UGRA
Display Analysis & Certification Tool
Report

Basics

Date:	2022-10-2 13:47:41
Report-Version:	v2.0.0
Monitor-Name:	\\.\DISPLAY1
EDID-Name:	PA32DC
EDID-Serial:	N4LMHT000023
Profile:	C:/.../PA32DC-2022-10-02T134058-5800K-18-100%-trc.icm
Created:	2022-10-2 13:40
Measurement device:	i1Pro, Rev. 3, Serial: 1107951
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

Softproof quality (depends on the calibration verification)

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

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

Diagram

White-Point

Gray Balance

Tone values

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 2.0 dE00.

XYZ (measured):	151.93 159.38 154.55
XYZ (normalized):	95.32 100.00 96.97
xy:	0.3261 0.3421
Luminance:	159.4 Cd/m2
Next Temperature:	5781 Kelvin
Reference Whitepoint:	5800.0 Kelvin
Deviation XYZ to Reference Whitepoint:	0.4 dE00
	0.4 dE76

Blackpoint

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

Luminance:	0.0 Cd/m2
Chromaticity:	0.5 Chroma (Lab)

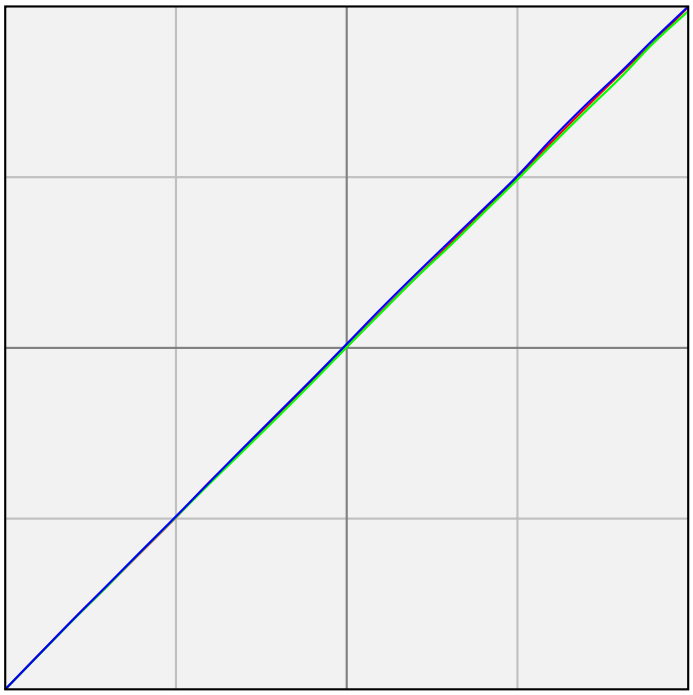
Gray balance

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	0	0.03	0.15	0.52		
5	5234	0.61	3.46	1.11	1.89	-0.2
10	5402	2.32	12.34	1.41	1.85	-0.4
15	5506	5.10	20.82	1.34	1.83	-0.2
20	5823	8.82	28.20	1.27	1.81	+0.1
25	5793	12.76	34.00	0.40	1.83	-0.1
30	5755	18.01	40.08	0.17	1.81	-0.0
35	5802	23.86	45.59	0.48	1.81	-0.1
40	5698	30.80	51.07	0.51	1.80	+0.1
45	5786	37.40	55.55	0.20	1.82	+0.0
50	5768	45.32	60.28	0.38	1.82	-0.1
55	5732	54.02	64.88	0.63	1.81	-0.1
60	5781	64.11	69.63	0.05	1.78	+0.3
65	5797	72.83	73.35	0.34	1.82	+0.0
70	5802	83.90	77.66	0.47	1.80	+0.2
75	5781	94.52	81.46	0.15	1.81	-0.1
80	5746	106.69	85.48	0.69	1.79	+0.0
85	5773	118.51	89.09	0.08	1.83	+0.1
90	5733	131.23	92.73	0.65	1.84	-0.0
95	5795	145.53	96.54	0.24	1.78	+0.1
100	5781	159.38	100.00	0.00		
Average	5773			0.39	1.82	0.1
Max				1.27		0.3
Range				1.93		

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 = 98.4%

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: 0.3261 0.3421).

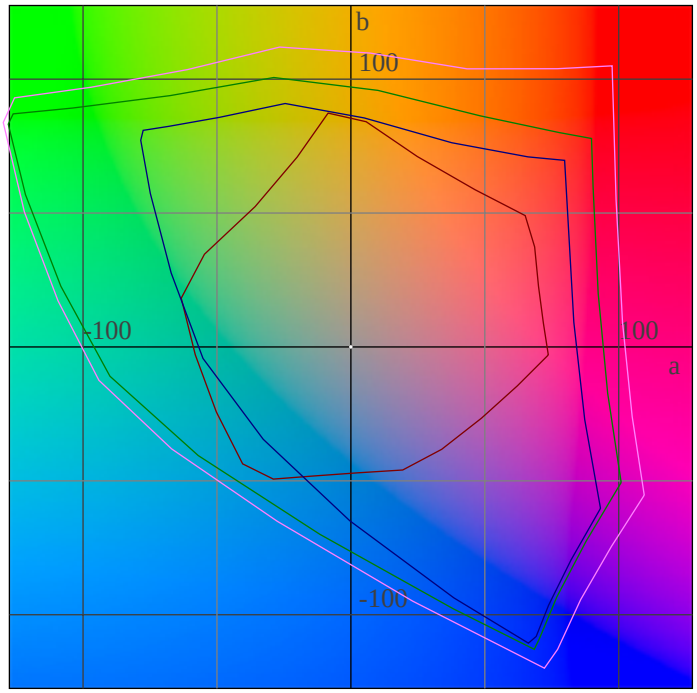
The assumed chromatic adaptation is: Bradford

RGB	Lab	deltaLab	dE76	dE00
0 0 0	0.2 0.4 0.4	-0.2 -0.4 -0.4	0.6	0.7
0 0 128	12.4 48.8 -80.1	-0.1 0.7 -0.2	0.8	0.3
0 0 255	27.0 74.4 -121.3	-0.1 0.4 -0.2	0.5	0.2
0 128 0	50.4 -86.8 61.3	0.3 -0.2 0.0	0.4	0.3
0 128 128	52.3 -58.6 -14.8	0.1 -0.3 0.4	0.5	0.3
0 170 255	67.1 -44.1 -54.6	-0.0 -0.1 0.1	0.1	0.1
0 255 0	84.7 -132.0 92.7	0.2 0.3 0.1	0.4	0.2
0 255 170	86.0 -109.3 15.5	0.1 0.3 0.1	0.3	0.1
0 255 255	87.3 -88.9 -22.1	0.1 -0.1 0.4	0.4	0.2
85 85 85	44.0 -0.4 0.1	0.0 0.4 -0.1	0.4	0.6
128 0 0	34.8 65.2 60.8	0.1 0.0 -0.7	0.8	0.3
128 0 128	37.7 72.6 -36.7	-0.1 0.1 -0.1	0.2	0.1
128 128 0	59.3 -9.7 76.5	0.1 -0.8 -0.1	0.8	0.5
128 128 128	60.8 0.5 -0.0	-0.1 -0.5 0.0	0.5	0.7
128 128 255	63.8 21.7 -59.6	-0.0 -0.6 0.3	0.7	0.3
128 255 128	89.8 -73.0 43.0	-0.1 -0.2 0.1	0.2	0.1
170 0 255	50.7 94.0 -80.6	0.1 0.3 0.3	0.4	0.2
170 170 170	75.1 -0.4 0.2	-0.1 0.4 -0.2	0.5	0.7
170 255 0	91.5 -59.5 104.6	0.1 0.3 -0.1	0.3	0.1
170 255 255	93.8 -36.1 -10.8	0.0 0.2 0.2	0.3	0.1
255 0 0	60.8 98.5 106.2	0.1 0.2 -1.1	1.2	0.4
255 0 170	63.0 104.1 -16.7	0.0 0.2 -0.3	0.4	0.1
255 0 255	65.1 109.8 -55.6	-0.0 0.2 0.0	0.2	0.0
255 128 128	75.9 57.2 26.1	-0.1 -0.4 0.0	0.4	0.2
255 170 0	82.3 29.4 106.7	-0.0 -0.0 -0.6	0.6	0.1
255 170 255	85.1 44.8 -23.6	-0.1 -0.0 -0.0	0.1	0.1
255 255 0	97.9 -15.8 115.6	0.1 -0.1 -0.1	0.2	0.1
255 255 170	99.0 -8.0 38.0	-0.0 -0.0 -0.2	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	55.9 44.7 20.8	0.0 -0.0 -0.2	0.2	0.1
85 170 85	67.0 -58.4 34.3	-0.1 0.8 -0.3	0.9	0.2
85 85 170	46.3 16.6 -47.0	0.1 0.1 0.3	0.3	0.2
85 170 170	68.2 -43.0 -11.6	-0.1 0.7 -0.2	0.7	0.3
170 85 170	57.6 52.7 -27.3	0.0 -0.1 0.0	0.1	0.0
170 170 85	74.0 -9.2 46.5	-0.1 0.4 -0.5	0.6	0.3
Average			0.4	0.2
Maximum			1.2	0.7

Gamut-Volume

These measurements are only informative.

ISO Coated v2 (FOGRA39L)	100 %
sRGB	100 %
AdobeRGB	100 %
ECI-RGB v2.0	98 %



AdobeRGB
sRGB
ISO Coated v2 (FOGRA39L)
Monitor

Softproof Quality

The measurements are converted to Lab values based on the measured whitepoint (xy: 0.3261 0.3421) 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	0.6
Maximum		4.0	2.4
Primaries		5.0	0.9
Composite Gray Max		3.0	2.4

Reference (Lab)	Measurement (Lab)	Measurement (Yxy)	dE76	dE00
55.0 -37.0 -50.0	55.0 -35.0 -50.0	22.95 0.1685 0.2516	2.0	0.8
66.9 -24.7 -37.1	66.8 -25.1 -37.4	36.41 0.2257 0.2914	0.5	0.2
79.7 -12.5 -21.8	79.8 -12.3 -21.7	56.36 0.2863 0.3252	0.2	0.2
87.7 -5.8 -11.8	87.8 -5.9 -11.9	71.69 0.3165 0.3415	0.2	0.1
91.5 -3.0 -7.0	91.4 -2.5 -7.6	79.34 0.3295 0.3474	0.8	0.8
48.0 74.0 -3.0	48.0 74.0 -2.4	16.77 0.5113 0.2599	0.6	0.2
60.8 50.6 -6.7	61.0 50.7 -6.4	29.27 0.4311 0.2918	0.4	0.2
76.4 25.8 -6.9	76.5 26.0 -6.5	50.73 0.3764 0.3231	0.4	0.3
86.2 12.0 -5.2	86.2 12.2 -5.4	68.43 0.3548 0.3390	0.3	0.2
90.7 5.9 -3.9	90.8 6.3 -3.5	78.12 0.3491 0.3476	0.6	0.6
89.0 -5.0 93.0	89.0 -5.1 93.7	74.13 0.4604 0.4939	0.7	0.1
90.3 -4.7 62.6	90.2 -4.0 62.5	76.70 0.4319 0.4598	0.7	0.5
92.2 -3.5 31.1	92.1 -3.1 31.2	80.96 0.3903 0.4130	0.4	0.3
93.6 -1.6 13.3	93.5 -1.0 12.8	84.11 0.3648 0.3808	0.8	0.8
94.3 -0.9 5.4	94.3 -0.7 5.3	85.98 0.3533 0.3680	0.3	0.4
89.0 0.0 -1.8	89.1 0.3 -2.2	74.37 0.3424 0.3544	0.5	0.5
82.8 0.0 -1.7	82.6 0.2 -2.3	61.44 0.3419 0.3540	0.7	0.7
69.3 0.0 -1.4	69.6 -0.4 -1.1	40.12 0.3427 0.3565	0.5	0.6
54.1 0.0 -1.0	54.2 0.0 -0.9	22.13 0.3434 0.3560	0.1	0.1
36.6 -0.0 -0.5	36.5 0.4 -0.3	9.25 0.3459 0.3567	0.5	0.7
16.0 0.0 0.0	15.9 0.0 0.9	2.07 0.3510 0.3638	0.9	0.9
10.4 13.9 1.4	10.1 14.9 2.3	1.13 0.4511 0.3218	1.4	1.0
33.4 25.4 20.9	33.5 23.9 22.2	7.75 0.4985 0.3760	2.0	1.5
34.4 -3.3 22.3	34.1 -3.1 22.8	8.06 0.4099 0.4441	0.6	0.4
24.0 22.0 -46.0	24.0 21.6 -46.2	4.09 0.2211 0.1610	0.5	0.3
40.9 17.9 -36.6	40.8 18.3 -36.6	11.77 0.2761 0.2307	0.4	0.3
63.7 10.3 -23.8	63.7 10.9 -24.0	32.45 0.3118 0.2944	0.6	0.4
79.4 5.1 -13.6	79.5 5.3 -13.5	55.89 0.3288 0.3282	0.3	0.3
87.2 2.6 -8.1	87.1 3.6 -8.1	70.12 0.3371 0.3413	1.0	1.3
47.0 68.0 48.0	47.0 68.3 49.7	16.04 0.6255 0.3310	1.8	0.7
58.5 47.1 37.9	58.5 47.2 38.3	26.51 0.5309 0.3649	0.4	0.2
74.2 22.9 21.4	74.5 22.9 22.1	47.50 0.4292 0.3752	0.8	0.5
85.0 10.0 9.8	85.0 10.7 9.7	65.94 0.3797 0.3660	0.7	0.7
90.0 4.7 3.7	90.1 5.0 3.7	76.51 0.3594 0.3608	0.2	0.3
50.0 -65.0 27.0	50.1 -65.5 27.2	18.51 0.2440 0.5542	0.6	0.2
62.1 -39.8 21.0	62.2 -40.2 21.5	30.69 0.3066 0.4652	0.6	0.2
77.0 -19.1 11.0	77.0 -19.1 11.0	51.60 0.3333 0.4001	0.1	0.1
86.3 -8.4 4.2	86.2 -8.1 3.9	68.42 0.3399 0.3728	0.4	0.3
90.8 -4.1 0.9	90.7 -4.0 0.5	77.78 0.3407 0.3627	0.4	0.4
88.5 -0.4 -3.1	88.6 -0.3 -3.5	73.40 0.3393 0.3526	0.4	0.3

82.0 -0.9 -4.1	81.8 -0.6 -4.6	60.00 0.3365 0.3503	0.6	0.6
67.7 -2.0 -4.4	67.9 -1.5 -4.5	37.78 0.3333 0.3501	0.5	0.6
52.2 -2.5 -3.5	52.5 -2.6 -3.1	20.55 0.3317 0.3531	0.5	0.4
37.5 -3.9 -3.1	37.3 -5.1 -2.7	9.69 0.3220 0.3570	1.3	1.5
26.3 -6.8 -3.4	26.4 -8.8 -2.2	4.89 0.3043 0.3660	2.4	2.4
10.4 -8.2 -10.2	10.0 -10.1 -9.5	1.12 0.2269 0.3127	2.1	1.9
24.3 32.7 13.1	24.1 33.7 15.2	4.14 0.5414 0.3294	2.3	1.2
24.7 -17.0 7.5	24.6 -17.8 8.7	4.28 0.3099 0.4437	1.4	0.8
23.0 0.0 0.0	22.6 -0.1 1.2	3.69 0.3506 0.3642	1.2	1.2
38.5 6.6 3.9	38.3 7.8 4.3	10.25 0.3828 0.3597	1.4	1.3
61.5 5.4 3.8	61.5 5.8 4.1	29.87 0.3671 0.3615	0.6	0.5
78.1 2.9 0.9	78.2 2.6 1.3	53.58 0.3525 0.3586	0.4	0.4
86.6 1.5 -0.7	86.5 1.8 -0.8	69.05 0.3470 0.3556	0.4	0.5
53.1 37.7 28.9	53.1 38.4 29.9	21.09 0.5075 0.3658	1.2	0.4
41.5 22.7 16.8	41.5 23.6 16.9	12.19 0.4627 0.3654	0.9	0.5
31.9 40.0 24.0	31.7 39.6 25.5	6.95 0.5630 0.3440	1.6	1.0
32.5 44.4 -1.8	32.6 44.5 -1.9	7.34 0.4775 0.2777	0.1	0.1
51.3 1.3 44.5	51.1 0.9 45.5	19.40 0.4512 0.4635	1.1	0.5
34.6 -36.4 13.9	34.5 -36.5 14.4	8.23 0.2728 0.4913	0.5	0.3
36.0 -26.2 -20.9	35.9 -26.7 -20.6	8.98 0.2062 0.3132	0.6	0.3
20.9 9.6 -23.6	20.5 10.1 -24.3	3.11 0.2667 0.2296	0.9	0.4
71.2 18.8 17.3	71.3 18.8 17.6	42.69 0.4157 0.3725	0.3	0.2
71.2 22.2 73.1	71.1 23.2 74.3	42.40 0.5105 0.4424	1.6	0.5
47.7 71.2 16.2	47.7 71.4 16.7	16.56 0.5621 0.2914	0.5	0.2
38.0 55.4 -20.9	37.7 55.5 -20.8	9.92 0.4220 0.2297	0.3	0.3
73.7 -22.8 67.6	73.8 -22.6 68.6	46.37 0.4132 0.5135	1.0	0.3
52.3 -52.3 -20.2	52.2 -51.9 -20.5	20.35 0.1874 0.3480	0.6	0.3
43.3 -17.0 -48.6	43.4 -17.3 -48.8	13.39 0.1760 0.2252	0.4	0.2
95.0 0.0 -2.0	95.1 -0.3 -1.9	87.88 0.3422 0.3556	0.4	0.5
15.7 -3.1 11.7	15.3 -3.1 13.4	1.96 0.3999 0.4444	1.7	1.1
34.7 28.5 -4.0	34.9 27.9 -3.1	8.43 0.4189 0.3034	1.2	0.6
25.8 -11.0 -14.4	26.2 -12.2 -13.6	4.83 0.2478 0.3163	1.4	1.2
Average			0.8	0.6
Gamut-Volume				100 %

Measurement Data

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

RGB	XYZ	Yxy
255 255 255	151.93 159.38 154.55	159.38 0.3261 0.3421
0 0 0	0.04 0.03 -0.01	0.03 0.6943 0.4599
12 12 12	0.57 0.61 0.49	0.61 0.3398 0.3664
25 25 25	2.21 2.32 2.07	2.32 0.3349 0.3522
38 38 38	4.85 5.10 4.64	5.10 0.3323 0.3496
51 51 51	8.26 8.82 8.34	8.82 0.3250 0.3469
63 63 63	12.10 12.76 12.29	12.76 0.3258 0.3435
76 76 76	17.20 18.01 17.44	18.01 0.3267 0.3420
89 89 89	22.63 23.86 23.01	23.86 0.3256 0.3433
102 102 102	29.44 30.80 29.54	30.80 0.3280 0.3431
114 114 114	35.59 37.40 36.18	37.40 0.3260 0.3426
127 127 127	43.11 45.32 43.65	45.32 0.3264 0.3431
140 140 140	51.78 54.02 52.43	54.02 0.3272 0.3414
153 153 153	61.09 64.11 62.12	64.11 0.3261 0.3422
165 165 165	69.25 72.83 70.50	72.83 0.3258 0.3426
178 178 178	79.71 83.90 81.17	83.90 0.3256 0.3428
191 191 191	90.18 94.52 91.81	94.52 0.3261 0.3418
204 204 204	102.18 106.69 103.68	106.69 0.3269 0.3414
216 216 216	112.99 118.51 114.78	118.51 0.3263 0.3422
229 229 229	125.61 131.23 127.03	131.23 0.3272 0.3419
242 242 242	138.52 145.53 141.09	145.53 0.3258 0.3423
0 0 128	7.24 2.68 41.87	2.68 0.1397 0.0517
0 0 255	25.22 9.27 145.13	9.27 0.1404 0.0516
0 128 0	9.14 29.94 2.65	29.94 0.2190 0.7174
0 128 128	16.56 32.91 44.88	32.91 0.1755 0.3488
0 170 255	40.76 59.92 150.01	59.92 0.1626 0.2390
0 255 0	31.76 104.41 9.34	104.41 0.2183 0.7175
0 255 170	44.03 109.25 79.22	109.25 0.1894 0.4699
0 255 255	57.21 114.00 154.95	114.00 0.1754 0.3495
85 85 85	20.91 22.03 21.28	22.03 0.3255 0.3431
128 0 0	27.21 12.96 -0.05	12.96 0.6783 0.3230
128 0 128	34.67 15.75 42.01	15.75 0.3751 0.1704
128 128 0	36.81 43.26 2.72	43.26 0.4446 0.5225
128 128 128	44.19 46.17 44.79	46.17 0.3270 0.3416
128 128 255	62.18 52.66 148.54	52.66 0.2361 0.1999
128 255 128	67.15 121.19 51.74	121.19 0.2797 0.5048
170 0 255	70.30 30.74 145.20	30.74 0.2855 0.1248
170 170 170	73.29 77.15 74.50	77.15 0.3258 0.3430
170 255 0	77.32 126.46 9.38	126.46 0.3627 0.5933
170 255 255	102.77 135.97 154.91	135.97 0.2611 0.3454
255 0 0	94.13 44.87 0.01	44.87 0.6772 0.3228
255 0 170	106.42 49.43 69.44	49.43 0.4724 0.2194
255 0 255	119.62 54.27 145.16	54.27 0.3749 0.1701
255 128 128	111.66 78.26 44.86	78.26 0.4756 0.3333
255 170 0	110.21 95.82 4.51	95.82 0.5235 0.4551
255 170 255	135.71 105.30 150.10	105.30 0.3470 0.2692
255 255 0	126.51 149.78 9.45	149.78 0.4427 0.5242
255 255 170	139.04 154.75 79.15	154.75 0.3728 0.4150
170 85 85	53.48 37.49 21.26	37.49 0.4765 0.3341
85 170 85	32.00 58.45 24.56	58.45 0.2783 0.5082
85 85 170	29.46 25.04 71.29	25.04 0.2342 0.1991

85 170 170	40.63 61.53 74.43	61.53 0.2301 0.3484
170 85 170	62.15 40.64 71.22	40.64 0.3572 0.2336
170 170 85	64.59 73.93 24.46	73.93 0.3963 0.4536
0 131 203	26.29 37.40 99.31	37.40 0.1613 0.2295
87 160 217	46.32 58.79 113.25	58.79 0.2121 0.2692
155 194 230	79.49 90.36 126.30	90.36 0.2684 0.3051
197 216 237	105.45 114.57 134.55	114.57 0.2974 0.3231
216 227 240	119.10 126.65 138.33	126.65 0.3101 0.3297
171 33 102	51.62 26.27 27.84	26.27 0.4882 0.2485
186 94 142	67.98 46.30 52.26	46.30 0.4082 0.2780
206 158 189	93.16 80.66 88.56	80.66 0.3551 0.3074
221 199 218	113.03 109.01 115.93	109.01 0.3344 0.3225
229 218 230	123.76 124.49 127.75	124.49 0.3292 0.3311
234 216 42	105.90 117.20 12.33	117.20 0.4498 0.4978
235 221 99	111.02 121.45 33.43	121.45 0.4175 0.4567
235 228 162	119.00 128.55 71.97	128.55 0.3724 0.4023
236 232 204	126.24 133.83 105.19	133.83 0.3456 0.3664
236 235 223	129.76 136.94 121.99	136.94 0.3338 0.3523
215 216 220	113.31 118.56 119.21	118.56 0.3227 0.3377
194 195 199	93.62 97.96 98.91	97.96 0.3223 0.3372
152 153 155	60.82 63.96 63.44	63.96 0.3231 0.3398
110 110 112	33.65 35.28 35.01	35.28 0.3238 0.3394
68 68 69	14.14 14.75 14.46	14.75 0.3262 0.3402
30 30 30	3.14 3.30 3.04	3.30 0.3315 0.3479
30 17 21	2.49 1.79 1.50	1.79 0.4300 0.3099
87 49 38	15.90 12.20 4.84	12.20 0.4827 0.3702
66 64 37	11.50 12.78 4.92	12.78 0.3938 0.4375
41 37 105	9.51 6.71 29.58	6.71 0.2077 0.1465
80 71 135	22.99 18.97 47.32	18.97 0.2575 0.2125
138 132 181	55.01 51.95 81.50	51.95 0.2919 0.2757
185 182 212	88.85 89.24 109.55	89.24 0.3089 0.3103
210 208 227	109.54 111.87 123.89	111.87 0.3172 0.3240
169 37 35	46.77 24.93 4.01	24.93 0.6177 0.3293
184 89 67	59.65 41.61 14.19	41.61 0.5167 0.3605
205 152 129	84.61 75.20 46.38	75.20 0.4103 0.3647
221 195 183	107.19 104.80 85.83	104.80 0.3599 0.3519
228 216 212	119.79 121.80 111.15	121.80 0.3396 0.3453
33 122 58	12.60 29.62 12.45	29.62 0.2306 0.5418
92 149 95	31.53 48.99 28.01	48.99 0.2905 0.4514
155 187 154	67.44 82.28 64.26	82.28 0.3152 0.3845
197 212 198	98.19 109.08 98.73	109.08 0.3209 0.3565
216 225 220	115.12 124.01 119.13	124.01 0.3213 0.3461
212 215 221	111.49 117.06 120.15	117.06 0.3197 0.3357
189 193 201	91.03 95.71 100.53	95.71 0.3169 0.3332
144 149 156	56.84 60.28 64.01	60.28 0.3138 0.3328
101 107 111	30.50 32.79 34.37	32.79 0.3123 0.3358
65 72 74	13.83 15.48 16.33	15.48 0.3030 0.3392
41 50 51	6.44 7.82 8.24	7.82 0.2862 0.3474
13 24 31	1.33 1.81 3.09	1.81 0.2133 0.2900
71 27 31	10.56 6.49 3.06	6.49 0.5251 0.3227
33 49 36	4.68 6.84 4.43	6.84 0.2933 0.4287
41 41 41	5.60 5.89 5.42	5.89 0.3311 0.3483
80 69 67	17.10 16.28 13.75	16.28 0.3628 0.3455
138 127 124	47.64 47.52 42.01	47.52 0.3473 0.3465
184 178 178	82.92 85.35 80.88	85.35 0.3328 0.3426
209 207 209	106.21 110.05 108.19	110.05 0.3274 0.3392

155 83 66	45.32 33.18 13.69	33.18 0.4916 0.3599
105 67 58	23.99 19.24 10.75	19.24 0.4444 0.3565
96 36 33	17.59 10.87 3.54	10.87 0.5497 0.3398
98 34 64	19.77 11.55 12.18	11.55 0.4545 0.2654
114 101 40	29.05 30.68 6.58	30.68 0.4381 0.4626
34 75 45	7.12 13.16 7.34	13.16 0.2579 0.4763
28 77 96	9.74 14.51 25.86	14.51 0.1944 0.2896
37 35 66	5.92 5.02 12.84	5.02 0.2489 0.2112
189 146 128	74.30 67.66 45.45	67.66 0.3965 0.3610
203 142 41	75.18 66.77 8.28	66.77 0.5004 0.4445
171 35 74	49.63 25.84 15.71	25.84 0.5443 0.2834
117 35 103	28.89 15.70 28.33	15.70 0.3962 0.2153
156 176 49	57.20 73.52 12.03	73.52 0.4007 0.5150
16 126 138	18.06 32.87 50.90	32.87 0.1774 0.3228
25 93 163	17.93 21.88 66.95	21.88 0.1680 0.2049
236 237 241	133.38 140.11 139.91	140.11 0.3226 0.3389
29 30 19	2.73 3.11 1.28	3.11 0.3836 0.4370
89 50 70	18.29 13.34 14.49	13.34 0.3965 0.2893
32 51 64	6.13 7.77 12.47	7.77 0.2324 0.2945