

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2019-8-25 23:39:13
Report-Version: v2.0.0
Monitor-Name: \\.\DISPLAY1
EDID-Name: BenQ SW270C
EDID-Serial: ETN5K00450SL0
Profile: C:/.../SW270C 1_K5800_L160_G18_2019-08-25T21.13.31Z.icm
Created: 2019-8-25 21:29
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	no
Gamut ability	yes



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):	154.14 161.14 156.28
XYZ (normalized):	95.66 100.00 96.98
xy:	0.3269 0.3417
Luminance:	161.1 Cd/m2
Next Temperature:	5748 Kelvin
Reference Whitepoint:	5800.0 Kelvin
Deviation XYZ to Reference Whitepoint:	0.8 dE00
	0.6 dE76

Blackpoint

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

Luminance:	0.3 Cd/m2
Chromaticity:	4.2 Chroma (Lab)

Gray balance

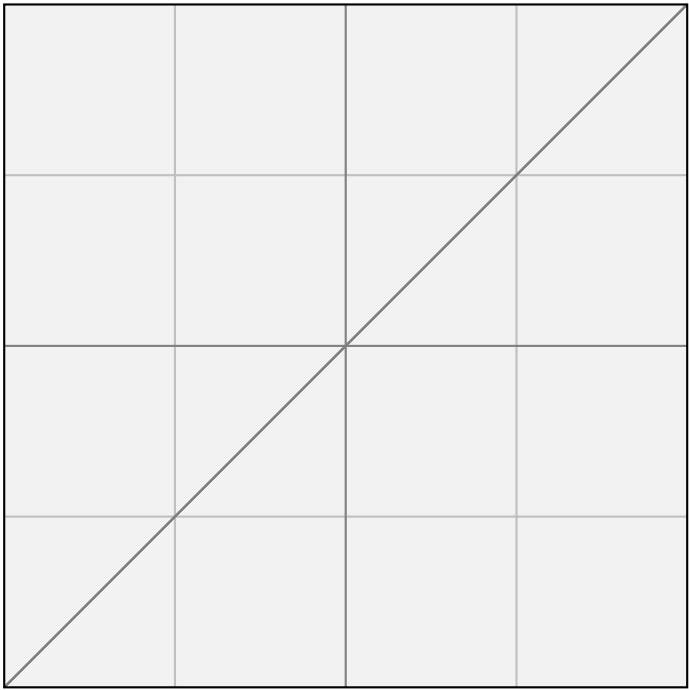
Average and maximum calculation will respect measurements with 1% minimum luminance only. The L-deviation shows the difference between the profile and measurement value.

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	0	0.29	1.61	4.19		
5	9672	0.54	3.02	3.57	2.16	-0.7
10	5817	2.58	13.23	1.21	1.86	+0.4
15	5891	5.21	20.94	0.80	1.84	-0.1
20	5699	8.84	28.07	0.37	1.83	-0.2
25	5756	12.99	34.11	0.37	1.84	-0.1
30	5749	18.17	40.04	0.02	1.83	-0.1
35	5788	24.49	45.91	0.60	1.81	+0.2
40	5781	31.53	51.35	0.78	1.80	+0.3
45	5766	38.18	55.78	0.48	1.81	+0.2
50	5789	46.50	60.66	0.69	1.81	+0.3
55	5871	54.97	65.05	1.02	1.81	+0.1
60	5741	64.51	69.49	0.15	1.80	+0.1
65	5736	73.58	73.33	0.74	1.82	-0.0
70	5698	84.52	77.55	0.65	1.81	+0.0
75	5747	96.12	81.65	0.03	1.80	+0.1
80	5772	108.45	85.66	0.47	1.79	+0.2
85	5791	120.73	89.36	0.43	1.78	+0.3
90	5761	133.20	92.87	0.14	1.81	+0.1
95	5760	146.60	96.40	0.13	1.84	-0.0
100	5748	161.14	100.00	0.00		
Average	5762			0.42	1.83	0.1
Max				1.02		0.3
Range				1.95		

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: 0.3269 0.3417).

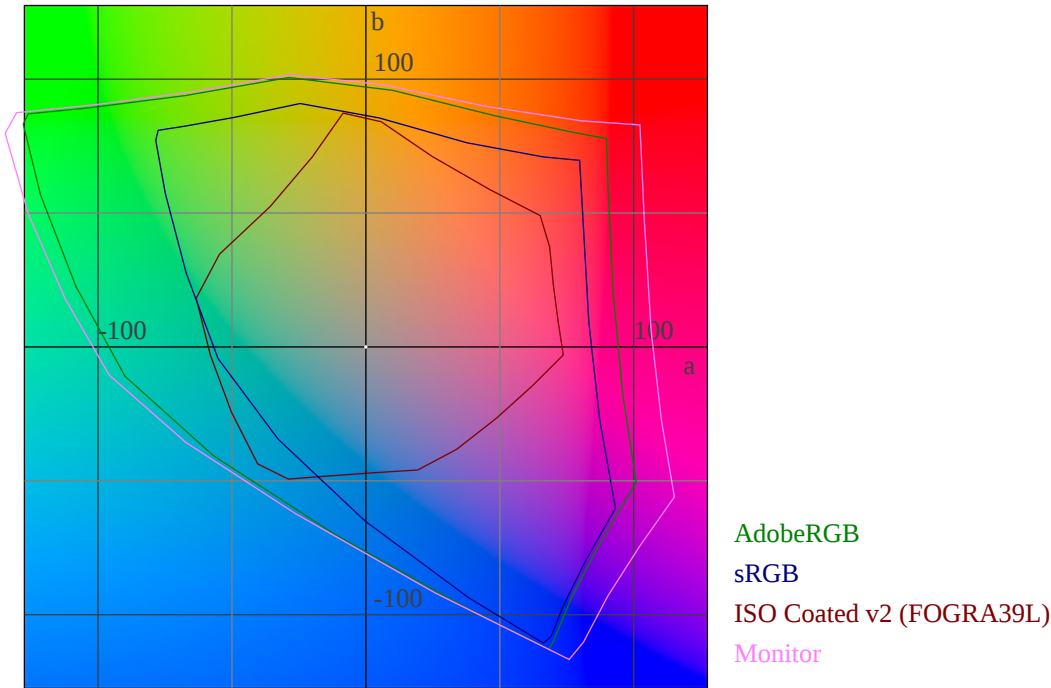
The assumed chromatic adaptation is: Bradford

RGB	Lab	deltaLab	dE76	dE00
0 0 0	1.6 -1.0 -4.2	-1.6 1.0 4.2	4.5	4.1
0 0 128	13.7 49.5 -76.7	-0.9 2.5 -1.6	3.1	0.9
0 0 255	27.8 78.2 -118.1	-0.3 0.3 -0.2	0.5	0.2
0 128 0	51.3 -90.5 55.6	-0.0 0.0 2.2	2.2	0.6
0 128 128	53.4 -60.8 -12.0	-0.5 1.0 -0.9	1.4	0.8
0 170 255	68.0 -44.0 -51.6	-0.2 0.3 -0.1	0.4	0.2
0 255 0	85.5 -137.4 87.2	0.1 0.7 0.1	0.7	0.1
0 255 170	87.0 -113.0 17.2	-0.1 1.1 -0.7	1.3	0.3
0 255 255	88.4 -91.1 -19.2	-0.2 0.8 -0.3	0.8	0.3
85 85 85	44.0 -0.2 -0.3	0.0 0.2 0.3	0.3	0.4
128 0 0	33.8 67.9 48.9	0.1 0.6 3.8	3.8	1.5
128 0 128	36.8 76.2 -38.0	0.1 0.4 0.8	0.9	0.3
128 128 0	59.3 -11.6 68.5	0.1 -0.0 0.5	0.6	0.1
128 128 128	61.0 -0.8 0.1	-0.3 0.8 -0.1	0.8	1.1
128 128 255	64.3 22.2 -57.5	-0.4 0.7 0.1	0.8	0.6
128 255 128	90.3 -76.4 42.4	-0.1 0.5 -0.3	0.6	0.1
170 0 255	50.0 99.8 -80.6	0.1 -0.5 1.0	1.1	0.2
170 170 170	75.0 0.3 -0.2	-0.0 -0.3 0.2	0.3	0.4
170 255 0	91.8 -61.9 97.2	0.1 -0.3 -1.1	1.2	0.3
170 255 255	94.4 -36.7 -9.7	-0.2 0.0 0.1	0.2	0.1
255 0 0	59.2 103.9 87.4	0.3 -0.4 -4.1	4.2	1.3
255 0 170	61.5 110.3 -19.8	0.3 -0.7 0.8	1.0	0.3
255 0 255	63.8 116.4 -57.3	0.3 -0.8 1.1	1.4	0.3
255 128 128	75.2 58.7 23.6	-0.1 0.1 -0.2	0.2	0.1
255 170 0	81.5 30.9 95.4	0.4 -1.1 -2.2	2.5	0.5
255 170 255	84.6 47.0 -24.1	0.0 -0.3 0.5	0.6	0.2
255 255 0	97.7 -17.2 106.5	0.2 -0.3 -2.2	2.2	0.5
255 255 170	99.0 -8.9 36.1	-0.0 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	55.4 46.9 18.6	0.0 -0.6 -0.1	0.6	0.2
85 170 85	67.3 -60.2 33.3	-0.0 0.4 -0.1	0.4	0.1
85 85 170	46.6 18.0 -45.8	-0.0 0.0 0.6	0.6	0.3
85 170 170	68.7 -43.5 -10.8	-0.1 0.4 0.3	0.5	0.2
170 85 170	57.2 55.5 -27.9	-0.0 -0.5 0.5	0.7	0.2
170 170 85	73.8 -9.3 44.0	0.0 -0.3 -0.5	0.5	0.3
Average			1.2	0.5
Maximum			4.5	4.1

Gamut-Volume

These measurements are only informative.

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



Softproof Quality

The measurements are converted to Lab values based on the measured whitepoint (xy: 0.3269 0.3417) 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	0.7
Maximum		4.0	2.3
Primaries		5.0	1.9
Composite Gray Max		3.0	1.7

Reference (Lab)	Measurement (Lab)	Measurement (Yxy)	dE76	dE00
55.0 -37.0 -50.0	55.9 -33.6 -48.5	23.79 0.1749 0.2560	3.8	1.5
66.9 -24.7 -37.1	66.9 -24.3 -38.2	36.45 0.2257 0.2891	1.2	0.5
79.7 -12.5 -21.8	80.1 -13.5 -21.6	56.81 0.2849 0.3264	1.1	0.7
87.7 -5.8 -11.8	88.0 -6.1 -12.2	71.97 0.3158 0.3414	0.6	0.4
91.5 -3.0 -7.0	91.7 -3.1 -6.9	79.93 0.3297 0.3490	0.2	0.2
48.0 74.0 -3.0	47.6 75.0 -4.1	16.51 0.5091 0.2557	1.5	0.6
60.8 50.6 -6.7	60.8 51.0 -7.3	29.04 0.4293 0.2897	0.7	0.3
76.4 25.8 -6.9	76.2 26.6 -7.9	50.29 0.3747 0.3200	1.3	0.7
86.2 12.0 -5.2	86.3 11.7 -5.6	68.66 0.3537 0.3390	0.5	0.4
90.7 5.9 -3.9	90.8 5.5 -4.2	78.11 0.3466 0.3470	0.6	0.6
89.0 -5.0 93.0	88.9 -6.4 95.5	73.95 0.4595 0.4974	2.9	0.8
90.3 -4.7 62.6	90.3 -6.2 63.1	76.87 0.4290 0.4634	1.6	0.9
92.2 -3.5 31.1	92.1 -4.6 30.7	80.89 0.3872 0.4138	1.3	1.0
93.6 -1.6 13.3	93.5 -2.8 12.8	84.15 0.3622 0.3824	1.3	1.5
94.3 -0.9 5.4	94.4 -2.3 5.2	86.13 0.3507 0.3690	1.4	1.9
89.0 0.0 -1.8	89.3 -0.5 -2.0	74.90 0.3416 0.3553	0.6	0.7
82.8 0.0 -1.7	83.1 -0.5 -1.8	62.36 0.3416 0.3556	0.6	0.8
69.3 0.0 -1.4	69.4 -0.4 -1.2	39.96 0.3424 0.3562	0.4	0.6
54.1 0.0 -1.0	54.4 0.5 -1.7	22.33 0.3424 0.3535	0.9	1.0
36.6 -0.0 -0.5	36.3 0.7 -1.4	9.17 0.3431 0.3527	1.1	1.3
16.0 0.0 0.0	16.7 -0.3 -1.4	2.24 0.3369 0.3514	1.6	1.5
10.4 13.9 1.4	10.0 15.9 -1.1	1.12 0.4323 0.3008	3.2	2.3
33.4 25.4 20.9	33.2 24.8 20.0	7.62 0.4952 0.3687	1.1	0.5
34.4 -3.3 22.3	34.2 -2.8 21.2	8.10 0.4062 0.4383	1.2	0.7
24.0 22.0 -46.0	23.7 22.3 -46.7	4.01 0.2203 0.1583	0.8	0.3
40.9 17.9 -36.6	40.6 18.7 -38.4	11.64 0.2715 0.2257	2.0	0.7
63.7 10.3 -23.8	63.9 9.1 -24.0	32.64 0.3087 0.2960	1.2	1.1
79.4 5.1 -13.6	79.6 5.5 -14.3	55.94 0.3276 0.3266	0.8	0.5
87.2 2.6 -8.1	87.6 1.7 -8.0	71.23 0.3344 0.3429	1.1	1.3
47.0 68.0 48.0	46.8 68.9 48.9	15.85 0.6263 0.3289	1.3	0.4
58.5 47.1 37.9	58.6 47.3 38.6	26.61 0.5314 0.3652	0.7	0.3
74.2 22.9 21.4	74.1 22.6 21.3	46.91 0.4276 0.3742	0.3	0.2
85.0 10.0 9.8	85.2 9.1 9.9	66.49 0.3773 0.3678	0.9	0.9
90.0 4.7 3.7	90.2 4.0 3.7	76.77 0.3578 0.3615	0.8	0.9
50.0 -65.0 27.0	50.1 -66.2 27.5	18.54 0.2429 0.5563	1.3	0.3
62.1 -39.8 21.0	62.5 -40.1 21.4	30.99 0.3069 0.4645	0.6	0.4
77.0 -19.1 11.0	77.1 -19.1 11.2	51.62 0.3336 0.4006	0.2	0.1
86.3 -8.4 4.2	86.6 -9.0 4.0	69.19 0.3386 0.3736	0.7	0.7
90.8 -4.1 0.9	91.0 -4.7 0.5	78.59 0.3397 0.3632	0.7	0.7
88.5 -0.4 -3.1	89.0 -0.9 -3.0	74.08 0.3392 0.3540	0.7	0.8

82.0 -0.9 -4.1	82.3 -1.3 -4.2	60.86 0.3360 0.3518	0.6	0.6
67.7 -2.0 -4.4	67.8 -3.3 -4.6	37.67 0.3299 0.3517	1.3	1.7
52.2 -2.5 -3.5	52.4 -2.4 -4.2	20.53 0.3292 0.3500	0.7	0.6
37.5 -3.9 -3.1	37.6 -4.3 -3.0	9.85 0.3233 0.3549	0.5	0.6
26.3 -6.8 -3.4	26.2 -7.3 -3.0	4.83 0.3061 0.3590	0.6	0.6
10.4 -8.2 -10.2	10.8 -9.8 -11.8	1.23 0.2189 0.2967	2.3	1.6
24.3 32.7 13.1	24.6 32.1 12.3	4.29 0.5222 0.3268	1.0	0.5
24.7 -17.0 7.5	24.4 -17.6 6.6	4.24 0.3029 0.4326	1.1	0.8
23.0 0.0 0.0	22.5 0.3 -0.4	3.66 0.3453 0.3562	0.7	0.7
38.5 6.6 3.9	38.6 7.0 3.7	10.44 0.3780 0.3592	0.4	0.5
61.5 5.4 3.8	61.7 4.5 3.1	30.01 0.3620 0.3606	1.1	1.1
78.1 2.9 0.9	78.1 3.1 0.6	53.37 0.3521 0.3568	0.4	0.4
86.6 1.5 -0.7	86.9 0.5 -0.7	69.72 0.3452 0.3569	1.0	1.4
53.1 37.7 28.9	52.9 38.1 28.8	20.94 0.5048 0.3645	0.4	0.3
41.5 22.7 16.8	41.3 23.3 16.7	12.04 0.4616 0.3654	0.6	0.4
31.9 40.0 24.0	31.8 40.4 23.1	6.99 0.5580 0.3381	1.0	0.6
32.5 44.4 -1.8	32.2 45.2 -2.5	7.19 0.4778 0.2747	1.0	0.5
51.3 1.3 44.5	51.5 0.9 44.9	19.71 0.4496 0.4620	0.6	0.4
34.6 -36.4 13.9	34.5 -36.8 14.1	8.26 0.2716 0.4905	0.4	0.2
36.0 -26.2 -20.9	36.1 -25.8 -21.3	9.08 0.2070 0.3096	0.6	0.4
20.9 9.6 -23.6	20.7 9.8 -24.2	3.17 0.2662 0.2306	0.7	0.3
71.2 18.8 17.3	71.4 18.4 17.5	42.81 0.4149 0.3729	0.6	0.5
71.2 22.2 73.1	71.1 22.1 74.5	42.30 0.5087 0.4444	1.4	0.4
47.7 71.2 16.2	47.6 72.2 16.6	16.49 0.5638 0.2900	1.1	0.3
38.0 55.4 -20.9	37.8 56.4 -21.8	9.98 0.4205 0.2269	1.4	0.4
73.7 -22.8 67.6	73.5 -22.3 69.0	45.90 0.4144 0.5139	1.5	0.6
52.3 -52.3 -20.2	52.9 -54.5 -19.5	20.99 0.1858 0.3537	2.3	1.1
43.3 -17.0 -48.6	43.6 -17.6 -48.9	13.57 0.1759 0.2256	0.7	0.4
95.0 0.0 -2.0	95.0 -1.0 -2.6	87.68 0.3402 0.3549	1.1	1.5
15.7 -3.1 11.7	16.2 -3.5 11.3	2.13 0.3866 0.4334	0.7	0.7
34.7 28.5 -4.0	34.4 28.7 -4.6	8.23 0.4163 0.2976	0.6	0.4
25.8 -11.0 -14.4	25.6 -11.1 -14.8	4.62 0.2453 0.3080	0.5	0.3
Average			1.0	0.7
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	154.14 161.14 156.28	161.14 0.3269 0.3417
0 0 0	0.24 0.29 0.69	0.29 0.2002 0.2342
12 12 12	0.57 0.54 0.85	0.54 0.2903 0.2745
25 25 25	2.52 2.58 2.63	2.58 0.3257 0.3337
38 38 38	5.00 5.21 5.23	5.21 0.3240 0.3372
51 51 51	8.50 8.84 8.58	8.84 0.3280 0.3409
63 63 63	12.47 12.99 12.71	12.99 0.3267 0.3403
76 76 76	17.37 18.17 17.61	18.17 0.3269 0.3418
89 89 89	23.28 24.49 23.64	24.49 0.3259 0.3430
102 102 102	29.94 31.53 30.34	31.53 0.3261 0.3434
114 114 114	36.62 38.18 37.36	38.18 0.3265 0.3404
127 127 127	44.21 46.50 44.94	46.50 0.3259 0.3428
140 140 140	52.16 54.97 53.76	54.97 0.3242 0.3417
153 153 153	61.67 64.51 62.40	64.51 0.3270 0.3421
165 165 165	70.74 73.58 71.88	73.58 0.3272 0.3403
178 178 178	81.24 84.52 81.92	84.52 0.3280 0.3412
191 191 191	91.97 96.12 93.24	96.12 0.3269 0.3417
204 204 204	103.41 108.45 105.03	108.45 0.3263 0.3422
216 216 216	115.22 120.73 117.57	120.73 0.3259 0.3415
229 229 229	127.31 133.20 129.31	133.20 0.3266 0.3417
242 242 242	140.18 146.60 142.42	146.60 0.3266 0.3416
0 0 128	7.94 3.01 41.07	3.01 0.1527 0.0578
0 0 255	27.19 9.76 142.53	9.76 0.1515 0.0544
0 128 0	9.36 31.50 4.04	31.50 0.2085 0.7015
0 128 128	17.31 34.89 44.51	34.89 0.1790 0.3608
0 170 255	42.58 62.30 148.19	62.30 0.1683 0.2462
0 255 0	31.82 108.19 12.29	108.19 0.2089 0.7104
0 255 170	44.93 113.56 80.09	113.56 0.1883 0.4760
0 255 255	59.11 118.72 154.32	118.72 0.1780 0.3574
85 85 85	21.33 22.34 21.85	22.34 0.3255 0.3410
128 0 0	27.23 12.40 0.99	12.40 0.6704 0.3052
128 0 128	35.08 15.18 42.28	15.18 0.3791 0.1640
128 128 0	36.79 43.80 4.30	43.80 0.4334 0.5160
128 128 128	44.82 47.19 45.66	47.19 0.3256 0.3428
128 128 255	64.25 54.24 147.61	54.24 0.2415 0.2038
128 255 128	67.52 124.13 53.98	124.13 0.2749 0.5054
170 0 255	72.78 30.22 144.47	30.22 0.2941 0.1221
170 170 170	74.63 77.87 75.81	77.87 0.3269 0.3410
170 255 0	77.99 128.93 12.77	128.93 0.3550 0.5869
170 255 255	105.50 139.51 156.17	139.51 0.2630 0.3478
255 0 0	94.61 42.64 1.65	42.64 0.6811 0.3070
255 0 170	107.70 47.23 71.00	47.23 0.4767 0.2090
255 0 255	121.80 52.20 145.42	52.20 0.3813 0.1634
255 128 128	112.28 77.47 46.77	77.47 0.4747 0.3275
255 170 0	110.25 94.40 7.22	94.40 0.5204 0.4456
255 170 255	137.69 104.95 151.01	104.95 0.3498 0.2666
255 255 0	126.85 150.84 13.31	150.84 0.4359 0.5184
255 255 170	140.23 156.30 82.80	156.30 0.3697 0.4120
170 85 85	54.25 37.12 22.35	37.12 0.4771 0.3264
85 170 85	32.33 59.67 25.87	59.67 0.2743 0.5062
85 85 170	30.71 25.72 71.31	25.72 0.2404 0.2013

85 170 170	41.71 63.12 75.29	63.12 0.2316 0.3505
170 85 170	63.64 40.50 71.90	40.50 0.3615 0.2301
170 170 85	65.24 74.42 26.33	74.42 0.3930 0.4483
0 129 206	28.03 39.13 100.44	39.13 0.1672 0.2335
84 159 220	47.41 59.48 116.09	59.48 0.2126 0.2667
153 193 231	80.57 92.05 128.34	92.05 0.2677 0.3059
196 215 238	107.24 116.28 137.02	116.28 0.2974 0.3225
216 227 240	121.20 128.99 139.49	128.99 0.3110 0.3310
170 40 102	52.19 26.21 28.98	26.21 0.4860 0.2441
185 97 142	68.63 46.50 53.57	46.50 0.4068 0.2756
206 159 190	94.23 80.90 91.05	80.90 0.3540 0.3039
221 199 218	114.68 110.61 118.02	110.61 0.3340 0.3222
228 218 231	124.90 125.88 130.69	125.88 0.3274 0.3300
237 216 22	106.23 118.21 11.59	118.21 0.4501 0.5008
237 221 92	111.28 123.10 33.35	123.10 0.4156 0.4598
236 228 160	119.50 129.89 73.42	129.89 0.3702 0.4024
236 232 202	126.72 135.38 106.39	135.38 0.3439 0.3674
236 235 222	130.56 138.71 123.84	138.71 0.3321 0.3528
215 216 220	115.21 120.73 121.05	120.73 0.3227 0.3382
194 195 199	95.86 100.52 100.63	100.52 0.3227 0.3384
152 153 155	61.45 64.41 64.05	64.41 0.3236 0.3391
110 110 112	34.62 35.99 36.41	35.99 0.3234 0.3363
68 68 69	14.28 14.78 14.99	14.78 0.3242 0.3355
30 30 30	3.44 3.61 3.77	3.61 0.3181 0.3338
30 17 21	2.57 1.80 1.90	1.80 0.4104 0.2871
87 50 36	16.10 12.15 5.33	12.15 0.4795 0.3618
66 64 35	11.79 12.99 5.40	12.99 0.3907 0.4303
38 37 106	9.58 6.66 29.99	6.66 0.2073 0.1440
77 71 137	23.24 19.00 49.34	19.00 0.2538 0.2075
136 132 182	55.29 52.84 82.76	52.84 0.2896 0.2768
184 182 213	90.37 90.33 112.36	90.33 0.3084 0.3082
209 209 228	111.47 114.92 127.09	114.92 0.3154 0.3251
169 43 29	47.23 24.96 4.15	24.96 0.6187 0.3270
185 92 63	60.74 42.28 14.29	42.28 0.5178 0.3604
205 153 127	84.69 75.13 47.04	75.13 0.4094 0.3632
221 196 182	108.45 106.88 87.26	106.88 0.3584 0.3532
228 216 211	121.21 123.58 112.89	123.58 0.3389 0.3455
36 120 56	12.72 29.96 12.49	29.96 0.2306 0.5430
93 148 94	32.40 49.98 28.71	49.98 0.2917 0.4499
156 186 153	68.44 83.19 64.75	83.19 0.3163 0.3845
197 211 198	100.14 111.53 100.91	111.53 0.3204 0.3568
216 225 220	117.53 126.68 121.78	126.68 0.3211 0.3461
212 215 221	113.66 119.44 121.65	119.44 0.3204 0.3367
189 193 201	93.16 98.15 102.33	98.15 0.3173 0.3343
143 149 156	56.70 60.79 64.64	60.79 0.3113 0.3338
101 106 111	30.99 33.12 35.67	33.12 0.3106 0.3320
65 72 74	14.41 15.91 16.93	15.91 0.3050 0.3367
41 50 51	6.63 7.81 8.54	7.81 0.2885 0.3399
13 24 31	1.51 2.00 3.80	2.00 0.2065 0.2738
71 29 30	10.80 6.82 3.77	6.82 0.5050 0.3187
33 49 35	4.72 6.84 4.89	6.84 0.2871 0.4157
41 41 41	5.67 5.90 5.81	5.90 0.3264 0.3393
80 70 67	17.49 16.78 14.47	16.78 0.3587 0.3443
138 127 124	48.04 48.29 43.73	48.29 0.3430 0.3448
184 178 178	84.12 85.96 82.48	85.96 0.3331 0.3403
209 207 209	107.83 112.35 110.23	112.35 0.3264 0.3400

155 85 64	45.59 33.34 14.23	33.34 0.4893 0.3579
105 68 56	23.97 19.22 10.80	19.22 0.4440 0.3560
96 38 31	18.11 11.08 4.09	11.08 0.5443 0.3328
97 36 63	19.88 11.46 12.34	11.46 0.4552 0.2624
115 101 36	29.96 31.52 7.03	31.52 0.4373 0.4601
35 74 45	7.25 13.35 7.53	13.35 0.2577 0.4746
26 76 97	10.15 14.82 26.89	14.82 0.1957 0.2858
36 35 66	6.07 5.17 13.14	5.17 0.2490 0.2120
189 147 126	75.36 68.62 46.13	68.62 0.3964 0.3610
204 143 30	75.51 67.41 8.26	67.41 0.4995 0.4459
171 42 72	50.55 26.07 15.89	26.07 0.5464 0.2819
116 39 104	29.73 15.99 29.53	15.99 0.3951 0.2125
158 175 41	57.60 73.56 11.75	73.56 0.4031 0.5147
12 125 139	18.43 34.24 51.76	34.24 0.1765 0.3279
16 92 166	18.38 22.40 68.41	22.40 0.1683 0.2051
236 237 242	134.52 141.35 142.71	141.35 0.3214 0.3377
30 30 18	3.00 3.42 1.67	3.42 0.3704 0.4233
88 51 70	18.37 13.19 15.04	13.19 0.3942 0.2830
31 50 64	6.06 7.51 12.70	7.51 0.2306 0.2859