UGRA
Display Analysis & Certification Tool
Report

Basics

Date:	2007-10-28 12:11:39
Report-Version:	v1.2.1
Monitor-Name:	\\.\DISPLAY2
Profile:	C:/WINDOWS/System32/spool/DRIVERS/COLOR/Hyundai W240D 28.10.07-650
Created:	2007-10-28 12:01
Measurement device:	DTP94-LCD mode

Summary

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

Calibration

White Point	no
Gray balance	no
Profile quality	no

Softproofing

MultiColor, HighBody	no
Offset/Gravure Paper Type 1/2	no
Offset on uncoated paper	no
Newspaper Printing	no
Layout	yes

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 .

XYZ:	139.98 149.40 159.27
XYZ (normalized):	93.69 100.00 106.61
Luminance:	149.4 Cd/m2
Next Temperature:	6511 Kelvin
Assumed Target Whitepoint:	6500 Kelvin
Distance to assumed Target Whitepoint:	2.8 deltaE

Blackpoint

Luminance:	0.6 Cd/m2
Chromaticity:	4.0 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	13365	0.60	3.63	3.96	
5	13033	0.60	3.63	3.88	-1.#J
10	13171	0.60	3.63	3.96	-1.#J
15	13764	0.60	3.63	3.97	1.#J
20	12980	0.60	3.63	3.96	1.#J
25	7979	0.60	3.63	4.24	-1.#J
30	3141	0.90	5.44	7.96	5.36
35	2617	1.90	11.08	13.35	4.65
40	2766	3.90	18.41	15.90	4.28
45	3270	6.90	25.62	15.03	4.06
50	4055	12.10	34.19	12.22	3.80
55	4359	17.90	41.19	11.70	3.69
60	4700	24.90	47.84	10.57	3.62
65	4856	33.60	54.54	10.45	3.58
70	4969	44.30	61.35	10.62	3.52
75	5136	57.20	68.23	10.00	3.47
80	5253	72.20	75.03	10.04	3.36
85	5339	87.60	81.09	9.99	3.40
90	5472	106.20	87.53	9.23	3.40
95	5703	129.70	94.66	7.71	2.95
100	6511	149.40	100.00	0.00	
Average	4643			10.49	-1.#J
Range				15.90	

Tone values = 100.0%

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	3.6 0.8 -3.8	-3.6 -0.8 3.8	5.3
0 0 128	6.2 16.9 -34.5	6.1 21.5 -30.3	37.6
0 0 255	29.7 64.9 -108.8	1.2 -1.3 1.4	2.3
0 128 0	26.0 -32.6 23.1	19.5 -19.4 20.0	34.0
0 128 128	26.8 -23.0 -4.2	20.6 -10.7 -6.1	24.0
0 170 255	53.3 4.3 -71.7	11.9 -22.2 19.3	31.7
0 255 0	85.5 -84.9 72.8	0.4 -1.4 -1.3	2.0
0 255 170	86.1 -77.9 41.3	1.1 5.3 -20.2	20.9
0 255 255	88.4 -55.1 -18.4	0.6 -0.8 1.3	1.7
85 85 85	9.2 11.9 4.7	26.7 -11.9 -4.7	29.6
128 0 0	21.7 36.7 23.4	6.8 10.8 16.6	21.0
128 0 128	22.9 39.8 -7.4	9.1 14.4 -24.5	29.8
128 128 0	33.8 5.8 33.8	18.7 -14.9 17.6	29.7
128 128 128	34.6 10.0 8.0	19.4 -10.0 -7.9	23.2
128 128 255	44.1 47.7 -86.6	15.0 -23.5 25.2	37.5
128 255 128	88.1 -72.0 65.5	1.3 13.2 -22.1	25.8
170 0 255	44.9 75.2 -83.6	3.5 1.0 5.6	6.7
170 170 170	57.6 8.6 7.0	12.6 -8.6 -7.0	16.8
170 255 0	90.3 -56.6 78.6	0.6 7.0 -1.1	7.1
170 255 255	93.1 -33.7 -11.3	0.7 5.4 1.6	5.7
255 0 0	56.7 79.4 68.7	1.0 -0.6 -1.2	1.7
255 0 170	58.3 82.7 13.6	1.9 0.9 -25.5	25.6
255 0 255	62.5 92.2 -53.6	1.0 -2.3 0.7	2.6
255 128 128	61.6 69.2 49.0	9.2 -19.7 -23.5	32.1
255 170 0	69.7 44.2 72.2	8.5 -18.4 2.3	20.4
255 170 255	74.1 59.6 -37.3	7.7 -18.7 11.7	23.3
255 255 0	97.3 -16.5 87.8	0.1 1.4 -2.6	3.0
255 255 170	98.1 -11.9 58.8	0.4 3.3 -21.1	21.4
255 255 255	100.0 0.0 0.0	0.0 -0.0 0.0	0.0
170 85 85	35.5 52.8 41.5	12.9 -15.9 -22.5	30.4
85 170 85	47.5 -47.6 42.6	14.7 3.8 -10.3	18.4
85 85 170	16.6 36.0 -56.5	23.0 -17.9 10.7	31.0
85 170 170	49.0 -32.4 -6.5	15.0 2.6 -3.2	15.5
170 85 170	37.9 58.5 -20.4	13.1 -13.6 -7.0	20.1
170 170 85	56.3 0.7 54.2	12.3 -9.3 -12.8	20.1
Average			18.8
Maximum			37.6

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
55.2 -39.9 -50.7	43.2 0.4 -56.2	42.4
67.6 -27.1 -36.5	55.2 -16.4 -46.1	19.0
80.8 -13.8 -21.0	72.6 -11.9 -27.7	10.7
47.2 75.9 -3.8	46.9 68.0 35.4	40.0
60.7 52.2 -7.1	52.1 71.9 9.7	27.2
77.0 26.2 -7.7	68.8 46.0 -2.2	22.1
89.7 -4.5 94.7	86.2 5.6 81.1	17.3
91.3 -4.6 63.1	87.9 3.1 81.8	20.5
93.3 -3.3 30.6	90.9 2.6 50.3	20.7
53.5 38.4 28.8	41.6 58.1 49.2	30.8
41.4 23.1 16.6	23.8 38.4 27.8	25.8
32.4 40.3 21.9	21.9 37.0 24.0	11.2
32.6 44.6 -1.8	22.2 37.3 24.7	29.4
51.3 1.9 44.3	32.6 20.6 34.1	28.4
34.0 -40.9 14.5	8.4 -9.5 3.0	42.1
36.2 -30.6 -20.6	11.8 -3.4 -16.4	36.8
21.2 3.4 -23.0	3.6 0.6 -4.4	25.7
89.8 0.3 -3.5	86.0 8.2 0.6	9.7
83.6 0.2 -3.7	76.8 8.7 0.1	11.5
70.2 0.0 -3.7	57.5 8.6 1.5	16.2
55.1 0.0 -3.1	36.2 9.8 2.8	22.1
37.5 0.1 -2.1	10.7 11.5 4.4	29.8
16.9 0.4 -0.4	3.6 0.6 -4.0	13.8
24.4 16.2 -47.1	6.7 19.1 -37.6	20.3
41.2 16.0 -36.5	17.9 32.8 -43.8	29.6
64.6 9.3 -23.6	49.2 21.5 -28.0	20.1
47.3 69.0 45.1	46.5 67.4 55.5	10.6
58.9 47.7 37.0	50.7 68.9 60.8	33.0
75.0 23.2 20.3	66.4 43.1 39.5	28.9
48.6 -67.5 28.0	32.6 -39.4 29.4	32.4
62.5 -41.7 22.4	47.5 -46.9 37.3	21.7
77.9 -19.6 11.3	68.6 -20.5 22.4	14.5
72.0 19.1 16.5	62.1 37.6 33.6	27.1
72.2 22.1 73.2	64.0 47.1 67.9	26.8
47.5 72.3 15.3	46.9 67.8 54.6	39.6
37.5 56.5 -21.1	29.5 47.8 5.9	29.5
74.1 -22.1 69.3	64.5 -15.1 59.9	15.2
52.3 -55.2 -20.1	37.6 -26.1 -12.8	33.5
43.9 -20.9 -49.8	25.3 17.7 -57.2	43.5
96.0 0.5 -3.3	95.5 8.3 -1.8	7.9
89.5 -0.1 -3.7	85.4 7.6 -0.6	9.3
83.0 -1.1 -4.3	75.8 6.9 -0.6	11.4
68.6 -2.7 -4.0	55.2 3.9 1.1	15.8
53.0 -5.1 -2.3	33.1 2.2 4.2	22.2
37.8 -8.1 -0.9	9.6 1.1 2.9	29.9
25.9 -13.3 -2.2	3.0 0.9 -3.2	27.0
Average		24.0
Gamut-Volume		90 %

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	139.98 149.40 159.27	85 85 170	7.24 3.60 28.72
0 0 0	0.60 0.60 1.03	85 170 170	17.42 26.60 33.08
12 12 12	0.60 0.60 1.02	170 85 170	27.82 14.70 29.18
25 25 25	0.60 0.60 1.03	170 170 85	32.69 35.70 6.76
38 38 38	0.60 0.60 1.03	0 153 221	21.41 20.80 79.43
51 51 51	0.61 0.60 1.02	47 180 231	30.35 35.70 96.23
63 63 63	0.67 0.60 0.93	155 209 240	58.97 67.50 117.21
76 76 76	1.13 0.90 0.90	207 0 122	42.38 22.80 7.89
89 89 89	2.38 1.90 1.34	217 99 161	53.75 29.20 25.20
102 102 102	4.70 3.90 2.51	227 169 205	77.67 57.60 65.43
114 114 114	7.87 6.90 4.95	249 225 0	95.18 100.70 16.57
127 127 127	12.79 12.10 9.49	248 230 92	98.35 105.90 17.76
140 140 140	18.62 17.90 14.92	246 236 171	107.84 115.70 47.42
153 153 153	25.48 24.90 22.00	189 95 80	31.11 17.50 2.56
165 165 165	33.99 33.60 30.08	134 82 72	10.03 5.80 1.38
178 178 178	44.69 44.30 40.54	130 42 47	8.73 5.00 1.42
191 191 191	56.87 57.20 52.70	130 37 83	8.91 5.10 1.40
204 204 204	71.99 72.20 68.79	139 119 38	13.11 10.70 2.41
216 216 216	87.08 87.60 84.49	0 96 56	0.96 1.40 1.17
229 229 229	104.63 106.20 103.37	0 100 118	1.90 2.10 5.29
242 242 242	126.61 129.70 129.70	43 53 87	0.60 0.60 1.09
0 0 128	1.88 1.10 7.70	223 225 232	100.47 101.40 107.27
0 0 255	25.41 10.60 132.25	205 207 215	76.20 76.20 81.34
0 128 0	3.48 7.10 2.31	168 170 177	38.48 37.90 39.17
0 128 128	4.83 7.60 9.41	129 131 136	14.36 13.50 13.17
0 170 255	36.01 33.50 139.86	88 89 92	2.24 1.80 1.44
0 255 0	46.15 100.30 20.16	46 46 46	0.60 0.60 1.04
0 255 170	51.50 102.60 47.87	41 54 131	2.13 1.20 9.04
0 255 255	71.61 110.80 155.39	96 89 158	7.15 3.90 21.45
85 85 85	1.92 1.50 1.14	155 150 199	32.06 26.70 55.34
128 0 0	8.55 4.90 1.44	208 0 43	41.34 22.30 2.93
128 0 128	10.00 5.50 8.31	218 98 78	48.89 27.10 3.25
128 128 0	11.50 11.60 2.74	229 165 146	68.69 52.30 21.52
128 128 128	13.11 12.30 9.93	0 141 61	5.21 11.00 3.09
128 128 255	37.29 22.10 137.93	84 170 106	12.46 24.60 7.27
128 255 128	56.80 108.00 28.40	163 203 168	44.75 57.90 37.20
170 0 255	47.66 22.50 134.39	213 161 145	57.06 44.60 20.53
170 170 170	38.34 37.90 34.25	231 157 0	64.90 47.60 6.80
170 255 0	68.68 114.60 21.73	208 0 92	42.07 22.70 3.19
170 255 255	94.88 125.50 157.63	150 25 125	15.98 8.70 7.67
255 0 0	65.42 35.00 3.75	171 192 0	39.03 49.40 9.39
255 0 170	71.96 37.80 30.24	0 149 157	10.08 15.00 23.15
255 0 255	92.27 46.00 135.54	0 116 188	9.94 7.20 42.37
255 128 128	71.37 43.10 12.30	242 243 250	130.77 132.40 145.48
255 170 0	76.09 58.50 8.44	221 224 232	98.28 99.50 107.44
255 170 255	103.11 69.90 143.28	201 206 214	72.99 73.90 79.79
255 255 0	112.40 137.90 23.85	159 168 173	33.56 34.50 35.85
255 255 170	119.48 141.00 51.47	116 129 129	10.88 11.30 10.39
170 85 85	22.44 12.50 2.15	77 94 91	1.54 1.60 1.40
85 170 85	12.21 24.50 5.68	42 69 66	0.51 0.50 0.85