

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2007-10-26 15:03:38
Report-Version: v1.2.2
Monitor-Name: \\.\DISPLAY1
Profile: C:/WINDOWS/System32/spool/.../COLOR/03_asus_pg221_ugra.icc
Created: 2007-10-26 15:00
Measurement device: eye-one display

Summary

The monitor has passed the certification according to the UGRA DACT specifications.

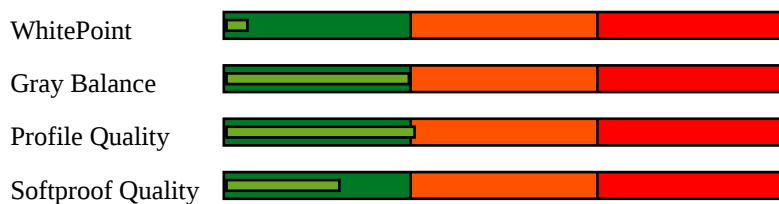
Calibration

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

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:	114.11 119.78 116.88
XYZ (normalized):	95.27 100.00 97.57
Luminance:	119.8 Cd/m2
Next Temperature:	5819 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.2 deltaE

Blackpoint

Luminance:	0.1 Cd/m2
Chromaticity:	0.4 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	5786	0.12	0.91	0.37	
5	6131	0.59	4.43	0.74	1.85
10	5812	1.88	13.03	0.42	1.83
15	5935	3.94	21.17	1.26	1.82
20	5744	6.76	28.49	1.03	1.81
25	5704	9.71	34.20	0.61	1.83
30	5705	13.42	39.92	0.62	1.83
35	5753	17.95	45.62	0.49	1.81
40	5781	23.09	51.01	0.25	1.80
45	5785	28.39	55.79	0.78	1.81
50	5744	34.52	60.62	0.72	1.81
55	5788	41.05	65.18	0.64	1.80
60	5746	47.79	69.40	0.77	1.80
65	5817	54.78	73.37	0.21	1.82
70	5810	63.24	77.75	0.53	1.80
75	5782	71.81	81.81	0.40	1.79
80	5758	80.73	85.70	0.61	1.77
85	5833	88.74	88.96	0.13	1.85
90	5805	98.04	92.51	0.27	1.90
95	5787	108.66	96.29	0.32	1.92
100	5819	119.78	100.00	0.00	
Average	5785			0.53	1.82
Range				1.97	

Tone values = 92.9%

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	0.9 -0.3 0.2	-0.9 0.3 -0.2	1.0
0 0 128	13.3 39.6 -71.5	0.4 0.4 -1.8	1.9
0 0 255	29.4 58.8 -109.0	-0.4 1.6 -1.8	2.4
0 128 0	50.8 -58.2 43.8	0.5 2.2 2.7	3.5
0 128 128	52.7 -39.3 -12.6	0.6 1.2 0.5	1.4
0 170 255	67.9 -27.6 -49.6	0.4 -0.1 1.5	1.6
0 255 0	85.6 -85.0 71.4	0.2 0.3 -1.1	1.2
0 255 170	87.0 -70.7 15.1	0.2 -0.1 -0.8	0.9
0 255 255	88.6 -57.3 -18.7	0.0 -0.5 0.4	0.6
85 85 85	44.0 0.3 0.2	-0.0 -0.3 -0.2	0.3
128 0 0	33.0 52.8 46.7	0.3 -0.7 2.3	2.4
128 0 128	36.6 60.0 -32.4	0.1 -1.4 -2.3	2.7
128 128 0	59.3 -10.2 54.4	-0.1 1.5 2.8	3.2
128 128 128	61.0 -0.2 0.5	-0.3 0.2 -0.5	0.6
128 128 255	64.8 17.2 -53.4	-0.6 0.1 -0.2	0.6
128 255 128	90.5 -50.1 38.2	-0.2 -0.6 -1.3	1.5
170 0 255	50.4 77.2 -73.6	-0.1 -0.9 -1.2	1.5
170 170 170	75.0 0.1 0.3	-0.0 -0.1 -0.3	0.3
170 255 0	91.9 -43.1 79.7	-0.0 0.5 -1.2	1.3
170 255 255	94.8 -24.1 -8.8	-0.4 -0.8 -0.2	0.9
255 0 0	57.4 81.2 81.0	1.1 -2.3 -5.5	6.1
255 0 170	59.9 86.1 -15.4	1.2 -2.4 -1.6	3.1
255 0 255	62.8 90.3 -52.3	0.8 -1.8 -0.1	2.0
255 128 128	74.3 42.9 22.5	0.4 0.1 -0.4	0.6
255 170 0	81.0 20.2 78.1	0.3 0.7 0.5	0.9
255 170 255	84.3 33.8 -22.3	0.2 0.3 0.7	0.8
255 255 0	97.5 -13.4 88.8	0.2 0.3 -2.4	2.4
255 255 170	98.6 -6.5 33.9	0.2 -0.0 -1.5	1.5
255 255 255	100.0 0.0 0.0	0.0 0.0 -0.0	0.0
170 85 85	54.8 34.9 17.4	0.2 -1.0 0.1	1.0
85 170 85	67.5 -40.3 28.5	-0.1 0.5 0.5	0.7
85 85 170	46.8 14.2 -41.3	0.0 -0.6 -0.9	1.1
85 170 170	68.9 -29.0 -9.5	-0.1 0.3 -0.4	0.5
170 85 170	56.8 42.0 -24.7	0.2 -1.2 -0.6	1.4
170 170 85	73.7 -7.4 38.0	-0.0 0.2 0.6	0.6
Average			1.5
Maximum			6.1

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	57.3 -22.1 -46.2	15.5
66.9 -24.7 -37.1	66.8 -24.8 -37.1	0.1
79.7 -12.5 -21.8	80.0 -12.8 -21.3	0.6
48.0 74.0 -3.0	49.0 72.5 1.0	4.4
60.8 50.6 -6.7	60.6 52.2 -5.8	1.9
76.4 25.8 -6.9	76.2 26.4 -6.7	0.7
89.0 -5.0 93.0	89.1 -5.6 80.8	12.2
90.3 -4.7 62.6	90.0 -4.6 62.7	0.3
92.2 -3.5 31.1	92.0 -3.2 31.6	0.5
53.1 37.7 28.9	52.8 39.1 28.7	1.4
41.5 22.7 16.8	41.5 23.1 17.1	0.4
31.9 40.0 24.0	32.0 40.7 23.8	0.7
32.5 44.5 -1.8	32.5 45.6 -1.0	1.4
51.3 1.3 44.5	51.3 1.0 42.1	2.4
34.6 -36.4 13.9	33.7 -38.2 12.0	2.7
36.0 -26.2 -20.9	35.8 -24.1 -20.7	2.1
20.9 9.6 -23.6	20.7 9.6 -23.2	0.5
89.0 0.0 -1.9	89.0 0.2 -1.8	0.2
82.8 0.0 -1.7	83.0 0.5 -1.6	0.5
69.3 0.0 -1.4	69.4 0.7 -1.4	0.7
54.1 0.0 -1.0	54.1 0.3 -0.8	0.3
36.6 0.0 -0.5	36.3 0.7 -0.5	0.8
16.0 0.0 0.0	16.2 0.8 0.3	0.9
24.0 22.0 -46.0	23.6 22.5 -44.7	1.5
40.9 17.9 -36.6	40.6 19.0 -35.7	1.5
63.7 10.3 -23.8	64.0 10.3 -23.4	0.5
47.0 68.0 48.0	46.9 69.0 49.0	1.4
58.5 47.1 37.9	57.9 48.9 37.7	1.9
74.2 22.9 21.4	74.3 22.9 22.1	0.7
50.0 -65.0 27.0	50.8 -54.0 27.4	11.0
62.1 -39.8 21.0	62.1 -40.7 20.6	1.0
77.0 -19.1 11.0	77.2 -19.5 11.1	0.5
71.2 18.9 17.3	71.2 19.4 17.5	0.6
71.2 22.1 73.1	70.8 21.1 69.0	4.2
47.7 71.2 16.2	48.3 71.2 19.2	3.0
38.0 55.4 -20.9	37.8 56.9 -18.2	3.1
73.7 -22.8 67.6	73.7 -24.2 64.5	3.4
52.3 -52.3 -20.1	54.0 -38.0 -16.7	14.8
43.3 -17.0 -48.6	43.6 -11.5 -47.3	5.7
95.0 0.0 -2.0	94.5 0.8 -2.4	1.1
88.5 -0.4 -3.1	88.9 -0.3 -2.5	0.7
82.0 -0.9 -4.1	82.3 -0.5 -4.0	0.5
67.7 -2.0 -4.4	67.9 -2.3 -3.6	0.8
52.2 -2.5 -3.5	52.3 -2.3 -2.7	0.8
37.5 -3.9 -3.1	37.1 -3.2 -3.3	0.7
26.3 -6.8 -3.4	26.4 -8.0 -3.0	1.3
Average		2.4
Gamut-Volume		92 %

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	114.11 119.78 116.88	85 85 170	21.96 19.22 48.98
0 0 0	0.11 0.12 0.10	85 170 170	35.38 47.24 55.33
12 12 12	0.54 0.59 0.57	170 85 170	41.59 29.62 49.73
25 25 25	1.80 1.88 1.86	170 170 85	48.91 55.13 23.00
38 38 38	3.67 3.94 3.77	0 135 211	24.62 30.75 75.19
51 51 51	6.38 6.76 6.38	53 163 224	34.85 44.13 85.09
63 63 63	9.25 9.71 9.27	142 196 234	59.92 68.39 95.48
76 76 76	12.87 13.42 12.97	196 0 106	39.65 20.66 20.10
89 89 89	17.20 17.95 17.48	207 82 146	50.97 34.26 38.55
102 102 102	22.00 23.09 22.38	219 153 192	69.65 60.09 66.63
114 114 114	26.93 28.39 27.28	239 218 0	79.51 88.29 14.37
127 127 127	32.86 34.52 33.14	239 222 74	82.60 90.87 25.02
140 140 140	38.99 41.05 39.59	237 229 153	88.92 96.21 53.75
153 153 153	45.81 47.79 46.53	172 76 62	33.88 24.61 10.62
165 165 165	52.26 54.78 53.58	114 64 55	17.87 14.43 8.07
178 178 178	60.08 63.24 61.27	109 27 31	13.60 8.33 3.01
191 191 191	68.42 71.81 69.57	111 23 65	15.01 8.65 8.92
204 204 204	77.20 80.73 78.39	118 101 26	21.96 23.18 5.80
216 216 216	84.49 88.74 86.72	4 78 42	4.96 9.49 5.83
229 229 229	93.56 98.04 95.73	0 79 99	7.52 10.79 19.42
242 242 242	103.65 108.66 105.64	38 34 69	4.49 3.85 9.48
0 0 128	4.90 2.15 26.68	215 216 220	84.90 88.95 89.43
0 0 255	17.71 7.97 96.55	194 195 199	71.15 74.39 74.62
0 128 0	10.74 22.94 5.18	152 153 156	45.75 47.74 47.92
0 128 128	15.82 25.07 32.82	110 110 112	25.30 26.46 26.35
0 170 255	36.12 46.13 107.34	68 68 69	10.58 11.00 10.91
0 255 0	38.86 80.59 15.78	30 30 30	2.49 2.57 2.47
0 255 170	47.42 84.24 62.36	42 33 110	7.05 4.90 21.15
0 255 255	57.11 88.75 115.23	82 68 141	17.17 14.04 34.67
85 85 85	15.88 16.61 16.14	140 130 186	41.56 39.50 61.55
128 0 0	16.43 8.80 0.79	193 0 29	35.14 18.60 3.12
128 0 128	21.85 11.14 27.42	205 78 61	44.45 30.50 10.59
128 128 0	27.64 32.57 6.13	219 148 125	63.12 56.13 34.84
128 128 128	33.25 34.98 33.77	0 127 48	11.46 22.94 9.76
128 128 255	46.47 41.03 104.90	67 154 88	23.36 36.56 21.49
128 255 128	61.55 92.82 44.62	145 189 151	50.79 62.22 48.85
170 0 255	45.76 22.82 97.70	200 143 125	55.83 50.62 34.26
170 170 170	55.09 57.79 56.08	218 138 0	54.97 49.63 7.52
170 255 0	66.61 96.06 17.01	196 0 75	38.01 19.94 11.33
170 255 255	85.78 104.73 116.45	134 17 108	22.07 11.83 20.09
255 0 0	56.11 29.57 1.45	149 180 0	42.28 55.12 10.43
255 0 170	64.35 33.10 46.04	0 131 140	17.23 26.56 37.85
255 0 255	73.90 37.52 97.94	0 94 171	14.53 16.59 49.45
255 128 128	72.64 55.85 34.51	236 237 242	99.30 103.59 104.94
255 170 0	74.96 69.29 10.14	212 215 222	84.25 88.56 89.99
255 170 255	93.24 77.46 109.11	188 193 202	69.31 72.90 76.21
255 255 0	95.75 111.50 17.36	142 150 157	42.48 45.38 47.66
255 255 170	104.41 115.20 63.94	100 107 111	22.84 24.52 25.60
170 85 85	35.48 26.99 16.82	63 72 75	10.55 11.53 12.50
85 170 85	29.29 44.62 22.24	38 50 52	4.90 5.87 6.43