

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2011-1-12 22:52:57
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY1
Profile: C:/Windows/system32/spool/DRIVERS/COLOR/P27T-6_ugra.icc
Created: 2011-1-12 22:49
Measurement device: eye-one pro

Summary

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

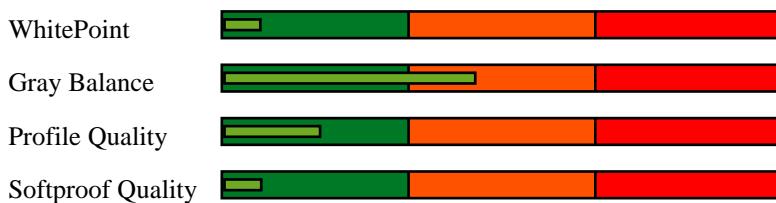
Calibration

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:	133.62 139.85 135.77
XYZ (normalized):	95.55 100.00 97.08
Luminance:	139.8 Cd/m2
Next Temperature:	5764 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.4 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:	1.3 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	6499	0.28	1.81	1.30	
5	5622	0.71	4.57	0.26	1.96
10	5642	2.35	13.71	1.45	1.83
15	5696	4.65	21.29	0.23	1.83
20	5671	7.85	28.42	0.46	1.81
25	5769	11.22	34.04	0.02	1.84
30	5788	15.71	39.97	0.81	1.84
35	5797	20.72	45.38	0.28	1.83
40	5775	26.44	50.58	0.08	1.83
45	5832	32.34	55.20	0.69	1.85
50	5855	39.28	59.97	0.69	1.84
55	5733	46.77	64.52	0.27	1.84
60	5717	55.25	69.12	0.38	1.83
65	5805	63.08	72.96	0.32	1.85
70	5794	72.47	77.17	0.28	1.84
75	5739	82.69	81.36	0.23	1.84
80	5792	92.88	85.21	0.44	1.83
85	5736	104.15	89.15	0.28	1.83
90	5761	115.38	92.80	0.06	1.83
95	5754	127.82	96.57	0.36	1.80
100	5764	139.85	100.00	0.00	
Average	5759			0.39	1.84
Range				2.26	
Max				1.45	

Tone values = 92.0%

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	1.8 0.8 -1.0	-1.8 -0.8 1.0	2.2
0 0 128	12.3 52.9 -78.0	-0.6 1.2 -1.0	1.6
0 0 255	25.1 84.2 -121.3	0.8 -2.3 1.9	3.1
0 128 0	50.9 -88.7 52.9	0.3 -1.3 -0.2	1.3
0 128 128	52.4 -58.7 -13.7	0.4 -1.4 0.5	1.5
0 170 255	67.2 -43.6 -52.5	0.2 -0.5 1.0	1.1
0 255 0	86.1 -136.0 82.3	-0.4 0.0 -2.7	2.7
0 255 170	87.1 -112.6 16.4	-0.3 0.6 -1.3	1.4
0 255 255	88.2 -91.2 -20.0	-0.1 0.3 0.1	0.4
85 85 85	43.7 -0.2 -0.1	0.3 0.2 0.1	0.3
128 0 0	33.8 67.1 51.3	0.2 1.0 2.7	2.9
128 0 128	36.3 76.4 -37.0	0.5 0.3 0.8	1.0
128 128 0	59.4 -12.1 65.0	0.1 0.6 -0.1	0.6
128 128 128	60.5 -0.5 -0.2	0.2 0.5 0.2	0.6
128 128 255	62.8 24.0 -58.8	0.8 -1.0 1.8	2.2
128 255 128	90.6 -77.6 41.5	-0.4 1.7 -1.5	2.3
170 0 255	49.0 101.1 -80.4	0.6 -0.9 1.6	1.9
170 170 170	74.7 -0.1 -0.2	0.2 0.1 0.2	0.3
170 255 0	92.3 -62.9 91.9	-0.2 0.9 -2.8	2.9
170 255 255	94.1 -37.5 -9.9	-0.0 0.6 0.2	0.6
255 0 0	59.7 103.2 86.5	0.1 -0.1 0.3	0.3
255 0 170	61.5 110.2 -17.8	0.3 -0.5 0.4	0.7
255 0 255	63.4 117.0 -55.9	0.4 -1.0 1.1	1.5
255 128 128	74.9 60.1 23.9	0.4 -1.2 0.0	1.3
255 170 0	82.0 30.3 91.2	0.0 -0.4 -1.9	2.0
255 170 255	84.2 47.6 -23.6	0.3 -0.7 0.7	1.1
255 255 0	98.3 -17.6 101.1	-0.2 0.2 -3.0	3.0
255 255 170	99.3 -9.5 36.7	-0.3 0.8 -1.6	1.8
255 255 255	100.0 -0.0 0.0	0.0 -0.0 0.0	0.0
170 85 85	55.2 46.4 19.0	0.3 -0.1 -0.0	0.3
85 170 85	67.2 -60.4 32.4	0.1 0.7 -0.8	1.1
85 85 170	45.8 18.6 -45.8	0.4 -0.5 0.9	1.1
85 170 170	68.3 -43.9 -11.0	0.2 0.5 0.2	0.6
170 85 170	56.6 55.7 -27.4	0.5 -0.6 0.9	1.1
170 170 85	73.8 -9.9 43.0	0.1 0.4 -0.8	0.9
Average			1.4
Maximum			3.1

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	100 %
sRGB	100 %
AdobeRGB	99 %
ECI-RGB v1.0	93 %

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	54.9 -32.1 -50.5	5.0
66.9 -24.7 -37.1	66.8 -25.2 -37.5	0.6
79.7 -12.5 -21.8	79.5 -12.8 -22.1	0.6
48.0 74.0 -3.0	47.7 73.7 -3.0	0.4
60.8 50.6 -6.7	60.3 50.9 -6.7	0.6
76.4 25.8 -6.9	76.2 26.4 -6.5	0.7
89.0 -5.0 93.0	89.4 -5.0 94.0	1.1
90.3 -4.7 62.6	90.7 -5.0 64.6	2.1
92.2 -3.5 31.1	92.1 -3.0 31.6	0.7
53.1 37.7 28.9	52.9 38.1 28.9	0.4
41.5 22.7 16.8	41.3 22.3 16.6	0.5
31.9 40.0 24.0	31.7 39.7 22.5	1.5
32.5 44.4 -1.8	32.2 44.1 -2.2	0.7
51.3 1.3 44.5	51.0 1.3 44.6	0.3
34.6 -36.4 13.9	34.6 -35.8 14.2	0.8
36.0 -26.2 -20.9	35.8 -26.1 -20.2	0.7
20.9 9.6 -23.6	21.0 9.3 -23.2	0.5
89.0 0.0 -1.8	89.0 -0.4 -1.4	0.6
82.8 0.0 -1.7	82.6 -0.4 -2.1	0.6
69.3 0.0 -1.4	69.1 0.2 -1.1	0.4
54.1 0.0 -1.0	53.8 0.1 -1.4	0.6
36.6 -0.0 -0.5	36.4 0.2 -0.8	0.4
16.0 0.0 0.0	16.7 0.1 -0.1	0.7
24.0 22.0 -46.0	23.9 22.0 -46.4	0.5
40.9 17.9 -36.6	40.5 18.0 -36.7	0.5
63.7 10.3 -23.8	63.4 10.3 -23.9	0.3
47.0 68.0 48.0	46.9 67.6 47.3	0.8
58.5 47.1 37.9	58.2 47.4 38.3	0.6
74.2 22.9 21.4	74.0 23.1 21.6	0.4
50.0 -65.0 27.0	49.8 -64.2 27.4	0.9
62.1 -39.8 21.0	62.1 -40.8 21.6	1.2
77.0 -19.1 11.0	76.9 -20.1 11.5	1.2
71.2 18.8 17.3	71.1 18.7 17.7	0.5
71.2 22.2 73.1	71.0 22.2 74.1	1.1
47.7 71.2 16.2	47.6 71.0 16.4	0.2
38.0 55.4 -20.9	37.7 54.4 -21.1	1.1
73.7 -22.8 67.6	73.6 -23.6 68.8	1.4
52.3 -52.3 -20.2	52.1 -52.0 -20.3	0.4
43.3 -17.0 -48.6	42.8 -15.7 -49.5	1.7
95.0 0.0 -2.0	95.1 0.3 -2.1	0.3
88.5 -0.4 -3.1	88.6 -0.6 -2.7	0.5
82.0 -0.9 -4.1	81.8 -1.0 -4.0	0.2
67.7 -2.0 -4.4	67.4 -2.4 -4.3	0.6
52.2 -2.5 -3.5	52.0 -2.8 -3.7	0.4
37.5 -3.9 -3.1	37.4 -4.8 -2.9	1.0
26.3 -6.8 -3.4	26.7 -7.0 -3.0	0.6
Average		0.8
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	133.62 139.85 135.77	85 85 170	25.92 21.60 59.94
0 0 0	0.30 0.28 0.36	85 170 170	35.47 54.02 64.76
12 12 12	0.68 0.71 0.68	170 85 170	54.09 34.35 60.24
25 25 25	2.32 2.35 2.36	170 170 85	56.24 64.49 23.86
38 38 38	4.45 4.65 4.47	0 130 208	23.74 32.73 87.21
51 51 51	7.55 7.85 7.59	85 160 221	40.64 51.54 99.11
63 63 63	10.72 11.22 10.90	154 193 232	68.87 78.43 110.32
76 76 76	14.88 15.71 15.07	170 40 103	44.87 22.88 24.41
89 89 89	19.74 20.72 20.13	185 97 143	58.50 39.64 44.89
102 102 102	25.24 26.44 25.68	206 159 190	81.39 70.12 76.89
114 114 114	30.70 32.34 31.41	237 216 0	94.20 103.83 11.75
127 127 127	37.32 39.28 38.39	237 221 87	98.19 107.84 29.09
140 140 140	44.70 46.77 45.14	236 227 158	104.69 112.66 63.11
153 153 153	52.93 55.25 53.41	155 85 64	39.54 28.95 12.40
165 165 165	60.19 63.08 61.56	105 68 56	20.57 16.68 9.42
178 178 178	69.22 72.47 70.72	96 37 31	15.53 9.59 3.65
191 191 191	79.06 82.69 79.99	97 36 64	16.99 9.94 10.54
204 204 204	88.82 92.88 90.82	115 101 33	25.45 26.68 6.11
216 216 216	99.59 104.15 100.68	35 74 44	6.40 11.61 6.62
229 229 229	110.22 115.38 111.91	27 76 97	8.56 12.63 22.24
242 242 242	121.97 127.82 123.53	36 36 67	5.36 4.63 11.19
0 0 128	6.66 2.38 34.43	215 216 220	98.85 103.70 103.07
0 0 255	22.42 7.46 119.99	194 195 199	82.04 86.03 86.63
0 128 0	8.08 26.79 4.20	152 153 155	52.80 55.17 54.71
0 128 128	14.60 28.97 38.66	110 110 112	29.11 30.42 30.53
0 170 255	36.05 52.79 127.53	68 68 69	12.32 12.86 12.80
0 255 0	28.46 95.16 14.18	30 30 30	2.99 3.13 3.06
0 255 170	39.07 98.60 71.33	38 38 108	8.41 5.92 25.92
0 255 255	50.80 102.36 134.80	78 72 138	19.81 16.39 40.83
85 85 85	18.21 19.10 18.59	137 133 183	47.64 45.14 70.53
128 0 0	23.47 10.81 0.66	169 43 30	40.68 21.80 3.95
128 0 128	29.81 12.85 34.80	184 91 62	52.03 36.13 12.33
128 128 0	31.75 38.02 4.76	205 153 127	73.28 64.79 40.48
128 128 128	38.15 40.09 39.12	36 120 54	11.06 25.54 10.87
128 128 255	53.82 44.72 124.88	93 148 92	27.28 42.57 24.50
128 255 128	58.43 108.44 49.05	156 186 153	58.54 71.84 55.87
170 0 255	61.79 25.37 120.76	189 147 126	64.79 58.90 39.54
170 170 170	63.88 66.91 65.22	204 143 24	65.35 58.30 7.60
170 255 0	67.90 112.99 14.73	171 42 73	43.46 22.72 13.85
170 255 255	90.29 120.24 135.29	116 40 105	25.12 13.85 24.88
255 0 0	82.85 37.79 1.60	158 175 33	49.55 63.99 10.87
255 0 170	93.47 41.23 58.84	14 125 140	15.74 28.64 44.27
255 0 255	105.07 45.02 121.35	18 93 167	15.65 18.74 58.15
255 128 128	97.31 66.49 39.81	236 237 242	117.56 122.75 123.03
255 170 0	96.57 83.11 8.22	212 215 221	97.69 102.56 104.08
255 170 255	118.75 90.30 128.38	189 193 201	79.70 83.90 87.30
255 255 0	111.36 132.64 15.40	143 149 156	48.80 52.02 55.05
255 255 170	122.10 136.73 72.56	101 107 111	26.28 28.25 30.04
170 85 85	46.49 31.94 19.00	65 72 75	12.26 13.64 14.49
85 170 85	27.82 51.55 23.36	41 50 52	6.00 7.02 7.67