	0.0
170 85 85	55.1 34.6 17.7	-0.0 -0.3 -0.6	0.6
85 170 85	67.6 -47.9 28.5	0.1 3.8 0.0	3.8
85 85 170	46.0 21.6 -42.4	0.2 -2.5 -0.0	2.5
85 170 170	68.8 -30.7 -9.7	0.0 1.6 -0.0	1.6
170 85 170	56.6 46.6 -24.8	0.0 -1.7 -0.6	1.8
170 170 85	74.0 -12.4 38.0	-0.1 2.3 -0.2	2.3
Average			2.9
Maximum			6.6

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	57.3 -16.5 -46.8	20.9
66.9 -24.7 -37.1	66.7 -24.5 -38.0	1.0
79.7 -12.5 -21.8	79.7 -13.0 -22.3	0.7
48.0 74.0 -3.0	48.6 74.6 0.3	3.4
60.8 50.6 -6.7	60.8 51.9 -5.9	1.6
76.4 25.8 -6.9	76.4 27.0 -7.1	1.3
89.0 -5.0 93.0	89.0 -5.6 79.5	13.5
90.3 -4.7 62.6	90.3 -7.3 63.8	2.9
92.2 -3.5 31.1	91.8 -4.9 32.4	1.9
53.1 37.7 28.9	53.3 37.7 28.2	0.7
41.5 22.7 16.8	41.9 22.1 17.0	0.7
31.9 40.0 24.0	32.4 41.0 23.4	1.3
32.5 44.5 -1.8	33.1 45.9 -1.6	1.5
51.3 1.3 44.5	51.3 0.9 42.4	2.1
34.6 -36.4 13.9	34.6 -40.1 13.4	3.7
36.0 -26.2 -20.9	35.8 -22.3 -20.5	3.9
20.9 9.6 -23.6	21.1 11.0 -23.8	1.4
89.0 0.0 -1.9	88.7 0.5 -2.6	1.0
82.8 0.0 -1.7	82.9 0.0 -0.9	0.8
69.3 0.0 -1.4	69.1 0.1 -1.5	0.2
54.1 0.0 -1.0	54.0 0.3 -0.5	0.6
36.6 0.0 -0.5	36.8 0.3 -1.2	0.7
16.0 0.0 0.0	16.6 -0.0 -0.2	0.6
24.0 22.0 -46.0	23.7 24.8 -45.8	2.8
40.9 17.9 -36.6	41.0 18.3 -35.6	1.1
63.7 10.3 -23.8	63.7 10.9 -23.8	0.6
47.0 68.0 48.0	47.3 68.6 49.3	1.5
58.5 47.1 37.9	58.6 47.4 37.8	0.3
74.2 22.9 21.4	74.1 23.1 21.4	0.2
50.0 -65.0 27.0	49.7 -61.2 26.7	3.8
62.1 -39.8 21.0	61.6 -42.1 20.2	2.4
77.0 -19.1 11.0	76.9 -21.1 11.4	2.0
71.2 18.9 17.3	71.5 18.4 18.3	1.2
71.2 22.1 73.1	71.4 20.1 67.7	5.8
47.7 71.2 16.2	48.5 72.1 18.7	2.7
38.0 55.4 -20.9	38.3 57.4 -19.7	2.4
73.7 -22.8 67.6	73.7 -26.4 62.8	6.0
52.3 -52.3 -20.1	53.3 -37.6 -17.6	15.0
43.3 -17.0 -48.6	43.7 -5.1 -46.9	12.0
95.0 0.0 -2.0	94.6 0.0 -1.9	0.4
88.5 -0.4 -3.1	88.5 -0.5 -3.2	0.1
82.0 -0.9 -4.1	82.1 -2.7 -3.6	1.9
67.7 -2.0 -4.4	67.3 -2.3 -4.5	0.5
52.2 -2.5 -3.5	52.1 -2.6 -3.4	0.2
37.5 -3.9 -3.1	37.5 -4.7 -3.3	0.9
26.3 -6.8 -3.4	26.1 -5.8 -3.9	1.1
Average		2.9
Gamut-Volume		90 %

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	114.88 120.21 117.49	85 85 170	22.14 18.35 48.82
0 0 0	0.16 0.16 0.30	85 170 170	34.49 46.97 55.67
12 12 12	0.61 0.64 0.74	170 85 170	42.73 29.48 49.56
25 25 25	1.85 1.92 1.92	170 170 85	48.75 56.21 23.65
38 38 38	3.90 4.10 3.94	0 138 213	24.72 30.38 76.33
51 51 51	6.50 6.74 6.63	42 166 225	33.64 43.58 86.54
63 63 63	9.36 9.86 9.99	139 197 235	58.53 67.42 96.34
76 76 76	12.93 13.69 13.26	193 0 106	40.48 20.78 20.16
89 89 89	17.28 18.08 17.62	203 86 146	51.53 34.83 38.75
102 102 102	21.95 22.91 22.39	216 155 193	70.70 60.75 67.71
114 114 114	26.82 28.03 27.46	247 212 0	82.18 89.28 15.40
127 127 127	32.72 34.31 33.57	245 218 69	84.24 92.52 25.02
140 140 140	38.71 40.91 39.75	241 226 151	89.41 96.57 53.12
153 153 153	45.53 47.72 46.58	172 76 61	35.04 25.68 11.19
165 165 165	52.03 54.68 53.05	114 64 55	18.40 14.93 8.34
178 178 178	60.11 63.00 61.24	108 28 30	14.27 8.72 3.18
191 191 191	68.30 71.89 69.79	109 27 65	15.69 9.11 9.43
204 204 204	76.60 80.32 78.37	121 99 23	22.62 23.46 5.85
216 216 216	85.05 88.91 87.02	16 77 41	5.18 9.97 5.92
229 229 229	93.53 98.00 95.39	0 80 99	7.45 10.69 19.45
242 242 242	103.66 109.05 105.68	35 36 69	4.59 3.94 9.92
0 0 128	5.18 1.53 26.59	214 216 220	84.63 88.28 90.10
0 0 255	18.37 5.58 95.79	194 195 199	71.19 74.47 73.97
0 128 0	9.91 23.05 5.86	152 153 156	45.48 47.54 47.89
0 128 128	15.12 24.47 33.03	110 110 112	25.36 26.47 26.18
0 170 255	35.34 44.45 107.02	68 68 69	10.86 11.32 11.50
0 255 0	35.29 80.82 17.52	30 30 30	2.54 2.66 2.63
0 255 170	43.91 83.36 62.75	34 39 111	6.89 4.80 21.84
0 255 255	53.97 86.35 115.48	76 73 142	16.87 14.23 35.17
85 85 85	15.83 16.58 16.20	136 133 187	40.87 38.92 61.41
128 0 0	17.41 9.38 1.18	192 0 27	36.59 19.53 3.15
128 0 128	22.88 11.01 27.27	205 78 59	46.20 32.01 11.01
128 128 0	27.43 32.91 6.88	219 147 125	63.96 56.26 35.23
128 128 128	33.22 34.72 33.95	0 124 46	10.07 21.88 9.55
128 128 255	46.73 38.93 104.52	75 151 87	23.01 36.03 21.54
128 255 128	58.70 92.80 45.79	148 188 150	50.22 61.78 48.42
170 0 255	47.66 21.19 97.27	200 142 124	56.80 51.52 34.13
170 170 170	55.23 58.17 56.55	221 136 0	57.38 51.36 8.39
170 255 0	64.24 97.07 18.94	194 0 75	39.46 20.67 11.65
170 255 255	83.63 103.22 116.66	130 27 109	22.76 12.34 21.39
255 0 0	60.24 32.30 1.98	157 176 0	42.92 55.53 11.37
255 0 170	68.65 34.67 45.89	0 131 141	16.38 25.65 37.84
255 0 255	78.50 37.77 97.68	0 98 172	14.76 16.41 49.43
255 128 128	75.69 57.60 34.74	235 237 242	99.68 104.28 104.98
255 170 0	77.43 72.48 11.42	211 215 222	83.83 88.01 90.72
255 170 255	96.14 78.11 108.99	187 194 202	68.16 72.72 75.74
255 255 0	96.01 114.27 19.42	141 150 157	41.71 44.51 47.74
255 255 170	104.75 116.96 64.78	99 107 112	22.62 24.30 25.90
170 85 85	36.42 27.63 16.92	63 72 75	10.59 11.80 12.81
85 170 85	28.06 45.02 22.74	38 50 52	4.98 5.75 6.57