UGRA
Display Analysis & Certification Tool
Report

Basics

Date:	2019-10-1 01:58:36
Report-Version:	v2.0.0
Monitor-Name:	\\.\DISPLAY1
EDID-Name:	BenQ PD3220U
EDID-Serial:	8BJ00473019
Profile:	C:/.../BenQ_PD3220U-2019-10-01T015109-5800K-18-100%-trc.icm
Created:	2019-10-1 1:51
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

Softproof quality (depends on the calibration verification)

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

The monitor has not 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):	154.51 161.60 157.72
XYZ (normalized):	95.61 100.00 97.60
xy:	0.3261 0.3410
Luminance:	161.6 Cd/m2
Next Temperature:	5785 Kelvin
Reference Whitepoint:	5800.0 Kelvin
Deviation XYZ to Reference Whitepoint:	0.6 dE00
	0.4 dE76

Blackpoint

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

Luminance:	0.2 Cd/m2
Chromaticity:	1.2 Chroma (Lab)

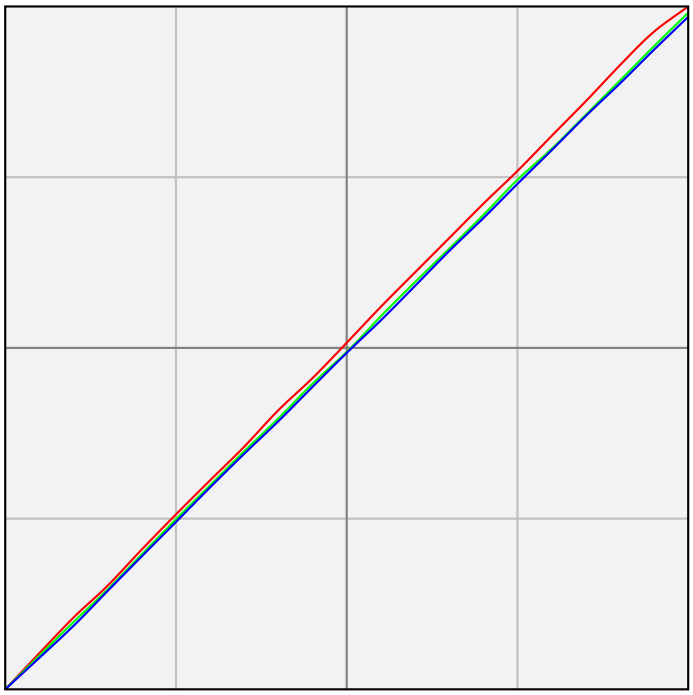
Gray balance

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	9790	0.16	0.90	1.21		
5	6989	0.66	3.70	1.91	1.91	+0.0
10	5588	2.42	12.60	1.43	1.85	-0.2
15	5754	5.19	20.87	0.13	1.83	-0.1
20	5696	8.76	27.91	0.72	1.82	-0.2
25	5707	12.70	33.69	0.59	1.84	-0.4
30	5770	17.92	39.73	0.91	1.83	-0.4
35	5827	24.21	45.61	0.39	1.82	-0.1
40	5727	30.72	50.70	0.47	1.82	-0.2
45	5793	37.38	55.21	0.39	1.83	-0.3
50	5747	45.43	59.99	0.74	1.83	-0.3
55	5744	54.65	64.82	0.64	1.81	-0.1
60	5749	64.24	69.30	0.64	1.80	-0.1
65	5758	73.69	73.29	0.28	1.83	-0.0
70	5766	84.40	77.42	0.25	1.82	-0.1
75	5763	96.00	81.52	0.44	1.81	-0.0
80	5775	107.92	85.39	0.35	1.81	-0.1
85	5771	119.67	88.95	0.19	1.85	-0.1
90	5752	133.17	92.75	0.48	1.83	+0.0
95	5764	147.24	96.46	0.26	1.81	+0.0
100	5785	161.60	100.00	0.00		
Average	5758			0.46	1.83	0.1
Max				0.91		0.4
Range				1.81		

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 = 97.6%

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 0.3410).

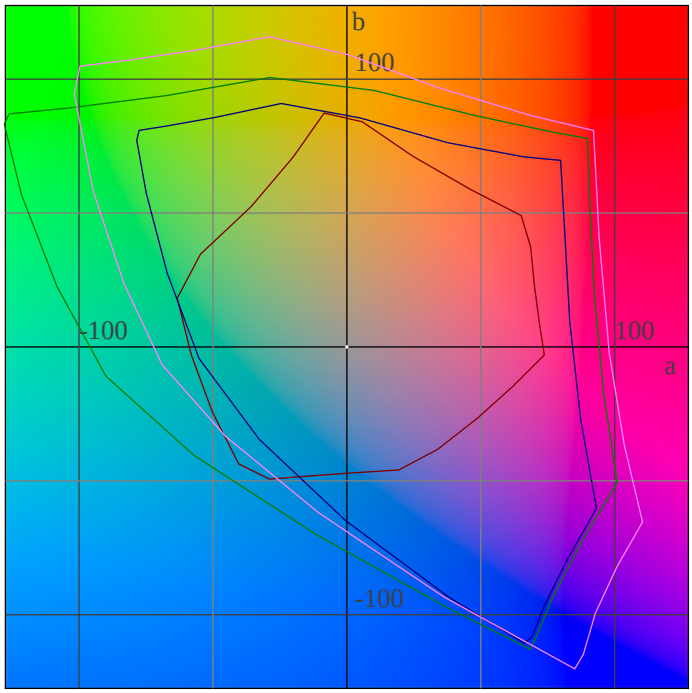
The assumed chromatic adaptation is: Bradford

RGB	Lab	deltaLab	dE76	dE00
0 0 0	0.9 0.5 -1.1	-0.9 -0.5 1.1	1.5	1.4
0 0 128	12.4 58.0 -80.1	0.0 0.1 -0.4	0.4	0.2
0 0 255	26.4 89.5 -122.7	0.5 -1.7 0.9	2.0	0.5
0 128 0	52.4 -67.6 67.1	0.4 -0.7 2.2	2.3	0.6
0 128 128	53.9 -42.0 -10.9	0.4 -0.4 0.3	0.6	0.5
0 170 255	69.1 -25.4 -50.8	0.2 -0.1 0.3	0.3	0.2
0 255 0	88.0 -103.9 104.7	-0.1 0.5 0.1	0.5	0.1
0 255 170	89.1 -83.3 22.3	-0.0 0.5 -0.2	0.5	0.1
0 255 255	90.3 -64.5 -16.1	0.0 0.4 0.0	0.4	0.1
85 85 85	44.1 -0.2 0.1	-0.1 0.2 -0.1	0.3	0.4
128 0 0	31.0 61.5 47.7	-0.1 0.2 1.6	1.7	0.7
128 0 128	34.1 73.3 -43.1	0.1 -0.1 -0.3	0.3	0.1
128 128 0	59.0 -12.6 77.0	0.3 -0.7 1.1	1.4	0.5
128 128 128	60.4 0.6 -0.2	0.3 -0.6 0.2	0.7	1.0
128 128 255	63.4 27.1 -60.3	0.4 -1.0 0.7	1.3	0.5
128 255 128	91.8 -62.0 48.5	-0.0 0.3 -0.4	0.5	0.1
170 0 255	47.0 99.6 -87.7	0.2 -0.9 0.4	0.9	0.2
170 170 170	74.9 0.2 0.0	0.0 -0.2 -0.0	0.2	0.3
170 255 0	93.1 -54.7 111.6	-0.1 0.1 -0.0	0.2	0.1
170 255 255	95.2 -27.9 -8.0	-0.0 -0.0 0.0	0.0	0.0
255 0 0	55.1 93.4 80.2	-0.1 -0.1 0.8	0.8	0.3
255 0 170	57.4 102.7 -27.9	0.0 -0.5 0.0	0.5	0.1
255 0 255	59.8 111.5 -65.9	0.1 -0.7 0.3	0.8	0.1
255 128 128	72.9 50.4 20.3	0.2 -0.8 0.0	0.8	0.3
255 170 0	80.5 21.2 101.8	-0.0 -0.3 0.1	0.3	0.1
255 170 255	83.2 42.3 -27.2	0.0 -0.3 0.1	0.4	0.1
255 255 0	98.1 -20.2 118.4	-0.1 0.1 -0.3	0.3	0.1
255 255 170	99.0 -10.1 38.2	-0.0 0.1 -0.1	0.1	0.0
255 255 255	100.0 0.0 -0.0	0.0 0.0 0.0	0.0	0.0
170 85 85	53.8 39.2 16.3	-0.1 -0.1 -0.3	0.3	0.2
85 170 85	68.4 -48.8 37.9	0.1 0.3 -0.0	0.3	0.1
85 85 170	46.4 20.5 -47.0	0.0 0.1 0.1	0.1	0.1
85 170 170	69.6 -32.2 -8.8	0.1 0.1 0.1	0.2	0.1
170 85 170	55.5 50.6 -31.4	0.0 -0.3 -0.1	0.3	0.1
170 170 85	73.8 -10.8 46.7	-0.0 -0.2 -0.2	0.3	0.2
Average			0.6	0.3
Maximum			2.3	1.4

Gamut-Volume

These measurements are only informative.

ISO Coated v2 (FOGRA39L)	94 %
sRGB	100 %
AdobeRGB	88 %
ECI-RGB v2.0	81 %



AdobeRGB
sRGB
ISO Coated v2 (FOGRA39L)
Monitor

Softproof Quality

The measurements are converted to Lab values based on the measured whitepoint (xy: 0.3261 0.3410) 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	7.2
Primaries		5.0	7.2
Composite Gray Max		3.0	1.2

Reference (Lab)	Measurement (Lab)	Measurement (Yxy)	dE76	dE00
55.0 -37.0 -50.0	57.3 -20.1 -45.9	25.21 0.2039 0.2575	17.6	7.2
66.9 -24.7 -37.1	66.9 -24.7 -37.4	36.44 0.2264 0.2911	0.3	0.1
79.7 -12.5 -21.8	79.8 -12.2 -21.7	56.25 0.2864 0.3251	0.3	0.2
87.7 -5.8 -11.8	87.6 -5.5 -12.1	71.25 0.3167 0.3409	0.4	0.4
91.5 -3.0 -7.0	91.4 -2.7 -7.3	79.44 0.3297 0.3479	0.5	0.5
48.0 74.0 -3.0	48.0 74.7 -2.3	16.82 0.5131 0.2594	1.0	0.3
60.8 50.6 -6.7	60.8 51.1 -7.0	28.98 0.4304 0.2902	0.5	0.2
76.4 25.8 -6.9	76.4 26.0 -7.2	50.54 0.3749 0.3218	0.4	0.2
86.2 12.0 -5.2	86.4 12.6 -5.2	68.70 0.3558 0.3391	0.6	0.5
90.7 5.9 -3.9	90.6 6.7 -3.8	77.64 0.3491 0.3467	0.8	0.9
89.0 -5.0 93.0	89.1 -5.1 93.6	74.35 0.4602 0.4938	0.6	0.1
90.3 -4.7 62.6	90.4 -4.2 62.9	77.24 0.4318 0.4604	0.6	0.3
92.2 -3.5 31.1	92.2 -3.1 31.2	81.17 0.3903 0.4129	0.4	0.3
93.6 -1.6 13.3	93.6 -1.1 13.1	84.45 0.3652 0.3813	0.6	0.7
94.3 -0.9 5.4	94.5 -0.5 5.7	86.34 0.3541 0.3684	0.5	0.6
89.0 0.0 -1.8	88.9 0.5 -2.2	74.06 0.3428 0.3543	0.6	0.8
82.8 0.0 -1.7	82.8 0.4 -1.9	61.85 0.3429 0.3546	0.5	0.6
69.3 0.0 -1.4	69.3 0.5 -1.2	39.76 0.3441 0.3554	0.5	0.8
54.1 0.0 -1.0	53.9 1.0 -1.2	21.87 0.3448 0.3541	1.1	1.5
36.6 -0.0 -0.5	36.4 0.2 -0.8	9.21 0.3436 0.3552	0.5	0.5
16.0 0.0 0.0	16.1 1.2 0.0	2.12 0.3518 0.3554	1.2	1.8
10.4 13.9 1.4	10.1 14.4 0.0	1.13 0.4317 0.3118	1.4	1.0
33.4 25.4 20.9	33.2 25.8 21.4	7.65 0.5030 0.3697	0.7	0.3
34.4 -3.3 22.3	34.0 -2.7 21.8	8.00 0.4085 0.4401	0.9	0.7
24.0 22.0 -46.0	23.8 21.6 -45.7	4.05 0.2223 0.1616	0.5	0.2
40.9 17.9 -36.6	40.9 17.9 -36.4	11.81 0.2758 0.2316	0.2	0.1
63.7 10.3 -23.8	63.8 11.0 -24.0	32.53 0.3121 0.2945	0.7	0.5
79.4 5.1 -13.6	79.3 5.9 -13.7	55.52 0.3292 0.3273	0.8	0.9
87.2 2.6 -8.1	87.2 2.8 -8.0	70.37 0.3361 0.3420	0.3	0.3
47.0 68.0 48.0	47.0 68.5 48.5	16.03 0.6241 0.3297	0.7	0.2
58.5 47.1 37.9	58.7 46.9 37.9	26.68 0.5294 0.3650	0.2	0.2
74.2 22.9 21.4	74.1 23.2 21.6	46.89 0.4290 0.3739	0.3	0.1
85.0 10.0 9.8	85.1 10.5 9.7	66.11 0.3793 0.3662	0.6	0.5
90.0 4.7 3.7	90.0 5.3 3.5	76.26 0.3596 0.3602	0.6	0.7
50.0 -65.0 27.0	50.3 -57.9 28.0	18.70 0.2653 0.5423	7.2	2.3
62.1 -39.8 21.0	62.0 -40.0 20.8	30.35 0.3056 0.4635	0.3	0.2
77.0 -19.1 11.0	77.0 -18.5 11.0	51.53 0.3342 0.3996	0.5	0.3
86.3 -8.4 4.2	86.4 -8.1 4.3	68.87 0.3405 0.3733	0.3	0.3
90.8 -4.1 0.9	90.8 -3.9 0.9	78.15 0.3414 0.3632	0.3	0.3
88.5 -0.4 -3.1	88.5 -0.2 -3.4	73.05 0.3395 0.3526	0.4	0.4

82.0 -0.9 -4.1	82.0 -0.3 -4.3	60.25 0.3374 0.3506	0.6	0.9
67.7 -2.0 -4.4	67.6 -1.1 -4.6	37.42 0.3339 0.3494	0.9	1.2
52.2 -2.5 -3.5	52.1 -1.9 -3.4	20.27 0.3323 0.3515	0.6	0.7
37.5 -3.9 -3.1	37.4 -3.8 -2.8	9.78 0.3251 0.3547	0.3	0.3
26.3 -6.8 -3.4	25.9 -7.1 -3.3	4.70 0.3055 0.3574	0.5	0.5
10.4 -8.2 -10.2	10.5 -7.1 -10.4	1.19 0.2392 0.3009	1.1	1.1
24.3 32.7 13.1	24.1 32.9 13.3	4.13 0.5314 0.3266	0.4	0.2
24.7 -17.0 7.5	24.5 -16.1 7.8	4.24 0.3136 0.4347	1.0	0.7
23.0 0.0 0.0	22.6 0.1 0.0	3.68 0.3462 0.3585	0.4	0.3
38.5 6.6 3.9	38.5 6.1 4.1	10.37 0.3769 0.3619	0.5	0.6
61.5 5.4 3.8	61.2 6.7 3.5	29.48 0.3674 0.3591	1.3	1.4
78.1 2.9 0.9	78.1 3.5 0.9	53.30 0.3533 0.3571	0.6	0.8
86.6 1.5 -0.7	86.5 1.6 -0.7	69.09 0.3470 0.3560	0.2	0.2
53.1 37.7 28.9	53.1 37.5 29.4	21.17 0.5042 0.3664	0.5	0.3
41.5 22.7 16.8	41.3 22.8 16.9	12.06 0.4609 0.3669	0.3	0.2
31.9 40.0 24.0	31.8 40.7 24.2	6.98 0.5621 0.3393	0.8	0.3
32.5 44.4 -1.8	32.4 45.1 -1.6	7.25 0.4808 0.2771	0.7	0.3
51.3 1.3 44.5	51.0 2.3 45.0	19.29 0.4540 0.4596	1.2	0.8
34.6 -36.4 13.9	34.0 -35.1 13.6	8.01 0.2750 0.4859	1.5	0.7
36.0 -26.2 -20.9	35.9 -23.1 -20.3	8.93 0.2158 0.3106	3.1	1.5
20.9 9.6 -23.6	20.8 10.3 -24.1	3.20 0.2690 0.2308	0.9	0.5
71.2 18.8 17.3	71.2 19.6 17.4	42.46 0.4168 0.3713	0.7	0.4
71.2 22.2 73.1	71.2 22.3 73.6	42.53 0.5081 0.4433	0.6	0.1
47.7 71.2 16.2	47.8 71.5 16.4	16.64 0.5613 0.2910	0.4	0.1
38.0 55.4 -20.9	37.9 55.5 -20.5	10.06 0.4232 0.2308	0.5	0.2
73.7 -22.8 67.6	73.7 -22.5 68.6	46.32 0.4136 0.5133	1.0	0.4
52.3 -52.3 -20.2	53.8 -37.8 -17.6	21.81 0.2233 0.3463	14.8	5.1
43.3 -17.0 -48.6	44.2 -8.9 -46.9	13.96 0.1977 0.2277	8.4	4.7
95.0 0.0 -2.0	95.0 0.3 -1.9	87.57 0.3430 0.3551	0.3	0.4
15.7 -3.1 11.7	15.7 -1.8 11.0	2.04 0.3948 0.4257	1.5	1.6
34.7 28.5 -4.0	34.5 29.2 -4.3	8.24 0.4186 0.2975	0.8	0.4
25.8 -11.0 -14.4	25.6 -10.3 -14.8	4.62 0.2482 0.3073	0.9	0.7
Average			1.3	0.8
Gamut-Volume				94 %

Measurement Data

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

RGB	XYZ	Yxy
255 255 255	154.51 161.60 157.72	161.60 0.3261 0.3410
0 0 0	0.18 0.16 0.27	0.16 0.2929 0.2674
12 12 12	0.66 0.66 0.82	0.66 0.3082 0.3081
25 25 25	2.39 2.42 2.43	2.42 0.3305 0.3344
38 38 38	4.96 5.19 5.03	5.19 0.3267 0.3417
51 51 51	8.48 8.76 8.59	8.76 0.3281 0.3393
63 63 63	12.24 12.70 12.40	12.70 0.3278 0.3401
76 76 76	17.30 17.92 17.76	17.92 0.3265 0.3382
89 89 89	23.04 24.21 23.62	24.21 0.3252 0.3416
102 102 102	29.51 30.72 29.92	30.72 0.3274 0.3407
114 114 114	35.84 37.38 36.74	37.38 0.3259 0.3400
127 127 127	43.72 45.43 44.57	45.43 0.3270 0.3398
140 140 140	52.54 54.65 53.47	54.65 0.3270 0.3402
153 153 153	61.74 64.24 62.88	64.24 0.3269 0.3402
165 165 165	70.61 73.69 71.85	73.69 0.3267 0.3409
178 178 178	80.84 84.40 82.37	84.40 0.3265 0.3408
191 191 191	92.07 96.00 93.86	96.00 0.3266 0.3405
204 204 204	103.41 107.92 105.57	107.92 0.3263 0.3405
216 216 216	114.56 119.67 116.75	119.67 0.3264 0.3410
229 229 229	127.72 133.17 129.91	133.17 0.3268 0.3408
242 242 242	141.00 147.24 143.54	147.24 0.3265 0.3410
0 0 128	8.38 2.69 42.58	2.69 0.1561 0.0501
0 0 255	28.99 9.06 149.03	9.06 0.1550 0.0484
0 128 0	13.85 33.04 2.30	33.04 0.2815 0.6718
0 128 128	22.07 35.66 44.69	35.66 0.2155 0.3482
0 170 255	52.23 64.99 152.49	64.99 0.1937 0.2410
0 255 0	48.36 116.45 7.23	116.45 0.2811 0.6769
0 255 170	62.30 120.83 78.71	120.83 0.2379 0.4615
0 255 255	77.27 125.47 156.13	125.47 0.2153 0.3496
85 85 85	21.40 22.44 21.82	22.44 0.3259 0.3418
128 0 0	22.27 10.46 0.62	10.46 0.6676 0.3137
128 0 128	30.59 13.06 43.17	13.06 0.3523 0.1504
128 128 0	36.01 43.43 2.60	43.43 0.4389 0.5293
128 128 128	44.35 46.12 45.21	46.12 0.3269 0.3399
128 128 255	65.08 52.60 151.68	52.60 0.2416 0.1953
128 255 128	79.04 129.51 50.35	129.51 0.3053 0.5002
170 0 255	66.22 26.47 149.89	26.47 0.2730 0.1091
170 170 170	74.49 77.77 75.88	77.77 0.3265 0.3409
170 255 0	85.65 133.88 7.92	133.88 0.3766 0.5886
170 255 255	114.65 142.94 156.97	142.94 0.2766 0.3448
255 0 0	77.29 36.19 1.64	36.19 0.6714 0.3143
255 0 170	91.12 40.44 73.26	40.44 0.4449 0.1974
255 0 255	106.24 45.17 150.78	45.17 0.3516 0.1495
255 128 128	99.34 71.86 46.36	71.86 0.4566 0.3303
255 170 0	100.50 92.05 5.00	92.05 0.5087 0.4660
255 170 255	129.49 101.21 154.15	101.21 0.3365 0.2630
255 255 0	125.48 152.47 8.62	152.47 0.4379 0.5320
255 255 170	139.55 156.95 80.54	156.95 0.3701 0.4163
170 85 85	48.00 34.85 22.25	34.85 0.4567 0.3316
85 170 85	37.84 62.16 24.19	62.16 0.3047 0.5005
85 85 170	31.30 25.51 73.01	25.51 0.2411 0.1965

85 170 170	47.78 65.25 75.36	65.25 0.2536 0.3464
170 85 170	57.92 37.92 73.44	37.92 0.3421 0.2240
170 170 85	64.58 74.69 24.68	74.69 0.3939 0.4556
0 132 203	33.98 41.48 101.08	41.48 0.1925 0.2350
52 161 218	47.39 59.66 115.71	59.66 0.2127 0.2678
142 194 230	80.75 91.42 128.68	91.42 0.2684 0.3039
190 216 237	106.89 115.45 136.89	115.45 0.2976 0.3214
213 227 240	121.14 128.57 140.79	128.57 0.3102 0.3292
191 37 100	52.90 26.75 28.40	26.75 0.4896 0.2476
201 96 141	68.69 46.51 53.56	46.51 0.4070 0.2756
215 159 189	94.44 81.52 91.27	81.52 0.3534 0.3051
226 199 218	115.64 110.96 118.31	110.96 0.3353 0.3217
231 218 230	125.45 125.46 130.33	125.46 0.3291 0.3291
244 215 44	107.91 119.15 12.70	119.15 0.4501 0.4970
243 220 100	113.46 123.98 34.10	123.98 0.4179 0.4566
239 227 163	121.32 130.65 73.67	130.65 0.3726 0.4012
238 232 204	128.83 136.22 107.23	136.22 0.3461 0.3659
237 235 223	132.61 139.41 124.30	139.41 0.3346 0.3518
215 216 220	114.92 119.71 121.07	119.71 0.3231 0.3366
194 195 199	95.94 99.97 100.92	99.97 0.3232 0.3368
152 153 155	61.74 64.27 64.30	64.27 0.3244 0.3377
110 110 112	34.16 35.35 35.58	35.35 0.3251 0.3364
68 68 69	14.28 14.88 14.93	14.88 0.3239 0.3375
30 30 30	3.36 3.43 3.34	3.43 0.3320 0.3382
32 17 21	2.50 1.82 1.79	1.82 0.4094 0.2978
95 49 37	16.37 12.20 5.03	12.20 0.4871 0.3631
67 64 37	11.68 12.86 5.22	12.86 0.3924 0.4320
36 39 104	9.58 6.73 29.65	6.73 0.2085 0.1465
78 73 135	23.37 19.32 48.21	19.32 0.2571 0.2125
137 133 181	56.11 52.80 83.26	52.80 0.2920 0.2748
184 182 212	90.17 89.91 111.56	89.91 0.3092 0.3083
209 209 227	111.27 113.84 126.79	113.84 0.3162 0.3235
189 39 31	47.56 25.29 4.35	25.29 0.6160 0.3276
202 90 65	60.82 42.49 14.77	42.49 0.5151 0.3599
217 152 129	85.14 75.27 47.21	75.27 0.4101 0.3625
227 195 183	109.10 106.54 87.81	106.54 0.3595 0.3511
231 216 212	121.68 123.09 113.41	123.09 0.3397 0.3436
0 120 60	14.39 30.28 12.50	30.28 0.2517 0.5297
76 148 97	31.75 49.09 28.71	49.09 0.2898 0.4481
149 186 155	68.77 83.28 65.48	83.28 0.3161 0.3828
194 212 198	100.55 111.31 100.88	111.31 0.3215 0.3559
215 225 220	117.71 126.32 121.50	126.32 0.3220 0.3456
211 215 221	112.91 118.12 121.98	118.12 0.3198 0.3346
188 193 201	93.14 97.45 102.58	97.45 0.3177 0.3324
142 149 156	57.49 60.53 64.86	60.53 0.3143 0.3310
100 107 111	30.81 32.80 34.88	32.80 0.3129 0.3330
64 72 74	14.42 15.82 16.88	15.82 0.3060 0.3358
38 50 51	6.49 7.62 8.48	7.62 0.2872 0.3374
9 24 31	1.58 1.95 3.49	1.95 0.2244 0.2779
78 28 30	10.60 6.57 3.45	6.57 0.5140 0.3187
29 49 36	4.87 6.86 4.67	6.86 0.2969 0.4182
41 41 41	5.69 5.95 5.80	5.95 0.3266 0.3410
82 70 67	17.21 16.71 14.30	16.71 0.3569 0.3465
141 127 124	48.18 47.56 42.94	47.56 0.3474 0.3429
186 178 178	84.41 86.09 82.64	86.09 0.3335 0.3401
210 207 209	107.94 111.64 110.20	111.64 0.3273 0.3385

169 84 65	45.85 33.79 14.30	33.79 0.4881 0.3597
113 67 57	23.93 19.32 10.83	19.32 0.4426 0.3572
107 36 32	18.17 11.07 3.89	11.07 0.5483 0.3342
108 35 63	20.03 11.58 12.18	11.58 0.4574 0.2644
120 100 40	29.80 30.92 6.82	30.92 0.4412 0.4578
19 74 46	7.20 12.97 7.47	12.97 0.2603 0.4693
0 77 96	10.38 14.62 26.07	14.62 0.2032 0.2863
36 36 66	6.20 5.23 13.30	5.23 0.2508 0.2116
199 146 128	75.57 68.22 46.31	68.22 0.3975 0.3589
218 142 40	76.11 67.93 8.71	67.93 0.4983 0.4447
191 39 72	50.69 26.37 16.28	26.37 0.5431 0.2825
129 39 102	29.70 16.16 28.99	16.16 0.3968 0.2158
156 175 51	58.15 74.42 12.23	74.42 0.4016 0.5139
0 126 139	23.26 35.60 51.83	35.60 0.2101 0.3217
0 94 163	20.85 23.06 67.57	23.06 0.1871 0.2068
235 237 241	135.66 141.55 142.41	141.55 0.3233 0.3373
30 30 19	2.98 3.28 1.63	3.28 0.3778 0.4153
95 51 70	18.54 13.24 15.08	13.24 0.3956 0.2825
24 51 64	6.17 7.54 12.80	7.54 0.2327 0.2845