

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2019-7-2 01:04:18
Report-Version: v2.0.0
Monitor-Name: \\.\DISPLAY1
EDID-Name: PA24A
EDID-Serial: J9LMQS047281
Profile: C:/Windows/.../PA24A-2019-07-02T005845-5800K-18-100%-trc.icm
Created: 2019-7-2 0:58
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	no

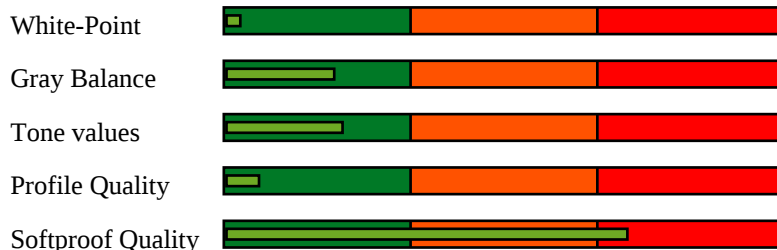


**The monitor has
not passed the certification
according to the UDACT v2.0
specifications.**

Softproof quality (depends on the calibration verification)

ISO Coated v2 (FOGRA39L)	no
sRGB	no
AdobeRGB	no
ECI-RGB v2.0	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 2.0 dE00.

XYZ (measured):	155.40 162.81 158.96
XYZ (normalized):	95.44 100.00 97.64
xy:	0.3257 0.3412
Luminance:	162.8 Cd/m2
Next Temperature:	5804 Kelvin
Reference Whitepoint:	5800.0 Kelvin
Deviation XYZ to Reference Whitepoint:	0.1 dE00
	0.1 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:	0.1 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	6225	0.13	0.75	0.13		
5	6102	0.72	4.01	0.45	1.87	+0.3
10	5682	2.55	13.04	0.34	1.83	+0.3
15	5762	5.39	21.26	0.22	1.81	+0.3
20	5826	8.99	28.18	0.37	1.81	+0.0
25	5759	13.28	34.31	0.39	1.81	+0.2
30	5818	18.23	39.91	0.40	1.82	-0.2
35	5783	24.41	45.62	0.27	1.81	-0.0
40	5746	31.45	51.06	0.35	1.80	+0.1
45	5795	38.54	55.76	0.29	1.81	+0.2
50	5818	46.38	60.32	0.10	1.81	-0.0
55	5832	55.01	64.79	0.52	1.81	-0.1
60	5780	64.70	69.28	0.20	1.81	-0.1
65	5808	74.65	73.45	0.15	1.81	+0.1
70	5789	85.71	77.66	0.65	1.81	+0.2
75	5772	96.91	81.58	0.28	1.81	+0.1
80	5822	109.38	85.60	0.16	1.78	+0.1
85	5807	120.83	89.02	0.45	1.82	+0.0
90	5807	134.32	92.79	0.16	1.83	+0.0
95	5796	148.80	96.57	0.18	1.78	+0.2
100	5804	162.81	100.00	0.00		
Average	5798			0.29	1.81	0.1
Max				0.65		0.2
Range				1.16		

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 = 96.9%

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: 0.3257 0.3412).

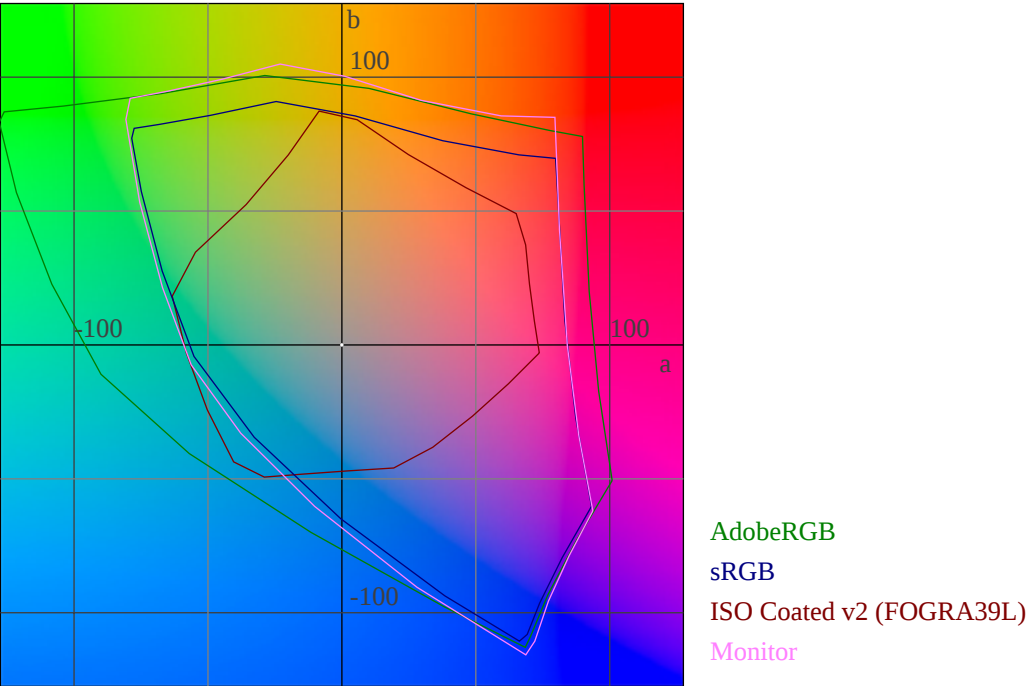
The assumed chromatic adaptation is: Bradford

RGB	Lab	deltaLab	dE76	dE00
0 0 0	0.7 -0.1 -0.0	-0.7 0.1 0.0	0.8	0.5
0 0 128	13.8 45.9 -77.1	-0.4 1.0 -0.5	1.1	0.4
0 0 255	28.4 70.1 -116.3	0.1 0.8 -1.0	1.3	0.2
0 128 0	52.5 -53.5 60.1	-0.0 -0.6 0.8	0.9	0.2
0 128 128	54.4 -35.0 -9.9	-0.2 0.3 -1.0	1.1	0.7
0 170 255	69.7 -22.3 -49.2	-0.3 0.3 -0.3	0.5	0.3
0 255 0	87.8 -82.1 92.1	-0.3 0.3 -0.1	0.5	0.2
0 255 170	89.1 -67.2 20.4	-0.3 0.5 -0.6	0.8	0.3
0 255 255	90.4 -53.0 -16.2	-0.2 0.4 -0.3	0.5	0.3
85 85 85	44.0 0.3 -0.0	-0.0 -0.3 0.0	0.3	0.4
128 0 0	31.4 53.1 50.2	-0.2 0.1 0.6	0.7	0.3
128 0 128	34.9 62.1 -41.2	-0.2 0.1 0.0	0.2	0.1
128 128 0	59.1 -10.1 70.7	0.1 -0.3 0.3	0.5	0.2
128 128 128	60.7 -0.2 0.4	-0.0 0.2 -0.4	0.4	0.5
128 128 255	64.2 20.7 -57.9	-0.1 0.0 0.3	0.3	0.2
128 255 128	91.5 -50.7 46.1	-0.1 0.8 -1.3	1.5	0.4
170 0 255	48.1 83.1 -84.1	-0.1 -0.2 0.4	0.4	0.1
170 170 170	75.0 -0.3 -0.2	-0.1 0.3 0.2	0.4	0.5
170 255 0	92.8 -44.5 99.9	-0.1 0.6 -0.1	0.6	0.2
170 255 255	95.1 -23.8 -8.2	-0.0 0.5 -0.0	0.5	0.3
255 0 0	55.9 81.1 85.7	-0.5 -0.6 -0.4	0.9	0.5
255 0 170	58.6 88.1 -25.6	-0.5 -0.6 0.4	0.9	0.5
255 0 255	61.1 94.6 -62.0	-0.4 -0.5 -0.2	0.7	0.4
255 128 128	73.3 42.9 21.5	-0.1 -0.6 -0.6	0.9	0.3
255 170 0	80.6 19.0 95.5	-0.1 -0.7 -0.5	0.9	0.3
255 170 255	83.7 35.3 -25.7	-0.1 -0.3 0.1	0.3	0.1
255 255 0	97.9 -15.9 107.9	-0.1 0.1 -0.4	0.5	0.1
255 255 170	98.9 -8.0 36.6	-0.1 0.1 -0.1	0.2	0.1
255 255 255	100.0 0.0 0.0	0.0 0.0 -0.0	0.0	0.0
170 85 85	53.7 33.7 16.5	0.1 -0.4 -0.0	0.4	0.2
85 170 85	68.4 -39.7 36.2	-0.2 0.4 -0.9	1.0	0.4
85 85 170	46.7 16.9 -46.2	-0.1 -0.5 0.8	0.9	0.2
85 170 170	69.8 -26.8 -9.0	-0.2 0.3 0.1	0.4	0.2
170 85 170	55.8 42.7 -30.7	0.0 -0.4 0.8	0.9	0.3
170 170 85	73.8 -9.0 45.0	-0.1 0.4 -0.7	0.8	0.3
Average			0.7	0.3
Maximum			1.5	0.7

Gamut-Volume

These measurements are only informative.

ISO Coated v2 (FOGRA39L)	93 %
sRGB	100 %
AdobeRGB	80 %
ECI-RGB v2.0	76 %



Softproof Quality

The measurements are converted to Lab values based on the measured whitepoint (xy: 0.3257 0.3412) 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	0.8
Maximum		4.0	8.7
Primaries		5.0	8.7
Composite Gray Max		3.0	0.5

Reference (Lab)	Measurement (Lab)	Measurement (Yxy)	dE76	dE00
55.0 -37.0 -50.0	58.2 -17.4 -45.4	26.20 0.2108 0.2586	20.4	8.7
66.9 -24.7 -37.1	66.9 -24.6 -37.6	36.52 0.2263 0.2907	0.5	0.2
79.7 -12.5 -21.8	79.7 -12.8 -22.0	56.23 0.2849 0.3248	0.4	0.2
87.7 -5.8 -11.8	87.7 -6.1 -11.8	71.53 0.3165 0.3420	0.3	0.3
91.5 -3.0 -7.0	91.5 -2.8 -7.1	79.60 0.3299 0.3485	0.2	0.2
48.0 74.0 -3.0	48.2 74.3 -3.3	16.96 0.5086 0.2584	0.5	0.3
60.8 50.6 -6.7	61.0 51.3 -7.2	29.26 0.4301 0.2898	0.9	0.3
76.4 25.8 -6.9	76.4 26.0 -7.0	50.57 0.3755 0.3222	0.2	0.1
86.2 12.0 -5.2	86.2 12.3 -5.2	68.38 0.3553 0.3393	0.3	0.2
90.7 5.9 -3.9	90.7 6.4 -4.2	77.73 0.3480 0.3464	0.6	0.5
89.0 -5.0 93.0	89.0 -4.5 94.2	74.07 0.4616 0.4935	1.3	0.4
90.3 -4.7 62.6	90.3 -4.4 63.4	77.05 0.4321 0.4613	0.9	0.3
92.2 -3.5 31.1	92.2 -3.4 31.1	81.25 0.3897 0.4132	0.1	0.1
93.6 -1.6 13.3	93.6 -1.6 12.9	84.28 0.3641 0.3814	0.4	0.2
94.3 -0.9 5.4	94.4 -1.2 5.7	86.27 0.3531 0.3691	0.4	0.4
89.0 0.0 -1.8	89.0 0.3 -1.8	74.14 0.3432 0.3552	0.3	0.5
82.8 0.0 -1.7	82.9 0.4 -2.2	61.93 0.3424 0.3542	0.6	0.7
69.3 0.0 -1.4	69.3 -0.0 -1.0	39.76 0.3434 0.3563	0.3	0.3
54.1 0.0 -1.0	54.3 0.2 -1.0	22.24 0.3436 0.3558	0.2	0.3
36.6 -0.0 -0.5	36.6 -0.2 -0.7	9.32 0.3427 0.3564	0.3	0.3
16.0 0.0 0.0	17.1 0.1 0.5	2.33 0.3487 0.3608	1.2	0.9
10.4 13.9 1.4	10.4 15.4 1.3	1.18 0.4453 0.3160	1.4	1.0
33.4 25.4 20.9	33.4 26.2 21.1	7.71 0.5028 0.3680	0.9	0.4
34.4 -3.3 22.3	34.3 -3.1 22.2	8.13 0.4079 0.4419	0.3	0.2
24.0 22.0 -46.0	24.4 21.8 -46.1	4.23 0.2229 0.1622	0.5	0.3
40.9 17.9 -36.6	41.1 18.0 -37.2	11.91 0.2740 0.2299	0.7	0.3
63.7 10.3 -23.8	63.4 10.8 -24.4	32.10 0.3106 0.2934	0.9	0.4
79.4 5.1 -13.6	79.5 5.1 -14.2	55.79 0.3272 0.3271	0.6	0.4
87.2 2.6 -8.1	87.1 3.2 -8.6	70.16 0.3356 0.3407	0.7	0.8
47.0 68.0 48.0	47.3 68.7 48.7	16.24 0.6240 0.3299	1.1	0.4
58.5 47.1 37.9	58.5 48.0 38.2	26.45 0.5326 0.3635	1.0	0.3
74.2 22.9 21.4	74.0 23.3 21.5	46.78 0.4291 0.3736	0.4	0.2
85.0 10.0 9.8	85.0 10.5 9.8	66.06 0.3795 0.3665	0.5	0.4
90.0 4.7 3.7	89.9 5.2 3.0	76.15 0.3585 0.3593	0.9	0.9
50.0 -65.0 27.0	52.0 -48.3 31.1	20.17 0.2974 0.5291	17.3	6.3
62.1 -39.8 21.0	62.2 -39.6 21.3	30.68 0.3075 0.4640	0.4	0.2
77.0 -19.1 11.0	76.9 -19.3 11.2	51.33 0.3332 0.4007	0.3	0.2
86.3 -8.4 4.2	86.4 -8.2 4.3	68.84 0.3404 0.3735	0.2	0.2
90.8 -4.1 0.9	90.8 -4.1 1.0	78.06 0.3413 0.3635	0.1	0.1
88.5 -0.4 -3.1	88.6 -0.4 -3.0	73.24 0.3400 0.3535	0.1	0.1

82.0 -0.9 -4.1	81.9 -0.8 -4.6	60.14 0.3361 0.3505	0.5	0.5
67.7 -2.0 -4.4	67.5 -1.9 -4.6	37.24 0.3325 0.3503	0.3	0.3
52.2 -2.5 -3.5	52.5 -2.4 -3.4	20.56 0.3314 0.3522	0.3	0.3
37.5 -3.9 -3.1	37.6 -3.7 -2.8	9.88 0.3258 0.3545	0.4	0.4
26.3 -6.8 -3.4	26.3 -6.4 -3.5	4.83 0.3077 0.3553	0.4	0.4
10.4 -8.2 -10.2	10.5 -7.3 -11.3	1.19 0.2333 0.2947	1.4	1.3
24.3 32.7 13.1	24.6 33.2 12.0	4.28 0.5250 0.3231	1.3	0.9
24.7 -17.0 7.5	24.6 -16.5 6.9	4.30 0.3086 0.4308	0.8	0.5
23.0 0.0 0.0	23.0 -0.1 0.3	3.80 0.3467 0.3600	0.3	0.3
38.5 6.6 3.9	38.8 6.9 4.5	10.53 0.3804 0.3620	0.8	0.6
61.5 5.4 3.8	61.5 5.0 3.7	29.85 0.3643 0.3614	0.4	0.5
78.1 2.9 0.9	78.4 2.6 1.6	53.82 0.3530 0.3592	0.7	0.7
86.6 1.5 -0.7	86.6 1.8 -0.9	69.23 0.3469 0.3555	0.4	0.5
53.1 37.7 28.9	53.1 38.1 29.5	21.12 0.5060 0.3656	0.7	0.3
41.5 22.7 16.8	41.8 23.3 17.2	12.38 0.4623 0.3667	0.8	0.4
31.9 40.0 24.0	32.2 40.1 24.6	7.19 0.5594 0.3419	0.7	0.4
32.5 44.4 -1.8	32.9 44.4 -1.8	7.51 0.4767 0.2786	0.4	0.3
51.3 1.3 44.5	51.5 1.4 45.9	19.69 0.4525 0.4627	1.4	0.5
34.6 -36.4 13.9	35.0 -33.4 14.9	8.50 0.2854 0.4853	3.3	1.6
36.0 -26.2 -20.9	36.8 -19.7 -19.6	9.45 0.2286 0.3109	6.7	3.3
20.9 9.6 -23.6	21.1 9.2 -23.6	3.27 0.2680 0.2350	0.4	0.3
71.2 18.8 17.3	71.2 19.3 17.5	42.46 0.4166 0.3717	0.5	0.3
71.2 22.2 73.1	71.0 23.0 74.2	42.21 0.5103 0.4425	1.4	0.5
47.7 71.2 16.2	48.0 71.8 16.1	16.76 0.5605 0.2903	0.7	0.3
38.0 55.4 -20.9	38.3 55.4 -21.1	10.26 0.4201 0.2304	0.3	0.3
73.7 -22.8 67.6	73.9 -23.4 69.1	46.50 0.4122 0.5155	1.7	0.4
52.3 -52.3 -20.2	55.3 -32.8 -15.5	23.22 0.2398 0.3490	20.2	7.3
43.3 -17.0 -48.6	45.2 -8.5 -46.2	14.71 0.2022 0.2314	9.1	5.2
95.0 0.0 -2.0	95.1 -0.3 -1.8	87.75 0.3423 0.3557	0.4	0.5
15.7 -3.1 11.7	16.6 -2.9 14.0	2.21 0.4016 0.4434	2.4	1.6
34.7 28.5 -4.0	34.8 29.9 -4.5	8.40 0.4197 0.2964	1.4	0.6
25.8 -11.0 -14.4	25.7 -10.8 -14.3	4.66 0.2485 0.3102	0.3	0.2
Average			1.7	0.8
Gamut-Volume				93 %

Measurement Data

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

RGB	XYZ	Yxy
255 255 255	155.40 162.81 158.96	162.81 0.3257 0.3412
0 0 0	0.12 0.13 0.13	0.13 0.3163 0.3450
12 12 12	0.69 0.72 0.75	0.72 0.3199 0.3336
25 25 25	2.46 2.55 2.47	2.55 0.3283 0.3416
38 38 38	5.14 5.39 5.21	5.39 0.3265 0.3424
51 51 51	8.61 8.99 8.88	8.99 0.3252 0.3395
63 63 63	12.74 13.28 12.99	13.28 0.3267 0.3404
76 76 76	17.46 18.23 17.96	18.23 0.3254 0.3398
89 89 89	23.36 24.41 23.87	24.41 0.3261 0.3407
102 102 102	30.09 31.45 30.51	31.45 0.3269 0.3417
114 114 114	36.71 38.54 37.43	38.54 0.3258 0.3420
127 127 127	44.25 46.38 45.38	46.38 0.3254 0.3410
140 140 140	52.62 55.01 54.23	55.01 0.3251 0.3399
153 153 153	61.78 64.70 62.92	64.70 0.3262 0.3416
165 165 165	71.30 74.65 73.04	74.65 0.3256 0.3409
178 178 178	81.54 85.71 82.92	85.71 0.3259 0.3426
191 191 191	92.58 96.91 94.19	96.91 0.3263 0.3416
204 204 204	104.34 109.38 107.05	109.38 0.3253 0.3410
216 216 216	115.59 120.83 118.54	120.83 0.3256 0.3404
229 229 229	128.08 134.32 131.00	134.32 0.3256 0.3414
242 242 242	141.95 148.80 144.91	148.80 0.3258 0.3415
0 0 128	7.77 3.11 42.41	3.11 0.1458 0.0584
0 0 255	26.09 10.25 143.12	10.25 0.1454 0.0571
0 128 0	16.88 33.44 3.62	33.44 0.3130 0.6198
0 128 128	24.56 36.73 44.98	36.73 0.2311 0.3457
0 170 255	54.96 66.82 152.38	66.82 0.2005 0.2437
0 255 0	58.40 116.62 12.17	116.62 0.3120 0.6230
0 255 170	71.00 121.44 82.02	121.44 0.2587 0.4425
0 255 255	84.68 126.63 158.02	126.63 0.2293 0.3429
85 85 85	21.57 22.52 22.02	22.52 0.3263 0.3407
128 0 0	20.68 10.80 0.42	10.80 0.6483 0.3384
128 0 128	28.34 13.78 42.78	13.78 0.3338 0.1623
128 128 0	37.23 43.90 3.82	43.90 0.4383 0.5167
128 128 128	44.89 47.12 45.60	47.12 0.3262 0.3424
128 128 255	64.00 54.64 150.64	54.64 0.2377 0.2029
128 255 128	85.81 129.61 53.16	129.61 0.3195 0.4826
170 0 255	60.95 28.21 147.49	28.21 0.2576 0.1192
170 170 170	74.92 78.67 77.10	78.67 0.3248 0.3410
170 255 0	91.98 133.69 12.55	133.69 0.3861 0.5612
170 255 255	118.23 143.72 158.40	143.72 0.2813 0.3419
255 0 0	72.58 37.73 1.17	37.73 0.6510 0.3385
255 0 170	85.55 42.79 73.31	42.79 0.4243 0.2122
255 0 255	99.10 48.03 148.21	48.03 0.3355 0.1626
255 128 128	95.96 73.43 46.20	73.43 0.4451 0.3406
255 170 0	99.59 92.79 6.78	92.79 0.5001 0.4659
255 170 255	126.06 103.34 153.54	103.34 0.3292 0.2699
255 255 0	129.13 152.81 12.97	152.81 0.4379 0.5182
255 255 170	141.80 157.71 83.33	157.71 0.3704 0.4119
170 85 85	45.85 35.03 22.24	35.03 0.4446 0.3397
85 170 85	41.50 62.61 25.66	62.61 0.3198 0.4825
85 85 170	30.90 26.17 73.36	26.17 0.2369 0.2007

85 170 170	50.81 66.29 76.88	66.29 0.2619 0.3418
170 85 170	55.15 38.70 73.59	38.70 0.3293 0.2311
170 170 85	65.75 75.10 26.05	75.10 0.3939 0.4500
0 134 205	36.44 43.41 103.84	43.41 0.1984 0.2363
33 162 219	47.81 60.27 117.15	60.27 0.2123 0.2676
136 195 231	80.88 92.11 130.32	92.11 0.2667 0.3037
188 217 237	107.49 116.78 137.74	116.78 0.2969 0.3226
212 227 240	121.95 129.80 141.62	129.80 0.3100 0.3300
204 6 103	53.40 27.15 29.67	27.15 0.4845 0.2463
213 87 143	69.81 47.29 54.72	47.29 0.4063 0.2752
223 155 190	95.05 82.16 91.63	82.16 0.3536 0.3056
230 197 218	115.57 111.27 118.72	111.27 0.3344 0.3220
233 217 231	126.04 126.55 132.25	126.55 0.3275 0.3288
242 216 30	108.48 119.57 12.43	119.57 0.4511 0.4972
241 221 94	113.66 124.61 33.82	124.61 0.4177 0.4580
238 228 161	121.88 131.77 74.41	131.77 0.3715 0.4017
237 232 203	128.89 136.98 108.25	136.98 0.3445 0.3661
236 235 222	132.68 140.35 125.09	140.35 0.3333 0.3525
215 216 220	115.56 120.74 121.36	120.74 0.3231 0.3376
194 195 199	96.59 100.86 102.26	100.86 0.3223 0.3365
152 153 155	61.80 64.75 64.56	64.75 0.3234 0.3388
110 110 112	34.65 36.22 36.22	36.22 0.3235 0.3382
68 68 69	14.46 15.18 15.17	15.18 0.3227 0.3388
30 30 30	3.62 3.79 3.61	3.79 0.3286 0.3437
34 16 21	2.66 1.91 1.72	1.91 0.4231 0.3029
99 46 37	16.69 12.40 5.22	12.40 0.4864 0.3614
67 64 36	11.88 13.17 5.29	13.17 0.3915 0.4343
42 36 106	10.06 7.08 31.01	7.08 0.2089 0.1471
82 70 137	23.75 19.63 49.72	19.63 0.2551 0.2109
140 131 182	55.68 52.51 83.69	52.51 0.2902 0.2737
185 181 213	90.66 91.03 113.79	91.03 0.3068 0.3081
210 208 228	111.87 114.36 128.54	114.36 0.3153 0.3224
201 19 33	48.44 25.80 4.44	25.80 0.6157 0.3279
212 82 65	61.24 42.40 14.59	42.40 0.5180 0.3586
223 149 129	85.52 75.64 47.55	75.64 0.4098 0.3624
231 194 183	109.58 107.24 88.16	107.24 0.3593 0.3516
233 215 212	122.19 123.86 115.26	123.86 0.3382 0.3428
0 125 56	17.90 32.86 12.55	32.86 0.2827 0.5191
59 152 94	32.41 50.00 28.91	50.00 0.2911 0.4492
142 188 154	68.49 83.61 65.52	83.61 0.3147 0.3842
191 213 198	100.96 112.10 101.55	112.10 0.3209 0.3563
213 225 220	118.12 127.13 122.13	127.13 0.3215 0.3460
211 215 221	113.74 119.31 122.44	119.31 0.3199 0.3356
187 193 201	93.20 98.01 103.68	98.01 0.3160 0.3324
141 149 156	57.17 60.71 65.02	60.71 0.3126 0.3319
99 107 111	31.27 33.52 35.60	33.52 0.3115 0.3339
63 72 74	14.70 16.12 17.18	16.12 0.3062 0.3358
37 50 51	6.80 7.90 8.84	7.90 0.2888 0.3356
6 24 31	1.58 1.97 3.69	1.97 0.2187 0.2717
83 24 31	11.05 6.86 3.90	6.86 0.5066 0.3147
24 50 36	4.94 7.01 4.99	7.01 0.2915 0.4139
41 41 41	5.89 6.19 5.97	6.19 0.3266 0.3428
84 69 67	17.73 17.09 14.43	17.09 0.3600 0.3469
142 127 124	48.34 48.53 43.66	48.53 0.3440 0.3453
187 178 178	85.14 87.57 83.07	87.57 0.3329 0.3424
211 207 209	108.92 112.71 111.73	112.71 0.3267 0.3381

177 79 65	46.26 33.93 14.30	33.93 0.4896 0.3591
118 65 57	24.78 19.96 11.13	19.96 0.4436 0.3572
113 30 32	18.59 11.49 4.02	11.49 0.5453 0.3370
115 28 64	20.58 12.08 12.79	12.08 0.4529 0.2657
120 101 37	30.27 31.79 6.83	31.79 0.4394 0.4615
0 77 45	7.96 13.87 7.67	13.87 0.2700 0.4701
0 78 97	11.63 15.57 27.01	15.57 0.2145 0.2873
37 35 66	6.24 5.38 13.35	5.38 0.2497 0.2156
204 144 127	75.88 68.73 46.57	68.73 0.3969 0.3595
224 139 35	76.41 67.89 8.48	67.89 0.5001 0.4444
204 14 74	51.41 26.72 16.74	26.72 0.5419 0.2817
139 27 104	30.33 16.59 30.16	16.59 0.3935 0.2152
148 178 43	58.23 75.29 12.17	75.29 0.3997 0.5167
0 130 139	26.37 38.15 52.71	38.15 0.2250 0.3254
0 95 165	22.18 24.47 69.63	24.47 0.1907 0.2104
235 237 241	136.21 142.92 143.55	142.92 0.3223 0.3381
29 30 18	3.17 3.58 1.48	3.58 0.3850 0.4353
101 47 71	19.14 13.59 15.56	13.59 0.3962 0.2815
21 51 64	6.20 7.67 12.79	7.67 0.2327 0.2875