

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2009-12-5 20:30:05
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY1
EDID-Name:
EDID-Serial:
Profile: C:/WINDOWS/System32/spool/DRIVERS/COLOR/hyundai_ugra.icc
Created: 2009-12-5 20:24
Measurement device: DTP94-LCD mode

Summary

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

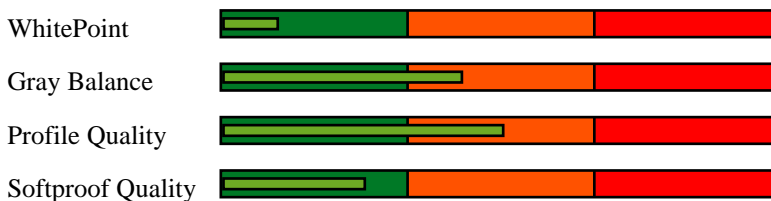
Calibration

White Point	yes
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
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:	114.18 120.07 116.63
XYZ (normalized):	95.09 100.00 97.14
Luminance:	120.1 Cd/m2
Next Temperature:	5814 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:	0.1 Cd/m2
Chromaticity:	1.5 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	15615	0.15	1.13	1.51	
5	6367	0.67	5.04	0.74	1.83
10	5735	1.98	13.53	0.29	1.83
15	5908	4.05	21.48	0.51	1.81
20	5713	6.75	28.44	1.10	1.81
25	5601	9.70	34.15	1.20	1.84
30	5714	13.50	39.99	0.51	1.83
35	5760	18.26	45.92	0.92	1.81
40	5709	22.90	50.77	0.66	1.82
45	5844	28.14	55.52	1.35	1.83
50	5949	33.74	59.98	1.28	1.84
55	5947	40.36	64.65	0.97	1.82
60	5918	47.21	68.98	1.21	1.81
65	5716	54.49	73.14	1.24	1.83
70	5768	62.34	77.23	0.39	1.84
75	5768	71.08	81.40	0.41	1.83
80	5812	79.85	85.25	0.60	1.85
85	5794	88.91	88.95	0.66	1.88
90	5787	98.21	92.48	0.38	1.91
95	5810	108.38	96.11	0.27	1.98
100	5814	120.07	100.00	0.00	
Average	5793			0.73	1.84
Range				2.51	
Max				1.35	

Tone values = 92.4%

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	1.1 -0.1 -1.5	-1.1 0.1 1.5	1.9
0 0 128	14.0 56.2 -82.8	-1.0 -6.2 5.1	8.0
0 0 255	32.2 69.6 -119.9	-4.3 6.1 2.4	7.8
0 128 0	52.5 -85.7 51.9	-2.2 -0.8 3.1	3.9
0 128 128	53.1 -53.9 -16.4	-0.9 -2.8 2.0	3.6
0 170 255	68.8 -36.5 -60.2	-1.8 -4.3 7.0	8.4
0 255 0	88.7 -124.6 84.8	-4.4 -6.3 -1.6	7.8
0 255 170	89.8 -103.4 19.1	-4.2 -3.3 -5.1	7.4
0 255 255	90.5 -81.5 -23.0	-3.4 -4.3 1.2	5.6
85 85 85	43.9 0.1 1.0	0.1 -0.1 -1.0	1.0
128 0 0	38.0 62.4 55.3	-2.8 0.2 2.3	3.6
128 0 128	40.5 72.2 -35.0	-2.3 -1.4 0.4	2.7
128 128 0	59.7 -15.0 63.1	-0.4 3.8 5.8	7.0
128 128 128	60.3 -1.9 0.1	0.4 1.9 -0.1	1.9
128 128 255	64.9 22.9 -65.8	-0.9 -0.8 8.4	8.5
128 255 128	90.4 -76.8 45.4	-1.1 4.4 -5.1	6.9
170 0 255	56.5 91.1 -78.5	-4.9 1.4 1.6	5.3
170 170 170	74.5 0.8 -0.4	0.5 -0.8 0.4	1.0
170 255 0	93.4 -63.8 91.8	-2.1 4.4 2.2	5.4
170 255 255	94.1 -35.7 -11.3	-0.4 1.0 0.7	1.3
255 0 0	63.8 94.8 92.2	-2.3 0.0 2.9	3.7
255 0 170	65.8 101.9 -14.2	-2.1 -0.9 -0.7	2.4
255 0 255	69.2 105.4 -56.7	-3.2 1.6 4.3	5.6
255 128 128	77.3 58.0 30.2	-1.1 -3.4 -4.3	5.6
255 170 0	83.9 31.2 92.6	-1.5 -3.7 3.1	5.0
255 170 255	85.8 49.1 -23.8	-0.6 -5.2 1.5	5.4
255 255 0	99.6 -16.5 102.1	-1.7 -0.4 2.2	2.8
255 255 170	99.2 -8.9 40.9	-0.3 0.5 -4.9	4.9
255 255 255	100.0 0.0 0.0	0.0 -0.0 0.0	0.0
170 85 85	56.9 45.6 23.9	-0.7 -2.5 -3.5	4.4
85 170 85	67.1 -59.8 34.1	-0.5 2.9 -2.4	3.8
85 85 170	46.2 21.8 -49.5	0.4 -4.3 4.4	6.1
85 170 170	68.0 -41.8 -13.4	-0.1 1.0 1.6	1.9
170 85 170	58.3 55.5 -27.3	-0.3 -4.1 1.5	4.3
170 170 85	73.8 -9.2 47.4	-0.1 -0.1 -3.8	3.8
Average			4.5
Maximum			8.5

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	56.5 -27.2 -54.4	10.9
66.9 -24.7 -37.1	66.7 -24.8 -40.8	3.7
79.7 -12.5 -21.8	79.4 -13.4 -24.2	2.7
48.0 74.0 -3.0	50.4 77.1 0.0	5.0
60.8 50.6 -6.7	61.4 54.8 -6.2	4.3
76.4 25.8 -6.9	76.1 28.2 -7.3	2.5
89.0 -5.0 93.0	89.9 -5.2 92.6	1.0
90.3 -4.7 62.6	90.7 -5.3 68.9	6.4
92.2 -3.5 31.1	92.1 -3.3 34.5	3.3
53.1 37.7 28.9	53.7 39.4 32.6	4.1
41.5 22.7 16.8	41.9 23.8 19.2	2.7
31.9 40.0 24.0	33.7 42.1 26.7	3.9
32.5 44.5 -1.8	33.7 46.4 1.0	3.6
51.3 1.3 44.5	51.4 0.3 46.2	2.0
34.6 -36.4 13.9	35.1 -39.0 15.3	3.0
36.0 -26.2 -20.9	35.8 -24.9 -23.5	2.9
20.9 9.6 -23.6	20.9 11.5 -25.6	2.7
89.0 0.0 -1.9	88.8 -0.7 -1.4	0.8
82.8 0.0 -1.7	82.5 0.6 -1.5	0.7
69.3 0.0 -1.4	68.9 0.5 -1.9	0.8
54.1 0.0 -1.0	53.9 -0.2 -0.8	0.4
36.6 0.0 -0.5	36.7 0.6 -0.5	0.6
16.0 0.0 0.0	16.8 0.3 -0.3	0.9
24.0 22.0 -46.0	24.1 25.9 -49.9	5.5
40.9 17.9 -36.6	40.8 21.5 -40.8	5.6
63.7 10.3 -23.8	63.2 9.5 -25.8	2.2
47.0 68.0 48.0	49.4 70.5 52.9	6.0
58.5 47.1 37.9	59.2 50.4 41.8	5.2
74.2 22.9 21.4	74.2 24.6 23.6	2.8
50.0 -65.0 27.0	51.0 -68.0 29.6	4.1
62.1 -39.8 21.0	62.1 -42.1 23.5	3.4
77.0 -19.1 11.0	76.9 -20.9 12.2	2.2
71.2 18.9 17.3	71.5 21.4 19.4	3.3
71.2 22.1 73.1	71.8 23.0 75.4	2.5
47.7 71.2 16.2	50.0 73.6 21.0	5.8
38.0 55.4 -20.9	38.8 57.9 -21.5	2.7
73.7 -22.8 67.6	74.1 -25.6 69.8	3.6
52.3 -52.3 -20.1	53.2 -49.6 -22.5	3.7
43.3 -17.0 -48.6	43.6 -12.5 -53.9	7.0
95.0 0.0 -2.0	94.8 0.3 -2.5	0.6
88.5 -0.4 -3.1	88.2 -0.9 -3.0	0.6
82.0 -0.9 -4.1	81.6 -1.8 -4.0	0.9
67.7 -2.0 -4.4	67.1 -2.2 -6.1	1.8
52.2 -2.5 -3.5	52.0 -2.5 -3.1	0.5
37.5 -3.9 -3.1	37.4 -4.6 -3.1	0.8
26.3 -6.8 -3.4	26.5 -7.4 -2.6	1.1
Average		3.1
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	114.18 120.07 116.63	85 85 170	23.37 18.90 56.01
0 0 0	0.14 0.15 0.26	85 170 170	30.62 46.01 57.74
12 12 12	0.63 0.67 0.70	170 85 170	49.04 31.61 54.67
25 25 25	1.88 1.98 1.89	170 170 85	48.27 55.39 18.24
38 38 38	3.86 4.05 4.02	0 132 206	23.05 30.11 83.95
51 51 51	6.36 6.75 6.32	83 161 219	34.88 44.17 89.60
63 63 63	9.23 9.70 9.04	153 194 231	58.59 67.27 97.85
76 76 76	12.89 13.50 12.96	172 26 103	43.53 22.18 21.86
89 89 89	17.27 18.26 17.36	186 92 143	53.39 35.39 39.63
102 102 102	21.83 22.90 21.89	206 157 190	70.27 59.97 66.77
114 114 114	26.45 28.14 26.90	237 216 23	81.43 90.36 10.87
127 127 127	31.71 33.74 32.91	237 221 92	83.74 92.67 22.45
140 140 140	38.25 40.36 39.96	236 228 160	89.14 96.70 51.29
153 153 153	45.00 47.21 46.97	156 82 65	35.20 25.66 9.83
165 165 165	52.32 54.49 52.89	106 66 57	18.35 14.75 7.65
178 178 178	59.41 62.34 60.27	97 34 32	15.08 9.25 3.00
191 191 191	67.74 71.08 68.71	98 32 64	16.11 9.35 8.88
204 204 204	75.69 79.85 77.06	116 101 36	21.91 23.34 5.06
216 216 216	84.33 88.91 85.60	34 76 45	5.33 10.25 5.61
229 229 229	93.62 98.21 95.34	26 77 97	7.49 10.86 20.88
242 242 242	103.21 108.38 105.49	36 35 67	4.74 3.94 10.33
0 0 128	6.86 2.45 35.40	215 216 220	83.97 88.66 88.14
0 0 255	22.96 9.89 121.68	194 195 199	70.14 73.43 73.17
0 128 0	7.95 24.70 4.29	152 153 155	45.04 47.15 47.56
0 128 128	13.73 25.66 36.23	110 110 112	24.92 26.26 26.03
0 170 255	35.25 48.07 127.88	68 68 69	10.77 11.24 11.10
0 255 0	30.19 88.24 13.00	30 30 30	2.60 2.71 2.67
0 255 170	39.84 91.57 63.67	39 37 106	7.78 5.18 24.52
0 255 255	50.83 94.03 128.56	78 71 137	17.99 14.34 38.80
85 85 85	15.74 16.55 15.63	137 132 182	40.23 38.48 62.30
128 0 0	23.06 11.83 0.81	170 31 33	39.14 20.97 3.18
128 0 128	29.21 13.90 33.82	185 86 65	47.15 32.21 9.99
128 128 0	26.70 33.07 4.55	206 151 128	63.75 56.04 33.53
128 128 128	31.99 34.23 33.17	34 123 55	9.52 23.11 9.27
128 128 255	49.49 41.68 125.80	92 150 93	23.01 36.66 20.08
128 255 128	49.66 92.58 38.54	156 187 153	49.57 61.55 47.15
170 0 255	62.71 30.04 122.59	190 145 127	57.12 51.11 33.15
170 170 170	54.51 56.99 55.77	205 141 32	57.57 51.35 6.55
170 255 0	59.58 100.06 13.45	172 29 74	41.37 21.66 11.69
170 255 255	77.99 103.13 118.50	117 33 105	23.41 12.60 22.65
255 0 0	75.60 38.09 1.52	158 177 40	42.30 55.85 9.27
255 0 170	85.65 41.60 54.49	6 128 139	14.69 25.85 41.52
255 0 255	98.38 47.83 122.95	16 94 166	14.63 16.82 55.93
255 128 128	87.73 61.65 32.64	236 237 242	99.86 104.76 105.78
255 170 0	87.59 75.52 7.60	212 215 221	82.44 87.14 88.85
255 170 255	106.95 81.24 115.39	189 193 201	67.34 71.61 74.56
255 255 0	98.91 117.58 13.70	143 149 156	41.35 44.19 48.49
255 255 170	104.19 117.00 57.39	101 107 111	22.51 24.25 25.43
170 85 85	41.98 29.44 15.45	65 72 75	10.54 11.75 12.57
85 170 85	23.70 44.10 19.05	41 50 51	4.99 5.92 6.35