

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2008-6-1 0:16:19
Report-Version: v1.2.2
Monitor-Name: \\.\DISPLAY1
Profile: C:/WINDOWS/System32/spool/.../COLOR/nec_ugra_150cd-trc.icc
Created: 2008-6-1 0:10
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	yes
Offset/Gravure Paper Type 1/2	yes
Offset on uncoated paper	yes
Newspaper Printing	yes

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 .

XYZ:	143.72 150.80 147.70
XYZ (normalized):	95.31 100.00 97.95
Luminance:	150.8 Cd/m2
Next Temperature:	5835 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.3 deltaE

Blackpoint

Luminance:	0.3 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	11813	0.30	1.80	2.18	
5	7288	0.80	4.79	1.94	1.91
10	5881	2.70	14.35	0.14	1.81
15	5833	5.10	21.51	0.20	1.83
20	5833	8.60	28.65	0.24	1.81
25	5789	12.50	34.58	0.24	1.82
30	5790	17.10	40.15	0.49	1.82
35	5790	22.70	45.71	0.54	1.81
40	5789	29.10	51.03	0.32	1.81
45	5697	35.30	55.49	0.89	1.83
50	5697	42.70	60.17	0.95	1.83
55	5786	51.10	64.87	0.76	1.83
60	5787	59.70	69.18	0.44	1.83
65	5789	68.20	73.04	0.42	1.85
70	5787	78.60	77.35	0.48	1.84
75	5787	89.60	81.52	0.50	1.83
80	5833	100.50	85.32	0.55	1.84
85	5835	110.40	88.55	0.00	1.92
90	5789	122.40	92.21	0.51	1.99
95	5789	135.30	95.88	0.53	2.12
100	5835	150.80	100.00	0.00	
Average	5795			0.43	1.86
Range				1.17	

Tone values = 98.3%

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	1.8 0.4 -2.1	-1.8 -0.4 2.1	2.8
0 0 128	13.6 47.9 -74.3	0.3 -0.4 -1.5	1.6
0 0 255	28.4 75.5 -115.6	0.9 -3.7 0.8	3.9
0 128 0	50.5 -83.0 52.5	0.5 -0.8 3.6	3.7
0 128 128	52.6 -55.7 -11.6	0.4 0.3 -1.3	1.4
0 170 255	67.4 -39.4 -51.0	0.6 -0.9 -0.1	1.1
0 255 0	85.3 -127.3 82.4	-0.0 0.6 2.4	2.5
0 255 170	86.6 -105.1 17.1	0.1 1.3 -1.1	1.7
0 255 255	88.1 -84.3 -18.7	0.1 0.5 -0.7	0.9
85 85 85	43.9 0.5 -0.1	0.1 -0.5 0.1	0.5
128 0 0	34.1 64.4 49.0	-0.3 1.0 3.6	3.8
128 0 128	36.9 72.1 -35.6	0.4 0.4 -0.7	0.9
128 128 0	59.1 -11.2 65.3	0.1 0.2 2.2	2.2
128 128 128	60.8 0.7 0.7	-0.1 -0.7 -0.7	1.0
128 128 255	64.2 23.0 -56.5	0.1 -1.5 -0.0	1.5
128 255 128	89.9 -71.6 41.3	0.0 0.4 -0.0	0.4
170 0 255	50.2 95.2 -78.7	0.7 -1.5 0.8	1.9
170 170 170	74.8 0.4 0.2	0.1 -0.4 -0.2	0.5
170 255 0	91.6 -59.1 91.9	0.0 0.4 1.8	1.8
170 255 255	94.0 -34.1 -9.3	0.2 -0.4 -0.2	0.5
255 0 0	59.6 98.6 83.5	-0.2 0.3 -0.3	0.4
255 0 170	61.6 104.5 -17.9	0.3 -0.1 -0.4	0.5
255 0 255	64.2 110.7 -55.2	0.4 -1.0 0.2	1.1
255 128 128	75.2 56.2 23.7	-0.1 -0.2 -0.3	0.4
255 170 0	81.6 28.7 90.1	0.0 -0.4 1.4	1.5
255 170 255	84.6 45.3 -23.3	0.2 -1.0 0.2	1.1
255 255 0	97.7 -16.9 101.1	-0.1 0.2 0.9	1.0
255 255 170	98.8 -8.1 35.4	0.0 -0.3 0.1	0.3
255 255 255	100.0 0.0 0.0	0.0 0.0 -0.0	0.0
170 85 85	55.5 43.8 18.4	-0.1 0.3 0.1	0.3
85 170 85	67.0 -55.6 32.3	0.1 -0.5 0.2	0.6
85 85 170	46.6 18.0 -44.2	0.2 -1.0 -0.4	1.1
85 170 170	68.2 -39.3 -9.9	0.3 -1.0 -0.6	1.2
170 85 170	57.2 52.8 -26.3	0.2 -0.7 -0.6	0.9
170 170 85	73.4 -8.8 42.0	0.2 -0.3 1.0	1.0
Average			1.3
Maximum			3.9

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	55.5 -30.3 -47.5	7.2
66.9 -24.7 -37.1	66.6 -24.2 -35.8	1.5
79.7 -12.5 -21.8	79.6 -12.5 -21.1	0.6
48.0 74.0 -3.0	48.0 73.9 -2.9	0.1
60.8 50.6 -6.7	60.7 50.9 -6.2	0.7
76.4 25.8 -6.9	76.3 25.3 -6.4	0.7
89.0 -5.0 93.0	88.5 -5.5 91.6	1.5
90.3 -4.7 62.6	89.9 -5.2 61.7	1.0
92.2 -3.5 31.1	91.6 -3.5 30.5	0.9
53.1 37.7 28.9	53.0 37.8 28.1	0.8
41.5 22.7 16.8	41.9 22.3 17.3	0.8
31.9 40.0 24.0	32.0 39.7 22.9	1.1
32.5 44.5 -1.8	32.5 44.4 -1.4	0.4
51.3 1.3 44.5	51.1 1.9 44.0	0.9
34.6 -36.4 13.9	34.7 -35.7 13.3	0.9
36.0 -26.2 -20.9	35.8 -25.3 -20.0	1.2
20.9 9.6 -23.6	21.1 10.5 -24.4	1.2
89.0 0.0 -1.9	88.4 0.2 -2.5	0.9
82.8 0.0 -1.7	82.6 0.2 -2.4	0.7
69.3 0.0 -1.4	69.2 -0.1 -0.9	0.5
54.1 0.0 -1.0	54.2 0.5 -0.8	0.6
36.6 0.0 -0.5	36.8 0.1 -1.0	0.5
16.0 0.0 0.0	17.4 -0.2 -0.1	1.4
24.0 22.0 -46.0	24.1 22.7 -45.5	0.9
40.9 17.9 -36.6	41.2 17.4 -34.9	1.8
63.7 10.3 -23.8	63.5 11.2 -24.1	0.9
47.0 68.0 48.0	47.1 67.9 47.5	0.6
58.5 47.1 37.9	58.8 47.3 37.6	0.4
74.2 22.9 21.4	74.2 22.4 21.8	0.7
50.0 -65.0 27.0	49.9 -64.4 26.4	0.8
62.1 -39.8 21.0	62.3 -39.4 21.4	0.5
77.0 -19.1 11.0	77.3 -20.3 12.1	1.7
71.2 18.9 17.3	71.3 19.4 17.3	0.6
71.2 22.1 73.1	71.4 22.1 72.1	0.9
47.7 71.2 16.2	47.7 71.4 15.6	0.7
38.0 55.4 -20.9	38.1 55.8 -20.3	0.8
73.7 -22.8 67.6	73.7 -22.6 66.7	0.9
52.3 -52.3 -20.1	52.2 -50.7 -18.6	2.2
43.3 -17.0 -48.6	42.9 -16.7 -47.5	1.3
95.0 0.0 -2.0	94.3 0.2 -2.7	1.0
88.5 -0.4 -3.1	88.0 -0.3 -3.2	0.6
82.0 -0.9 -4.1	81.9 -0.4 -4.5	0.6
67.7 -2.0 -4.4	67.4 -2.3 -4.6	0.5
52.2 -2.5 -3.5	52.4 -2.8 -3.4	0.4
37.5 -3.9 -3.1	37.8 -4.8 -3.6	1.1
26.3 -6.8 -3.4	26.8 -8.8 -3.4	2.1
Average		1.0
Gamut-Volume		99 %

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	143.72 150.80 147.70	85 85 170	28.71 24.10 65.33
0 0 0	0.30 0.30 0.50	85 170 170	39.69 58.20 68.87
12 12 12	0.76 0.80 0.97	170 85 170	57.99 37.80 65.75
25 25 25	2.57 2.70 2.65	170 170 85	60.19 68.70 25.84
38 38 38	4.85 5.10 4.97	0 130 207	26.65 36.10 92.19
51 51 51	8.17 8.60 8.37	80 159 220	43.71 55.10 104.51
63 63 63	11.95 12.50 12.21	152 193 232	74.51 84.80 118.72
76 76 76	16.40 17.10 16.80	174 35 102	48.89 24.90 27.02
89 89 89	21.77 22.70 22.30	188 94 143	63.63 43.20 49.13
102 102 102	27.82 29.10 28.42	207 158 190	87.04 75.70 83.84
114 114 114	33.85 35.30 34.06	238 217 16	98.39 109.40 12.33
127 127 127	40.95 42.70 41.20	238 222 90	103.27 114.00 32.18
140 140 140	48.57 51.10 49.31	237 228 159	110.54 119.80 68.41
153 153 153	56.91 59.70 57.95	158 84 64	42.52 31.30 13.85
165 165 165	65.20 68.20 66.60	107 68 56	22.80 18.60 10.41
178 178 178	74.92 78.60 76.30	98 36 31	16.94 10.50 3.99
191 191 191	85.41 89.60 86.98	99 34 63	18.64 10.90 11.43
204 204 204	95.50 100.50 97.86	116 101 35	27.73 29.00 6.73
216 216 216	105.22 110.40 108.13	32 75 45	6.93 12.60 7.45
229 229 229	117.02 122.40 119.53	23 76 97	9.32 13.60 24.14
242 242 242	129.35 135.30 132.13	36 35 67	5.92 5.00 12.77
0 0 128	7.23 2.80 36.63	215 216 220	105.18 110.10 112.39
0 0 255	25.50 9.50 131.67	194 195 199	88.47 92.60 94.53
0 128 0	9.28 28.50 4.20	152 153 155	56.88 59.70 59.52
0 128 128	16.41 31.50 40.32	110 110 112	32.02 33.40 33.40
0 170 255	40.56 57.20 136.67	68 68 69	13.57 14.20 14.37
0 255 0	32.47 100.80 13.67	30 30 30	3.42 3.60 3.54
0 255 170	44.19 105.20 74.92	38 36 107	9.23 6.40 27.91
0 255 255	57.59 110.20 143.51	78 71 137	21.93 18.30 44.11
85 85 85	19.94 20.80 20.43	137 131 183	51.83 48.80 77.47
128 0 0	24.80 11.80 0.98	173 39 29	44.22 23.70 4.34
128 0 128	31.49 14.20 37.84	188 90 63	56.98 39.80 14.08
128 128 0	34.02 40.60 4.68	207 152 127	79.02 70.50 44.16
128 128 128	41.91 43.70 42.17	29 121 56	11.98 27.80 12.08
128 128 255	60.15 50.50 136.89	90 149 93	30.07 46.40 26.87
128 255 128	64.43 115.00 51.50	155 187 153	63.61 78.40 60.57
170 0 255	66.12 28.50 133.38	191 146 127	70.49 63.90 43.61
170 170 170	69.22 72.40 70.70	207 143 28	71.02 63.70 8.75
170 255 0	73.56 119.90 14.34	174 37 73	46.89 24.40 15.54
170 255 255	99.03 129.30 145.37	119 36 104	27.94 15.20 27.23
255 0 0	86.01 40.50 2.06	158 177 39	53.87 69.30 12.18
255 0 170	97.06 44.40 65.05	0 126 140	17.31 31.10 46.70
255 0 255	110.79 49.50 134.36	2 92 166	16.67 20.20 61.19
255 128 128	102.90 72.40 44.10	236 237 242	124.01 129.80 132.50
255 170 0	101.40 88.50 8.53	212 215 221	103.41 108.60 112.17
255 170 255	127.15 98.20 141.07	189 193 201	86.33 90.70 96.16
255 255 0	118.32 141.10 15.10	143 149 156	52.65 56.20 60.43
255 255 170	130.60 145.50 78.78	101 107 111	28.68 30.90 32.94
170 85 85	49.35 34.80 21.30	65 72 75	13.56 15.10 16.55
85 170 85	31.15 55.30 24.81	40 50 51	6.28 7.60 8.47