

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2019-3-27 00:42:38
Report-Version: v2.0.0
Monitor-Name: \\.\DISPLAY1
EDID-Name: EV2457
EDID-Serial:
Profile: C:/Windows/system32/spool/drivers/color/EV2457-5800K-18.icm
Created: 2019-3-27 0:35
Measurement device: i1Pro, Rev. 3, Serial: 342165
Evaluation method: UDACT v2.0

Summary

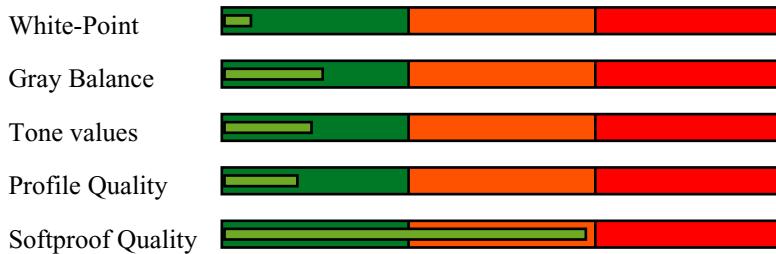
Calibration (Reference Whitepoint: 5800.00 Kelvin)

| | |
|-----------------|-----|
| 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 |

Diagram



The monitor has
not passed the certification
according to the UDACT v2.0
specifications.

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): | 154.41 161.89 157.17 |
| XYZ (normalized): | 95.38 100.00 97.09 |
| xy: | 0.3261 0.3419 |
| Luminance: | 161.9 Cd/m2 |
| Next Temperature: | 5782 Kelvin |
| Reference Whitepoint: | 5800.0 Kelvin |
| Deviation XYZ to Reference Whitepoint: | 0.3 dE00 |
| | 0.3 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: | 1.4 Chroma (Lab) |

Gray balance

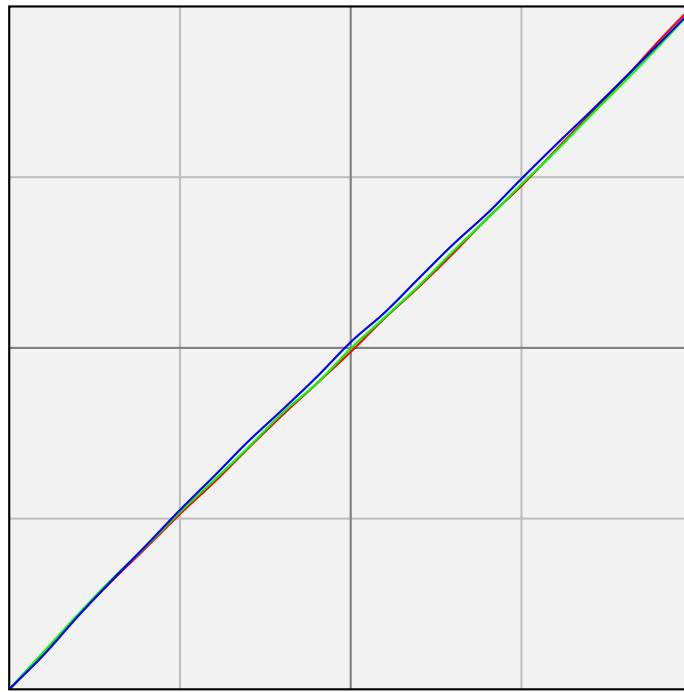
Average and maximum calculation will respect measurements with 1% minimum luminance only. The L-deviation shows the difference between the profile and measurement value.

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 | 10789 | 0.22 | 1.25 | 1.42 | | |
| 5 | 6123 | 0.95 | 5.31 | 0.71 | 1.82 | +1.6 |
| 10 | 5833 | 2.66 | 13.49 | 0.35 | 1.83 | +0.7 |
| 15 | 5737 | 5.36 | 21.25 | 0.15 | 1.82 | +0.2 |
| 20 | 5757 | 8.98 | 28.23 | 0.37 | 1.82 | +0.1 |
| 25 | 5846 | 13.10 | 34.17 | 0.30 | 1.83 | +0.1 |
| 30 | 5795 | 18.17 | 39.96 | 0.70 | 1.82 | -0.1 |
| 35 | 5756 | 24.45 | 45.78 | 0.43 | 1.81 | +0.1 |
| 40 | 5754 | 31.30 | 51.08 | 0.18 | 1.80 | +0.2 |
| 45 | 5819 | 37.76 | 55.40 | 0.65 | 1.82 | -0.1 |
| 50 | 5773 | 46.54 | 60.56 | 0.24 | 1.81 | +0.2 |
| 55 | 5798 | 55.10 | 64.99 | 0.13 | 1.81 | +0.1 |
| 60 | 5839 | 64.43 | 69.32 | 0.54 | 1.80 | -0.0 |
| 65 | 5813 | 74.06 | 73.38 | 0.28 | 1.82 | +0.1 |
| 70 | 5737 | 84.75 | 77.49 | 0.45 | 1.82 | +0.0 |
| 75 | 5818 | 96.90 | 81.76 | 0.33 | 1.79 | +0.2 |
| 80 | 5795 | 108.55 | 85.53 | 0.60 | 1.78 | +0.1 |
| 85 | 5791 | 120.82 | 89.22 | 0.21 | 1.81 | +0.2 |
| 90 | 5781 | 133.94 | 92.90 | 0.02 | 1.80 | +0.2 |
| 95 | 5781 | 147.41 | 96.43 | 0.21 | 1.81 | +0.0 |
| 100 | 5782 | 161.89 | 100.00 | 0.00 | | |
| Average | 5790 | | | 0.33 | 1.81 | 0.1 |
| Max | | | | 0.70 | | 0.2 |
| Range | | | | 1.06 | | |

Tone values

This test 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 0.3419).

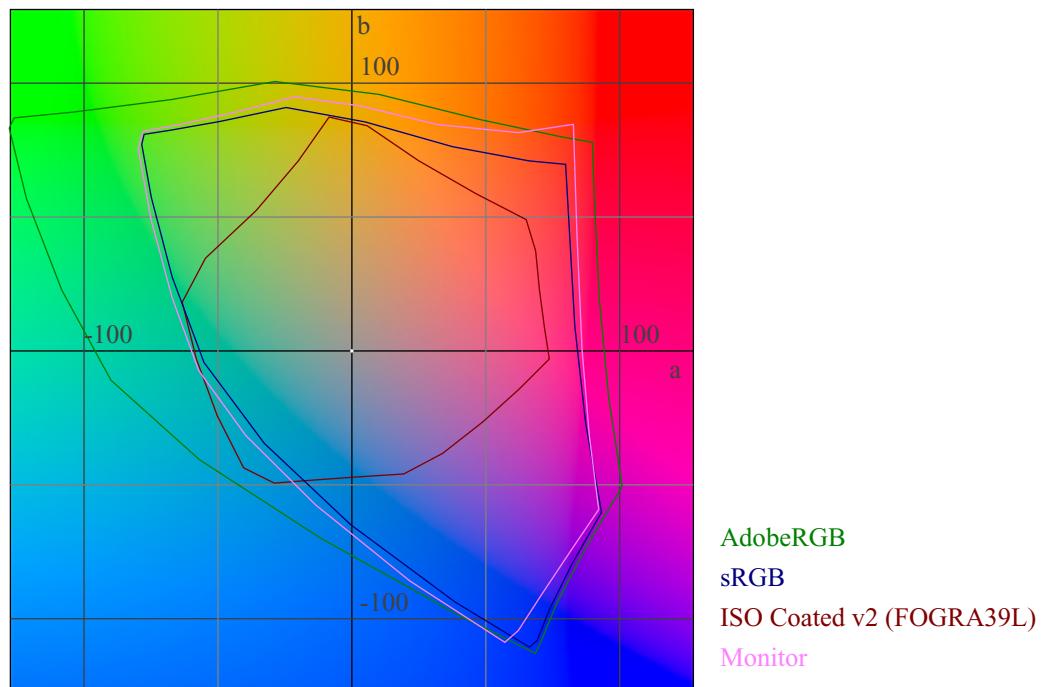
The assumed chromatic adaptation is: CAT02

| RGB | Lab | deltaLab | dE76 | dE00 |
|-------------|------------------|----------------|------|------|
| 0 0 0 | 1.2 0.2 -1.4 | -1.2 -0.2 1.4 | 1.9 | 1.6 |
| 0 0 128 | 15.2 37.8 -71.7 | 0.2 1.2 -1.2 | 1.7 | 0.4 |
| 0 0 255 | 30.6 59.7 -110.7 | 0.8 -0.7 0.5 | 1.2 | 0.7 |
| 0 128 0 | 51.7 -52.6 54.1 | 0.7 -0.9 0.0 | 1.1 | 0.7 |
| 0 128 128 | 54.1 -35.5 -10.5 | 0.4 -0.1 -0.1 | 0.4 | 0.4 |
| 0 170 255 | 69.7 -24.8 -47.3 | 0.4 0.1 0.1 | 0.4 | 0.3 |
| 0 255 0 | 86.9 -80.9 83.8 | 0.4 0.0 -1.9 | 2.0 | 0.5 |
| 0 255 170 | 88.6 -66.9 18.3 | 0.3 0.1 0.0 | 0.3 | 0.2 |
| 0 255 255 | 90.2 -54.0 -15.9 | 0.4 0.2 -0.0 | 0.4 | 0.2 |
| 85 85 85 | 44.0 0.6 -0.3 | -0.0 -0.6 0.3 | 0.6 | 0.9 |
| 128 0 0 | 30.2 54.3 47.0 | 0.5 1.1 3.2 | 3.4 | 1.2 |
| 128 0 128 | 34.5 60.7 -39.4 | 0.4 0.5 0.1 | 0.7 | 0.4 |
| 128 128 0 | 58.6 -9.8 65.1 | 0.3 0.6 -0.6 | 0.9 | 0.5 |
| 128 128 128 | 60.8 -0.6 -0.0 | -0.1 0.6 0.0 | 0.6 | 0.8 |
| 128 128 255 | 65.0 17.4 -54.4 | -0.2 0.7 -0.6 | 0.9 | 0.3 |
| 128 255 128 | 91.2 -49.0 41.2 | 0.1 -0.3 0.4 | 0.5 | 0.2 |
| 170 0 255 | 48.6 79.2 -80.2 | 0.5 -0.4 0.3 | 0.7 | 0.5 |
| 170 170 170 | 75.0 -0.2 -0.1 | -0.1 0.2 0.1 | 0.2 | 0.3 |
| 170 255 0 | 92.1 -42.7 92.0 | 0.3 0.1 -2.2 | 2.3 | 0.5 |
| 170 255 255 | 95.2 -23.6 -7.8 | 0.1 -0.3 -0.1 | 0.3 | 0.2 |
| 255 0 0 | 54.6 83.9 84.6 | -0.0 -0.1 0.5 | 0.5 | 0.2 |
| 255 0 170 | 57.7 88.5 -24.2 | 0.1 -0.3 0.4 | 0.5 | 0.2 |
| 255 0 255 | 60.7 93.2 -59.7 | 0.3 -0.6 0.3 | 0.8 | 0.3 |
| 255 128 128 | 73.5 42.5 19.9 | -0.6 1.2 0.4 | 1.4 | 0.6 |
| 255 170 0 | 80.1 20.0 89.6 | -0.2 0.3 -2.3 | 2.3 | 0.6 |
| 255 170 255 | 84.0 33.6 -23.7 | -0.4 1.0 -0.6 | 1.2 | 0.5 |
| 255 255 0 | 97.2 -14.0 100.2 | 0.1 -0.0 -2.8 | 2.8 | 0.5 |
| 255 255 170 | 98.6 -6.8 33.6 | -0.0 -0.1 0.9 | 0.9 | 0.4 |
| 255 255 255 | 100.0 -0.0 0.0 | 0.0 0.0 -0.0 | 0.0 | 0.0 |
| 170 85 85 | 53.6 34.2 15.5 | -0.1 0.2 0.5 | 0.6 | 0.3 |
| 85 170 85 | 68.2 -38.2 32.8 | -0.1 -0.6 0.0 | 0.6 | 0.2 |
| 85 85 170 | 47.3 14.5 -43.3 | -0.1 -0.3 0.0 | 0.3 | 0.2 |
| 85 170 170 | 69.9 -26.9 -8.6 | -0.1 -0.3 -0.0 | 0.4 | 0.2 |
| 170 85 170 | 56.0 41.4 -28.7 | -0.0 0.2 0.3 | 0.4 | 0.2 |
| 170 170 85 | 73.5 -7.8 41.5 | -0.1 0.1 0.0 | 0.2 | 0.1 |
| Average | | | 1.0 | 0.4 |
| Maximum | | | 3.4 | 1.6 |

Gamut-Volume

These measurements are only informative.

| | |
|--------------------------|------|
| ISO Coated v2 (FOGRA39L) | 93 % |
| sRGB | 99 % |
| AdobeRGB | 78 % |
| ECI-RGB v2.0 | 75 % |



Softproof Quality

The measurements are converted to Lab values based on the measured whitepoint (xy: 0.3261 0.3419) 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 | 7.8 |
| Primaries |  | 5.0 | 7.8 |
| Composite Gray Max |  | 3.0 | 0.8 |

| Reference (Lab) | Measurement (Lab) | Measurement (Yxy) | dE76 | dE00 |
|------------------|-------------------|---------------------|------|------|
| 55.0 -37.0 -50.0 | 57.8 -18.9 -44.6 | 25.72 0.2092 0.2608 | 19.1 | 7.8 |
| 66.9 -24.7 -37.1 | 66.8 -24.5 -37.4 | 36.40 0.2267 0.2911 | 0.3 | 0.2 |
| 79.7 -12.5 -21.8 | 79.7 -12.2 -21.7 | 56.22 0.2865 0.3251 | 0.3 | 0.2 |
| 87.7 -5.8 -11.8 | 87.9 -6.0 -11.5 | 71.86 0.3170 0.3424 | 0.4 | 0.3 |
| 91.5 -3.0 -7.0 | 91.6 -3.2 -6.6 | 79.80 0.3302 0.3495 | 0.4 | 0.4 |
| 48.0 74.0 -3.0 | 48.0 74.0 -3.5 | 16.78 0.5078 0.2581 | 0.5 | 0.2 |
| 60.8 50.6 -6.7 | 60.9 50.1 -6.4 | 29.14 0.4299 0.2922 | 0.5 | 0.2 |
| 76.4 25.8 -6.9 | 76.6 25.7 -7.4 | 50.84 0.3741 0.3217 | 0.6 | 0.4 |
| 86.2 12.0 -5.2 | 86.2 12.1 -5.6 | 68.34 0.3544 0.3388 | 0.4 | 0.3 |
| 90.7 5.9 -3.9 | 90.9 5.8 -3.8 | 78.19 0.3479 0.3475 | 0.2 | 0.2 |
| 89.0 -5.0 93.0 | 89.1 -4.7 94.0 | 74.33 0.4612 0.4935 | 1.1 | 0.3 |
| 90.3 -4.7 62.6 | 90.6 -5.0 62.6 | 77.60 0.4301 0.4609 | 0.4 | 0.2 |
| 92.2 -3.5 31.1 | 92.3 -3.1 30.4 | 81.49 0.3890 0.4116 | 0.9 | 0.4 |
| 93.6 -1.6 13.3 | 93.6 -1.6 12.3 | 84.46 0.3631 0.3804 | 1.0 | 0.6 |
| 94.3 -0.9 5.4 | 94.3 -0.9 5.0 | 85.98 0.3524 0.3675 | 0.5 | 0.4 |
| 89.0 0.0 -1.8 | 89.3 -0.1 -1.7 | 74.70 0.3427 0.3557 | 0.3 | 0.3 |
| 82.8 0.0 -1.7 | 82.8 0.3 -2.5 | 61.78 0.3417 0.3536 | 0.9 | 0.9 |
| 69.3 0.0 -1.4 | 69.3 -0.1 -1.7 | 39.76 0.3420 0.3550 | 0.3 | 0.4 |
| 54.1 0.0 -1.0 | 54.2 0.6 -1.2 | 22.15 0.3439 0.3547 | 0.6 | 0.8 |
| 36.6 -0.0 -0.5 | 36.5 0.1 -0.9 | 9.29 0.3431 0.3553 | 0.4 | 0.4 |
| 16.0 0.0 0.0 | 16.7 0.4 0.0 | 2.24 0.3477 0.3575 | 0.8 | 0.8 |
| 10.4 13.9 1.4 | 11.6 13.7 1.0 | 1.35 0.4298 0.3217 | 1.3 | 0.8 |
| 33.4 25.4 20.9 | 33.4 25.4 20.2 | 7.74 0.4975 0.3679 | 0.7 | 0.4 |
| 34.4 -3.3 22.3 | 34.5 -3.4 22.5 | 8.26 0.4079 0.4432 | 0.2 | 0.1 |
| 24.0 22.0 -46.0 | 24.2 21.9 -45.7 | 4.16 0.2242 0.1626 | 0.3 | 0.2 |
| 40.9 17.9 -36.6 | 40.9 17.8 -36.4 | 11.81 0.2756 0.2317 | 0.2 | 0.1 |
| 63.7 10.3 -23.8 | 64.0 9.7 -23.4 | 32.83 0.3112 0.2969 | 0.8 | 0.5 |
| 79.4 5.1 -13.6 | 79.5 5.0 -13.8 | 55.81 0.3278 0.3279 | 0.2 | 0.2 |
| 87.2 2.6 -8.1 | 87.3 2.8 -8.0 | 70.56 0.3361 0.3421 | 0.2 | 0.3 |
| 47.0 68.0 48.0 | 46.8 67.5 47.3 | 15.84 0.6210 0.3303 | 0.9 | 0.3 |
| 58.5 47.1 37.9 | 58.5 47.0 37.3 | 26.44 0.5289 0.3641 | 0.5 | 0.2 |
| 74.2 22.9 21.4 | 74.4 22.7 20.8 | 47.26 0.4264 0.3732 | 0.7 | 0.3 |
| 85.0 10.0 9.8 | 85.1 10.0 9.8 | 66.13 0.3786 0.3669 | 0.1 | 0.1 |
| 90.0 4.7 3.7 | 90.3 4.4 3.9 | 77.00 0.3588 0.3616 | 0.5 | 0.5 |
| 50.0 -65.0 27.0 | 51.5 -48.2 30.4 | 19.67 0.2959 0.5285 | 17.2 | 6.0 |
| 62.1 -39.8 21.0 | 61.9 -39.3 21.0 | 30.31 0.3074 0.4630 | 0.6 | 0.3 |
| 77.0 -19.1 11.0 | 77.1 -19.0 10.9 | 51.68 0.3333 0.3999 | 0.1 | 0.1 |
| 86.3 -8.4 4.2 | 86.4 -8.0 3.5 | 68.70 0.3394 0.3719 | 0.7 | 0.6 |
| 90.8 -4.1 0.9 | 90.9 -4.1 0.6 | 78.21 0.3407 0.3630 | 0.3 | 0.2 |
| 88.5 -0.4 -3.1 | 88.6 -0.3 -3.2 | 73.23 0.3398 0.3532 | 0.1 | 0.1 |

| | | | | | | | | | | |
|--------------|-------|-------|------|-------|-------|-------|--------|--------|------|-----|
| 82.0 | -0.9 | -4.1 | 82.2 | -0.9 | -4.3 | 60.71 | 0.3365 | 0.3512 | 0.3 | 0.3 |
| 67.7 | -2.0 | -4.4 | 67.5 | -1.6 | -4.9 | 37.32 | 0.3323 | 0.3492 | 0.7 | 0.7 |
| 52.2 | -2.5 | -3.5 | 52.3 | -2.4 | -3.5 | 20.39 | 0.3311 | 0.3519 | 0.1 | 0.1 |
| 37.5 | -3.9 | -3.1 | 37.6 | -4.0 | -3.5 | 9.88 | 0.3224 | 0.3524 | 0.4 | 0.4 |
| 26.3 | -6.8 | -3.4 | 26.4 | -6.4 | -2.6 | 4.88 | 0.3116 | 0.3594 | 0.9 | 0.8 |
| 10.4 | -8.2 | -10.2 | 11.7 | -6.7 | -9.1 | 1.37 | 0.2536 | 0.3124 | 2.4 | 1.8 |
| 24.3 | 32.7 | 13.1 | 24.5 | 32.0 | 12.2 | 4.27 | 0.5216 | 0.3268 | 1.2 | 0.6 |
| 24.7 | -17.0 | 7.5 | 24.7 | -16.2 | 7.0 | 4.30 | 0.3102 | 0.4306 | 0.9 | 0.6 |
| 23.0 | 0.0 | 0.0 | 23.0 | 0.4 | 0.1 | 3.79 | 0.3475 | 0.3580 | 0.4 | 0.6 |
| 38.5 | 6.6 | 3.9 | 38.7 | 7.0 | 4.0 | 10.49 | 0.3791 | 0.3603 | 0.5 | 0.4 |
| 61.5 | 5.4 | 3.8 | 61.8 | 5.0 | 3.6 | 30.18 | 0.3640 | 0.3612 | 0.5 | 0.5 |
| 78.1 | 2.9 | 0.9 | 78.1 | 3.0 | 1.1 | 53.39 | 0.3528 | 0.3579 | 0.2 | 0.2 |
| 86.6 | 1.5 | -0.7 | 86.7 | 1.6 | -0.5 | 69.43 | 0.3472 | 0.3562 | 0.2 | 0.2 |
| 53.1 | 37.7 | 28.9 | 53.3 | 37.9 | 28.6 | 21.35 | 0.5031 | 0.3646 | 0.4 | 0.3 |
| 41.5 | 22.7 | 16.8 | 41.6 | 22.4 | 16.3 | 12.23 | 0.4574 | 0.3661 | 0.6 | 0.3 |
| 31.9 | 40.0 | 24.0 | 32.0 | 39.1 | 23.4 | 7.10 | 0.5537 | 0.3419 | 1.1 | 0.4 |
| 32.5 | 44.4 | -1.8 | 32.7 | 44.1 | -2.3 | 7.39 | 0.4741 | 0.2775 | 0.6 | 0.3 |
| 51.3 | 1.3 | 44.5 | 51.4 | 1.2 | 45.1 | 19.58 | 0.4510 | 0.4619 | 0.7 | 0.2 |
| 34.6 | -36.4 | 13.9 | 34.3 | -33.4 | 14.3 | 8.13 | 0.2830 | 0.4847 | 3.1 | 1.4 |
| 36.0 | -26.2 | -20.9 | 36.0 | -19.9 | -20.2 | 9.03 | 0.2248 | 0.3081 | 6.3 | 3.2 |
| 20.9 | 9.6 | -23.6 | 21.0 | 9.9 | -23.5 | 3.26 | 0.2708 | 0.2345 | 0.4 | 0.4 |
| 71.2 | 18.8 | 17.3 | 71.2 | 19.1 | 16.7 | 42.46 | 0.4147 | 0.3707 | 0.6 | 0.5 |
| 71.2 | 22.2 | 73.1 | 71.2 | 21.8 | 74.6 | 42.48 | 0.5080 | 0.4450 | 1.5 | 0.6 |
| 47.7 | 71.2 | 16.2 | 47.7 | 71.2 | 15.9 | 16.58 | 0.5592 | 0.2906 | 0.4 | 0.2 |
| 38.0 | 55.4 | -20.9 | 38.1 | 55.3 | -20.8 | 10.15 | 0.4210 | 0.2307 | 0.2 | 0.1 |
| 73.7 | -22.8 | 67.6 | 73.3 | -22.4 | 68.6 | 45.56 | 0.4139 | 0.5139 | 1.1 | 0.5 |
| 52.3 | -52.3 | -20.2 | 54.5 | -32.9 | -15.8 | 22.41 | 0.2378 | 0.3480 | 20.0 | 7.0 |
| 43.3 | -17.0 | -48.6 | 44.4 | -9.2 | -45.9 | 14.11 | 0.1997 | 0.2308 | 8.3 | 4.6 |
| 95.0 | 0.0 | -2.0 | 95.0 | -0.2 | -2.3 | 87.60 | 0.3418 | 0.3549 | 0.3 | 0.3 |
| 15.7 | -3.1 | 11.7 | 16.2 | -2.4 | 11.1 | 2.15 | 0.3914 | 0.4273 | 1.1 | 1.0 |
| 34.7 | 28.5 | -4.0 | 34.9 | 28.2 | -3.9 | 8.44 | 0.4168 | 0.3006 | 0.4 | 0.2 |
| 25.8 | -11.0 | -14.4 | 25.9 | -11.0 | -14.7 | 4.73 | 0.2469 | 0.3092 | 0.3 | 0.2 |
| <hr/> | | | | | | | | | | |
| Average | | | | | | | | | | |
| Gamut-Volume | | | | | | | | | | |
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Measurement Data

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

| RGB | XYZ | Yxy |
|-------------|----------------------|----------------------|
| 255 255 255 | 154.41 161.89 157.17 | 161.89 0.3261 0.3419 |
| 0 0 0 | 0.23 0.22 0.36 | 0.22 0.2801 0.2777 |
| 12 12 12 | 0.91 0.95 0.99 | 0.95 0.3195 0.3328 |
| 25 25 25 | 2.52 2.66 2.57 | 2.66 0.3249 0.3434 |
| 38 38 38 | 5.12 5.36 5.18 | 5.36 0.3271 0.3423 |
| 51 51 51 | 8.53 8.98 8.61 | 8.98 0.3266 0.3436 |
| 63 63 63 | 12.46 13.10 12.80 | 13.10 0.3247 0.3415 |
| 76 76 76 | 17.44 18.17 17.90 | 18.17 0.3259 0.3395 |
| 89 89 89 | 23.43 24.45 23.83 | 24.45 0.3267 0.3410 |
| 102 102 102 | 29.87 31.30 30.25 | 31.30 0.3267 0.3424 |
| 114 114 114 | 36.13 37.76 37.15 | 37.76 0.3254 0.3400 |
| 127 127 127 | 44.33 46.54 44.99 | 46.54 0.3263 0.3426 |
| 140 140 140 | 52.54 55.10 53.64 | 55.10 0.3258 0.3416 |
| 153 153 153 | 61.44 64.43 63.24 | 64.43 0.3249 0.3407 |
| 165 165 165 | 70.61 74.06 72.28 | 74.06 0.3254 0.3414 |
| 178 178 178 | 81.09 84.75 82.06 | 84.75 0.3271 0.3419 |
| 191 191 191 | 92.27 96.90 94.45 | 96.90 0.3253 0.3417 |
| 204 204 204 | 103.82 108.55 106.20 | 108.55 0.3259 0.3407 |
| 216 216 216 | 115.09 120.82 117.21 | 120.82 0.3259 0.3422 |
| 229 229 229 | 127.75 133.94 130.00 | 133.94 0.3261 0.3420 |
| 242 242 242 | 140.75 147.41 143.38 | 147.41 0.3262 0.3416 |
| 0 0 128 | 7.36 3.54 38.60 | 3.54 0.1488 0.0714 |
| 0 0 255 | 25.60 11.88 136.36 | 11.88 0.1473 0.0683 |
| 0 128 0 | 16.22 31.98 4.88 | 31.98 0.3056 0.6025 |
| 0 128 128 | 23.82 35.93 44.39 | 35.93 0.2287 0.3450 |
| 0 170 255 | 53.23 66.41 145.43 | 66.41 0.2008 0.2505 |
| 0 255 0 | 56.68 112.58 16.42 | 112.58 0.3052 0.6063 |
| 0 255 170 | 69.45 118.82 83.64 | 118.82 0.2554 0.4370 |
| 0 255 255 | 82.81 125.11 154.63 | 125.11 0.2284 0.3451 |
| 85 85 85 | 21.53 22.42 21.97 | 22.42 0.3266 0.3401 |
| 128 0 0 | 19.65 9.95 0.54 | 9.95 0.6518 0.3302 |
| 128 0 128 | 27.31 13.51 39.65 | 13.51 0.3394 0.1679 |
| 128 128 0 | 36.28 42.60 5.15 | 42.60 0.4318 0.5070 |
| 128 128 128 | 44.65 47.05 45.69 | 47.05 0.3250 0.3425 |
| 128 128 255 | 63.47 56.09 143.27 | 56.09 0.2415 0.2134 |
| 128 255 128 | 85.42 127.35 58.36 | 127.35 0.3150 0.4697 |
| 170 0 255 | 59.48 28.89 137.58 | 28.89 0.2632 0.1279 |
| 170 170 170 | 74.52 78.23 76.04 | 78.23 0.3257 0.3419 |
| 170 255 0 | 90.63 130.04 16.86 | 130.04 0.3816 0.5475 |
| 170 255 255 | 117.71 143.05 155.99 | 143.05 0.2825 0.3433 |
| 255 0 0 | 70.65 35.54 1.10 | 35.54 0.6585 0.3313 |
| 255 0 170 | 83.20 41.35 68.04 | 41.35 0.4320 0.2147 |
| 255 0 255 | 96.39 47.38 138.89 | 47.38 0.3410 0.1676 |
| 255 128 128 | 95.85 73.61 47.73 | 73.61 0.4413 0.3389 |
| 255 170 0 | 98.51 90.90 8.94 | 90.90 0.4966 0.4583 |
| 255 170 255 | 125.14 104.06 148.19 | 104.06 0.3316 0.2757 |
| 255 255 0 | 127.71 149.06 17.26 | 149.06 0.4344 0.5070 |
| 255 255 170 | 141.02 155.57 87.04 | 155.57 0.3676 0.4055 |
| 170 85 85 | 45.59 34.67 22.48 | 34.67 0.4438 0.3374 |
| 85 170 85 | 41.48 61.70 27.96 | 61.70 0.3163 0.4705 |
| 85 85 170 | 30.65 26.81 69.53 | 26.81 0.2414 0.2111 |

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| 85 170 170 | 50.45 65.95 75.49 | 65.95 0.2629 0.3437 |
| 170 85 170 | 54.60 38.92 70.11 | 38.92 0.3337 0.2379 |
| 170 170 85 | 65.50 73.98 28.38 | 73.98 0.3902 0.4407 |
| 0 131 207 | 34.97 42.46 99.43 | 42.46 0.1977 0.2401 |
| 37 160 221 | 47.34 59.78 114.70 | 59.78 0.2134 0.2695 |
| 137 194 232 | 80.66 91.61 127.85 | 91.61 0.2688 0.3052 |
| 189 216 238 | 107.34 116.68 136.12 | 116.68 0.2980 0.3240 |
| 212 227 240 | 121.18 129.39 139.31 | 129.39 0.3108 0.3319 |
| 203 15 105 | 52.60 26.84 29.00 | 26.84 0.4851 0.2475 |
| 212 88 144 | 68.57 46.95 52.81 | 46.95 0.4074 0.2789 |
| 223 155 191 | 94.83 82.24 91.60 | 82.24 0.3530 0.3061 |
| 229 197 219 | 114.69 110.65 117.89 | 110.65 0.3342 0.3224 |
| 233 217 231 | 125.52 126.61 130.54 | 126.61 0.3280 0.3309 |
| 242 219 0 | 108.03 119.09 13.34 | 119.09 0.4493 0.4953 |
| 240 224 87 | 113.30 124.60 35.24 | 124.60 0.4148 0.4562 |
| 238 229 158 | 121.73 131.29 75.39 | 131.29 0.3707 0.3998 |
| 237 233 202 | 128.36 136.44 108.56 | 136.44 0.3438 0.3654 |
| 236 235 222 | 131.72 139.07 124.88 | 139.07 0.3329 0.3515 |
| 215 216 220 | 115.37 120.97 120.67 | 120.97 0.3231 0.3388 |
| 194 195 199 | 95.73 100.06 101.43 | 100.06 0.3221 0.3367 |
| 152 153 155 | 61.41 64.40 64.65 | 64.40 0.3224 0.3381 |
| 110 110 112 | 34.42 35.87 35.85 | 35.87 0.3243 0.3379 |
| 68 68 69 | 14.38 15.05 15.02 | 15.05 0.3236 0.3385 |
| 30 30 30 | 3.48 3.62 3.51 | 3.62 0.3281 0.3410 |
| 34 17 21 | 2.87 2.17 1.99 | 2.17 0.4086 0.3090 |
| 99 47 37 | 16.48 12.38 5.42 | 12.38 0.4808 0.3611 |
| 67 65 34 | 11.95 13.29 5.32 | 13.29 0.3910 0.4350 |
| 42 33 108 | 9.89 7.00 29.86 | 7.00 0.2116 0.1497 |
| 82 68 138 | 23.36 19.43 47.76 | 19.43 0.2580 0.2145 |
| 140 130 184 | 56.02 53.48 82.46 | 53.48 0.2918 0.2786 |
| 185 181 214 | 90.05 90.60 111.55 | 90.60 0.3082 0.3101 |
| 210 208 228 | 111.46 114.39 126.43 | 114.39 0.3164 0.3247 |
| 200 27 33 | 46.75 25.08 4.53 | 25.08 0.6123 0.3284 |
| 211 85 64 | 60.41 42.20 14.92 | 42.20 0.5140 0.3591 |
| 223 151 128 | 85.50 76.00 48.45 | 76.00 0.4072 0.3620 |
| 230 195 182 | 108.67 106.76 87.46 | 106.76 0.3588 0.3525 |
| 233 216 211 | 122.09 124.51 113.48 | 124.51 0.3391 0.3458 |
| 0 125 53 | 17.23 31.78 12.50 | 31.78 0.2800 0.5167 |
| 59 152 91 | 31.82 49.03 28.70 | 49.03 0.2905 0.4475 |
| 142 188 152 | 68.63 83.61 65.75 | 83.61 0.3148 0.3835 |
| 191 213 197 | 100.28 111.21 101.61 | 111.21 0.3203 0.3552 |
| 213 225 220 | 117.57 126.63 121.66 | 126.63 0.3213 0.3461 |
| 211 215 221 | 113.04 118.64 121.26 | 118.64 0.3203 0.3361 |
| 188 193 201 | 93.40 98.38 102.88 | 98.38 0.3170 0.3339 |
| 141 149 156 | 57.06 60.50 64.81 | 60.50 0.3129 0.3317 |
| 99 107 111 | 30.83 33.06 34.99 | 33.06 0.3118 0.3343 |
| 63 72 75 | 14.54 16.02 17.36 | 16.02 0.3034 0.3344 |
| 37 50 51 | 6.82 7.93 8.52 | 7.93 0.2931 0.3408 |
| 7 24 31 | 1.83 2.24 3.62 | 2.24 0.2381 0.2912 |
| 82 25 31 | 10.76 6.82 3.78 | 6.82 0.5038 0.3191 |
| 25 50 35 | 4.93 6.97 4.94 | 6.97 0.2928 0.4138 |
| 41 41 41 | 5.89 6.13 5.94 | 6.13 0.3279 0.3414 |
| 84 69 67 | 17.60 16.94 14.47 | 16.94 0.3591 0.3457 |
| 142 127 124 | 48.56 48.78 43.75 | 48.78 0.3442 0.3457 |
| 187 178 178 | 84.22 86.38 82.24 | 86.38 0.3331 0.3416 |
| 211 207 209 | 108.37 112.39 110.14 | 112.39 0.3275 0.3397 |

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| 177 81 65 | 46.42 34.15 14.84 | 34.15 0.4865 0.3579 |
| 117 66 57 | 24.15 19.63 11.27 | 19.63 0.4387 0.3565 |
| 112 33 32 | 18.10 11.31 4.16 | 11.31 0.5392 0.3369 |
| 115 29 65 | 20.13 11.86 12.60 | 11.86 0.4515 0.2659 |
| 120 102 33 | 29.88 31.40 7.11 | 31.40 0.4369 0.4592 |
| 0 77 43 | 7.50 13.17 7.44 | 13.17 0.2668 0.4684 |
| 0 77 97 | 10.97 14.81 26.04 | 14.81 0.2116 0.2858 |
| 38 34 67 | 6.26 5.36 13.06 | 5.36 0.2536 0.2171 |
| 203 145 127 | 75.33 68.36 46.92 | 68.36 0.3952 0.3586 |
| 223 142 26 | 75.69 67.89 8.75 | 67.89 0.4969 0.4457 |
| 203 22 75 | 50.47 26.39 16.38 | 26.39 0.5413 0.2830 |
| 138 27 106 | 29.90 16.41 29.18 | 16.41 0.3961 0.2174 |
| 148 179 32 | 57.05 73.16 12.39 | 73.16 0.4001 0.5131 |
| 0 128 139 | 25.14 36.61 50.76 | 36.61 0.2234 0.3254 |
| 0 92 167 | 20.95 23.42 66.17 | 23.42 0.1895 0.2118 |
| 235 237 242 | 135.29 141.87 142.64 | 141.87 0.3223 0.3380 |
| 29 30 18 | 3.10 3.46 1.74 | 3.46 0.3736 0.4166 |
| 100 48 71 | 18.72 13.61 15.12 | 13.61 0.3946 0.2868 |
| 21 51 65 | 6.23 7.73 12.90 | 7.73 0.2319 0.2879 |