UGRA
Display Analysis & Certification Tool
Report

Basics

Date:	2010-5-18 23:41:27
Report-Version:	v1.3.1
Monitor-Name:	\\.\DISPLAY1
Profile:	C:/WINDOWS/System32/spool/.../COLOR/M2700HD_UGRA.icc
Created:	2010-5-18 23:16
Measurement device:	DTP94-LCD mode

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
sRGB	yes
AdobeRGB	no
ECI-RGB	no

Diagram

WhitePoint 

Gray Balance 

Profile Quality 

Softproof Quality 

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:	134.03 140.22 135.99
XYZ (normalized):	95.58 100.00 96.99
Luminance:	140.2 Cd/m2
Next Temperature:	5756 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:	0.2 Cd/m2
Chromaticity:	2.2 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	25047	0.19	1.22	2.16	
5	8505	0.65	4.19	3.19	1.89
10	5933	2.26	13.30	0.46	1.84
15	6036	4.53	20.94	0.95	1.84
20	5800	7.52	27.74	0.42	1.83
25	5759	11.24	34.02	0.18	1.84
30	5799	15.51	39.68	0.37	1.84
35	5785	20.51	45.12	0.29	1.84
40	5706	26.59	50.64	0.39	1.82
45	5783	32.13	54.98	0.19	1.85
50	5774	39.08	59.77	0.20	1.85
55	5729	46.76	64.44	0.25	1.84
60	5757	54.81	68.82	0.28	1.84
65	5783	63.28	72.98	0.25	1.85
70	5752	72.17	76.96	0.18	1.86
75	5798	82.31	81.13	0.38	1.85
80	5775	92.67	85.04	0.33	1.85
85	5779	102.43	88.47	0.22	1.93
90	5750	114.65	92.47	0.50	1.94
95	5738	126.73	96.15	0.29	1.96
100	5756	140.22	100.00	0.00	
Average	5789			0.32	1.86
Range				1.32	
Max				0.95	

Tone values = 94.6%

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: CAT02

RGB	Lab	deltaLab	deltaE
0 0 0	1.2 0.1 -2.2	-1.2 -0.1 2.2	2.5
0 0 128	12.7 45.0 -73.5	1.0 -1.8 -0.6	2.1
0 0 255	28.1 66.7 -113.0	0.9 -1.4 1.0	1.9
0 128 0	50.2 -59.7 45.1	1.3 0.9 3.3	3.7
0 128 128	51.8 -39.1 -13.5	1.5 -0.1 1.4	2.1
0 170 255	67.1 -26.5 -51.4	1.4 -0.8 2.9	3.3
0 255 0	85.7 -88.8 74.8	0.3 -0.2 -1.6	1.6
0 255 170	87.0 -73.3 15.6	0.5 -0.3 -0.6	0.8
0 255 255	88.4 -58.9 -19.0	0.4 -0.4 0.8	1.0
85 85 85	43.7 -0.1 -0.2	0.3 0.1 0.2	0.4
128 0 0	33.1 52.1 45.7	-0.1 1.6 4.6	4.9
128 0 128	36.3 60.8 -33.4	0.1 0.2 -2.1	2.2
128 128 0	58.7 -11.0 56.6	0.5 1.4 2.8	3.2
128 128 128	60.2 -0.1 -0.0	0.5 0.1 0.0	0.6
128 128 255	63.7 19.4 -55.9	0.5 -0.4 1.6	1.7
128 255 128	90.5 -53.3 39.9	-0.1 0.3 -1.9	1.9
170 0 255	49.9 80.4 -75.8	0.1 -0.3 -0.4	0.5
170 170 170	74.5 0.0 -0.1	0.4 -0.0 0.1	0.4
170 255 0	92.1 -46.3 83.6	-0.1 1.1 -1.8	2.1
170 255 255	94.6 -25.5 -8.9	-0.1 -0.0 -0.0	0.1
255 0 0	58.0 81.6 78.9	0.2 -0.4 -0.0	0.4
255 0 170	60.3 87.9 -16.3	0.5 -1.1 -1.7	2.1
255 0 255	62.9 93.3 -53.7	0.4 -1.0 -0.1	1.1
255 128 128	74.0 44.9 22.7	0.5 -0.6 -0.5	0.9
255 170 0	80.9 20.6 80.9	0.3 0.4 0.7	0.8
255 170 255	83.9 36.0 -23.4	0.4 -0.4 1.2	1.3
255 255 0	97.8 -14.9 92.2	-0.1 0.5 -2.5	2.5
255 255 170	98.8 -7.3 34.7	0.0 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	54.7 34.4 17.5	0.1 0.4 0.0	0.5
85 170 85	67.0 -42.3 29.4	0.5 0.6 0.6	1.0
85 85 170	46.2 15.5 -43.0	0.6 -0.5 0.2	0.8
85 170 170	68.3 -29.7 -10.3	0.6 0.2 0.5	0.8
170 85 170	56.6 43.1 -25.7	0.3 -0.5 -0.3	0.7
170 170 85	73.1 -7.4 38.7	0.5 -0.5 1.0	1.2
Average			1.5
Maximum			4.9

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	93 %
sRGB	100 %
AdobeRGB	83 %
ECI-RGB v1.0	75 %

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	55.8 -20.5 -47.6	16.7
66.9 -24.7 -37.1	66.1 -25.5 -37.6	1.2
79.7 -12.5 -21.8	79.3 -12.6 -21.9	0.5
48.0 74.0 -3.0	48.3 72.1 -0.6	3.1
60.8 50.6 -6.7	60.5 50.8 -5.6	1.2
76.4 25.8 -6.9	75.7 26.0 -7.5	0.9
89.0 -5.0 93.0	88.7 -5.2 84.1	8.9
90.3 -4.7 62.6	90.3 -5.3 63.2	0.9
92.2 -3.5 31.1	92.0 -3.2 31.8	0.7
53.1 37.7 28.9	52.8 37.9 28.9	0.3
41.5 22.7 16.8	41.3 22.3 16.8	0.5
31.9 40.0 24.0	32.3 38.8 24.6	1.4
32.5 44.4 -1.8	32.7 43.6 -0.8	1.3
51.3 1.3 44.5	50.9 0.2 43.0	1.9
34.6 -36.4 13.9	33.6 -37.0 12.1	2.0
36.0 -26.2 -20.9	35.2 -23.4 -20.7	2.9
20.9 9.6 -23.6	20.9 8.6 -23.1	1.1
89.0 0.0 -1.8	88.5 -0.0 -1.9	0.5
82.8 0.0 -1.7	82.4 -0.3 -2.0	0.6
69.3 0.0 -1.4	68.7 0.1 -1.3	0.6
54.1 0.0 -1.0	53.6 -0.2 -0.8	0.6
36.6 -0.0 -0.5	36.3 -0.2 -0.8	0.4
16.0 0.0 0.0	16.5 -1.0 0.2	1.1
24.0 22.0 -46.0	23.7 22.1 -45.6	0.5
40.9 17.9 -36.6	40.3 18.1 -35.9	0.9
63.7 10.3 -23.8	63.0 11.0 -24.0	1.0
47.0 68.0 48.0	46.9 67.5 47.9	0.5
58.5 47.1 37.9	58.3 46.8 37.6	0.5
74.2 22.9 21.4	73.7 22.3 21.9	1.0
50.0 -65.0 27.0	49.6 -54.8 26.6	10.3
62.1 -39.8 21.0	61.4 -40.3 20.6	1.0
77.0 -19.1 11.0	76.5 -19.6 11.1	0.7
71.2 18.8 17.3	70.6 18.4 17.3	0.8
71.2 22.2 73.1	70.8 20.6 71.0	2.6
47.7 71.2 16.2	47.7 70.3 17.8	1.8
38.0 55.4 -20.9	37.9 55.2 -19.4	1.6
73.7 -22.8 67.6	73.2 -24.1 65.9	2.1
52.3 -52.3 -20.2	52.4 -36.6 -18.7	15.8
43.3 -17.0 -48.6	43.1 -10.1 -48.3	7.0
95.0 0.0 -2.0	94.8 0.2 -2.0	0.3
88.5 -0.4 -3.1	88.0 -0.5 -3.1	0.5
82.0 -0.9 -4.1	81.5 -0.9 -4.7	0.8
67.7 -2.0 -4.4	67.4 -2.1 -4.3	0.3
52.2 -2.5 -3.5	51.7 -2.4 -2.9	0.8
37.5 -3.9 -3.1	37.2 -4.1 -3.1	0.4
26.3 -6.8 -3.4	25.4 -6.6 -4.7	1.5
Average		2.2
Gamut-Volume		93 %

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	134.03 140.22 135.99	85 85 170	25.49 21.98 57.44
0 0 0	0.19 0.19 0.37	85 170 170	40.32 54.05 64.05
12 12 12	0.64 0.65 0.90	170 85 170	48.87 34.44 58.18
25 25 25	2.14 2.26 2.24	170 170 85	56.29 63.22 25.99
38 38 38	4.27 4.53 4.51	0 134 210	27.63 34.01 85.47
51 51 51	7.21 7.52 7.40	53 163 223	39.64 50.45 97.60
63 63 63	10.72 11.24 10.87	142 195 234	68.84 78.23 109.59
76 76 76	14.84 15.51 15.21	194 0 106	45.36 23.60 23.55
89 89 89	19.63 20.51 20.05	205 85 145	59.02 40.09 44.22
102 102 102	25.52 26.59 25.73	218 154 192	80.34 69.31 77.23
114 114 114	30.66 32.13 31.24	241 217 0	92.71 102.20 15.55
127 127 127	37.29 39.08 37.90	240 222 79	97.24 106.89 29.62
140 140 140	44.79 46.76 45.30	238 228 155	104.41 112.49 62.65
153 153 153	52.48 54.81 53.35	171 77 63	39.48 28.94 12.37
165 165 165	60.37 63.28 61.48	114 64 56	20.65 16.76 9.41
178 178 178	69.06 72.17 70.10	108 29 31	15.89 9.98 3.47
191 191 191	78.59 82.31 80.33	110 26 65	17.39 10.30 10.36
204 204 204	88.65 92.67 90.36	119 101 29	25.16 26.66 6.51
216 216 216	97.78 102.43 99.55	12 77 42	5.87 10.97 6.72
229 229 229	109.33 114.65 110.57	0 79 98	8.60 12.23 21.99
242 242 242	121.35 126.73 122.91	37 35 68	5.23 4.57 11.03
0 0 128	6.02 2.45 31.50	215 216 220	98.00 102.49 102.55
0 0 255	21.28 8.87 114.31	194 195 199	81.66 85.53 85.86
0 128 0	11.87 25.95 5.63	152 153 155	52.34 54.67 54.44
0 128 128	17.87 28.27 37.67	110 110 112	28.90 30.29 29.98
0 170 255	41.61 52.61 125.26	68 68 69	12.27 12.86 12.78
0 255 0	44.19 94.23 17.51	30 30 30	2.87 3.07 2.95
0 255 170	54.37 98.24 72.25	41 35 110	8.30 5.83 25.15
0 255 255	65.75 103.13 133.99	81 69 140	19.72 16.28 39.87
85 85 85	18.25 19.11 18.65	139 131 185	47.35 44.57 69.80
128 0 0	19.25 10.41 1.03	192 11 31	40.81 21.90 3.85
128 0 128	25.64 12.97 32.11	204 81 62	52.02 36.32 12.69
128 128 0	31.32 37.05 6.47	218 148 126	72.37 64.34 39.80
128 128 128	37.89 39.68 38.52	0 126 49	12.46 25.35 11.03
128 128 255	53.50 46.28 122.50	71 153 89	26.74 41.61 24.47
128 255 128	70.45 108.32 50.63	146 189 151	58.19 71.11 55.60
170 0 255	54.27 26.46 115.27	199 143 126	63.74 58.01 39.17
170 170 170	63.76 66.69 64.83	218 139 7	64.24 57.96 8.43
170 255 0	76.77 112.61 18.73	194 0 75	43.37 22.82 13.30
170 255 255	99.34 122.02 135.21	132 23 107	25.69 14.08 24.09
255 0 0	67.31 35.51 2.09	151 179 15	48.75 63.22 11.67
255 0 170	77.51 39.57 54.82	0 130 140	19.04 29.02 43.22
255 0 255	88.80 44.41 115.87	0 95 170	16.98 19.09 57.55
255 128 128	85.87 64.92 39.65	236 237 242	116.96 122.13 122.24
255 170 0	88.01 80.79 11.14	212 215 222	96.49 101.19 103.30
255 170 255	109.94 89.86 127.20	188 193 202	79.22 83.25 87.60
255 255 0	112.05 131.12 19.43	142 150 157	49.17 52.26 55.27
255 255 170	122.59 135.31 74.15	100 107 111	26.05 27.88 29.10
170 85 85	41.38 31.52 19.43	64 72 75	12.28 13.53 14.49
85 170 85	33.04 51.17 25.04	38 50 52	5.51 6.42 7.50