

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2010-7-17 22:36:45
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY1
Profile: C:/Windows/system32/spool/drivers/color/asus_ve246h_ugra2.icc
Created: 2010-7-17 22:28
Measurement device: DTP94-LCD mode

Summary

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

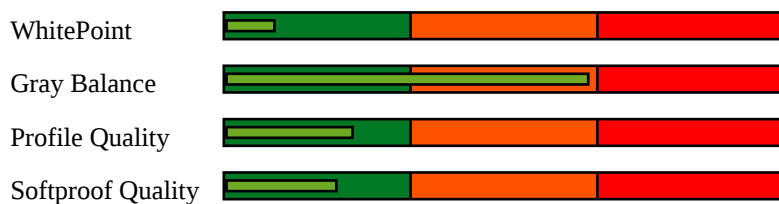
Calibration

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:	113.95 119.13 116.58
XYZ (normalized):	95.66 100.00 97.86
Luminance:	119.1 Cd/m2
Next Temperature:	5794 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.5 deltaE

Blackpoint

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

Luminance:	0.3 Cd/m2
Chromaticity:	0.5 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	5146	0.28	2.12	0.47	
5	4571	0.83	6.29	3.10	1.85
10	5680	2.04	13.90	0.35	1.83
15	5855	3.99	21.39	0.21	1.83
20	5790	6.73	28.51	1.16	1.82
25	5807	9.62	34.14	0.78	1.84
30	5741	13.51	40.15	0.53	1.83
35	5788	17.77	45.52	0.25	1.83
40	5732	22.70	50.75	0.54	1.83
45	5710	27.78	55.40	0.68	1.84
50	5720	33.61	60.08	0.56	1.84
55	5779	40.08	64.68	0.31	1.83
60	5770	47.26	69.23	0.25	1.82
65	5784	54.01	73.11	0.21	1.85
70	5765	61.87	77.24	0.44	1.85
75	5812	70.31	81.30	0.30	1.84
80	5816	78.94	85.13	0.31	1.85
85	5782	88.12	88.91	0.75	1.89
90	5815	97.87	92.64	0.81	1.90
95	5783	107.88	96.23	0.62	2.00
100	5794	119.13	100.00	0.00	
Average	5775			0.48	1.85
Range				1.36	
Max				1.16	

Tone values = 88.5%

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	2.1 0.5 0.1	-2.1 -0.5 -0.1	2.2
0 0 128	14.0 42.3 -71.3	0.8 -1.6 -1.3	2.2
0 0 255	29.6 62.7 -110.7	0.9 -1.2 0.8	1.7
0 128 0	50.4 -59.1 45.0	0.7 0.8 3.1	3.3
0 128 128	52.1 -38.8 -13.2	1.1 0.2 0.7	1.3
0 170 255	67.8 -27.1 -50.7	0.8 0.3 1.9	2.1
0 255 0	85.2 -87.9 74.4	0.3 -0.4 -1.6	1.7
0 255 170	86.6 -72.1 14.7	0.5 -0.6 -0.5	0.9
0 255 255	88.2 -58.0 -19.8	0.5 -0.5 0.9	1.1
85 85 85	43.8 -0.1 0.3	0.2 0.1 -0.3	0.3
128 0 0	33.6 51.1 49.2	-0.3 1.6 3.8	4.1
128 0 128	37.1 59.6 -32.0	-0.1 -0.3 -2.7	2.7
128 128 0	58.8 -10.8 57.1	0.2 1.4 3.0	3.3
128 128 128	60.4 0.2 0.4	0.3 -0.2 -0.4	0.5
128 128 255	64.3 18.8 -55.1	0.3 -0.3 1.0	1.1
128 255 128	90.0 -51.8 39.3	0.1 -0.6 -1.7	1.8
170 0 255	50.7 77.9 -74.6	0.2 -0.5 -0.3	0.6
170 170 170	74.9 -0.5 0.1	0.1 0.5 -0.1	0.5
170 255 0	91.5 -45.5 83.7	0.2 0.9 -1.6	1.8
170 255 255	94.3 -24.7 -9.5	0.1 -0.4 0.2	0.5
255 0 0	58.6 79.8 86.7	-0.1 -0.2 -1.0	1.0
255 0 170	61.0 85.8 -14.8	0.4 -1.0 -2.0	2.3
255 0 255	63.7 90.6 -52.3	0.4 -0.8 -0.2	0.9
255 128 128	74.6 43.1 24.1	0.0 0.3 -1.0	1.1
255 170 0	81.6 19.2 82.9	-0.4 1.5 0.7	1.7
255 170 255	84.8 33.8 -22.1	-0.2 1.1 0.3	1.2
255 255 0	97.6 -14.3 93.6	-0.1 0.1 -2.7	2.7
255 255 170	98.6 -6.8 34.6	0.1 -0.3 -1.4	1.4
255 255 255	100.0 0.0 0.0	0.0 -0.0 0.0	0.0
170 85 85	54.9 34.1 18.5	0.1 0.1 -0.4	0.4
85 170 85	67.1 -42.3 29.4	0.1 1.0 0.2	1.0
85 85 170	46.5 15.3 -42.6	0.5 -0.7 -0.0	0.9
85 170 170	68.5 -29.6 -10.3	0.3 0.6 0.1	0.7
170 85 170	56.9 42.2 -25.0	0.3 -0.6 -0.4	0.7
170 170 85	73.6 -8.8 39.8	-0.1 1.0 0.1	1.0
Average			1.5
Maximum			4.1

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	94 %
sRGB	99 %
AdobeRGB	82 %
ECI-RGB v1.0	77 %

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	56.2 -21.0 -46.6	16.4
66.9 -24.7 -37.1	66.2 -25.7 -37.3	1.2
79.7 -12.5 -21.8	79.3 -12.6 -21.7	0.4
48.0 74.0 -3.0	48.9 70.8 1.2	5.3
60.8 50.6 -6.7	60.6 50.5 -6.0	0.7
76.4 25.8 -6.9	76.1 25.4 -6.4	0.7
89.0 -5.0 93.0	89.0 -6.1 85.2	7.8
90.3 -4.7 62.6	90.0 -5.4 62.7	0.7
92.2 -3.5 31.1	92.2 -4.3 32.5	1.6
53.1 37.7 28.9	53.0 37.3 29.4	0.6
41.5 22.7 16.8	41.8 22.4 17.5	0.9
31.9 40.0 24.0	32.5 38.8 23.7	1.3
32.5 44.4 -1.8	33.0 43.7 0.2	2.2
51.3 1.3 44.5	51.2 0.8 42.5	2.0
34.6 -36.4 13.9	34.4 -36.1 12.8	1.1
36.0 -26.2 -20.9	35.8 -23.1 -20.1	3.2
20.9 9.6 -23.6	20.9 10.2 -22.9	0.9
89.0 0.0 -1.8	88.8 -0.4 -1.4	0.6
82.8 0.0 -1.7	82.4 -0.5 -1.3	0.8
69.3 0.0 -1.4	69.1 -0.3 -0.5	0.9
54.1 0.0 -1.0	53.8 0.2 -0.3	0.8
36.6 -0.0 -0.5	36.6 -0.5 0.1	0.8
16.0 0.0 0.0	16.7 0.4 0.1	0.8
24.0 22.0 -46.0	23.6 22.1 -44.4	1.6
40.9 17.9 -36.6	40.6 18.2 -35.4	1.2
63.7 10.3 -23.8	63.3 10.2 -23.3	0.6
47.0 68.0 48.0	47.2 67.0 47.2	1.3
58.5 47.1 37.9	58.2 46.4 38.2	0.8
74.2 22.9 21.4	73.8 22.4 21.9	0.8
50.0 -65.0 27.0	50.3 -54.6 27.2	10.4
62.1 -39.8 21.0	61.8 -41.0 20.7	1.3
77.0 -19.1 11.0	76.5 -19.5 11.2	0.7
71.2 18.8 17.3	71.0 18.3 17.9	0.9
71.2 22.2 73.1	70.9 20.6 71.5	2.2
47.7 71.2 16.2	48.3 69.1 18.9	3.4
38.0 55.4 -20.9	38.1 54.9 -18.8	2.2
73.7 -22.8 67.6	73.6 -24.4 66.1	2.1
52.3 -52.3 -20.2	53.4 -37.7 -16.7	15.0
43.3 -17.0 -48.6	43.3 -9.6 -47.9	7.5
95.0 0.0 -2.0	94.6 -0.4 -1.8	0.6
88.5 -0.4 -3.1	88.3 -0.8 -2.9	0.6
82.0 -0.9 -4.1	81.6 -1.8 -3.6	1.0
67.7 -2.0 -4.4	67.4 -2.2 -4.0	0.5
52.2 -2.5 -3.5	51.9 -2.5 -2.6	1.0
37.5 -3.9 -3.1	37.4 -3.8 -2.8	0.4
26.3 -6.8 -3.4	26.4 -7.4 -2.4	1.1
Average		2.4
Gamut-Volume		94 %

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	113.95 119.13 116.58	85 85 170	21.98 18.99 49.37
0 0 0	0.28 0.28 0.26	85 170 170	34.68 46.37 55.33
12 12 12	0.80 0.83 0.58	170 85 170	41.79 29.71 49.87
25 25 25	1.97 2.04 1.98	170 170 85	48.03 54.52 22.07
38 38 38	3.81 3.99 3.94	0 134 209	23.78 29.33 72.71
51 51 51	6.35 6.73 6.40	52 163 222	33.88 43.10 83.60
63 63 63	9.12 9.62 9.28	142 195 233	58.55 66.49 93.60
76 76 76	12.89 13.51 13.02	195 0 106	39.01 20.66 19.85
89 89 89	16.96 17.77 17.30	205 83 146	50.25 34.20 38.44
102 102 102	21.69 22.70 21.90	218 153 192	68.68 59.51 65.59
114 114 114	26.57 27.78 26.73	241 218 0	78.80 87.40 13.05
127 127 127	32.19 33.61 32.48	240 222 80	81.96 90.16 25.47
140 140 140	38.28 40.08 39.00	238 229 155	88.59 96.09 53.34
153 153 153	45.20 47.26 46.01	171 76 64	33.64 24.81 10.57
165 165 165	51.62 54.01 52.66	114 64 56	17.96 14.59 8.09
178 178 178	59.12 61.87 60.08	108 28 32	13.63 8.57 3.16
191 191 191	67.11 70.31 68.76	110 24 65	15.01 8.91 8.74
204 204 204	75.35 78.94 77.27	119 101 30	21.76 22.91 5.79
216 216 216	84.00 88.12 85.47	11 78 42	5.38 9.80 5.96
229 229 229	93.17 97.87 95.29	0 79 98	7.63 10.75 19.06
242 242 242	102.92 107.88 104.82	37 34 68	4.59 3.90 9.42
0 0 128	5.36 2.34 27.02	215 216 220	83.95 87.95 88.08
0 0 255	18.69 8.29 98.44	194 195 199	69.32 72.71 72.71
0 128 0	10.28 22.24 4.93	152 153 155	44.85 46.99 46.45
0 128 128	15.50 24.35 32.47	110 110 112	24.89 25.97 25.61
0 170 255	36.17 45.81 108.10	68 68 69	10.56 11.12 10.86
0 255 0	37.12 78.81 14.81	30 30 30	2.57 2.67 2.60
0 255 170	46.04 82.48 62.14	40 34 109	7.05 4.94 20.86
0 255 255	55.96 87.04 115.36	81 68 140	17.04 14.06 34.21
85 85 85	15.61 16.34 15.87	139 130 185	40.37 38.26 59.59
128 0 0	16.50 9.08 0.68	192 0 34	34.88 18.86 3.50
128 0 128	22.21 11.48 27.40	204 79 63	43.94 30.77 10.62
128 128 0	26.79 31.63 5.48	218 148 127	61.73 54.84 34.29
128 128 128	32.64 34.08 33.04	0 127 49	11.02 22.20 9.67
128 128 255	46.29 40.23 105.32	70 154 89	22.99 35.93 21.33
128 255 128	59.58 90.69 43.23	146 189 151	49.42 60.32 47.55
170 0 255	46.66 23.40 99.13	200 143 126	54.80 49.93 33.62
170 170 170	54.60 57.28 55.90	218 139 16	54.84 49.49 7.16
170 255 0	64.29 94.00 15.52	195 0 76	37.27 19.94 11.36
170 255 255	84.20 102.80 115.98	132 19 108	21.96 12.09 20.51
255 0 0	57.63 31.00 1.20	151 180 18	41.86 54.37 10.17
255 0 170	66.23 34.54 46.71	0 131 139	16.78 25.74 36.90
255 0 255	76.05 39.01 99.40	0 94 169	14.65 16.33 49.11
255 128 128	73.43 56.31 33.76	236 237 242	98.65 103.33 104.00
255 170 0	75.59 70.15 9.32	211 215 222	82.45 86.57 88.79
255 170 255	94.36 78.34 109.40	188 193 201	67.26 71.11 74.08
255 255 0	94.99 110.75 15.89	142 150 157	41.75 44.36 47.10
255 255 170	103.97 114.42 63.29	100 107 111	22.34 23.94 24.97
170 85 85	35.31 26.99 16.32	64 72 75	10.63 11.65 12.45
85 170 85	28.26 43.69 21.56	38 50 51	4.94 5.83 6.27