

UGRA Display Analysis & Certification Tool Report

Basics

Date: 2019-2-14 18:06:47
Report-Version: v2.0.0
Monitor-Name: \\.\DISPLAY1
EDID-Name: PA271Q
EDID-Serial: 8X101008TB
Profile: C:/WINDOWS/system32/spool/drivers/color/PA271Q 8X101008TB.icc
Created: 2019-2-14 17:12
Measurement device: i1Display Pro, Serial: OE-18.B-02.106319.01, Correction: RG Phosphor
Evaluation method: FograCert

Summary

Calibration (Assumed Target Whitepoint: 5800.00 Kelvin)

White Point	ja
Gray balance	ja
Tone values	ja
Profile quality	ja
Softproof quality	ja

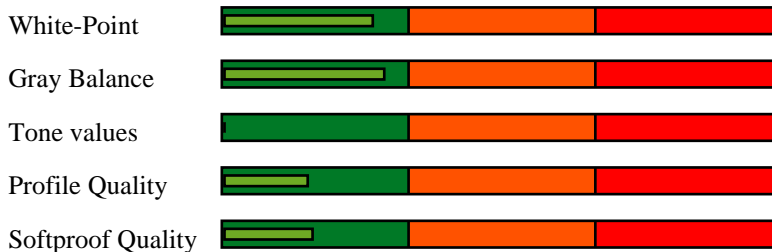


The monitor has passed the certification according to the FograCert specifications.

Gamut Volume Depends on the calibration verification.

ISO Coated v2 (FOGRA39L)	ja
sRGB	ja
AdobeRGB	ja
ECI-RGB	ja

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 DeltaE-2000.

XYZ:	153.88 160.45 158.84
XYZ (normalized):	95.90 100.00 99.00
xy:	0.3252 0.3391
Luminance:	160.5 Cd/m2
Next Temperature:	5829 Kelvin
Assumed Target Whitepoint:	5800.0 Kelvin
Distance to assumed Target Whitepoint:	1.6 DeltaE-2000
	1.3 DeltaE-76

Blackpoint

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

Luminance:	0.1 Cd/m2
Chromaticity:	1.7 Chroma (Lab)

Gray balance

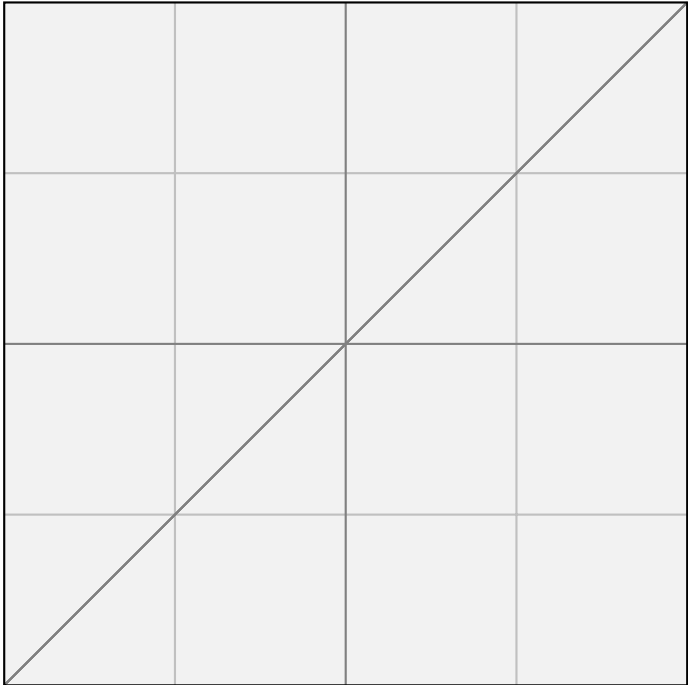
Average and maximum calculation will respect measurements with 1% minimum luminance only. The L-deviation shows the difference between the profile and measurement value.

The maximum allowed deviations to comply with this test are an average of DeltaC 1.0, a range of DeltaC 2.0 and a maximum L-deviation of 2.3.

%	Kelvin	Cd/m2	L	Chroma	Gamma	delta-L
0	230906	0.14	0.76	1.70		
5	6752	0.96	5.38	1.79	1.76	+0.8
10	6217	1.85	10.20	1.67	1.97	+0.6
15	6039	3.08	15.06	1.41	2.10	+0.5
20	5995	4.78	19.96	1.34	2.19	+0.3
25	5883	6.83	24.51	1.29	2.28	+0.2
30	5845	9.64	29.43	1.25	2.34	+0.1
35	5833	13.25	34.51	1.25	2.38	+0.1
40	5830	17.62	39.55	1.35	2.41	+0.0
45	5833	22.43	44.20	1.36	2.46	-0.0
50	5799	28.70	49.36	1.24	2.48	+0.0
55	5822	36.02	54.50	1.04	2.49	-0.0
60	5822	44.31	59.54	1.29	2.51	-0.0
65	5809	53.26	64.32	1.01	2.55	-0.0
70	5803	64.13	69.45	0.75	2.57	-0.0
75	5814	76.45	74.60	0.58	2.57	-0.0
80	5813	90.22	79.74	0.37	2.58	-0.0
85	5808	104.62	84.59	0.30	2.63	+0.1
90	5825	121.60	89.76	0.06	2.64	-0.0
95	5827	139.87	94.81	0.11	2.67	-0.0
100	5829	160.45	100.00	0.00		
Average	5835			0.86	2.40	0.1
Max				1.36		0.3
Range				1.73		

Tone values

This tests checks the calibration curves 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 DeltaE-2000 and a maximum of 4.0 DeltaE-2000.

The Lab values are calculated, based on the measured white point (xy: 0.3252 0.3391).

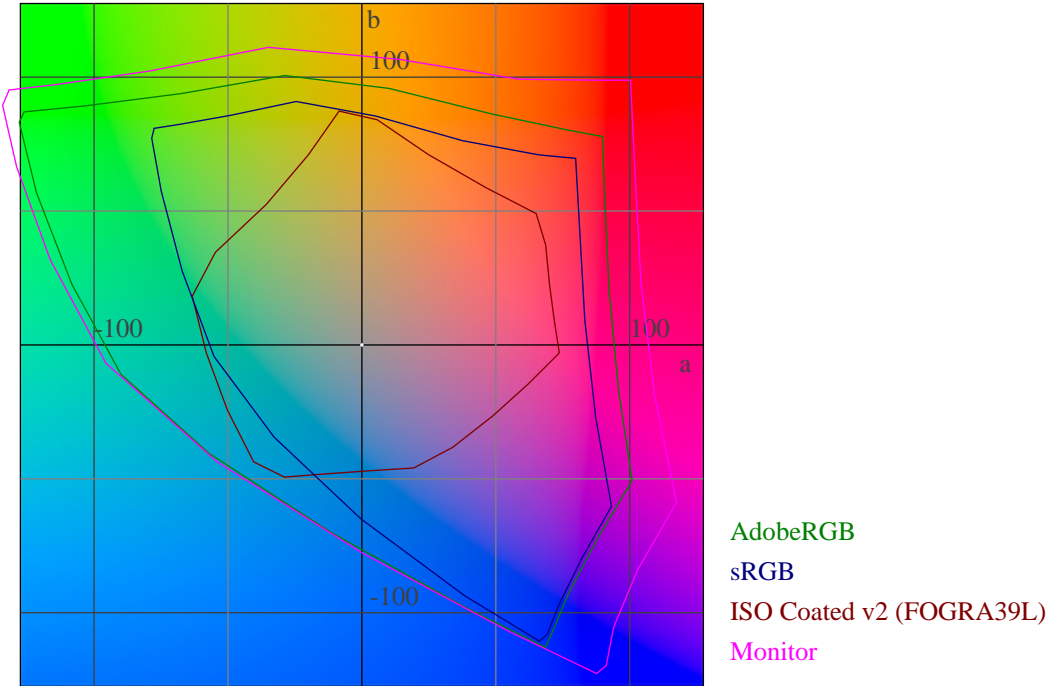
The assumed chromatic adaptation is: CAT02

RGB	Lab	deltaLab	DeltaE-76	DeltaE-2000
0 0 0	0.7 0.3 -1.7	-0.7 -0.3 1.7	1.9	1.7
0 0 128	6.9 51.4 -69.4	0.4 0.6 -1.5	1.7	0.5
0 0 255	23.5 94.9 -125.3	1.4 -3.4 0.5	3.7	1.4
0 128 0	40.9 -73.8 52.7	0.8 -2.8 1.1	3.1	1.0
0 128 128	42.9 -48.9 -10.1	0.1 -0.1 -1.8	1.8	1.0
0 170 255	60.4 -22.0 -63.3	0.0 0.6 -1.8	1.9	0.5
0 255 0	86.1 -133.9 98.0	0.0 -1.6 -2.8	3.2	0.7
0 255 170	87.1 -115.6 32.9	-0.2 -0.4 -2.9	2.9	0.9
0 255 255	88.4 -87.5 -17.8	-0.1 0.2 -2.3	2.3	1.0
85 85 85	32.9 0.9 -0.7	-0.1 -0.2 0.6	0.6	0.6
128 0 0	25.9 57.0 41.8	1.0 0.9 4.0	4.2	1.8
128 0 128	28.1 67.4 -35.3	1.0 -0.3 1.9	2.2	1.0
128 128 0	48.1 -8.8 65.0	0.6 -1.4 0.5	1.6	1.0
128 128 128	49.8 1.1 -0.6	-0.1 -0.1 0.3	0.4	0.4
128 128 255	53.8 36.9 -75.3	-0.0 0.4 -0.7	0.8	0.1
128 255 128	89.2 -92.5 58.1	-0.3 -1.4 -1.0	1.8	0.5
170 0 255	43.2 102.3 -92.7	1.4 -2.2 1.8	3.1	1.3
170 170 170	66.3 0.7 -0.4	0.0 -0.1 0.2	0.2	0.2
170 255 0	90.8 -76.4 106.1	0.0 -1.0 -3.0	3.2	0.8
170 255 255	93.0 -45.9 -11.3	-0.2 -0.5 -1.0	1.1	0.6
255 0 0	58.4 102.2 98.4	0.9 -0.5 0.9	1.4	0.9
255 0 170	59.8 109.2 -9.6	1.0 -1.3 2.8	3.3	1.2
255 0 255	62.0 120.0 -61.0	1.1 -2.1 2.0	3.1	1.1
255 128 128	69.4 71.9 31.5	0.4 -0.1 2.6	2.6	1.2
255 170 0	76.3 43.9 103.4	0.8 -1.0 -1.7	2.1	0.6
255 170 255	79.5 62.0 -32.7	0.2 0.2 0.5	0.6	0.3
255 255 0	98.0 -19.5 118.5	0.3 -0.2 -3.1	3.2	0.6
255 255 170	98.9 -12.2 49.5	0.0 -0.1 1.0	1.0	0.3
255 255 255	100.0 0.0 -0.0	0.0 -0.0 0.0	0.0	0.0
170 85 85	45.7 48.5 20.6	0.3 0.1 1.7	1.7	1.0
85 170 85	58.7 -61.5 37.9	0.0 -1.3 0.0	1.3	0.4
85 85 170	35.5 24.2 -50.5	-0.0 0.1 -0.3	0.3	0.1
85 170 170	59.9 -42.5 -10.7	-0.1 -0.5 -0.6	0.8	0.4
170 85 170	47.3 58.8 -30.8	0.3 -0.1 0.9	1.0	0.5
170 170 85	65.2 -9.8 48.6	0.2 -0.4 0.6	0.7	0.3
Average			1.9	0.7
Maximum			4.2	1.8

Gamut-Volume





These measurements are only informative.

ISO Coated v2 (FOGRA39L)	100 %
sRGB	100 %
AdobeRGB	100 %
ECI-RGB v2.0	96 %



Softproof Quality

The measurements are converted to Lab values based on the measured whitepoint (xy: 0.3252 0.3391) and compared with the selected reference. The maximum allowed deviations to comply with this test are an average of 2.0 DeltaE-2000 and a minimum Gamut volume of 90% for ISO Coated v2 (FOGRA39L).

		Limit	DeltaE-2000
Average		2.0	0.5
Maximum		4.0	1.9
Primaries Gradient		5.0	1.9
Composite Gray Max		3.0	0.5

Reference (Lab)	Measurement (Lab)	Measurement (Yxy)	DeltaE-76	DeltaE-2000
55.0 -37.0 -50.0	55.5 -31.9 -46.9	23.43 0.1797 0.2587	6.0	1.9
66.9 -24.7 -37.1	66.9 -24.7 -36.2	36.56 0.2287 0.2941	0.9	0.4
79.7 -12.5 -21.8	79.8 -12.6 -20.9	56.39 0.2872 0.3270	0.8	0.4
87.7 -5.8 -11.8	87.7 -5.6 -11.3	71.52 0.3179 0.3425	0.5	0.3
91.5 -3.0 -7.0	91.5 -2.8 -6.6	79.50 0.3306 0.3493	0.4	0.3
48.0 74.0 -3.0	47.4 74.5 -5.2	16.33 0.5049 0.2542	2.3	1.0
60.8 50.6 -6.7	60.6 50.0 -7.6	28.85 0.4268 0.2900	1.1	0.5
76.4 25.8 -6.9	76.3 26.2 -7.4	50.31 0.3751 0.3213	0.6	0.3
86.2 12.0 -5.2	86.1 12.3 -5.7	68.25 0.3545 0.3385	0.5	0.4
90.7 5.9 -3.9	90.7 5.9 -4.1	77.80 0.3474 0.3469	0.2	0.2
89.0 -5.0 93.0	88.8 -4.8 93.7	73.79 0.4609 0.4936	0.7	0.2
90.3 -4.7 62.6	90.3 -4.7 61.8	77.00 0.4297 0.4598	0.8	0.2
92.2 -3.5 31.1	92.1 -3.5 30.6	81.00 0.3888 0.4125	0.5	0.2
93.6 -1.6 13.3	93.6 -1.8 12.9	84.43 0.3638 0.3817	0.4	0.3
94.3 -0.9 5.4	94.4 -1.0 5.4	86.13 0.3531 0.3684	0.0	0.0
89.0 0.0 -1.8	88.9 -0.0 -1.9	74.00 0.3424 0.3552	0.1	0.1
82.8 0.0 -1.7	82.8 0.1 -1.4	61.87 0.3433 0.3558	0.3	0.3
69.3 0.0 -1.4	69.3 -0.3 -1.3	39.70 0.3426 0.3561	0.3	0.4
54.1 0.0 -1.0	54.0 0.5 -1.3	22.00 0.3434 0.3544	0.6	0.8
36.6 0.0 -0.5	36.7 0.5 -0.9	9.38 0.3440 0.3544	0.7	0.8
16.0 0.0 0.0	16.4 -0.2 -0.8	2.18 0.3402 0.3547	0.9	0.9
10.4 13.9 1.4	10.9 13.9 -0.7	1.25 0.4213 0.3110	2.1	1.5
33.4 25.4 20.9	33.2 25.3 19.4	7.64 0.4952 0.3662	1.5	0.9
34.4 -3.3 22.3	34.5 -2.9 21.2	8.26 0.4055 0.4380	1.2	0.6
24.0 22.0 -46.0	24.0 22.0 -45.6	4.11 0.2243 0.1622	0.4	0.2
40.9 17.9 -36.6	40.8 18.5 -36.7	11.77 0.2763 0.2305	0.6	0.4
63.7 10.3 -23.8	63.8 10.3 -23.8	32.52 0.3112 0.2953	0.1	0.1
79.4 5.1 -13.6	79.4 4.8 -13.3	55.56 0.3283 0.3289	0.5	0.4
87.2 2.6 -8.1	87.2 2.7 -7.7	70.41 0.3363 0.3426	0.4	0.3
47.0 68.0 48.0	46.4 68.3 45.7	15.59 0.6215 0.3271	2.4	1.2
58.5 47.1 37.9	58.1 47.1 36.4	26.11 0.5280 0.3626	1.5	0.8
74.2 22.9 21.4	74.2 22.8 20.8	47.02 0.4269 0.3731	0.6	0.3
85.0 10.0 9.8	84.9 10.0 9.3	65.76 0.3779 0.3662	0.5	0.3
90.0 4.7 3.7	89.9 4.9 3.5	76.13 0.3589 0.3605	0.3	0.3
50.0 -65.0 27.0	49.9 -63.7 26.8	18.35 0.2477 0.5501	1.3	0.4
62.1 -39.8 21.0	62.1 -38.8 20.8	30.51 0.3083 0.4617	1.0	0.4
77.0 -19.1 11.0	76.9 -18.8 10.7	51.34 0.3332 0.3991	0.5	0.3
86.3 -8.4 4.2	86.4 -8.3 4.2	68.86 0.3402 0.3734	0.1	0.1
90.8 -4.1 0.9	90.7 -4.0 0.8	77.73 0.3411 0.3633	0.2	0.2
88.5 -0.4 -3.1	88.4 -0.1 -3.3	72.97 0.3399 0.3528	0.3	0.4

82.0 -0.9 -4.1	81.8 -0.8 -4.4	59.95 0.3364 0.3508	0.4	0.3
67.7 -2.0 -4.4	67.7 -1.8 -4.3	37.62 0.3331 0.3507	0.2	0.2
52.2 -2.5 -3.5	52.2 -2.5 -3.6	20.36 0.3306 0.3517	0.1	0.1
37.5 -3.9 -3.1	37.5 -3.6 -3.5	9.82 0.3236 0.3520	0.4	0.4
26.3 -6.8 -3.4	26.5 -6.4 -3.6	4.93 0.3073 0.3545	0.5	0.5
10.4 -8.2 -10.2	10.9 -6.9 -10.9	1.25 0.2397 0.2983	1.6	1.5
24.3 32.7 13.1	24.2 32.0 11.3	4.16 0.5191 0.3239	2.0	1.1
24.7 -17.0 7.5	24.9 -16.6 6.6	4.39 0.3074 0.4287	1.1	0.7
23.0 0.0 0.0	23.2 0.1 -0.5	3.87 0.3439 0.3562	0.5	0.5
38.5 6.6 3.9	38.4 7.0 3.0	10.29 0.3761 0.3570	1.0	0.9
61.5 5.4 3.8	61.6 5.4 3.9	29.99 0.3657 0.3615	0.2	0.2
78.1 2.9 0.9	78.1 2.9 0.6	53.46 0.3515 0.3570	0.4	0.3
86.6 1.5 -0.7	86.7 1.0 -0.5	69.33 0.3465 0.3568	0.5	0.6
53.1 37.7 28.9	52.7 37.8 27.6	20.75 0.5019 0.3629	1.4	0.9
41.5 22.7 16.8	41.3 22.9 15.6	12.06 0.4573 0.3634	1.2	0.9
31.9 40.0 24.0	31.6 39.7 22.0	6.89 0.5535 0.3375	2.0	1.1
32.5 44.4 -1.8	32.2 44.2 -3.2	7.17 0.4718 0.2743	1.5	0.8
51.3 1.3 44.5	51.1 1.6 43.6	19.32 0.4497 0.4586	1.0	0.5
34.6 -36.4 13.9	34.5 -34.7 12.8	8.23 0.2746 0.4800	2.0	0.8
36.0 -26.2 -20.9	35.9 -25.7 -20.3	8.97 0.2096 0.3134	0.8	0.3
20.9 9.6 -23.6	21.2 9.6 -23.6	3.29 0.2691 0.2346	0.2	0.2
71.2 18.8 17.3	70.9 19.0 16.3	42.10 0.4138 0.3700	1.0	0.7
71.2 22.2 73.1	70.9 22.1 72.8	42.11 0.5072 0.4430	0.4	0.2
47.7 71.2 16.2	47.1 71.1 14.0	16.11 0.5560 0.2872	2.3	1.2
38.0 55.4 -20.9	37.6 55.5 -22.3	9.88 0.4163 0.2264	1.4	0.7
73.7 -22.8 67.6	73.7 -22.4 67.5	46.18 0.4127 0.5118	0.5	0.2
52.3 -52.3 -20.2	52.3 -52.3 -18.1	20.40 0.1912 0.3566	2.0	1.0
43.3 -17.0 -48.6	43.2 -17.2 -47.4	13.30 0.1789 0.2288	1.3	0.4
95.0 0.0 -2.0	95.1 -0.5 -2.2	87.76 0.3415 0.3554	0.6	0.8
15.7 -3.1 11.7	16.1 -3.0 10.0	2.13 0.3830 0.4239	1.8	1.2
34.7 28.5 -4.0	34.6 28.5 -4.6	8.32 0.4152 0.2978	0.6	0.4
25.8 -11.0 -14.4	26.0 -10.4 -14.5	4.76 0.2499 0.3094	0.7	0.6
Average			0.9	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	153.88 160.45 158.84	160.45 0.3252 0.3391
0 0 0	0.14 0.14 0.30	0.14 0.2463 0.2321
12 12 12	0.93 0.96 1.12	0.96 0.3103 0.3171
25 25 25	1.81 1.85 2.02	1.85 0.3184 0.3257
38 38 38	3.00 3.08 3.26	3.08 0.3214 0.3297
51 51 51	4.65 4.78 5.00	4.78 0.3222 0.3314
63 63 63	6.66 6.83 7.03	6.83 0.3244 0.3330
76 76 76	9.38 9.64 9.83	9.64 0.3251 0.3340
89 89 89	12.88 13.25 13.47	13.25 0.3253 0.3346
102 102 102	17.13 17.62 17.89	17.62 0.3254 0.3347
114 114 114	21.78 22.43 22.74	22.43 0.3253 0.3350
127 127 127	27.84 28.70 28.87	28.70 0.3260 0.3360
140 140 140	34.84 36.02 36.18	36.02 0.3255 0.3365
153 153 153	42.91 44.31 44.61	44.31 0.3255 0.3361
165 165 165	51.47 53.26 53.29	53.26 0.3257 0.3370
178 178 178	61.85 64.13 63.86	64.13 0.3258 0.3378
191 191 191	73.62 76.45 76.05	76.45 0.3256 0.3381
204 204 204	86.74 90.22 89.48	90.22 0.3256 0.3386
216 216 216	100.55 104.62 103.58	104.62 0.3257 0.3389
229 229 229	116.61 121.60 120.27	121.60 0.3253 0.3392
242 242 242	134.22 139.87 138.58	139.87 0.3253 0.3389
0 0 128	4.94 1.52 25.53	1.52 0.1544 0.0476
0 0 255	27.25 7.97 143.03	7.97 0.1529 0.0447
0 128 0	5.84 18.83 1.91	18.83 0.2197 0.7084
0 128 128	10.99 21.17 27.58	21.17 0.1839 0.3544
0 170 255	39.37 47.36 147.05	47.36 0.1684 0.2026
0 255 0	33.26 108.94 9.74	108.94 0.2189 0.7170
0 255 170	43.15 112.61 60.38	112.61 0.1996 0.5210
0 255 255	60.94 118.14 153.47	118.14 0.1832 0.3553
85 85 85	11.71 12.06 12.23	12.06 0.3254 0.3349
128 0 0	16.08 7.35 0.32	7.35 0.6771 0.3094
128 0 128	21.42 8.92 27.36	8.92 0.3711 0.1547
128 128 0	22.74 26.75 1.96	26.75 0.4419 0.5199
128 128 128	28.38 29.25 29.44	29.25 0.3259 0.3359
128 128 255	51.07 36.34 148.24	36.34 0.2167 0.1542
128 255 128	56.26 119.35 37.45	119.35 0.2640 0.5602
170 0 255	59.85 22.61 146.43	22.61 0.2615 0.0988
170 170 170	55.24 57.24 57.15	57.24 0.3257 0.3374
170 255 0	66.78 124.37 9.84	124.37 0.3322 0.6188
170 255 255	95.21 133.79 156.90	133.79 0.2467 0.3467
255 0 0	90.67 41.11 0.43	41.11 0.6858 0.3109
255 0 170	101.21 44.19 54.81	44.19 0.5055 0.2207
255 0 255	119.05 49.36 148.12	49.36 0.3761 0.1559
255 128 128	103.05 63.16 31.03	63.16 0.5225 0.3202
255 170 0	103.02 79.49 3.75	79.49 0.5531 0.4268
255 170 255	132.02 89.76 152.33	89.76 0.3529 0.2399
255 255 0	124.99 150.69 9.94	150.69 0.4376 0.5276
255 255 170	135.92 154.81 65.47	154.81 0.3816 0.4346
170 85 85	37.54 23.77 12.54	23.77 0.5083 0.3219
85 170 85	21.13 42.62 14.93	42.62 0.2686 0.5416
85 85 170	19.57 14.48 53.46	14.48 0.2237 0.1655

85 170 170	29.08 45.31 56.30	45.31 0.2225 0.3467
170 85 170	45.54 26.25 54.34	26.25 0.3611 0.2081
170 170 85	47.16 54.49 15.26	54.49 0.4034 0.4661
0 159 218	28.22 38.53 97.74	38.53 0.1716 0.2343
109 184 228	47.47 59.54 114.02	59.54 0.2148 0.2694
177 211 237	80.49 91.09 127.99	91.09 0.2687 0.3041
212 227 242	106.81 115.11 136.48	115.11 0.2980 0.3212
227 235 244	120.60 127.77 140.26	127.77 0.3103 0.3288
193 58 131	51.42 25.95 29.82	25.95 0.4797 0.2421
204 127 168	67.61 46.13 54.24	46.13 0.4025 0.2746
220 183 207	93.84 80.69 91.53	80.69 0.3527 0.3033
231 215 229	114.29 109.55 119.19	109.55 0.3332 0.3194
236 229 238	124.55 124.90 131.99	124.90 0.3265 0.3274
243 226 59	106.49 117.04 13.46	117.04 0.4494 0.4938
243 230 127	111.98 122.42 35.94	122.42 0.4142 0.4528
242 235 185	120.08 129.28 75.30	129.28 0.3699 0.3982
242 239 218	127.61 135.14 108.49	135.14 0.3437 0.3640
242 241 232	131.37 138.05 125.43	138.05 0.3327 0.3496
226 227 230	113.97 118.79 121.26	118.79 0.3219 0.3355
211 212 214	95.33 99.30 100.73	99.30 0.3228 0.3362
176 178 179	61.01 63.72 64.70	63.72 0.3221 0.3364
138 139 140	34.05 35.31 36.12	35.31 0.3228 0.3347
94 95 95	14.55 15.06 15.37	15.06 0.3234 0.3348
41 42 41	3.35 3.51 3.62	3.51 0.3198 0.3348
42 19 26	2.70 2.00 2.08	2.00 0.3980 0.2955
116 71 53	16.17 12.11 5.59	12.11 0.4774 0.3575
92 90 52	11.97 13.16 5.71	13.16 0.3880 0.4268
54 56 133	9.81 6.87 29.83	6.87 0.2108 0.1478
105 100 162	23.45 19.24 48.40	19.24 0.2575 0.2112
163 161 201	55.69 52.55 83.34	52.55 0.2907 0.2743
202 202 224	89.23 89.42 111.44	89.42 0.3076 0.3083
222 222 235	110.79 113.16 127.03	113.16 0.3157 0.3224
192 60 47	46.18 24.48 4.81	24.48 0.6119 0.3244
204 120 91	59.41 41.29 15.28	41.29 0.5122 0.3560
220 178 156	84.71 74.93 48.63	74.93 0.4067 0.3598
231 212 202	107.65 105.22 88.57	105.22 0.3571 0.3491
236 227 224	120.66 122.01 114.15	122.01 0.3382 0.3419
47 148 82	12.91 29.40 13.03	29.40 0.2333 0.5312
120 173 124	32.12 48.86 29.33	48.86 0.2912 0.4429
179 204 179	68.08 82.30 66.37	82.30 0.3141 0.3797
213 224 214	99.95 110.45 101.70	110.45 0.3202 0.3539
227 233 230	116.50 124.73 121.79	124.73 0.3209 0.3436
224 226 231	112.42 117.17 122.37	117.17 0.3194 0.3329
206 210 216	92.01 96.30 102.88	96.30 0.3160 0.3307
169 175 180	57.23 60.44 65.27	60.44 0.3128 0.3304
129 136 139	30.66 32.71 35.39	32.71 0.3104 0.3312
90 99 101	14.48 15.79 17.42	15.79 0.3037 0.3311
58 72 73	6.87 7.93 9.04	7.93 0.2882 0.3326
11 31 43	1.67 2.04 3.73	2.04 0.2247 0.2739
97 40 43	10.48 6.59 3.90	6.59 0.4997 0.3144
46 71 51	4.99 7.03 5.20	7.03 0.2897 0.4083
59 60 59	5.97 6.21 6.28	6.21 0.3233 0.3366
107 96 93	17.22 16.47 14.82	16.47 0.3550 0.3395
165 156 151	48.24 48.04 43.58	48.04 0.3449 0.3435
203 199 199	83.96 85.75 84.06	85.75 0.3308 0.3379
222 221 222	107.45 111.25 111.00	111.25 0.3259 0.3374

180 113 91	44.93 32.89 14.96	32.89 0.4843 0.3545
134 94 81	23.86 19.18 11.49	19.18 0.4375 0.3518
125 53 45	17.67 10.88 4.31	10.88 0.5377 0.3310
126 52 88	19.56 11.42 12.77	11.42 0.4471 0.2609
144 130 57	29.44 30.69 7.52	30.69 0.4352 0.4536
48 101 66	7.44 13.19 8.11	13.19 0.2587 0.4590
33 104 124	10.06 14.60 26.23	14.60 0.1976 0.2869
51 52 91	6.28 5.38 13.37	5.38 0.2509 0.2148
207 172 155	74.31 67.17 47.45	67.17 0.3933 0.3555
219 169 57	74.76 66.64 9.32	66.64 0.4960 0.4422
193 60 100	49.02 25.44 16.98	25.44 0.5361 0.2782
145 58 132	29.22 15.88 29.98	15.88 0.3892 0.2115
182 196 71	57.60 73.42 13.31	73.42 0.3991 0.5087
0 154 165	18.31 33.13 49.74	33.13 0.1809 0.3275
9 123 186	18.20 22.00 66.16	22.00 0.1711 0.2068
241 243 246	134.77 140.89 144.16	140.89 0.3210 0.3356
41 42 21	3.02 3.39 1.87	3.39 0.3644 0.4098
117 74 96	18.48 13.31 15.43	13.31 0.3913 0.2819
43 73 89	6.34 7.72 13.03	7.72 0.2340 0.2850