

# Colorimetric Report

## Page (1/4)



CCalc 2.1  
Copyright © 2015, Denis Freund  
All Rights Reserved  
licensed for PRAD ProAdviser

|                  |                                       |
|------------------|---------------------------------------|
| Date             | Monday, February 9, 2015              |
| Display          | NEC PA322UHD                          |
| Sensor           | X-Rite i1 Pro                         |
| 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)                   | 6538 Kelvin              |
| White Point XYZ (normalized)        | 95.05 100.00 109.45      |
| DeltaE to D50/ D65                  | 19.89/ 0.35              |
| Assumed Target Whitepoint (2)       | 6500 Kelvin              |
| DeltaE to Assumed Target Whitepoint | 0.42                     |
| Brightness (3)                      | 140.00 cd/m <sup>2</sup> |
| Black Point (3)                     | 0.22 cd/m <sup>2</sup>   |
| Contrast (x:1)                      | 636:1                    |
| Gradation (Average)                 | 2.18                     |

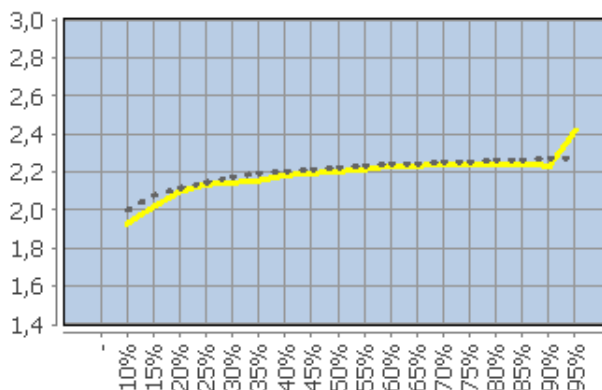
(2) Daylight (3) Measured with i1 Display Pro

|  | Percent     | Kelvin | Delta C | Delta E | Gamma |
|--|-------------|--------|---------|---------|-------|
|  | 5           | -      | -       | -       | -     |
|  | 10          | 7070   | 1.34    | 1.98    | 1.93  |
|  | 15          | 6809   | 0.68    | 1.22    | 2.02  |
|  | 20          | 6825   | 0.72    | 0.92    | 2.09  |
|  | 25          | 6552   | 0.26    | 0.52    | 2.13  |
|  | 30          | 6522   | 0.06    | 0.54    | 2.14  |
|  | 35          | 6611   | 0.43    | 0.86    | 2.15  |
|  | 40          | 6490   | 0.33    | 0.53    | 2.18  |
|  | 45          | 6569   | 0.26    | 0.46    | 2.19  |
|  | 50          | 6513   | 0.16    | 0.36    | 2.20  |
|  | 55          | 6493   | 0.23    | 0.38    | 2.21  |
|  | 60          | 6566   | 0.62    | 0.64    | 2.23  |
|  | 65          | 6491   | 0.28    | 0.33    | 2.23  |
|  | 70          | 6498   | 0.29    | 0.32    | 2.24  |
|  | 75          | 6522   | 0.15    | 0.22    | 2.24  |
|  | 80          | 6508   | 0.20    | 0.27    | 2.24  |
|  | 85          | 6516   | 0.19    | 0.23    | 2.24  |
|  | 90          | 6518   | 0.17    | 0.22    | 2.23  |
|  | 95          | 6523   | 0.13    | 0.32    | 2.42  |
|  | 100 (4)     | 6538   | -       | -       | -     |
|  | Average (5) | -      | 0.36    | 0.57    | 2.18  |
|  | Maximum (5) | -      | 1.34    | 1.98    | -     |
|  | Range (5)   | -      | 1.67    | -       | -     |

(4) Visual adaptation to display whitepoint is assumed

(5) Only luminance > 1% considered

### Corresponding Gamma



# Colorimetric Report

## Page (2/4)



CCalc 2.1  
Copyright © 2015, Denis Freund  
All Rights Reserved  
licensed for PRAD ProAdviser

|                  |                                       |
|------------------|---------------------------------------|
| Date             | Monday, February 9, 2015              |
| Display          | NEC PA322UHD                          |
| Sensor           | X-Rite i1 Pro                         |
| 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      | 2.13    | 0.00    | 1.55    | 2.63      |
|  | 0 0 63     | 0.74    | 0.63    | 1.43    | 1.50      |
|  | 0 0 127    | 0.59    | 0.36    | 0.34    | 0.40      |
|  | 0 0 191    | 0.58    | 0.06    | 0.11    | 0.15      |
|  | 0 0 255    | 1.78    | 0.70    | 0.47    | 0.59      |
|  | 0 63 0     | 4.15    | 1.17    | 0.47    | 1.64      |
|  | 0 63 63    | 0.41    | 0.07    | 0.56    | 0.60      |
|  | 0 63 127   | 0.34    | 0.28    | 0.43    | 0.48      |
|  | 0 63 191   | 0.16    | 0.11    | 0.05    | 0.08      |
|  | 0 63 255   | 0.70    | 0.16    | 0.23    | 0.27      |
|  | 0 127 0    | 1.24    | 0.39    | 0.27    | 0.44      |
|  | 0 127 63   | 0.27    | 0.15    | 0.20    | 0.23      |
|  | 0 127 127  | 0.11    | 0.27    | 0.42    | 0.47      |
|  | 0 127 191  | 0.25    | 0.58    | 0.43    | 0.57      |
|  | 0 127 255  | 0.14    | 0.14    | 0.03    | 0.08      |
|  | 0 191 0    | 0.23    | 0.08    | 0.31    | 0.31      |
|  | 0 191 63   | 0.11    | 0.02    | 0.30    | 0.30      |
|  | 0 191 127  | 0.25    | 0.15    | 0.22    | 0.25      |
|  | 0 191 191  | 0.01    | 0.08    | 0.32    | 0.32      |
|  | 0 191 255  | 0.30    | 0.38    | 0.02    | 0.25      |
|  | 0 255 0    | 0.14    | 0.59    | 0.10    | 0.24      |
|  | 0 255 63   | 0.52    | 0.11    | 0.09    | 0.13      |
|  | 0 255 127  | 0.86    | 0.05    | 0.03    | 0.17      |
|  | 0 255 191  | 0.14    | 0.01    | 0.17    | 0.18      |
|  | 0 255 255  | 0.35    | 0.26    | 0.04    | 0.19      |
|  | 63 0 0     | 2.39    | 1.12    | 1.12    | 1.66      |
|  | 63 0 63    | 1.10    | 0.63    | 0.84    | 1.00      |
|  | 63 0 127   | 0.65    | 0.22    | 0.55    | 0.58      |
|  | 63 0 191   | 0.87    | 0.19    | 0.02    | 0.17      |
|  | 63 0 255   | 1.80    | 0.45    | 0.52    | 0.61      |
|  | 63 63 0    | 3.30    | 0.29    | 0.40    | 1.35      |
|  | 63 63 63   | 0.34    | 0.03    | 0.66    | 0.74      |
|  | 63 63 127  | 0.59    | 0.27    | 0.41    | 0.49      |
|  | 63 63 191  | 0.28    | 0.13    | 0.04    | 0.09      |
|  | 63 63 255  | 0.83    | 0.15    | 0.26    | 0.30      |
|  | 63 127 0   | 1.13    | 0.01    | 0.30    | 0.41      |
|  | 63 127 63  | 0.65    | 0.16    | 0.28    | 0.37      |
|  | 63 127 127 | 0.15    | 0.31    | 0.49    | 0.55      |
|  | 63 127 191 | 0.31    | 0.30    | 0.41    | 0.46      |
|  | 63 127 255 | 0.10    | 0.13    | 0.13    | 0.14      |
|  | 63 191 0   | 0.43    | 0.18    | 0.39    | 0.41      |
|  | 63 191 63  | 0.43    | 0.26    | 0.34    | 0.37      |
|  | 63 191 127 | 0.42    | 0.25    | 0.27    | 0.33      |
|  | 63 191 191 | 0.23    | 0.16    | 0.33    | 0.36      |
|  | 63 191 255 | 0.05    | 0.02    | 0.31    | 0.31      |
|  | 63 255 0   | 0.07    | 0.77    | 0.11    | 0.30      |
|  | 63 255 63  | 0.67    | 0.38    | 0.10    | 0.21      |

# Colorimetric Report

## Page (3/4)



CCalc 2.1  
Copyright © 2015, Denis Freund  
All Rights Reserved  
licensed for PRAD ProAdviser

|                  |                                       |
|------------------|---------------------------------------|
| Date             | Monday, February 9, 2015              |
| Display          | NEC PA322UHD                          |
| Sensor           | X-Rite i1 Pro                         |
| 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  | 1.00    | 0.24    | 0.04    | 0.23      |
|  | 63 255 191  | 0.43    | 0.11    | 0.19    | 0.23      |
|  | 63 255 255  | 0.19    | 0.27    | 0.08    | 0.19      |
|  | 127 0 0     | 2.11    | 1.84    | 0.23    | 1.14      |
|  | 127 0 63    | 0.39    | 0.17    | 0.40    | 0.42      |
|  | 127 0 127   | 0.06    | 0.15    | 0.39    | 0.40      |
|  | 127 0 191   | 0.77    | 0.06    | 0.04    | 0.15      |
|  | 127 0 255   | 1.44    | 0.45    | 0.28    | 0.39      |
|  | 127 63 0    | 1.59    | 1.00    | 0.26    | 0.79      |
|  | 127 63 63   | 0.12    | 0.50    | 0.31    | 0.46      |
|  | 127 63 127  | 0.15    | 0.21    | 0.47    | 0.49      |
|  | 127 63 191  | 0.00    | 0.11    | 0.29    | 0.29      |
|  | 127 63 255  | 0.15    | 0.21    | 0.13    | 0.15      |
|  | 127 127 0   | 0.42    | 0.37    | 0.18    | 0.29      |
|  | 127 127 63  | 0.06    | 0.17    | 0.49    | 0.50      |
|  | 127 127 127 | 0.19    | 0.04    | 0.36    | 0.41      |
|  | 127 127 191 | 0.19    | 0.01    | 0.32    | 0.33      |
|  | 127 127 255 | 0.22    | 0.28    | 0.11    | 0.18      |
|  | 127 191 0   | 0.19    | 0.04    | 0.26    | 0.26      |
|  | 127 191 63  | 0.12    | 0.17    | 0.26    | 0.27      |
|  | 127 191 127 | 0.18    | 0.00    | 0.18    | 0.19      |
|  | 127 191 191 | 0.06    | 0.18    | 0.26    | 0.29      |
|  | 127 191 255 | 0.06    | 0.01    | 0.25    | 0.25      |
|  | 127 255 0   | 0.16    | 0.42    | 0.04    | 0.17      |
|  | 127 255 63  | 0.56    | 0.17    | 0.05    | 0.13      |
|  | 127 255 127 | 0.12    | 0.03    | 0.27    | 0.28      |
|  | 127 255 191 | 0.24    | 0.00    | 0.15    | 0.17      |
|  | 127 255 255 | 0.07    | 0.24    | 0.19    | 0.25      |
|  | 191 0 0     | 1.49    | 1.41    | 0.02    | 0.70      |
|  | 191 0 63    | 0.31    | 0.23    | 0.14    | 0.19      |
|  | 191 0 127   | 0.22    | 0.48    | 0.12    | 0.27      |
|  | 191 0 191   | 0.34    | 0.09    | 0.07    | 0.10      |
|  | 191 0 255   | 0.96    | 0.15    | 0.12    | 0.20      |
|  | 191 63 0    | 0.38    | 0.32    | 0.19    | 0.26      |
|  | 191 63 63   | 0.15    | 0.71    | 0.21    | 0.43      |
|  | 191 63 127  | 0.11    | 0.49    | 0.34    | 0.43      |
|  | 191 63 191  | 0.12    | 0.02    | 0.24    | 0.24      |
|  | 191 63 255  | 0.25    | 0.18    | 0.09    | 0.12      |
|  | 191 127 0   | 0.01    | 0.49    | 0.26    | 0.36      |
|  | 191 127 63  | 0.13    | 0.47    | 0.26    | 0.38      |
|  | 191 127 127 | 0.02    | 0.12    | 0.17    | 0.19      |
|  | 191 127 191 | 0.09    | 0.11    | 0.17    | 0.18      |
|  | 191 127 255 | 0.15    | 0.14    | 0.18    | 0.20      |
|  | 191 191 0   | 0.22    | 0.03    | 0.17    | 0.18      |
|  | 191 191 63  | 0.27    | 0.09    | 0.18    | 0.20      |
|  | 191 191 127 | 0.32    | 0.26    | 0.13    | 0.25      |
|  | 191 191 191 | 0.16    | 0.06    | 0.18    | 0.25      |

# Colorimetric Report

## Page (4/4)



CCalc 2.1  
Copyright © 2015, Denis Freund  
All Rights Reserved  
licensed for PRAD ProAdviser

|                  |                                       |
|------------------|---------------------------------------|
| Date             | Monday, February 9, 2015              |
| Display          | NEC PA322UHD                          |
| Sensor           | X-Rite i1 Pro                         |
| 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     | 0.19    | 0.05    | 0.17    | 0.19      |
|  | 191 255 0       | 0.56    | 0.69    | 0.01    | 0.29      |
|  | 191 255 63      | 0.51    | 0.09    | 0.23    | 0.25      |
|  | 191 255 127     | 0.21    | 0.16    | 0.17    | 0.19      |
|  | 191 255 191     | 0.40    | 0.09    | 0.10    | 0.18      |
|  | 191 255 255     | 0.09    | 0.15    | 0.16    | 0.20      |
|  | 255 0 0         | 0.63    | 0.83    | 0.10    | 0.35      |
|  | 255 0 63        | 0.29    | 0.25    | 0.07    | 0.14      |
|  | 255 0 127       | 0.37    | 0.54    | 0.06    | 0.26      |
|  | 255 0 191       | 0.51    | 0.06    | 0.03    | 0.10      |
|  | 255 0 255       | 1.07    | 0.03    | 0.14    | 0.22      |
|  | 255 63 0        | 0.33    | 0.31    | 0.18    | 0.23      |
|  | 255 63 63       | 0.30    | 0.19    | 0.19    | 0.21      |
|  | 255 63 127      | 0.26    | 0.09    | 0.17    | 0.19      |
|  | 255 63 191      | 0.46    | 0.12    | 0.11    | 0.15      |
|  | 255 63 255      | 0.51    | 0.19    | 0.03    | 0.12      |
|  | 255 127 0       | 0.56    | 0.12    | 0.15    | 0.19      |
|  | 255 127 63      | 0.26    | 0.60    | 0.33    | 0.44      |
|  | 255 127 127     | 0.00    | 0.01    | 0.25    | 0.25      |
|  | 255 127 191     | 0.07    | 0.06    | 0.22    | 0.22      |
|  | 255 127 255     | 0.25    | 0.12    | 0.10    | 0.13      |
|  | 255 191 0       | 0.56    | 0.83    | 0.19    | 0.43      |
|  | 255 191 63      | 0.28    | 0.78    | 0.20    | 0.43      |
|  | 255 191 127     | 0.13    | 0.68    | 0.13    | 0.43      |
|  | 255 191 191     | 0.14    | 0.12    | 0.03    | 0.11      |
|  | 255 191 255     | 0.19    | 0.04    | 0.02    | 0.08      |
|  | 255 255 0       | 0.98    | 0.08    | 0.12    | 0.22      |
|  | 255 255 63      | 0.38    | 0.15    | 0.12    | 0.16      |
|  | 255 255 127     | 0.12    | 0.04    | 0.05    | 0.06      |
|  | 255 255 191     | 0.47    | 0.17    | 0.04    | 0.23      |
|  | 255 255 255 (1) | -       | -       | -       | -         |
|  | Average (2)     | 0.49    | 0.28    | 0.25    | 0.34      |
|  | Maximum (2)     | 4.15    | 1.84    | 1.55    | 1.66      |

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

(2) Without Black

|             |                         |
|-------------|-------------------------|
| Color Space | Gamut Volume CIELAB D50 |
| sRGB        | 99%                     |