

Colorimetric Report

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CCalc 2.1

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| | |
|------------------|---------------------------------------|
| Date | Friday, November 13, 2015 |
| Display | Samsung U24E850R |
| Sensor | X-Rite i1 Display Pro (EDR: WLED) |
| Testchart | In accordance with ISO 12646:2007 (1) |
| Target | sRGB |
| Display Profile | Considered |
| Rendering Intent | Relative colorimetric |

(1) Five equally spaced code values for each channel

| | |
|-------------------------------------|--------------------------|
| White Point (CCT) | 6469 Kelvin |
| White Point XYZ (normalized) | 94.69 100.00 107.72 |
| DeltaE to D50/ D65 | 18.82/ 0.95 |
| Assumed Target Whitepoint (2) | 6500 Kelvin |
| DeltaE to Assumed Target Whitepoint | 0.86 |
| Brightness | 135.06 cd/m ² |
| Black Point | 0.15 cd/m ² |
| Contrast (x:1) | 900:1 |
| Gradation (Average) | 2.21 |

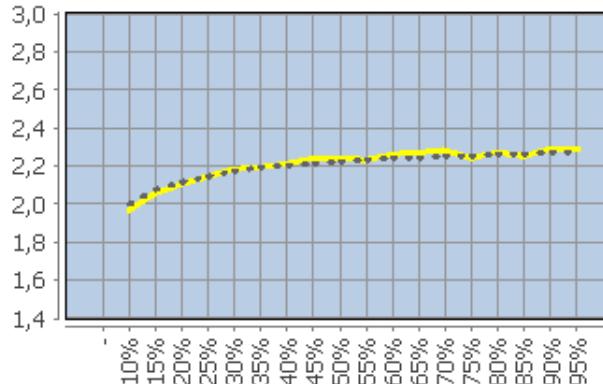
(2) Daylight

| | Percent | Kelvin | Delta C | Delta E | Gamma |
|--|-------------|--------|---------|---------|-------|
| | 5 | - | - | - | - |
| | 10 | 6585 | 0.51 | 0.85 | 1.97 |
| | 15 | 6581 | 0.77 | 0.83 | 2.06 |
| | 20 | 6548 | 0.27 | 0.40 | 2.10 |
| | 25 | 6470 | 0.34 | 0.37 | 2.14 |
| | 30 | 6560 | 0.36 | 0.37 | 2.18 |
| | 35 | 6559 | 0.83 | 0.84 | 2.19 |
| | 40 | 6475 | 0.17 | 0.24 | 2.21 |
| | 45 | 6404 | 1.15 | 1.20 | 2.24 |
| | 50 | 6497 | 0.59 | 0.68 | 2.24 |
| | 55 | 6401 | 0.80 | 0.81 | 2.23 |
| | 60 | 6448 | 0.22 | 0.32 | 2.26 |
| | 65 | 6526 | 0.94 | 0.99 | 2.27 |
| | 70 | 6425 | 0.28 | 0.39 | 2.28 |
| | 75 | 6451 | 0.21 | 0.25 | 2.24 |
| | 80 | 6506 | 0.27 | 0.28 | 2.27 |
| | 85 | 6454 | 0.45 | 0.47 | 2.25 |
| | 90 | 6436 | 0.48 | 0.49 | 2.29 |
| | 95 | 6473 | 0.60 | 0.60 | 2.29 |
| | 100 (3) | 6469 | - | - | - |
| | Average (4) | - | 0.51 | 0.58 | 2.21 |
| | Maximum (4) | - | 1.15 | 1.2 | - |
| | Range (4) | - | 1.97 | - | - |

(3) Visual adaptation to display whitepoint is assumed

(4) Only luminance > 1% considered

Corresponding Gamma



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| Date | Friday, November 13, 2015 | | | | |
| Display | Samsung U24E850R | | | | |
| Sensor | X-Rite i1 Display Pro (EDR: WLED) | | | | |
| Testchart | In accordance with ISO 12646:2007 (1) | | | | |
| Target | sRGB | | | | |
| Display Profile | Considered | | | | |
| Rendering Intent | Relative colorimetric | | | | |

(1) Five equally spaced code values for each channel

| | RGB | Delta C | Delta H | Delta L | Delta E94 |
|--|------------|---------|---------|---------|-----------|
| | 0 0 0 | 1.15 | 0.00 | 1.02 | 1.54 |
| | 0 0 63 | 0.80 | 0.10 | 0.44 | 0.53 |
| | 0 0 127 | 1.11 | 0.45 | 0.56 | 0.64 |
| | 0 0 191 | 0.30 | 0.17 | 0.06 | 0.10 |
| | 0 0 255 | 0.45 | 0.30 | 0.06 | 0.13 |
| | 0 63 0 | 0.92 | 0.31 | 0.07 | 0.37 |
| | 0 63 63 | 0.53 | 0.50 | 0.24 | 0.54 |
| | 0 63 127 | 0.28 | 0.50 | 0.09 | 0.33 |
| | 0 63 191 | 0.34 | 0.15 | 0.15 | 0.18 |
| | 0 63 255 | 0.82 | 0.61 | 0.11 | 0.28 |
| | 0 127 0 | 0.24 | 0.21 | 0.36 | 0.38 |
| | 0 127 63 | 0.52 | 0.24 | 0.42 | 0.46 |
| | 0 127 127 | 0.36 | 0.57 | 0.46 | 0.62 |
| | 0 127 191 | 0.43 | 1.11 | 0.41 | 0.81 |
| | 0 127 255 | 1.02 | 0.98 | 0.22 | 0.57 |
| | 0 191 0 | 0.01 | 0.06 | 0.03 | 0.04 |
| | 0 191 63 | 0.40 | 0.32 | 0.06 | 0.18 |
| | 0 191 127 | 0.64 | 0.49 | 0.18 | 0.36 |
| | 0 191 191 | 0.13 | 0.01 | 0.04 | 0.06 |
| | 0 191 255 | 0.05 | 0.19 | 0.07 | 0.13 |
| | 0 255 0 | 0.52 | 0.30 | 0.16 | 0.21 |
| | 0 255 63 | 0.51 | 0.23 | 0.19 | 0.23 |
| | 0 255 127 | 0.64 | 0.03 | 0.11 | 0.17 |
| | 0 255 191 | 0.09 | 0.37 | 0.06 | 0.20 |
| | 0 255 255 | 0.32 | 0.06 | 0.05 | 0.12 |
| | 63 0 0 | 1.06 | 0.70 | 0.51 | 0.81 |
| | 63 0 63 | 0.25 | 0.05 | 0.07 | 0.12 |
| | 63 0 127 | 0.44 | 0.19 | 0.36 | 0.38 |
| | 63 0 191 | 0.63 | 0.25 | 0.14 | 0.21 |
| | 63 0 255 | 0.62 | 0.24 | 0.12 | 0.17 |
| | 63 63 0 | 0.38 | 0.27 | 0.24 | 0.33 |
| | 63 63 63 | 0.50 | 0.06 | 0.22 | 0.55 |
| | 63 63 127 | 0.07 | 0.19 | 0.04 | 0.13 |
| | 63 63 191 | 0.30 | 0.02 | 0.12 | 0.13 |
| | 63 63 255 | 0.28 | 0.21 | 0.00 | 0.09 |
| | 63 127 0 | 0.86 | 0.07 | 0.37 | 0.43 |
| | 63 127 63 | 0.47 | 0.14 | 0.35 | 0.39 |
| | 63 127 127 | 0.19 | 0.02 | 0.19 | 0.22 |
| | 63 127 191 | 0.54 | 0.86 | 0.45 | 0.73 |
| | 63 127 255 | 1.03 | 0.78 | 0.26 | 0.51 |
| | 63 191 0 | 0.04 | 0.19 | 0.06 | 0.10 |
| | 63 191 63 | 0.07 | 0.15 | 0.07 | 0.10 |
| | 63 191 127 | 0.83 | 0.40 | 0.15 | 0.36 |
| | 63 191 191 | 0.01 | 0.12 | 0.05 | 0.10 |
| | 63 191 255 | 0.13 | 0.15 | 0.00 | 0.10 |
| | 63 255 0 | 0.62 | 0.17 | 0.15 | 0.19 |
| | 63 255 63 | 0.62 | 0.30 | 0.17 | 0.23 |

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| | |
|------------------|---------------------------------------|
| Date | Friday, November 13, 2015 |
| Display | Samsung U24E850R |
| Sensor | X-Rite i1 Display Pro (EDR: WLED) |
| Testchart | In accordance with ISO 12646:2007 (1) |
| Target | sRGB |
| Display Profile | Considered |
| Rendering Intent | Relative colorimetric |

(1) Five equally spaced code values for each channel

| | RGB | Delta C | Delta H | Delta L | Delta E94 |
|--|-------------|---------|---------|---------|-----------|
| | 63 255 127 | 0.75 | 0.00 | 0.06 | 0.17 |
| | 63 255 191 | 0.19 | 0.39 | 0.03 | 0.21 |
| | 63 255 255 | 0.13 | 0.05 | 0.05 | 0.07 |
| | 127 0 0 | 0.01 | 0.37 | 0.44 | 0.48 |
| | 127 0 63 | 0.22 | 0.30 | 0.43 | 0.47 |
| | 127 0 127 | 0.59 | 0.11 | 0.35 | 0.38 |
| | 127 0 191 | 0.18 | 0.22 | 0.30 | 0.32 |
| | 127 0 255 | 0.20 | 0.10 | 0.12 | 0.13 |
| | 127 63 0 | 0.18 | 1.01 | 0.05 | 0.58 |
| | 127 63 63 | 0.84 | 0.30 | 0.16 | 0.44 |
| | 127 63 127 | 0.75 | 0.26 | 0.16 | 0.33 |
| | 127 63 191 | 0.58 | 0.14 | 0.20 | 0.24 |
| | 127 63 255 | 0.02 | 0.01 | 0.05 | 0.05 |
| | 127 127 0 | 0.80 | 0.35 | 0.52 | 0.59 |
| | 127 127 63 | 1.03 | 0.15 | 0.53 | 0.66 |
| | 127 127 127 | 0.71 | 0.10 | 0.35 | 0.79 |
| | 127 127 191 | 0.93 | 0.04 | 0.34 | 0.49 |
| | 127 127 255 | 1.25 | 0.65 | 0.42 | 0.60 |
| | 127 191 0 | 0.07 | 0.28 | 0.21 | 0.25 |
| | 127 191 63 | 0.61 | 0.16 | 0.12 | 0.21 |
| | 127 191 127 | 0.59 | 0.08 | 0.01 | 0.21 |
| | 127 191 191 | 0.19 | 0.02 | 0.12 | 0.16 |
| | 127 191 255 | 0.15 | 0.12 | 0.15 | 0.18 |
| | 127 255 0 | 0.50 | 0.46 | 0.09 | 0.22 |
| | 127 255 63 | 0.52 | 0.35 | 0.07 | 0.18 |
| | 127 255 127 | 1.02 | 0.09 | 0.00 | 0.23 |
| | 127 255 191 | 0.24 | 0.31 | 0.12 | 0.22 |
| | 127 255 255 | 0.16 | 0.04 | 0.06 | 0.08 |
| | 191 0 0 | 1.17 | 0.71 | 0.14 | 0.42 |
| | 191 0 63 | 0.38 | 0.41 | 0.09 | 0.24 |
| | 191 0 127 | 0.15 | 0.32 | 0.04 | 0.16 |
| | 191 0 191 | 0.19 | 0.31 | 0.11 | 0.17 |
| | 191 0 255 | 1.04 | 0.30 | 0.05 | 0.20 |
| | 191 63 0 | 0.35 | 0.85 | 0.10 | 0.42 |
| | 191 63 63 | 0.02 | 0.63 | 0.05 | 0.34 |
| | 191 63 127 | 0.33 | 0.44 | 0.08 | 0.27 |
| | 191 63 191 | 0.43 | 0.39 | 0.01 | 0.21 |
| | 191 63 255 | 0.65 | 0.22 | 0.01 | 0.14 |
| | 191 127 0 | 0.27 | 1.03 | 0.32 | 0.61 |
| | 191 127 63 | 0.21 | 1.09 | 0.28 | 0.70 |
| | 191 127 127 | 0.56 | 0.31 | 0.22 | 0.40 |
| | 191 127 191 | 0.68 | 0.12 | 0.17 | 0.30 |
| | 191 127 255 | 0.81 | 0.41 | 0.32 | 0.42 |
| | 191 191 0 | 0.39 | 0.43 | 0.05 | 0.22 |
| | 191 191 63 | 0.70 | 0.31 | 0.04 | 0.24 |
| | 191 191 127 | 0.10 | 0.31 | 0.07 | 0.22 |
| | 191 191 191 | 0.09 | 0.00 | 0.08 | 0.13 |

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| | |
|------------------|---------------------------------------|
| Date | Friday, November 13, 2015 |
| Display | Samsung U24E850R |
| Sensor | X-Rite i1 Display Pro (EDR: WLED) |
| Testchart | In accordance with ISO 12646:2007 (1) |
| Target | sRGB |
| Display Profile | Considered |
| Rendering Intent | Relative colorimetric |

(1) Five equally spaced code values for each channel

| | RGB | Delta C | Delta H | Delta L | Delta E94 |
|--|-----------------|---------|---------|---------|-----------|
| | 191 191 255 | 0.08 | 0.11 | 0.06 | 0.10 |
| | 191 255 0 | 0.66 | 0.31 | 0.00 | 0.17 |
| | 191 255 63 | 0.11 | 0.12 | 0.02 | 0.06 |
| | 191 255 127 | 0.25 | 0.46 | 0.05 | 0.24 |
| | 191 255 191 | 0.09 | 0.28 | 0.04 | 0.18 |
| | 191 255 255 | 0.33 | 0.01 | 0.11 | 0.20 |
| | 255 0 0 | 0.41 | 0.17 | 0.01 | 0.10 |
| | 255 0 63 | 0.00 | 0.24 | 0.06 | 0.12 |
| | 255 0 127 | 0.54 | 0.30 | 0.31 | 0.35 |
| | 255 0 191 | 0.61 | 0.20 | 0.13 | 0.19 |
| | 255 0 255 | 0.45 | 0.46 | 0.12 | 0.22 |
| | 255 63 0 | 0.47 | 0.55 | 0.03 | 0.24 |
| | 255 63 63 | 0.09 | 0.47 | 0.08 | 0.22 |
| | 255 63 127 | 0.65 | 0.45 | 0.25 | 0.36 |
| | 255 63 191 | 0.17 | 0.33 | 0.20 | 0.25 |
| | 255 63 255 | 0.47 | 0.41 | 0.03 | 0.18 |
| | 255 127 0 | 1.22 | 0.36 | 0.14 | 0.33 |
| | 255 127 63 | 0.99 | 0.44 | 0.09 | 0.33 |
| | 255 127 127 | 1.09 | 0.55 | 0.05 | 0.44 |
| | 255 127 191 | 1.27 | 0.06 | 0.00 | 0.36 |
| | 255 127 255 | 0.17 | 0.43 | 0.22 | 0.30 |
| | 255 191 0 | 0.48 | 0.26 | 0.22 | 0.26 |
| | 255 191 63 | 0.76 | 0.11 | 0.18 | 0.26 |
| | 255 191 127 | 0.92 | 0.22 | 0.19 | 0.39 |
| | 255 191 191 | 0.27 | 0.09 | 0.26 | 0.29 |
| | 255 191 255 | 0.47 | 0.36 | 0.18 | 0.33 |
| | 255 255 0 | 0.65 | 0.06 | 0.13 | 0.18 |
| | 255 255 63 | 0.13 | 0.10 | 0.11 | 0.12 |
| | 255 255 127 | 0.16 | 0.42 | 0.01 | 0.22 |
| | 255 255 191 | 0.87 | 0.27 | 0.06 | 0.40 |
| | 255 255 255 (1) | - | - | - | - |
| | Average (2) | 0.48 | 0.00 | 0.17 | 0.29 |
| | Maximum (2) | 1.27 | 1.11 | 1.02 | 0.81 |

(1) Visual adaptation to display whitepoint is assumed; CIELAB reference values are adapted (Bradford transformation) to display whitepoint

(2) Without Black

RGB values compressed to video level if necessary

| | |
|-------------|-------------------------|
| Color Space | Gamut Volume CIELAB D50 |
| sRGB | 100% |

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| Date | Friday, November 13, 2015 |
| Display | Samsung U24E850R |
| Sensor | X-Rite i1 Display Pro (EDR: WLED) |
| Testchart | In accordance with ISO 12646:2007 (1) |
| Target | sRGB |
| Display Profile | Considered |
| Rendering Intent | Relative colorimetric |

(1) Five equally spaced code values for each channel

| Property | Device adjustments |
|----------------------|--|
| Backlight brightness | |
| Brightness | 25 |
| Contrast | 75 |
| RGB Gain | 50 45 32 |
| Gradation | Modus 1 |
| Other | Modus 1 ergibt ein gemessenes Gamma von 2,12, ist aber schon optimal voreingestellt. Modus 2 + 3 führen zu einem Gamma deutlich oberhalb von 2,2 |