

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2014-4-18 01:52:11
Report-Version: v2.0.0
Monitor-Name: \\.\DISPLAY1
EDID-Name: CG2420
EDID-Serial:
Profile: C:/Windows/system32/spool/drivers/.../CG2420(20351026)00000025.icc
Created: 2014-4-17 23:47
Measurement device: i1Pro, Rev. 3, Serial: 342165
Evaluation method: UDACT v2.0

Summary

Calibration (Reference Whitepoint: 5800.00 Kelvin)

White Point	yes
Gray balance	yes
Tone values	yes
Profile quality	yes
Gamut ability	yes



The monitor has
passed the certification
according to the UDACT v2.0
specifications.

Softproof quality (depends on the calibration verification)

ISO Coated v2 (FOGRA39L)	yes
sRGB	yes
AdobeRGB	yes
ECI-RGB v2.0	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 2.0 dE00.

XYZ (measured):	133.89 140.39 135.87
XYZ (normalized):	95.37 100.00 96.77
xy:	0.3264 0.3423
Luminance:	140.4 Cd/m2
Next Temperature:	5766 Kelvin
Reference Whitepoint:	5800.0 Kelvin
Deviation XYZ to Reference Whitepoint:	0.5 dE00
	0.5 dE76

Blackpoint

The blackpoint is not defined in ISO 12646. Therefore UDACT does only measure but not assess it.

Luminance:	0.1 Cd/m2
Chromaticity:	0.8 Chroma (Lab)

Gray balance

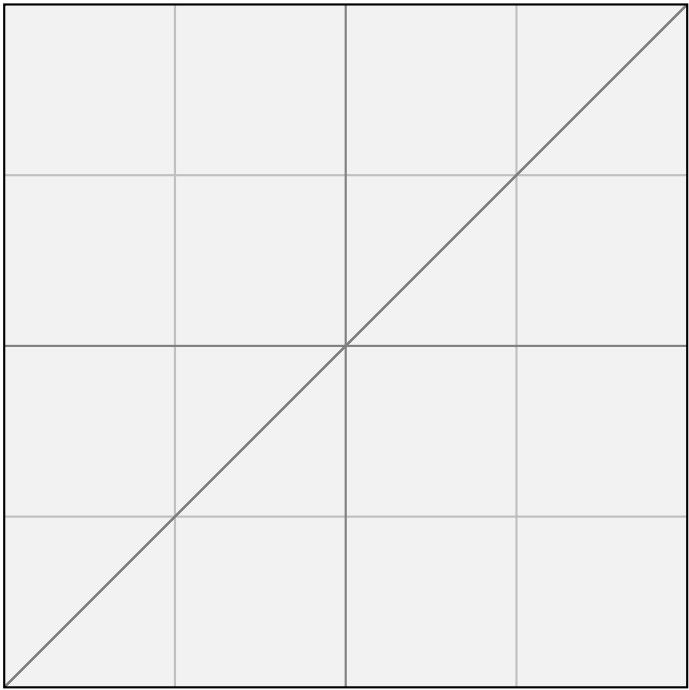
Average and maximum calculation will respect measurements with 1% minimum luminance only. The L-deviation shows the difference between the profile and measurement value.

The maximum allowed deviations to comply with this test are an average of 1.0 DeltaC, a range of 2.0 DeltaC. A maximum L-deviation of 2.3 dL00 in the luminance range of 20%-100% shall not be exceeded.

%	Kelvin	Cd/m2	L	Chroma	Gamma	Delta-L
0	7933	0.15	0.96	0.80		
5	5916	0.74	4.73	0.43	1.85	+1.1
10	5811	2.30	13.47	0.15	1.82	+0.7
15	5740	4.70	21.39	0.22	1.81	+0.4
20	5771	7.77	28.20	0.04	1.81	+0.0
25	5789	11.31	34.10	0.23	1.83	-0.0
30	5786	16.00	40.24	0.11	1.81	+0.1
35	5765	21.22	45.79	0.05	1.81	+0.1
40	5778	26.90	50.88	0.07	1.81	-0.1
45	5785	32.77	55.42	0.12	1.83	-0.1
50	5775	39.90	60.27	0.06	1.82	-0.1
55	5788	47.46	64.81	0.16	1.82	-0.1
60	5788	55.71	69.24	0.16	1.81	-0.1
65	5784	63.88	73.22	0.17	1.83	-0.1
70	5784	73.16	77.35	0.15	1.83	-0.1
75	5784	83.07	81.39	0.17	1.82	-0.1
80	5782	93.64	85.35	0.17	1.81	-0.1
85	5782	103.79	88.89	0.16	1.86	-0.1
90	5775	115.53	92.70	0.09	1.85	-0.1
95	5775	127.62	96.37	0.09	1.86	-0.0
100	5766	140.39	100.00	0.00		
Average	5780			0.12	1.82	0.1
Max				0.23		0.1
Range				0.35		

Tone values

This tests checks the calibration curves (vcgt) of the graphic card. 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.



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 2.0 dE00 and a maximum of 4.0 dE00.

The Lab values are calculated, based on the measured white point (xy: 0.3264 0.3423).

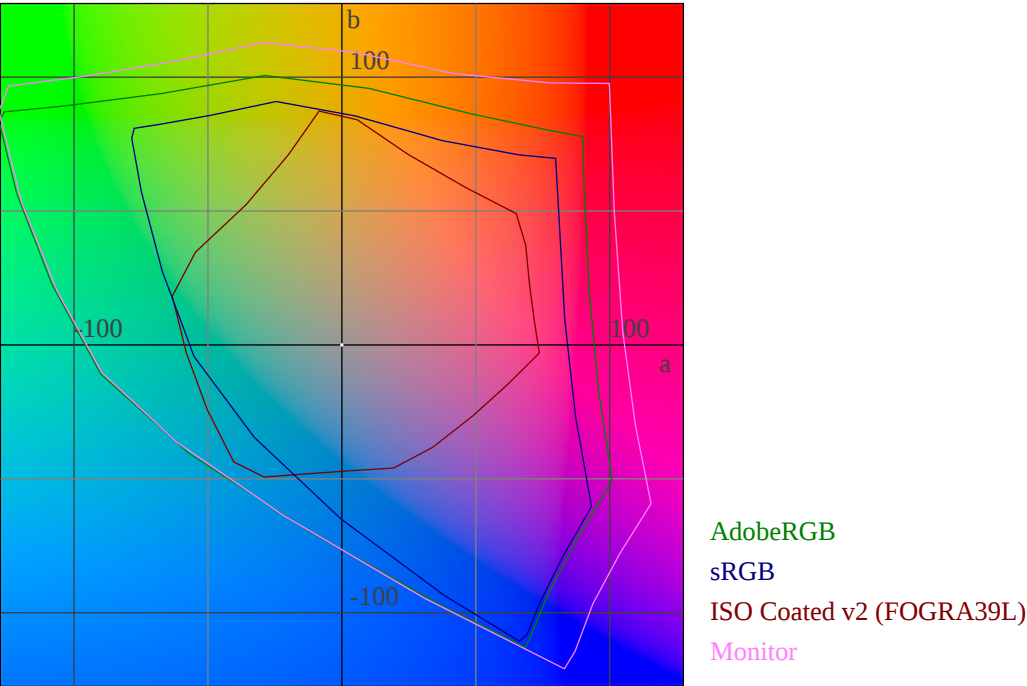
The assumed chromatic adaptation is: Bradford

RGB	Lab	deltaLab	dE76	dE00
0 0 0	1.0 0.3 -0.7	-1.0 -0.3 0.7	1.2	1.0
0 0 128	12.2 55.2 -79.8	-0.2 1.6 -1.2	2.0	0.4
0 0 255	26.2 86.1 -122.7	0.1 -0.2 0.2	0.3	0.1
0 128 0	51.1 -84.8 62.1	0.5 -1.2 1.7	2.1	0.6
0 128 128	52.8 -55.3 -13.0	0.3 -0.4 0.1	0.5	0.3
0 170 255	67.6 -38.0 -53.5	0.3 -0.5 0.5	0.7	0.3
0 255 0	86.3 -130.4 96.9	-0.1 0.4 -0.4	0.6	0.1
0 255 170	87.5 -106.1 18.4	-0.1 0.5 -0.4	0.6	0.2
0 255 255	88.6 -84.6 -19.5	-0.0 0.4 -0.0	0.4	0.1
85 85 85	44.0 -0.0 -0.1	-0.0 0.0 0.1	0.1	0.1
128 0 0	33.2 66.0 54.5	0.2 0.9 2.1	2.3	0.7
128 0 128	36.0 76.2 -39.2	0.2 0.5 -0.2	0.5	0.2
128 128 0	59.1 -12.6 76.2	0.4 0.0 0.6	0.7	0.3
128 128 128	60.6 -0.1 -0.1	0.1 0.1 0.1	0.2	0.2
128 128 255	63.6 24.8 -59.8	0.1 -0.0 0.2	0.3	0.1
128 255 128	90.6 -73.9 45.0	-0.1 0.4 -0.1	0.4	0.1
170 0 255	48.9 101.4 -83.7	0.3 -0.2 0.4	0.5	0.3
170 170 170	74.8 -0.0 -0.2	0.1 0.0 0.2	0.2	0.2
170 255 0	92.3 -62.4 107.1	-0.0 0.8 -0.5	1.0	0.2
170 255 255	94.4 -35.1 -9.7	0.0 0.3 0.0	0.3	0.1
255 0 0	58.8 101.4 98.9	-0.1 -0.4 -0.9	1.0	0.2
255 0 170	60.8 108.9 -20.6	-0.0 -0.4 -0.5	0.6	0.2
255 0 255	62.9 116.4 -59.6	0.0 -0.5 0.0	0.5	0.1
255 128 128	74.8 57.1 24.1	-0.1 -0.2 -0.1	0.2	0.1
255 170 0	81.6 28.1 105.9	0.1 -0.7 -1.4	1.5	0.3
255 170 255	84.2 46.4 -25.0	0.0 -0.2 0.0	0.2	0.1
255 255 0	98.1 -18.9 117.4	-0.0 -0.0 -1.3	1.3	0.2
255 255 170	99.0 -9.5 37.9	-0.0 -0.0 0.0	0.0	0.0
255 255 255	100.0 0.0 -0.0	0.0 0.0 -0.0	0.0	0.0
170 85 85	55.1 44.3 18.7	0.0 0.4 0.2	0.5	0.1
85 170 85	67.4 -57.5 35.1	0.1 -0.4 0.3	0.5	0.2
85 85 170	46.3 19.5 -46.8	-0.0 0.1 -0.1	0.1	0.0
85 170 170	68.6 -40.4 -10.7	0.1 -0.3 0.1	0.3	0.2
170 85 170	56.7 54.2 -29.0	0.1 0.4 0.0	0.4	0.1
170 170 85	73.7 -10.4 45.9	0.1 0.0 0.3	0.4	0.2
Average			0.6	0.2
Maximum			2.3	1.0

Gamut-Volume

These measurements are only informative.

ISO Coated v2 (FOGRA39L)	99 %
sRGB	100 %
AdobeRGB	100 %
ECI-RGB v2.0	94 %



Softproof Quality

The measurements are converted to Lab values based on the measured whitepoint (xy: 0.3264 0.3423) and compared with the selected reference. The maximum allowed deviations to comply with this test are an average of 2.0 dE00 and a minimum Gamut volume of 90% for ISO Coated v2 (FOGRA39L).

		Limit	dE00
Average		2.0	0.4
Maximum		4.0	2.6
Primaries		5.0	2.6
Composite Gray Max		3.0	0.7

Reference (Lab)	Measurement (Lab)	Measurement (Yxy)	dE76	dE00
55.0 -37.0 -50.0	55.6 -30.2 -48.5	23.54 0.1799 0.2539	7.0	2.6
66.9 -24.7 -37.1	66.8 -24.4 -37.0	36.43 0.2275 0.2919	0.3	0.1
79.7 -12.5 -21.8	79.7 -12.7 -21.8	56.15 0.2855 0.3251	0.2	0.1
87.7 -5.8 -11.8	87.6 -6.0 -12.1	71.26 0.3160 0.3413	0.4	0.3
91.5 -3.0 -7.0	91.5 -2.9 -7.2	79.49 0.3296 0.3483	0.2	0.2
48.0 74.0 -3.0	47.9 73.8 -3.3	16.69 0.5082 0.2586	0.4	0.2
60.8 50.6 -6.7	60.9 50.2 -6.8	29.11 0.4291 0.2915	0.4	0.1
76.4 25.8 -6.9	76.2 25.8 -7.2	50.21 0.3749 0.3220	0.3	0.2
86.2 12.0 -5.2	86.0 12.4 -5.5	68.06 0.3549 0.3386	0.5	0.4
90.7 5.9 -3.9	90.6 6.2 -3.9	77.50 0.3481 0.3469	0.3	0.3
89.0 -5.0 93.0	88.9 -4.8 93.8	73.92 0.4609 0.4937	0.8	0.2
90.3 -4.7 62.6	90.2 -4.4 62.3	76.84 0.4309 0.4601	0.4	0.2
92.2 -3.5 31.1	92.1 -3.2 30.8	80.95 0.3896 0.4125	0.5	0.3
93.6 -1.6 13.3	93.6 -1.4 12.9	84.24 0.3645 0.3813	0.4	0.3
94.3 -0.9 5.4	94.3 -1.2 5.3	86.05 0.3524 0.3683	0.3	0.4
89.0 0.0 -1.8	88.9 0.0 -2.1	73.90 0.3422 0.3548	0.3	0.2
82.8 0.0 -1.7	82.6 0.1 -2.2	61.43 0.3419 0.3545	0.5	0.4
69.3 0.0 -1.4	69.2 -0.2 -1.3	39.63 0.3425 0.3559	0.2	0.3
54.1 0.0 -1.0	54.0 0.3 -1.2	21.97 0.3432 0.3549	0.4	0.5
36.6 -0.0 -0.5	36.6 0.1 -0.8	9.35 0.3432 0.3554	0.3	0.4
16.0 0.0 0.0	16.8 0.3 0.1	2.26 0.3477 0.3581	0.9	0.7
10.4 13.9 1.4	11.2 12.3 1.0	1.29 0.4227 0.3253	1.9	1.4
33.4 25.4 20.9	33.3 25.5 20.9	7.68 0.5002 0.3693	0.2	0.1
34.4 -3.3 22.3	34.5 -2.7 21.5	8.26 0.4073 0.4383	1.0	0.7
24.0 22.0 -46.0	23.9 22.2 -46.3	4.06 0.2218 0.1599	0.4	0.1
40.9 17.9 -36.6	40.9 18.2 -36.3	11.83 0.2770 0.2319	0.4	0.4
63.7 10.3 -23.8	63.7 10.2 -23.8	32.40 0.3110 0.2953	0.1	0.1
79.4 5.1 -13.6	79.3 5.3 -13.8	55.44 0.3283 0.3275	0.3	0.3
87.2 2.6 -8.1	87.1 2.4 -8.2	70.21 0.3351 0.3419	0.2	0.3
47.0 68.0 48.0	47.0 67.9 47.2	16.01 0.6210 0.3298	0.8	0.3
58.5 47.1 37.9	58.5 47.0 37.9	26.47 0.5297 0.3647	0.1	0.1
74.2 22.9 21.4	74.1 22.5 21.4	46.88 0.4275 0.3745	0.4	0.3
85.0 10.0 9.8	84.9 9.7 9.7	65.86 0.3781 0.3669	0.3	0.3
90.0 4.7 3.7	89.9 5.0 3.4	76.05 0.3589 0.3602	0.4	0.4
50.0 -65.0 27.0	49.9 -64.9 27.1	18.33 0.2449 0.5534	0.2	0.1
62.1 -39.8 21.0	62.0 -39.9 20.6	30.45 0.3056 0.4626	0.4	0.2
77.0 -19.1 11.0	76.9 -19.4 11.3	51.38 0.3332 0.4010	0.4	0.2
86.3 -8.4 4.2	86.4 -8.5 4.2	68.76 0.3398 0.3735	0.1	0.1
90.8 -4.1 0.9	90.8 -4.6 0.9	77.99 0.3404 0.3638	0.4	0.5
88.5 -0.4 -3.1	88.5 -0.5 -3.2	73.06 0.3394 0.3532	0.2	0.2

82.0 -0.9 -4.1	81.8 -0.7 -4.4	59.99 0.3366 0.3507	0.4	0.4
67.7 -2.0 -4.4	67.5 -1.9 -4.7	37.27 0.3322 0.3500	0.4	0.3
52.2 -2.5 -3.5	52.4 -2.6 -3.4	20.47 0.3309 0.3524	0.2	0.2
37.5 -3.9 -3.1	37.6 -4.4 -3.0	9.84 0.3230 0.3550	0.6	0.7
26.3 -6.8 -3.4	26.4 -7.4 -3.1	4.88 0.3056 0.3591	0.7	0.7
10.4 -8.2 -10.2	11.4 -8.2 -9.7	1.31 0.2406 0.3101	1.1	0.7
24.3 32.7 13.1	24.6 31.8 12.8	4.29 0.5232 0.3287	0.9	0.4
24.7 -17.0 7.5	24.8 -16.3 7.4	4.36 0.3117 0.4327	0.7	0.5
23.0 0.0 0.0	22.8 -0.1 -0.1	3.76 0.3449 0.3586	0.2	0.2
38.5 6.6 3.9	38.7 6.0 4.3	10.49 0.3770 0.3628	0.8	0.8
61.5 5.4 3.8	61.4 5.7 3.6	29.69 0.3655 0.3603	0.4	0.4
78.1 2.9 0.9	77.9 3.1 0.9	53.12 0.3526 0.3573	0.3	0.4
86.6 1.5 -0.7	86.5 1.5 -0.7	69.02 0.3469 0.3560	0.1	0.1
53.1 37.7 28.9	53.1 37.3 28.9	21.12 0.5027 0.3660	0.4	0.2
41.5 22.7 16.8	41.6 22.5 17.1	12.26 0.4599 0.3679	0.4	0.3
31.9 40.0 24.0	31.9 39.5 23.9	7.04 0.5570 0.3419	0.5	0.2
32.5 44.4 -1.8	32.5 44.0 -1.8	7.30 0.4768 0.2786	0.4	0.1
51.3 1.3 44.5	51.2 0.8 44.1	19.47 0.4483 0.4613	0.6	0.4
34.6 -36.4 13.9	34.6 -35.4 13.6	8.31 0.2746 0.4846	1.1	0.4
36.0 -26.2 -20.9	35.9 -25.8 -20.8	8.94 0.2077 0.3113	0.4	0.2
20.9 9.6 -23.6	21.3 9.6 -23.5	3.33 0.2701 0.2355	0.4	0.3
71.2 18.8 17.3	71.2 18.6 17.3	42.46 0.4150 0.3722	0.2	0.2
71.2 22.2 73.1	71.2 22.1 73.1	42.53 0.5071 0.4432	0.1	0.0
47.7 71.2 16.2	47.5 70.8 16.1	16.44 0.5596 0.2911	0.4	0.2
38.0 55.4 -20.9	38.1 55.0 -20.9	10.13 0.4202 0.2308	0.4	0.1
73.7 -22.8 67.6	73.6 -22.9 67.4	46.01 0.4117 0.5128	0.2	0.1
52.3 -52.3 -20.2	52.2 -49.7 -19.9	20.29 0.1926 0.3483	2.6	0.8
43.3 -17.0 -48.6	43.0 -16.9 -48.6	13.19 0.1765 0.2250	0.3	0.3
95.0 0.0 -2.0	94.9 -0.0 -1.9	87.47 0.3426 0.3553	0.1	0.1
15.7 -3.1 11.7	16.6 -2.7 11.1	2.22 0.3896 0.4279	1.1	0.8
34.7 28.5 -4.0	34.8 28.8 -3.9	8.38 0.4186 0.2995	0.3	0.2
25.8 -11.0 -14.4	26.1 -11.3 -14.1	4.77 0.2483 0.3122	0.4	0.3
Average			0.6	0.4
Gamut-Volume				99 %

Measurement Data

This table lists all RGB measurements. The XYZ values represent the values from the measurement device.

RGB	XYZ	Yxy
255 255 255	133.89 140.39 135.87	140.39 0.3264 0.3423
0 0 0	0.15 0.15 0.21	0.15 0.3001 0.2920
12 12 12	0.69 0.74 0.70	0.74 0.3230 0.3459
25 25 25	2.19 2.30 2.23	2.30 0.3255 0.3424
38 38 38	4.50 4.70 4.56	4.70 0.3270 0.3416
51 51 51	7.41 7.77 7.53	7.77 0.3263 0.3421
63 63 63	10.80 11.31 11.02	11.31 0.3260 0.3413
76 76 76	15.24 16.00 15.50	16.00 0.3260 0.3423
89 89 89	20.25 21.22 20.55	21.22 0.3265 0.3422
102 102 102	25.65 26.90 26.08	26.90 0.3262 0.3421
114 114 114	31.22 32.77 31.77	32.77 0.3260 0.3422
127 127 127	38.04 39.90 38.65	39.90 0.3263 0.3422
140 140 140	45.23 47.46 46.06	47.46 0.3260 0.3421
153 153 153	53.09 55.71 54.06	55.71 0.3260 0.3421
165 165 165	60.91 63.88 62.02	63.88 0.3261 0.3419
178 178 178	69.74 73.16 70.98	73.16 0.3261 0.3421
191 191 191	79.20 83.07 80.63	83.07 0.3261 0.3420
204 204 204	89.29 93.64 90.87	93.64 0.3261 0.3420
216 216 216	98.95 103.79 100.69	103.79 0.3261 0.3421
229 229 229	110.15 115.53 111.94	115.53 0.3263 0.3422
242 242 242	121.68 127.62 123.65	127.62 0.3263 0.3422
0 0 128	6.86 2.28 36.16	2.28 0.1513 0.0504
0 0 255	23.95 7.70 127.52	7.70 0.1505 0.0484
0 128 0	8.71 27.22 2.38	27.22 0.2274 0.7105
0 128 128	15.59 29.67 38.78	29.67 0.1855 0.3531
0 170 255	38.53 53.65 131.43	53.65 0.1723 0.2399
0 255 0	30.52 96.52 7.72	96.52 0.2265 0.7162
0 255 170	42.06 100.27 69.02	100.27 0.1990 0.4744
0 255 255	54.47 104.18 135.52	104.18 0.1852 0.3542
85 85 85	18.57 19.47 18.88	19.47 0.3262 0.3421
128 0 0	22.49 10.37 0.27	10.37 0.6789 0.3130
128 0 128	29.47 12.60 36.56	12.60 0.3748 0.1602
128 128 0	31.30 37.82 2.38	37.82 0.4378 0.5289
128 128 128	38.49 40.38 39.14	40.38 0.3262 0.3422
128 128 255	55.67 45.98 130.21	45.98 0.2401 0.1983
128 255 128	60.39 109.24 44.90	109.24 0.2815 0.5092
170 0 255	61.82 24.99 127.80	24.99 0.2881 0.1165
170 170 170	64.24 67.37 65.42	67.37 0.3261 0.3419
170 255 0	68.38 113.83 7.84	113.83 0.3598 0.5990
170 255 255	92.59 121.55 135.73	121.55 0.2646 0.3474
255 0 0	79.87 36.55 0.35	36.55 0.6839 0.3130
255 0 170	91.13 40.09 61.37	40.09 0.4732 0.2082
255 0 255	103.54 44.03 127.98	44.03 0.3758 0.1598
255 128 128	95.40 66.57 39.59	66.57 0.4733 0.3303
255 170 0	94.27 82.54 3.88	82.54 0.5217 0.4568
255 170 255	118.10 90.44 131.82	90.44 0.3470 0.2657
255 255 0	110.01 132.77 7.83	132.77 0.4390 0.5298
255 255 170	121.52 136.43 69.83	136.43 0.3707 0.4162
170 85 85	45.57 31.88 19.02	31.88 0.4724 0.3304
85 170 85	29.00 52.29 21.55	52.29 0.2820 0.5085
85 85 170	26.77 22.11 62.54	22.11 0.2403 0.1984

85 170 170	37.20 54.93 65.20	54.93 0.2364 0.3492
170 85 170	53.77 34.52 62.70	34.52 0.3561 0.2286
170 170 85	56.00 64.69 21.69	64.69 0.3933 0.4543
0 131 203	24.89 33.73 86.63	33.73 0.1713 0.2322
80 160 217	41.03 51.79 98.97	51.79 0.2139 0.2700
152 194 230	69.59 79.29 110.90	79.29 0.2679 0.3052
195 216 237	92.29 100.32 117.96	100.32 0.2972 0.3230
216 227 240	104.85 111.76 121.11	111.76 0.3104 0.3309
174 40 102	45.26 23.05 24.95	23.05 0.4853 0.2472
188 97 142	59.38 40.57 46.13	40.57 0.4065 0.2777
207 159 189	81.24 70.35 78.00	70.35 0.3539 0.3064
222 199 218	99.21 95.51 101.58	95.51 0.3348 0.3223
229 218 230	108.14 108.81 112.26	108.81 0.3285 0.3305
238 215 42	93.25 102.95 10.75	102.95 0.4506 0.4975
238 220 99	97.79 107.20 29.63	107.20 0.4168 0.4569
237 227 163	104.85 113.23 63.74	113.23 0.3721 0.4018
237 232 204	111.16 118.06 92.38	118.06 0.3456 0.3671
236 235 223	114.07 120.73 107.40	120.73 0.3333 0.3528
215 216 220	99.07 103.79 103.97	103.79 0.3229 0.3383
194 195 199	82.38 86.28 86.69	86.28 0.3226 0.3379
152 153 155	53.00 55.65 55.34	55.65 0.3232 0.3393
110 110 112	29.53 30.86 30.79	30.86 0.3239 0.3384
68 68 69	12.54 13.13 13.05	13.13 0.3240 0.3389
30 30 30	3.04 3.17 3.06	3.17 0.3284 0.3420
30 18 21	2.31 1.79 1.64	1.79 0.4017 0.3122
89 49 37	14.20 10.64 4.47	10.64 0.4844 0.3632
67 64 37	10.47 11.53 4.76	11.53 0.3913 0.4310
38 38 105	8.38 5.86 25.95	5.86 0.2085 0.1457
78 72 135	20.31 16.79 41.40	16.79 0.2587 0.2139
137 133 181	48.11 45.69 71.30	45.69 0.2914 0.2767
184 182 212	77.72 77.98 96.07	77.98 0.3087 0.3097
209 209 227	95.95 98.68 109.32	98.68 0.3157 0.3247
173 42 34	41.02 21.95 3.98	21.95 0.6127 0.3278
188 91 66	52.42 36.62 12.63	36.62 0.5156 0.3602
207 153 129	73.46 65.39 40.80	65.39 0.4089 0.3640
222 196 183	93.72 92.22 75.36	92.22 0.3587 0.3529
229 216 212	105.00 106.66 97.65	106.66 0.3395 0.3448
29 120 58	11.06 25.83 10.85	25.83 0.2317 0.5411
90 148 96	27.65 42.82 24.97	42.82 0.2897 0.4486
155 186 154	59.02 72.17 55.97	72.17 0.3154 0.3856
197 212 198	86.74 96.56 86.85	96.56 0.3211 0.3574
216 225 220	101.33 109.53 104.43	109.53 0.3214 0.3474
212 215 221	97.65 102.63 104.73	102.63 0.3202 0.3365
189 193 201	80.14 84.29 88.13	84.29 0.3173 0.3337
143 149 156	49.29 52.39 55.75	52.39 0.3131 0.3328
101 107 111	26.77 28.78 30.30	28.78 0.3118 0.3352
65 72 74	12.48 13.84 14.70	13.84 0.3043 0.3373
40 50 51	5.80 6.87 7.50	6.87 0.2877 0.3405
12 24 31	1.46 1.86 3.13	1.86 0.2260 0.2884
72 29 31	9.35 5.93 3.20	5.93 0.5059 0.3211
33 49 36	4.34 6.13 4.22	6.13 0.2951 0.4174
41 41 41	5.02 5.27 5.12	5.27 0.3256 0.3423
80 70 67	15.07 14.69 12.39	14.69 0.3575 0.3485
139 127 124	41.69 41.61 37.20	41.61 0.3460 0.3453
185 178 178	72.73 74.54 71.03	74.54 0.3332 0.3415
210 207 209	93.41 96.90 94.89	96.90 0.3275 0.3398

158 85 66	39.62 29.28 12.47	29.28 0.4869 0.3598
107 68 57	20.99 17.05 9.45	17.05 0.4420 0.3590
98 37 32	15.65 9.72 3.45	9.72 0.5432 0.3372
99 36 63	17.24 10.12 10.60	10.12 0.4542 0.2665
116 101 40	25.68 27.13 6.19	27.13 0.4352 0.4598
33 74 46	6.48 11.71 6.75	11.71 0.2599 0.4694
23 76 96	8.66 12.73 22.79	12.73 0.1960 0.2881
36 36 66	5.49 4.73 11.55	4.73 0.2524 0.2171
191 147 128	65.07 59.27 39.96	59.27 0.3960 0.3607
207 143 41	65.94 59.03 7.68	59.03 0.4971 0.4450
174 41 73	43.29 22.61 13.99	22.61 0.5419 0.2830
119 40 103	25.77 14.13 25.36	14.13 0.3948 0.2165
158 175 50	49.94 64.27 10.86	64.27 0.3993 0.5139
0 125 138	16.24 28.85 44.03	28.85 0.1822 0.3237
4 93 163	15.60 18.97 57.96	18.97 0.1686 0.2050
236 237 241	117.21 122.84 122.50	122.84 0.3233 0.3388
30 30 19	2.77 3.11 1.55	3.11 0.3727 0.4183
90 51 70	16.25 11.70 13.04	11.70 0.3963 0.2854
30 51 64	5.42 6.77 11.08	6.77 0.2331 0.2908