

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2021-8-12 14:50:01
Report-Version: v2.0.0
Monitor-Name: \\.\DISPLAY1
EDID-Name: PA32UCG
EDID-Serial: M4LMQS181287
Profile: C:/Windows/.../PA32UCG-2021-08-12T144438-5800K-18-100%-trc.icm
Created: 2021-8-12 14:44
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



**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):	135.40 141.08 137.03
XYZ (normalized):	95.97 100.00 97.13
xy:	0.3274 0.3412
Luminance:	141.1 Cd/m2
Next Temperature:	5724 Kelvin
Reference Whitepoint:	5800.0 Kelvin
Deviation XYZ to Reference Whitepoint:	1.5 dE00
	1.0 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

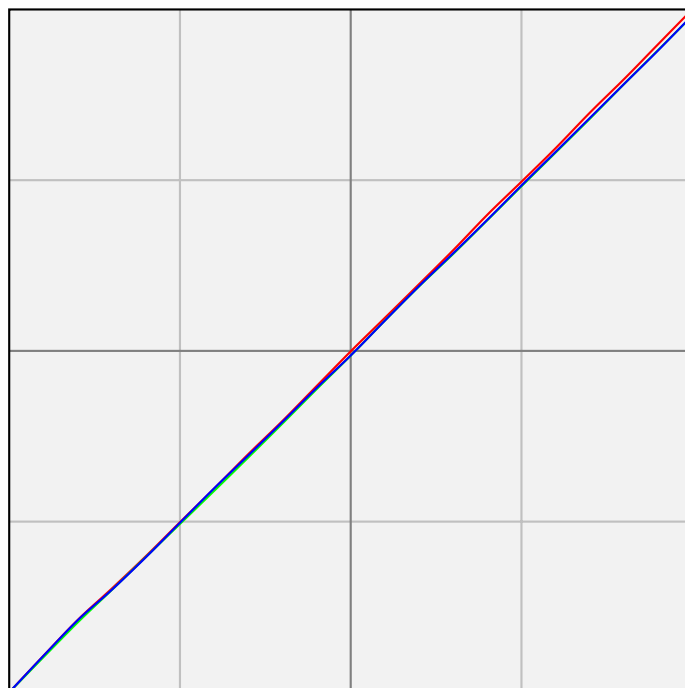
Average and maximum calculation will respect measurements with 1% minimum luminance only. The L-deviation shows the difference between the profile and measurement value.

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	8432	0.12	0.76	0.80		
5	6236	0.77	4.93	1.46	1.78	+1.3
10	5646	2.30	13.42	1.45	1.80	+0.6
15	5733	4.73	21.40	0.20	1.81	+0.4
20	5622	7.84	28.26	0.46	1.81	+0.1
25	5641	11.50	34.30	0.39	1.82	+0.2
30	5735	16.00	40.15	0.43	1.82	+0.1
35	5625	21.15	45.62	0.93	1.81	-0.0
40	5738	26.89	50.75	0.33	1.81	-0.2
45	5660	33.07	55.52	0.62	1.82	-0.0
50	5646	40.15	60.30	0.55	1.82	-0.0
55	5723	48.46	65.24	0.06	1.79	+0.3
60	5730	56.71	69.61	0.13	1.79	+0.2
65	5718	64.42	73.32	0.13	1.82	-0.0
70	5673	74.17	77.62	0.45	1.81	+0.1
75	5686	83.99	81.58	0.33	1.81	+0.1
80	5726	94.55	85.51	0.16	1.80	+0.1
85	5688	104.97	89.11	0.37	1.82	+0.1
90	5697	116.43	92.81	0.30	1.82	+0.1
95	5707	128.49	96.44	0.20	1.82	+0.0
100	5724	141.08	100.00	0.00		
Average	5691			0.34	1.81	0.1
Max				0.93		0.3
Range				1.88		

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 = 97.9%

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: 0.3274 0.3412).

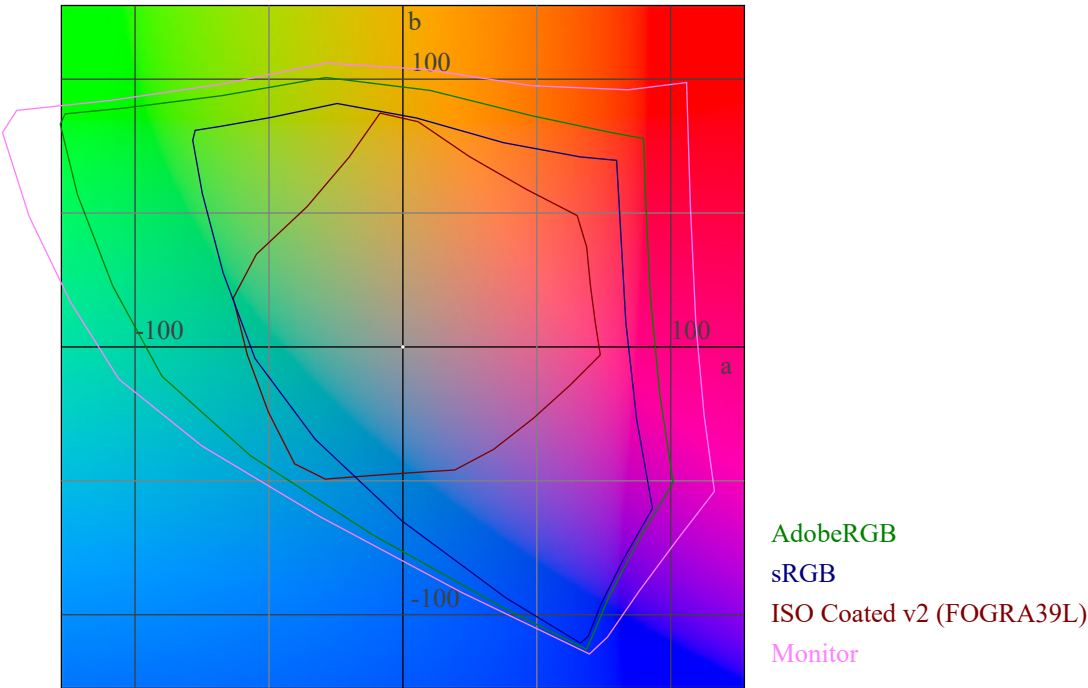
The assumed chromatic adaptation is: Bradford

RGB	Lab	deltaLab	dE76	dE00
0 0 0	0.8 0.3 -0.7	-0.8 -0.3 0.7	1.1	1.0
0 0 128	14.1 46.1 -75.2	-0.0 1.6 -1.5	2.2	0.4
0 0 255	29.1 71.4 -115.6	0.3 0.6 -0.5	0.8	0.3
0 128 0	50.1 -100.0 56.5	0.5 -0.4 1.8	1.9	0.7
0 128 128	52.2 -66.5 -13.9	0.3 0.4 -0.1	0.5	0.3
0 170 255	67.4 -50.8 -52.7	0.2 1.2 -0.2	1.2	0.4
0 255 0	84.4 -153.0 87.1	0.2 1.2 1.0	1.5	0.3
0 255 170	85.9 -125.1 14.8	0.2 1.5 0.3	1.5	0.3
0 255 255	87.4 -101.6 -21.1	0.2 1.6 0.1	1.6	0.3
85 85 85	44.0 0.9 -0.1	0.0 -0.9 0.1	1.0	1.4
128 0 0	34.5 70.4 56.5	0.1 0.4 1.7	1.7	0.6
128 0 128	37.7 77.0 -35.1	0.1 0.2 -0.7	0.8	0.3
128 128 0	59.0 -10.2 71.3	0.2 -0.9 0.9	1.3	0.5
128 128 128	60.7 0.4 0.3	-0.0 -0.4 -0.3	0.6	0.7
128 128 255	64.5 21.8 -57.0	-0.2 -0.0 -0.6	0.6	0.3
128 255 128	89.6 -80.6 41.3	-0.1 -0.9 0.5	1.0	0.2
170 0 255	51.5 98.4 -77.3	0.1 0.1 -0.6	0.6	0.2
170 170 170	75.0 0.4 0.2	-0.1 -0.4 -0.2	0.5	0.6
170 255 0	91.3 -64.6 98.8	-0.0 -0.8 0.1	0.8	0.2
170 255 255	94.0 -39.1 -10.1	-0.1 -0.6 -0.2	0.7	0.2
255 0 0	60.4 107.0 99.4	0.1 0.1 -0.2	0.3	0.1
255 0 170	62.9 111.8 -16.1	0.1 0.1 -0.5	0.6	0.2
255 0 255	65.3 116.7 -53.8	0.2 0.1 -0.3	0.4	0.2
255 128 128	75.7 61.8 25.5	-0.1 0.1 -0.1	0.2	0.1
255 170 0	81.9 33.3 100.0	-0.0 -0.4 -0.1	0.4	0.2
255 170 255	85.2 48.0 -22.6	-0.2 0.4 -0.4	0.6	0.2
255 255 0	97.6 -16.6 109.1	-0.0 -0.3 0.1	0.3	0.1
255 255 170	98.8 -8.2 36.2	0.0 -0.2 0.5	0.5	0.2
255 255 255	100.0 0.0 -0.0	0.0 0.0 0.0	0.0	0.0
170 85 85	55.8 49.3 20.0	-0.1 -0.6 0.0	0.6	0.2
85 170 85	66.7 -63.4 32.5	-0.0 -0.8 0.4	0.9	0.2
85 85 170	46.7 17.6 -44.9	0.1 -0.4 -0.4	0.6	0.5
85 170 170	68.3 -46.7 -11.1	-0.0 -0.3 -0.3	0.4	0.2
170 85 170	57.8 56.6 -26.2	-0.0 -0.2 -0.4	0.5	0.2
170 170 85	73.7 -8.5 44.2	-0.1 -0.7 0.3	0.8	0.4
Average			0.8	0.4
Maximum			2.2	1.4

Gamut-Volume

These measurements are only informative.

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



Softproof Quality

The measurements are converted to Lab values based on the measured whitepoint (xy: 0.3274 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	0.5
Maximum		4.0	1.5
Primaries		5.0	1.4
Composite Gray Max		3.0	1.4

Reference (Lab)	Measurement (Lab)	Measurement (Yxy)	dE76	dE00
55.0 -37.0 -50.0	54.7 -37.6 -50.0	22.67 0.1638 0.2523	0.7	0.3
66.9 -24.7 -37.1	66.9 -24.7 -36.5	36.56 0.2280 0.2933	0.6	0.2
79.7 -12.5 -21.8	79.7 -12.6 -21.8	56.08 0.2856 0.3251	0.1	0.1
87.7 -5.8 -11.8	87.8 -5.5 -11.5	71.61 0.3177 0.3420	0.4	0.3
91.5 -3.0 -7.0	91.7 -2.7 -6.7	80.12 0.3307 0.3490	0.5	0.4
48.0 74.0 -3.0	47.8 73.7 -3.0	16.65 0.5095 0.2591	0.3	0.2
60.8 50.6 -6.7	60.9 51.0 -6.6	29.10 0.4312 0.2909	0.5	0.2
76.4 25.8 -6.9	76.4 25.5 -7.0	50.51 0.3746 0.3225	0.3	0.2
86.2 12.0 -5.2	86.3 12.5 -5.0	68.59 0.3559 0.3394	0.5	0.4
90.7 5.9 -3.9	90.7 6.4 -4.0	77.93 0.3484 0.3466	0.6	0.6
89.0 -5.0 93.0	89.2 -4.5 92.4	74.56 0.4603 0.4918	0.8	0.3
90.3 -4.7 62.6	90.3 -4.1 62.0	76.96 0.4310 0.4593	0.8	0.4
92.2 -3.5 31.1	92.4 -3.2 30.6	81.61 0.3891 0.4120	0.7	0.3
93.6 -1.6 13.3	93.7 -1.7 13.2	84.62 0.3644 0.3820	0.1	0.1
94.3 -0.9 5.4	94.4 -0.6 5.2	86.31 0.3532 0.3677	0.4	0.5
89.0 0.0 -1.8	89.1 0.4 -1.6	74.46 0.3434 0.3554	0.4	0.6
82.8 0.0 -1.7	82.9 0.4 -1.7	61.94 0.3432 0.3550	0.4	0.6
69.3 0.0 -1.4	69.7 -0.4 -1.1	40.27 0.3426 0.3565	0.6	0.7
54.1 0.0 -1.0	54.0 0.6 -1.3	21.97 0.3435 0.3543	0.7	0.9
36.6 -0.0 -0.5	36.5 -0.4 -0.5	9.26 0.3429 0.3574	0.4	0.6
16.0 0.0 0.0	16.8 0.7 -0.8	2.26 0.3447 0.3520	1.4	1.4
10.4 13.9 1.4	11.2 15.0 0.1	1.30 0.4321 0.3124	1.8	1.3
33.4 25.4 20.9	33.5 26.0 20.2	7.76 0.4990 0.3664	1.0	0.7
34.4 -3.3 22.3	34.5 -4.2 21.7	8.25 0.4027 0.4427	1.1	1.0
24.0 22.0 -46.0	24.2 21.1 -45.6	4.17 0.2226 0.1636	1.1	0.5
40.9 17.9 -36.6	40.9 16.7 -36.0	11.81 0.2745 0.2337	1.3	0.6
63.7 10.3 -23.8	63.8 10.1 -23.5	32.59 0.3116 0.2962	0.4	0.2
79.4 5.1 -13.6	79.7 5.4 -13.4	56.07 0.3292 0.3285	0.4	0.4
87.2 2.6 -8.1	87.2 3.2 -8.2	70.47 0.3363 0.3413	0.6	0.8
47.0 68.0 48.0	46.8 67.9 47.4	15.91 0.6220 0.3297	0.6	0.3
58.5 47.1 37.9	58.5 47.5 37.9	26.48 0.5308 0.3640	0.4	0.2
74.2 22.9 21.4	74.5 22.2 21.5	47.46 0.4268 0.3748	0.8	0.5
85.0 10.0 9.8	85.1 10.4 9.6	66.22 0.3790 0.3662	0.5	0.4
90.0 4.7 3.7	90.1 5.4 3.5	76.44 0.3597 0.3601	0.7	0.8
50.0 -65.0 27.0	49.9 -64.2 26.7	18.36 0.2461 0.5506	0.8	0.2
62.1 -39.8 21.0	62.3 -40.0 20.7	30.78 0.3056 0.4626	0.4	0.2
77.0 -19.1 11.0	77.0 -19.1 10.5	51.57 0.3324 0.3990	0.5	0.3
86.3 -8.4 4.2	86.6 -8.1 4.3	69.11 0.3405 0.3734	0.3	0.3
90.8 -4.1 0.9	91.0 -4.0 1.2	78.42 0.3417 0.3638	0.4	0.3
88.5 -0.4 -3.1	88.7 -0.4 -3.1	73.47 0.3399 0.3534	0.1	0.1

82.0 -0.9 -4.1	82.0 -0.5 -4.3	60.36 0.3371 0.3508	0.5	0.6
67.7 -2.0 -4.4	68.0 -1.8 -4.4	37.99 0.3330 0.3505	0.4	0.4
52.2 -2.5 -3.5	52.0 -2.2 -4.0	20.15 0.3302 0.3503	0.6	0.6
37.5 -3.9 -3.1	37.5 -4.9 -2.7	9.84 0.3225 0.3568	1.2	1.4
26.3 -6.8 -3.4	26.5 -8.0 -2.7	4.92 0.3052 0.3617	1.4	1.4
10.4 -8.2 -10.2	11.3 -8.5 -9.8	1.30 0.2386 0.3099	1.0	0.7
24.3 32.7 13.1	24.1 32.3 12.3	4.12 0.5254 0.3256	0.9	0.5
24.7 -17.0 7.5	24.7 -16.2 6.6	4.31 0.3088 0.4288	1.2	0.7
23.0 0.0 0.0	22.8 0.3 0.5	3.74 0.3494 0.3603	0.7	0.7
38.5 6.6 3.9	38.6 5.6 4.2	10.40 0.3757 0.3632	1.1	1.2
61.5 5.4 3.8	61.7 5.6 4.2	30.08 0.3669 0.3620	0.6	0.5
78.1 2.9 0.9	78.2 3.8 1.1	53.62 0.3541 0.3572	0.9	1.1
86.6 1.5 -0.7	86.7 1.5 -0.6	69.37 0.3470 0.3563	0.2	0.1
53.1 37.7 28.9	52.9 38.5 29.0	21.00 0.5059 0.3641	0.8	0.4
41.5 22.7 16.8	41.6 22.1 17.3	12.27 0.4595 0.3689	0.8	0.6
31.9 40.0 24.0	31.8 39.6 23.3	7.01 0.5561 0.3403	0.7	0.3
32.5 44.4 -1.8	32.7 43.3 -1.7	7.38 0.4742 0.2802	1.2	0.4
51.3 1.3 44.5	51.3 2.3 43.7	19.55 0.4513 0.4573	1.3	0.8
34.6 -36.4 13.9	34.5 -36.2 14.1	8.25 0.2735 0.4893	0.4	0.2
36.0 -26.2 -20.9	35.9 -25.4 -20.4	8.97 0.2098 0.3125	0.9	0.4
20.9 9.6 -23.6	21.2 8.8 -22.9	3.30 0.2702 0.2386	1.1	0.5
71.2 18.8 17.3	71.7 18.4 17.7	43.21 0.4148 0.3731	0.8	0.6
71.2 22.2 73.1	71.4 21.2 72.8	42.70 0.5050 0.4444	1.0	0.5
47.7 71.2 16.2	47.7 70.7 16.0	16.55 0.5587 0.2913	0.6	0.2
38.0 55.4 -20.9	38.0 54.5 -21.0	10.07 0.4185 0.2307	0.8	0.3
73.7 -22.8 67.6	73.5 -22.8 67.4	45.93 0.4117 0.5126	0.3	0.1
52.3 -52.3 -20.2	52.2 -51.6 -20.7	20.33 0.1875 0.3471	0.9	0.4
43.3 -17.0 -48.6	43.2 -16.7 -48.7	13.32 0.1771 0.2251	0.3	0.2
95.0 0.0 -2.0	95.1 0.2 -1.7	87.91 0.3432 0.3555	0.4	0.4
15.7 -3.1 11.7	16.1 -1.9 10.8	2.12 0.3931 0.4248	1.5	1.5
34.7 28.5 -4.0	34.8 29.2 -3.6	8.40 0.4211 0.3000	0.8	0.4
25.8 -11.0 -14.4	25.9 -9.8 -13.9	4.73 0.2540 0.3114	1.3	1.0
Average			0.7	0.5
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	135.40 141.08 137.03	141.08 0.3274 0.3412
0 0 0	0.13 0.12 0.18	0.12 0.2988 0.2805
12 12 12	0.76 0.77 0.86	0.77 0.3184 0.3216
25 25 25	2.27 2.30 2.33	2.30 0.3293 0.3331
38 38 38	4.52 4.73 4.57	4.73 0.3272 0.3421
51 51 51	7.53 7.84 7.48	7.84 0.3296 0.3431
63 63 63	11.09 11.50 11.09	11.50 0.3292 0.3415
76 76 76	15.28 16.00 15.44	16.00 0.3271 0.3425
89 89 89	20.51 21.15 20.56	21.15 0.3296 0.3399
102 102 102	25.86 26.89 26.30	26.89 0.3271 0.3402
114 114 114	31.93 33.07 32.10	33.07 0.3288 0.3406
127 127 127	38.69 40.15 38.71	40.15 0.3291 0.3416
140 140 140	46.49 48.46 47.03	48.46 0.3274 0.3413
153 153 153	54.37 56.71 55.05	56.71 0.3273 0.3414
165 165 165	61.79 64.42 62.44	64.42 0.3275 0.3415
178 178 178	71.38 74.17 71.71	74.17 0.3285 0.3414
191 191 191	80.74 83.99 81.25	83.99 0.3283 0.3415
204 204 204	90.65 94.55 91.71	94.55 0.3274 0.3414
216 216 216	100.96 104.97 101.68	104.97 0.3282 0.3413
229 229 229	111.94 116.43 112.89	116.43 0.3280 0.3412
242 242 242	123.45 128.49 124.66	128.49 0.3278 0.3412
0 0 128	6.78 2.73 35.33	2.73 0.1511 0.0608
0 0 255	23.57 9.26 124.57	9.26 0.1497 0.0588
0 128 0	6.51 26.09 3.01	26.09 0.1827 0.7328
0 128 128	13.35 29.02 38.92	29.02 0.1642 0.3570
0 170 255	34.51 53.45 130.18	53.45 0.1582 0.2450
0 255 0	22.62 91.74 10.08	91.74 0.1818 0.7372
0 255 170	33.97 96.22 70.75	96.22 0.1690 0.4789
0 255 255	46.25 101.13 135.83	101.13 0.1633 0.3571
85 85 85	18.90 19.48 19.00	19.48 0.3294 0.3395
128 0 0	25.31 11.33 0.31	11.33 0.6849 0.3067
128 0 128	32.18 13.99 35.92	13.99 0.3921 0.1704
128 128 0	32.26 37.81 3.14	37.81 0.4407 0.5165
128 128 128	39.35 40.85 39.37	40.85 0.3291 0.3416
128 128 255	56.52 47.76 128.88	47.76 0.2424 0.2048
128 255 128	56.11 106.56 47.19	106.56 0.2674 0.5078
170 0 255	66.19 28.25 125.26	28.25 0.3013 0.1286
170 170 170	65.64 68.21 65.95	68.21 0.3285 0.3414
170 255 0	66.07 111.26 10.20	111.26 0.3523 0.5933
170 255 255	90.24 120.90 136.53	120.90 0.2596 0.3477
255 0 0	87.84 39.19 0.57	39.19 0.6884 0.3071
255 0 170	99.37 43.72 60.70	43.72 0.4876 0.2145
255 0 255	111.57 48.45 125.82	48.45 0.3903 0.1695
255 128 128	102.09 69.04 40.18	69.04 0.4831 0.3267
255 170 0	99.67 83.87 5.34	83.87 0.5277 0.4441
255 170 255	123.66 93.73 131.73	93.73 0.3542 0.2685
255 255 0	111.54 131.64 10.51	131.64 0.4397 0.5189
255 255 170	123.02 136.13 72.07	136.13 0.3714 0.4110
170 85 85	49.37 33.12 19.24	33.12 0.4853 0.3256
85 170 85	26.90 51.21 22.59	51.21 0.2671 0.5085
85 85 170	26.98 22.65 61.71	22.65 0.2423 0.2034

85 170 170	35.08 54.52 65.58	54.52 0.2261 0.3513
170 85 170	57.46 36.35 62.22	36.35 0.3683 0.2329
170 170 85	57.42 64.88 22.82	64.88 0.3957 0.4471
4 128 205	22.50 32.66 87.36	32.66 0.1579 0.2292
90 158 218	41.53 52.19 99.31	52.19 0.2152 0.2704
156 192 231	70.33 79.56 111.69	79.56 0.2689 0.3041
197 215 237	94.07 101.27 118.44	101.27 0.2998 0.3227
217 227 240	107.01 113.18 122.18	113.18 0.3126 0.3306
165 41 102	45.60 23.18 24.87	23.18 0.4869 0.2475
181 97 142	60.36 40.82 46.35	40.82 0.4092 0.2767
203 159 190	82.43 71.16 78.95	71.16 0.3545 0.3060
220 199 218	101.09 96.74 102.37	96.74 0.3367 0.3223
228 218 231	110.14 109.95 114.02	109.95 0.3296 0.3291
236 218 34	95.39 104.36 11.58	104.36 0.4514 0.4938
236 222 95	99.24 107.88 30.13	107.88 0.4183 0.4547
236 229 161	106.93 114.73 65.20	114.73 0.3728 0.3999
236 233 203	112.72 119.18 93.21	119.18 0.3467 0.3666
236 235 223	116.17 121.69 108.81	121.69 0.3351 0.3510
215 216 220	101.13 105.07 104.85	105.07 0.3251 0.3378
194 195 199	84.16 87.42 87.52	87.42 0.3248 0.3374
152 153 155	54.38 56.82 56.47	56.82 0.3243 0.3389
110 110 112	29.94 31.00 31.13	31.00 0.3252 0.3367
68 68 69	12.48 13.07 12.90	13.07 0.3246 0.3399
30 30 30	3.11 3.19 3.23	3.19 0.3263 0.3344
29 18 21	2.50 1.82 1.77	1.82 0.4112 0.2987
86 50 37	14.59 10.83 4.73	10.83 0.4838 0.3592
66 65 36	10.36 11.59 4.75	11.59 0.3880 0.4341
38 36 106	8.53 6.05 26.13	6.05 0.2095 0.1487
77 71 136	20.17 16.86 41.46	16.86 0.2569 0.2148
136 132 182	48.86 46.18 71.83	46.18 0.2928 0.2768
184 182 213	79.46 79.26 97.20	79.26 0.3105 0.3097
209 208 228	97.89 99.53 110.69	99.53 0.3177 0.3230
164 45 33	41.24 21.98 3.93	21.98 0.6142 0.3274
180 93 65	53.20 36.87 12.72	36.87 0.5175 0.3587
203 154 129	75.00 66.58 41.69	66.58 0.4092 0.3633
220 196 183	95.70 93.20 76.49	93.20 0.3606 0.3512
228 216 212	106.97 107.73 98.80	107.73 0.3412 0.3436
44 120 57	11.35 25.95 11.10	25.95 0.2345 0.5361
97 148 95	28.30 43.44 25.44	43.44 0.2912 0.4470
158 186 154	60.11 72.77 57.56	72.77 0.3157 0.3821
198 212 198	88.38 97.50 87.89	97.50 0.3228 0.3561
217 225 220	103.41 110.66 105.40	110.66 0.3237 0.3464
212 215 221	99.39 103.70 105.97	103.70 0.3216 0.3355
189 193 201	81.65 85.23 89.21	85.23 0.3188 0.3328
144 149 156	50.85 53.66 57.01	53.66 0.3148 0.3322
101 106 111	26.77 28.46 30.54	28.46 0.3121 0.3318
66 72 74	12.53 13.90 14.68	13.90 0.3049 0.3381
41 50 51	5.86 6.95 7.52	6.95 0.2883 0.3420
14 24 31	1.45 1.85 3.14	1.85 0.2249 0.2869
69 29 31	9.19 5.74 3.14	5.74 0.5086 0.3174
34 49 36	4.34 6.08 4.36	6.08 0.2935 0.4115
41 41 41	5.09 5.27 5.00	5.27 0.3311 0.3432
79 70 67	15.04 14.64 12.42	14.64 0.3572 0.3478
138 128 124	42.67 42.37 37.42	42.37 0.3484 0.3460
184 178 178	74.57 75.61 72.01	75.61 0.3356 0.3403
209 207 209	94.89 97.87 95.99	97.87 0.3286 0.3389

152 86 65	40.26 29.29 12.45	29.29 0.4910 0.3572
104 69 57	21.16 17.18 9.48	17.18 0.4425 0.3592
94 38 32	15.78 9.74 3.56	9.74 0.5428 0.3349
95 37 64	17.43 10.32 10.80	10.32 0.4521 0.2676
115 102 38	26.48 27.37 6.39	27.37 0.4396 0.4544
38 74 45	6.42 11.66 6.59	11.66 0.2603 0.4726
31 75 96	8.83 12.81 22.81	12.81 0.1987 0.2882
36 35 66	5.43 4.71 11.33	4.71 0.2530 0.2194
187 148 128	66.76 60.66 40.76	60.66 0.3970 0.3607
201 145 36	66.47 59.61 7.89	59.61 0.4962 0.4449
166 44 74	43.91 22.96 14.27	22.96 0.5412 0.2829
113 39 104	25.78 14.15 25.57	14.15 0.3935 0.2161
159 176 45	50.46 64.43 10.93	64.43 0.4010 0.5121
29 124 139	16.15 29.02 45.29	29.02 0.1786 0.3208
26 91 165	15.96 19.23 58.93	19.23 0.1696 0.2043
236 237 241	119.26 124.06 123.75	124.06 0.3249 0.3380
30 30 19	2.71 2.98 1.50	2.98 0.3773 0.4139
87 51 70	16.50 11.79 13.01	11.79 0.3995 0.2855
33 50 64	5.56 6.73 10.98	6.73 0.2391 0.2891