

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2011-4-18 23:18:21
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY1
Profile: C:/Windows/system32/spool/drivers/color/quato-ip240-ugra.icc
Created: 2011-4-18 23:15
Measurement device: eye-one pro

Summary

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

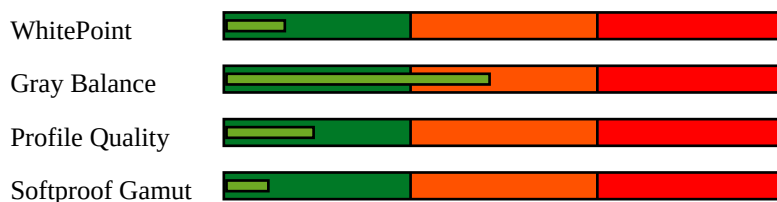
Calibration

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:	135.44 142.39 138.03
XYZ (normalized):	95.12 100.00 96.93
Luminance:	142.4 Cd/m2
Next Temperature:	5801 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.6 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:	0.6 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	6549	0.34	2.13	0.64	
5	6170	0.88	5.58	0.77	1.86
10	5933	2.41	13.79	0.40	1.84
15	5883	4.81	21.51	0.43	1.82
20	5814	7.99	28.40	1.13	1.81
25	5912	11.66	34.38	0.51	1.82
30	5904	16.24	40.26	0.78	1.82
35	5806	21.66	45.92	0.18	1.81
40	5830	27.32	50.91	0.62	1.81
45	5772	33.70	55.75	0.23	1.81
50	5801	40.31	60.16	0.72	1.82
55	5831	48.22	64.85	0.84	1.81
60	5861	56.86	69.42	0.66	1.80
65	5825	64.56	73.11	1.02	1.83
70	5746	74.59	77.51	0.87	1.81
75	5797	84.75	81.57	0.22	1.81
80	5850	94.75	85.27	1.06	1.80
85	5779	104.87	88.76	1.26	1.85
90	5851	116.69	92.55	1.03	1.84
95	5847	129.61	96.42	0.80	1.75
100	5801	142.39	100.00	0.00	
Average	5834			0.67	1.82
Range				1.97	
Max				1.26	

Tone values = 91.6%

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: Bradford

RGB	Lab	deltaLab	deltaE
0 0 0	2.1 0.1 -0.6	-2.1 -0.1 0.6	2.2
0 0 128	13.4 50.7 -77.5	-0.8 1.8 -1.4	2.4
0 0 255	27.2 79.9 -119.8	-0.1 -0.5 0.5	0.7
0 128 0	51.1 -89.6 56.6	0.5 -1.8 1.7	2.5
0 128 128	53.1 -60.0 -12.9	0.1 -0.9 0.4	1.0
0 170 255	68.2 -45.0 -51.8	-0.1 -0.0 0.2	0.3
0 255 0	86.3 -137.9 88.3	-0.1 -0.2 -0.2	0.3
0 255 170	87.6 -113.9 17.7	-0.1 0.3 -0.4	0.5
0 255 255	88.9 -92.2 -19.2	-0.1 -0.0 0.2	0.3
85 85 85	44.3 0.1 -0.2	-0.3 -0.1 0.2	0.4
128 0 0	33.3 70.4 51.6	-0.1 0.8 2.7	2.8
128 0 128	36.1 78.7 -38.4	0.1 0.3 0.1	0.4
128 128 0	59.0 -10.6 68.9	0.4 -1.0 1.3	1.6
128 128 128	60.6 0.6 -0.6	0.1 -0.6 0.6	0.8
128 128 255	63.7 23.3 -58.2	0.1 -0.4 0.3	0.5
128 255 128	90.5 -76.8 42.6	0.1 -0.4 0.2	0.5
170 0 255	49.1 102.5 -82.2	0.2 -0.3 0.9	1.0
170 170 170	74.9 0.2 -0.4	0.1 -0.2 0.4	0.5
170 255 0	92.1 -63.2 97.6	0.1 0.0 -0.3	0.3
170 255 255	94.4 -37.8 -9.4	0.1 0.1 0.0	0.1
255 0 0	58.4 107.6 90.6	0.0 0.1 -0.1	0.1
255 0 170	60.6 114.1 -20.6	0.1 -0.4 0.2	0.5
255 0 255	63.0 120.3 -58.4	0.0 -0.7 0.5	0.8
255 128 128	74.4 61.5 22.8	0.2 -0.6 0.5	0.8
255 170 0	81.2 32.1 95.8	0.3 -0.9 -0.3	1.0
255 170 255	84.2 48.2 -24.3	0.1 -0.2 0.1	0.3
255 255 0	97.7 -16.9 106.9	0.2 -0.6 -0.7	1.0
255 255 170	98.8 -8.4 36.1	0.2 -0.4 0.3	0.5
255 255 255	100.0 0.0 0.0	0.0 0.0 -0.0	0.0
170 85 85	55.0 47.3 18.1	0.0 0.7 0.2	0.7
85 170 85	67.5 -60.3 33.5	0.0 -0.5 0.3	0.6
85 85 170	46.7 17.9 -45.3	-0.3 0.2 -0.4	0.5
85 170 170	68.9 -44.0 -10.3	-0.0 -0.2 0.1	0.2
170 85 170	56.9 56.1 -28.4	-0.1 0.4 0.3	0.5
170 170 85	73.6 -9.4 43.7	0.2 -0.2 0.4	0.5
Average			0.8
Maximum			2.8

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	100 %
sRGB	100 %
AdobeRGB	100 %
ECI-RGB v1.0	95 %

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	55.2 -32.4 -49.9	4.6
66.9 -24.7 -37.1	67.0 -24.0 -37.1	0.7
79.7 -12.5 -21.8	79.8 -12.7 -22.2	0.5
48.0 74.0 -3.0	47.9 73.5 -3.7	0.9
60.8 50.6 -6.7	60.9 51.3 -7.3	0.9
76.4 25.8 -6.9	76.4 26.5 -7.7	1.1
89.0 -5.0 93.0	88.8 -4.3 93.2	0.7
90.3 -4.7 62.6	89.9 -3.6 61.9	1.4
92.2 -3.5 31.1	91.9 -3.1 30.5	0.8
53.1 37.7 28.9	53.1 37.1 27.7	1.4
41.5 22.7 16.8	41.6 22.6 15.5	1.2
31.9 40.0 24.0	31.9 40.0 22.3	1.7
32.5 44.4 -1.8	32.6 43.8 -2.6	1.1
51.3 1.3 44.5	51.1 2.1 43.7	1.1
34.6 -36.4 13.9	35.0 -36.1 13.9	0.6
36.0 -26.2 -20.9	36.1 -25.4 -20.9	0.8
20.9 9.6 -23.6	21.3 8.6 -23.4	1.1
89.0 0.0 -1.8	88.9 0.5 -2.4	0.8
82.8 0.0 -1.7	82.6 -0.2 -2.3	0.7
69.3 0.0 -1.4	69.2 -0.3 -2.3	1.0
54.1 0.0 -1.0	54.1 0.3 -1.0	0.3
36.6 -0.0 -0.5	36.7 -0.3 -1.0	0.6
16.0 0.0 0.0	16.8 0.2 -0.1	0.8
24.0 22.0 -46.0	24.3 21.5 -45.2	1.0
40.9 17.9 -36.6	41.0 17.1 -36.4	0.8
63.7 10.3 -23.8	63.6 10.8 -24.3	0.7
47.0 68.0 48.0	47.0 67.4 47.8	0.7
58.5 47.1 37.9	58.3 47.5 36.8	1.2
74.2 22.9 21.4	74.1 22.8 20.9	0.5
50.0 -65.0 27.0	49.9 -64.4 26.0	1.2
62.1 -39.8 21.0	61.8 -39.4 20.4	0.8
77.0 -19.1 11.0	76.8 -18.6 9.9	1.2
71.2 18.8 17.3	71.0 19.1 17.0	0.4
71.2 22.2 73.1	71.1 21.9 72.8	0.4
47.7 71.2 16.2	47.8 70.8 15.8	0.6
38.0 55.4 -20.9	38.1 55.1 -21.2	0.4
73.7 -22.8 67.6	73.4 -22.0 66.7	1.3
52.3 -52.3 -20.2	52.6 -52.5 -20.0	0.3
43.3 -17.0 -48.6	43.4 -17.1 -48.4	0.2
95.0 0.0 -2.0	94.9 0.3 -3.1	1.2
88.5 -0.4 -3.1	88.3 -0.2 -3.8	0.7
82.0 -0.9 -4.1	81.7 -0.6 -4.7	0.7
67.7 -2.0 -4.4	67.5 -1.4 -4.7	0.7
52.2 -2.5 -3.5	52.0 -2.2 -3.7	0.4
37.5 -3.9 -3.1	37.7 -4.8 -3.8	1.1
26.3 -6.8 -3.4	26.9 -6.8 -3.3	0.6
Average		0.9
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	135.44 142.39 138.03	85 85 170	27.11 22.84 62.51
0 0 0	0.33 0.34 0.38	85 170 170	36.72 56.19 66.26
12 12 12	0.84 0.88 0.92	170 85 170	55.50 35.15 63.30
25 25 25	2.29 2.41 2.39	170 170 85	56.91 65.36 23.30
38 38 38	4.59 4.81 4.76	0 128 206	24.30 33.75 89.15
51 51 51	7.70 7.99 7.96	85 158 219	41.87 52.79 100.97
63 63 63	11.03 11.66 11.43	154 192 231	70.55 80.61 113.56
76 76 76	15.30 16.24 15.77	170 45 102	45.69 23.32 25.59
89 89 89	20.63 21.66 21.07	185 99 142	60.59 41.10 47.36
102 102 102	26.09 27.32 26.83	206 160 190	83.12 71.78 80.50
114 114 114	32.12 33.70 32.61	237 217 27	94.44 104.22 11.14
127 127 127	38.54 40.31 39.46	237 221 93	98.34 107.56 29.96
140 140 140	46.07 48.22 47.41	236 228 160	105.56 114.27 64.77
153 153 153	54.13 56.86 55.85	155 87 65	40.00 29.67 13.17
165 165 165	61.73 64.56 63.52	105 69 57	21.27 17.29 10.16
178 178 178	71.40 74.59 72.42	96 39 32	15.94 9.84 3.81
191 191 191	80.52 84.75 81.92	97 38 63	17.48 10.31 11.16
204 204 204	90.43 94.75 93.32	115 101 37	26.17 27.36 6.35
216 216 216	100.49 104.87 102.67	35 74 45	6.65 12.16 6.94
229 229 229	111.30 116.69 114.82	27 75 97	8.95 13.08 23.46
242 242 242	123.46 129.61 127.12	36 36 66	5.48 4.80 11.70
0 0 128	7.00 2.58 36.44	215 216 220	100.46 105.20 106.16
0 0 255	23.83 8.32 127.36	194 195 199	83.17 87.49 88.25
0 128 0	8.19 27.67 3.33	152 153 155	53.63 56.45 57.30
0 128 128	15.12 30.51 39.75	110 110 112	30.02 31.45 31.24
0 170 255	37.48 55.63 132.09	68 68 69	12.63 13.33 13.36
0 255 0	28.63 98.11 10.99	30 30 30	3.06 3.21 3.13
0 255 170	39.86 102.13 71.33	39 37 106	8.63 6.13 26.15
0 255 255	52.30 106.53 137.92	78 72 137	20.42 17.12 42.34
85 85 85	19.02 19.97 19.48	137 132 182	48.75 46.16 72.79
128 0 0	24.00 10.54 0.56	169 48 31	41.33 22.23 3.93
128 0 128	30.70 12.81 36.66	184 94 64	52.91 36.81 13.14
128 128 0	32.15 38.20 3.61	205 154 128	74.35 66.17 41.85
128 128 128	39.23 41.03 40.30	36 119 56	11.23 26.17 11.43
128 128 255	55.94 46.91 129.73	93 147 94	27.83 43.10 25.25
128 255 128	59.44 110.49 47.82	156 185 154	59.97 73.05 58.25
170 0 255	63.52 25.53 127.61	189 148 127	65.64 59.71 40.60
170 170 170	65.24 68.46 66.91	204 145 33	66.17 59.46 7.80
170 255 0	68.39 115.00 11.34	171 47 73	44.29 23.23 14.59
170 255 255	92.00 123.37 137.30	116 42 104	26.14 14.32 26.04
255 0 0	83.31 36.26 1.06	158 175 43	50.58 64.84 11.23
255 0 170	94.83 40.16 61.92	14 124 139	16.28 29.85 45.63
255 0 255	107.47 44.55 127.93	18 91 165	16.08 19.63 59.45
255 128 128	98.24 66.45 40.76	236 237 242	118.70 124.40 126.57
255 170 0	96.95 82.70 6.17	212 215 221	98.59 103.64 106.86
255 170 255	120.64 91.50 132.37	189 193 201	80.80 85.16 89.54
255 255 0	111.53 133.28 11.60	143 149 156	50.14 53.22 56.79
255 255 170	123.01 137.52 72.83	101 106 111	26.81 28.79 30.63
170 85 85	47.10 32.15 19.58	65 72 75	12.68 14.16 15.43
85 170 85	28.61 53.23 22.99	41 50 51	6.15 7.21 7.94