

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2008-7-28 15:03:32
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY2
EDID-Name: ASUS VW223
EDID-Serial: 86LMTN052441
Profile: C:/WINDOWS/System32/spool/DRIVERS/COLOR/vw223b_ugra.icc
Created: 2008-7-28 14:55
Measurement device: DTP94-CRT mode

Summary

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

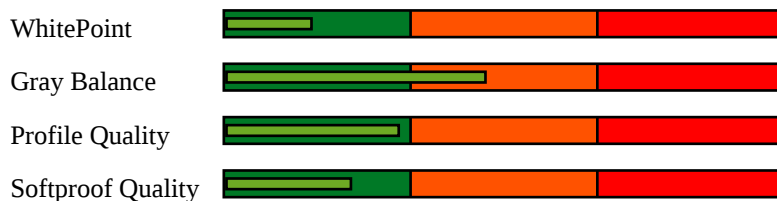
Calibration

White Point	yes
Gray balance	no
Profile quality	yes

Softproofing

MultiColor, HighBody	no
Offset/Gravure Paper Type 1/2	no
Offset on uncoated paper	no
Newspaper Printing	no
sRGB	no
AdobeRGB	no
ECI-RGB	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 2.0.

XYZ:	115.57 121.60 117.35
XYZ (normalized):	95.04 100.00 96.50
Luminance:	121.6 Cd/m2
Next Temperature:	5786 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.9 deltaE

Blackpoint

The blackpoint is not defined in ISO 12646. Therefore UDACT does only measure but not assess it.

Luminance:	0.2 Cd/m2
Chromaticity:	3.0 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	40315	0.20	1.49	3.00	
5	6650	0.70	5.20	1.59	1.86
10	5819	2.20	14.45	1.06	1.81
15	5784	4.10	21.47	0.20	1.82
20	5736	7.00	28.79	0.88	1.81
25	5692	10.00	34.44	0.95	1.83
30	5737	13.90	40.30	0.81	1.82
35	5737	18.30	45.70	0.89	1.82
40	5739	23.20	50.78	0.34	1.82
45	5786	28.30	55.35	0.00	1.84
50	5741	34.60	60.30	0.36	1.82
55	5786	40.70	64.54	0.00	1.84
60	5786	47.40	68.74	0.00	1.85
65	5786	54.90	72.99	0.00	1.85
70	5739	63.40	77.36	0.48	1.84
75	5786	71.90	81.36	0.00	1.83
80	5787	80.90	85.27	0.55	1.82
85	5787	89.70	88.81	0.57	1.86
90	5786	99.80	92.61	0.00	1.88
95	5786	111.10	96.56	0.00	1.76
100	5786	121.60	100.00	0.00	
Average	5767			0.37	1.83
Range				1.62	
Max				1.06	

Tone values = 91.8%

Through the calibration of a display tone values can be lost. A display for the printing industry should show at least 95% of the incoming tone values.

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	1.5 0.3 -3.0	-1.5 -0.3 3.0	3.4
0 0 128	13.2 45.6 -71.2	1.2 -1.2 0.1	1.8
0 0 255	29.2 65.6 -108.0	0.9 1.5 0.6	1.8
0 128 0	49.3 -64.2 39.6	1.2 -0.2 2.8	3.0
0 128 128	51.2 -41.6 -14.3	1.4 0.1 1.3	1.9
0 170 255	66.5 -27.0 -51.1	1.3 -0.8 2.9	3.3
0 255 0	84.3 -95.6 67.1	0.3 -1.8 -3.0	3.5
0 255 170	85.6 -78.3 13.2	0.5 -1.0 -1.6	1.9
0 255 255	87.3 -61.8 -20.1	0.4 -1.0 0.4	1.2
85 85 85	43.7 0.0 0.3	0.3 -0.0 -0.3	0.4
128 0 0	34.3 51.7 44.2	0.1 1.0 5.5	5.6
128 0 128	37.7 60.3 -29.4	0.2 0.3 -2.2	2.3
128 128 0	58.6 -11.3 51.6	0.5 0.9 2.4	2.7
128 128 128	60.4 0.3 0.1	0.3 -0.3 -0.1	0.5
128 128 255	64.1 20.2 -53.8	0.3 0.1 1.7	1.7
128 255 128	89.7 -55.8 36.5	-0.1 -0.9 -2.5	2.7
170 0 255	51.4 80.3 -70.9	0.4 -0.3 0.2	0.5
170 170 170	74.5 0.4 0.2	0.5 -0.4 -0.2	0.6
170 255 0	91.2 -48.4 76.6	0.0 0.1 -3.3	3.3
170 255 255	94.1 -26.2 -9.4	-0.1 -0.4 -0.2	0.5
255 0 0	59.5 80.0 79.8	0.8 -0.3 -3.9	4.0
255 0 170	61.8 86.4 -10.5	1.1 -0.7 -2.5	2.8
255 0 255	64.5 92.4 -48.5	1.0 -0.9 0.7	1.5
255 128 128	74.7 44.8 24.0	0.8 -0.3 -0.7	1.1
255 170 0	81.1 20.4 76.5	0.7 0.5 -0.8	1.2
255 170 255	84.3 36.3 -21.4	0.7 0.2 1.5	1.6
255 255 0	97.3 -15.8 86.4	0.2 0.2 -4.7	4.7
255 255 170	98.4 -7.9 33.7	0.3 0.1 -2.5	2.5
255 255 255	100.0 -0.0 0.0	0.0 -0.0 0.0	0.0
170 85 85	55.3 35.2 18.9	0.4 -0.2 -0.5	0.6
85 170 85	66.2 -44.5 26.8	0.5 -0.0 -0.1	0.5
85 85 170	46.2 16.0 -40.8	0.7 -0.0 -0.2	0.7
85 170 170	67.7 -30.8 -10.5	0.6 -0.0 -0.1	0.7
170 85 170	57.3 43.8 -22.8	0.5 -0.6 -0.4	0.9
170 170 85	73.2 -8.4 37.5	0.4 -0.1 -0.4	0.6
Average			1.9
Maximum			5.6

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	91 %
sRGB	95 %
AdobeRGB	84 %
ECI-RGB v1.0	76 %

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	55.7 -20.3 -48.5	16.8
66.9 -24.7 -37.1	66.1 -24.7 -38.7	1.8
79.7 -12.5 -21.8	79.1 -12.5 -22.8	1.2
48.0 74.0 -3.0	48.9 70.5 1.1	5.5
60.8 50.6 -6.7	60.2 51.3 -5.9	1.3
76.4 25.8 -6.9	75.7 26.7 -7.4	1.3
89.0 -5.0 93.0	88.7 -3.9 78.6	14.4
90.3 -4.7 62.6	89.9 -4.5 65.3	2.8
92.2 -3.5 31.1	91.8 -3.0 33.1	2.1
53.1 37.7 28.9	52.7 37.6 28.6	0.6
41.5 22.7 16.8	41.3 22.4 16.9	0.5
31.9 40.0 24.0	31.9 38.7 22.8	1.7
32.5 44.5 -1.8	32.7 43.9 -0.3	1.6
51.3 1.3 44.5	50.8 1.5 42.6	2.0
34.6 -36.4 13.9	34.3 -36.0 12.9	1.1
36.0 -26.2 -20.9	34.7 -24.0 -21.4	2.6
20.9 9.6 -23.6	21.0 8.2 -22.1	2.1
89.0 0.0 -1.9	88.4 0.3 -2.0	0.6
82.8 0.0 -1.7	82.2 0.7 -2.2	1.0
69.3 0.0 -1.4	68.3 -0.1 -1.3	1.0
54.1 0.0 -1.0	53.4 0.5 -1.2	0.9
36.6 0.0 -0.5	36.2 0.2 -0.2	0.6
16.0 0.0 0.0	17.0 -0.2 0.6	1.2
24.0 22.0 -46.0	23.6 21.1 -45.2	1.3
40.9 17.9 -36.6	40.0 18.0 -36.2	0.9
63.7 10.3 -23.8	63.0 10.3 -24.0	0.8
47.0 68.0 48.0	47.4 66.6 48.3	1.4
58.5 47.1 37.9	58.1 47.8 38.5	1.1
74.2 22.9 21.4	73.5 23.7 21.9	1.2
50.0 -65.0 27.0	49.0 -59.5 25.8	5.7
62.1 -39.8 21.0	61.4 -39.8 21.1	0.7
77.0 -19.1 11.0	76.3 -19.4 11.6	0.9
71.2 18.9 17.3	70.5 20.1 17.5	1.4
71.2 22.1 73.1	70.3 22.8 67.1	6.1
47.7 71.2 16.2	48.4 68.9 19.5	4.0
38.0 55.4 -20.9	37.8 55.2 -19.2	1.7
73.7 -22.8 67.6	73.0 -24.5 61.9	6.0
52.3 -52.3 -20.1	52.2 -39.3 -18.4	13.1
43.3 -17.0 -48.6	42.7 -10.0 -47.5	7.2
95.0 0.0 -2.0	94.6 -0.2 -2.3	0.5
88.5 -0.4 -3.1	87.9 -0.3 -3.3	0.6
82.0 -0.9 -4.1	81.3 -0.4 -4.6	0.9
67.7 -2.0 -4.4	66.6 -2.2 -4.2	1.1
52.2 -2.5 -3.5	51.5 -2.2 -3.9	0.9
37.5 -3.9 -3.1	37.0 -3.3 -2.9	0.8
26.3 -6.8 -3.4	26.5 -7.6 -3.0	0.9
Average		2.7
Gamut-Volume		91 %

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	115.57 121.60 117.35	85 85 170	22.12 19.10 47.62
0 0 0	0.20 0.20 0.42	85 170 170	33.59 45.90 54.33
12 12 12	0.67 0.70 0.79	170 85 170	43.47 30.70 48.63
25 25 25	2.05 2.20 2.06	170 170 85	48.21 54.90 23.10
38 38 38	3.89 4.10 3.93	0 136 213	23.78 29.40 74.65
51 51 51	6.60 7.00 6.58	56 164 226	34.37 43.70 85.60
63 63 63	9.45 10.00 9.37	143 196 235	59.06 67.50 95.48
76 76 76	13.14 13.90 13.14	188 0 107	39.51 21.00 19.95
89 89 89	17.30 18.30 17.30	199 82 147	50.65 34.30 37.99
102 102 102	22.05 23.20 22.19	214 153 193	69.49 59.90 66.36
114 114 114	26.90 28.30 27.31	243 216 0	80.56 88.50 15.70
127 127 127	32.99 34.60 33.29	242 221 67	83.44 91.80 23.90
140 140 140	38.68 40.70 39.28	239 228 151	89.69 97.10 52.38
153 153 153	45.05 47.40 45.74	168 75 62	33.78 24.90 10.68
165 165 165	52.18 54.90 52.98	112 63 55	17.81 14.50 8.08
178 178 178	60.27 63.40 60.64	105 26 31	13.39 8.40 3.14
191 191 191	68.34 71.90 69.38	107 23 66	15.05 8.90 8.77
204 204 204	77.12 80.90 78.53	119 100 22	21.89 23.00 5.66
216 216 216	85.50 89.70 87.08	22 78 41	5.37 9.90 5.88
229 229 229	94.85 99.80 96.31	0 79 99	7.11 10.30 18.86
242 242 242	105.59 111.10 107.21	35 35 69	4.52 4.00 9.26
0 0 128	5.38 2.20 26.26	215 216 220	84.61 88.80 88.54
0 0 255	18.86 8.10 93.94	194 195 199	70.52 73.80 74.02
0 128 0	9.15 21.70 5.75	152 153 156	44.37 46.70 46.29
0 128 128	14.50 23.90 32.31	110 110 112	24.95 26.10 25.95
0 170 255	34.79 44.60 105.67	68 68 69	10.58 11.10 10.78
0 255 0	33.92 78.50 17.55	30 30 30	2.65 2.80 2.62
0 255 170	42.92 82.10 62.42	36 35 112	7.00 5.00 21.33
0 255 255	53.39 86.70 114.16	77 69 143	16.76 13.90 34.30
85 85 85	15.78 16.60 15.88	137 131 187	40.55 38.60 60.20
128 0 0	17.58 9.70 1.17	187 0 29	35.64 19.40 3.39
128 0 128	23.33 12.10 26.62	200 77 60	44.98 31.20 10.49
128 128 0	26.90 32.10 6.78	216 147 125	62.71 55.40 34.09
128 128 128	33.08 34.70 33.38	0 127 45	9.69 21.40 9.44
128 128 255	47.12 40.80 103.63	79 154 86	23.13 36.10 20.81
128 255 128	58.01 91.80 45.51	150 189 150	49.81 61.20 47.13
170 0 255	49.14 24.40 95.91	198 142 125	55.53 50.10 33.54
170 170 170	55.01 57.70 55.51	217 137 0	55.62 49.50 8.16
170 255 0	63.49 95.50 18.85	189 0 76	37.95 20.40 11.28
170 255 255	84.01 104.40 115.97	127 19 109	22.06 12.10 20.59
255 0 0	60.36 32.70 2.00	156 179 0	41.68 54.60 11.42
255 0 170	69.30 36.30 44.40	0 132 141	15.76 25.00 36.88
255 0 255	79.86 40.80 96.36	0 96 172	14.31 16.20 48.13
255 128 128	75.68 57.60 34.16	235 237 242	100.21 105.50 105.50
255 170 0	76.35 70.50 11.22	211 215 222	83.09 87.50 89.06
255 170 255	96.03 78.80 107.61	188 193 202	68.15 71.80 75.02
255 255 0	95.04 112.50 19.28	142 150 157	41.11 44.00 46.23
255 255 170	104.24 116.20 64.37	100 107 112	22.35 24.00 25.51
170 85 85	36.79 28.00 16.60	64 72 75	10.57 11.60 12.25
85 170 85	27.07 43.30 22.35	39 51 52	5.04 6.00 6.51