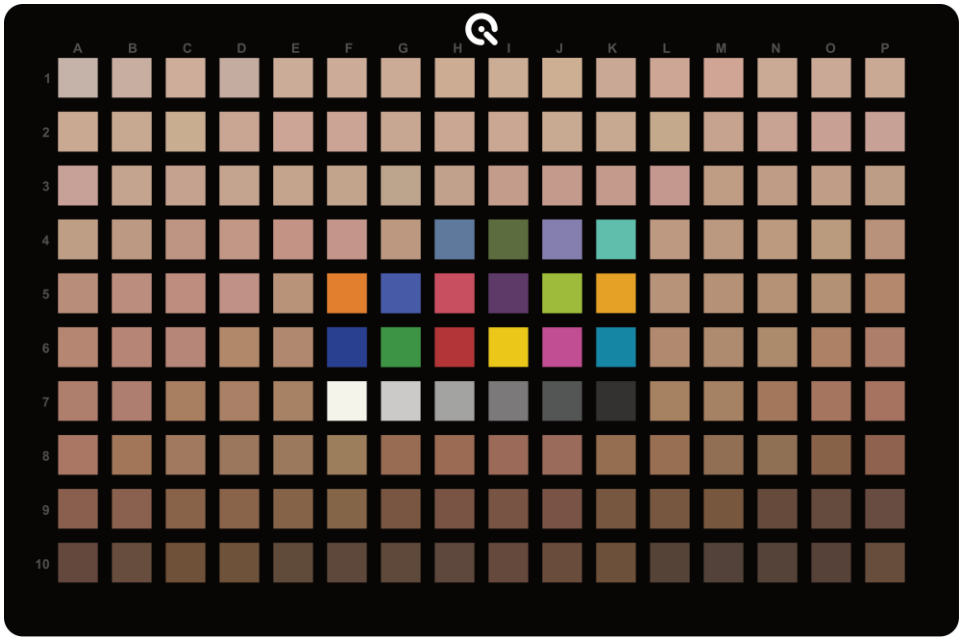
# TE300 A data sheet




## Overview

| | |
|---|---|
| Product name | TE300 A |
| Principle | A test chart to determine the color reproduction within the visible wavelength range of a digital camera. It contains all colors from the Pantone SkinTone Guide. In addition, the primary and secondary colors known from the well-known “ColorChecker” are included. |

## Features

### Color patches

| | |
|---|---|
| Type/s of pattern | 160 patches<br>• 138 skin tones<br>• 6 gray steps<br>• 16 ColorChecker patches |
| Color values | Pantone SkinTone Guide colors (original patches from guide)<br>Munsell colors and gray steps from ColorChecker (original Munsell papers)<br>Default color values provided by the patch manufacturers, individual measurement available on request.<br>The chart can only be measured during the manufacturing process, since the cover height makes post-production measurement impossible. Measured and unmeasured versions of the chart are provided.<br>All default values – Pantone and IE batch measurement - are given at the end of this data sheet. |
| Size of color patch [mm] | 15x15 |
| Surface finish | The color patches may show scratches or streaks.<br>This issue does not affect the test chart's function, as the scratches/streaks are not visible under standard illumination geometry. We also recommend recording the color chart slightly out of focus to obtain a stable average value in the result. |

## General description hardware

| | |
|---|---|
| Type | Reflective (A) |
| Aspect ratio | 2:1 |
| Chart size [mm] | W: 355, H: 235, D: 2 |
| Picture size [mm] | W: 315, H: 195 |
| Material | Pantone SkinTone Guide Paper<br>Specific matt paper (original Munsell sheets) |
| Mounting | Black plastic panel |
| Chart size tolerances | Up to +/- 0.5 mm as they are handmade in-house and no edge protection is used |
| Service life | 2 years<br>The color patches are not fadeless, especially when exposed to sunlight (ultraviolet light) or high intensity light sources. We therefore recommend storing the chart in the folder or case when not in use. Post-production recalibration of this chart is not possible. |
| Storage | Dark, dry, and free from harmful gas (e.g., formaldehyde or ozone).<br>20 °C and 25 °C with a humidity of 60% – 65% and no direct sunlight at any time. |
| Usage limitations | Do not use the test chart above 50 °C, the adhesive degrades at higher temperatures. This limit might also be reached through the illumination in a test setup. |
| Scope of delivery | Test chart |

## Miscellaneous

| | |
|---|---|
| Evaluation / Assessment | Supported by iQ-Analyzer-X V1.11.2<br>Visual appraisal |
| Reference data iQ-Analyzer-X | Default values implemented<br>Individual reference file provided, if ordered |
| Measurement device | X-Rite eXact (reflective charts)<br>https://www.image-engineering.de/content/products/charts/IE_reference_data_accuracy.pdf |
| Terms & Conditions | image-engineering.de/terms-and-conditions |

## Color Values – Original Pantone Data

| Patch | PANTONE | sRGB | HEX | L* | a | b |
|---|---|---|---|---|---|---|
| A1 | 1R00 SP | 196 / 178 / 169 | #c4b2a9 | 74.03 | 6.54 | 6.78 |
| B1 | 1Y00 SP | 198 / 174 / 161 | #c6aea1 | 73.10 | 8.35 | 9.94 |
| C1 | 2Y00 SP | 205 / 174 / 155 | #cdae9b | 73.55 | 10.62 | 14.12 |
| D1 | 1R01 SP | 194 / 172 / 162 | #c2aca2 | 72.23 | 8.27 | 8.16 |
| E1 | 1Y01 SP | 200 / 172 / 153 | #c8ac99 | 72.64 | 8.95 | 14.02 |
| F1 | 2Y01 SP | 203 / 171 / 153 | #cbab99 | 72.79 | 11.14 | 14.17 |
| G1 | 3Y01 SP | 202 / 171 / 150 | #caab96 | 72.51 | 10.20 | 15.03 |
| H1 | 4Y01 SP | 203 / 172 / 149 | #cbac95 | 72.97 | 10.11 | 16.54 |
| I1 | 5Y01 SP | 201 / 173 / 149 | #c9ad95 | 72.84 | 9.18 | 16.40 |
| J1 | 6Y01 SP | 203 / 176 / 148 | #cbb094 | 73.74 | 8.86 | 17.66 |
| K1 | 1R02 SP | 199 / 168 / 150 | #c7a896 | 71.46 | 10.11 | 14.36 |
| L1 | 2R02 SP | 203 / 166 / 149 | #cba695 | 71.39 | 13.36 | 14.15 |
| M1 | 3R02 SP | 206 / 165 / 149 | #cea595 | 71.54 | 15.18 | 14.78 |
| N1 | 1Y02 SP | 200 / 169 / 149 | #c8a995 | 71.88 | 9.83 | 15.22 |
| O1 | 2Y02 SP | 201 / 169 / 150 | #c9a996 | 71.99 | 10.92 | 14.69 |
| P1 | 3Y02 SP | 200 / 169 / 148 | #c8a994 | 71.78 | 10.71 | 15.28 |
| A2 | 4Y02 SP | 199 / 169 / 146 | #c7a992 | 71.76 | 9.97 | 16.11 |
| B2 | 5Y02 SP | 197 / 169 / 145 | #c5a991 | 71.39 | 8.84 | 16.23 |
| C2 | 6Y02 SP | 200 / 173 / 145 | #c8ad91 | 72.71 | 8.64 | 17.93 |
| D2 | 1R03 SP | 199 / 166 / 148 | #c7a694 | 71.08 | 10.77 | 14.83 |
| E2 | 2R03 SP | 202 / 165 / 150 | #caa596 | 71.10 | 13.36 | 13.53 |
| F2 | 3R03 SP | 203 / 163 / 149 | #cba395 | 70.70 | 14.93 | 13.12 |
| G2 | 1Y03 SP | 197 / 166 / 145 | #c5a691 | 70.55 | 10.02 | 15.52 |
| H2 | 2Y03 SP | 200 / 167 / 147 | #c8a793 | 71.14 | 11.46 | 15.05 |
| I2 | 3Y03 SP | 199 / 167 / 146 | #c7a792 | 71.14 | 10.65 | 15.69 |
| J2 | 4Y03 SP | 198 / 168 / 145 | #c6a891 | 71.15 | 10.09 | 15.98 |
| K2 | 5Y03 SP | 196 / 168 / 144 | #c4a890 | 71.04 | 9.32 | 16.07 |
| L2 | 6Y03 SP | 194 / 168 / 142 | #c2a88e | 70.87 | 8.06 | 17.12 |
| M2 | 1R04 SP | 195 / 163 / 143 | #c3a38f | 69.71 | 10.53 | 15.38 |
| N2 | 2R04 SP | 197 / 161 / 146 | #c5a192 | 69.41 | 13.56 | 13.30 |
| O2 | 3R04 SP | 198 / 161 / 149 | #c6a195 | 69.56 | 14.11 | 11.82 |
| P2 | 4R04 SP | 198 / 160 / 150 | #c6a096 | 69.43 | 14.76 | 10.83 |
| A3 | 5R04 SP | 198 / 160 / 152 | #c6a098 | 69.38 | 15.39 | 10.01 |
| B3 | 1Y04 SP | 194 / 163 / 142 | #c2a38e | 69.65 | 9.96 | 15.65 |
| C3 | 2Y04 SP | 195 / 162 / 143 | #c3a28f | 69.55 | 11.45 | 15.11 |
| D3 | 3Y04 SP | 194 / 163 / 143 | #c2a38f | 69.49 | 10.88 | 14.92 |
| E3 | 4Y04 SP | 194 / 164 / 141 | #c2a48d | 69.71 | 9.98 | 16.05 |
| F3 | 5Y04 SP | 192 / 164 / 141 | #c0a48d | 69.64 | 9.08 | 16.14 |
| G3 | 6Y04 SP | 187 / 163 / 140 | #bba38c | 68.91 | 7.72 | 15.53 |
| H3 | 1R05 SP | 191 / 159 / 140 | #bf9f8c | 68.24 | 10.47 | 15.15 |
| I3 | 2R05 SP | 194 / 156 / 140 | #c29c8c | 67.70 | 13.98 | 14.26 |
| J3 | 3R05 SP | 195 / 154 / 141 | #c39a8d | 67.48 | 15.75 | 13.22 |
| K3 | 4R05 SP | 195 / 154 / 142 | #c39a8e | 67.57 | 16.01 | 12.59 |
| L3 | 5R05 SP | 195 / 153 / 144 | #c39990 | 67.36 | 16.60 | 11.52 |
| M3 | 1Y05 SP | 190 / 157 / 134 | #be9d86 | 67.57 | 11.00 | 17.14 |
| N3 | 2Y06 SP | 190 / 156 / 135 | #be9c87 | 67.33 | 11.87 | 16.00 |
| O3 | 3Y05 SP | 190 / 157 / 136 | #be9d88 | 67.54 | 11.42 | 15.58 |
| P3 | 4Y05 SP | 188 / 157 / 135 | #bc9d87 | 67.30 | 10.65 | 16.23 |

| Patch | PANTONE | sRGB | HEX | L* | a | b |
|---|---|---|---|---|---|---|
| A4 | 5Y05 SP | 189 / 159 / 135 | #bd9f87 | 67.92 | 9.73 | 16.93 |
| B4 | 1R06 SP | 187 / 153 / 131 | #bb9983 | 66.15 | 11.54 | 16.81 |
| C4 | 2R06 SP | 189 / 149 / 132 | #bd9584 | 65.46 | 14.53 | 15.20 |
| D4 | 3R06 SP | 194 / 151 / 135 | #c29787 | 66.35 | 16.83 | 14.56 |
| E4 | 4R06 SP | 193 / 148 / 135 | #c19487 | 65.79 | 17.66 | 13.96 |
| F4 | 5R06 SP | 193 / 149 / 140 | #c1958c | 66.10 | 17.67 | 11.84 |
| G4 | 1Y06 SP | 187 / 152 / 129 | #bb9881 | 65.83 | 12.08 | 17.80 |
| H4 | Munsell 4.3PB | 91 / 120 / 155 | #5b789b | 49.32 | -3.82 | -22.54 |
| I4 | Munsell 7.6GY | 91 / 108 / 64 | #5b6c40 | 43.46 | -12.74 | 22.73 |
| J4 | Munsell 9.7PB | 131 / 127 / 175 | #837faf | 54.94 | 9.61 | -24.79 |
| K4 | Munsell 2.5BG | 95 / 189 / 172 | #5fbdac | 70.48 | -32.26 | -0.37 |
| L4 | 2Y06 SP | 189 / 153 / 131 | #bd9983 | 66.37 | 12.77 | 17.07 |
| M4 | 3Y06 SP | 186 / 153 / 130 | #ba9982 | 65.91 | 11.69 | 16.74 |
| N4 | 4Y06 SP | 185 / 153 / 128 | #b99980 | 65.96 | 10.70 | 17.85 |
| O4 | 5Y06 SP | 184 / 154 / 126 | #b89a7e | 65.91 | 9.83 | 18.84 |
| P4 | 1R07 SP | 183 / 146 / 123 | #b7927b | 63.70 | 12.51 | 18.16 |
| A5 | 2R07 SP | 182 / 141 / 123 | #b68d7b | 62.56 | 15.25 | 15.95 |
| B5 | 3R07 SP | 185 / 141 / 126 | #b98d7e | 62.83 | 17.69 | 14.91 |
| C5 | 4R07 SP | 188 / 141 / 128 | #bc8d80 | 63.36 | 18.48 | 14.51 |
| D5 | 5R07 SP | 190 / 145 / 134 | #be9186 | 64.58 | 18.28 | 13.04 |
| E5 | 1Y07 SP | 182 / 146 / 121 | #b69279 | 63.70 | 11.96 | 18.92 |
| F5 | Munsell 5.0YR | 224 / 127 / 48 | #e07f30 | 62.73 | 35.83 | 56.50 |
| G5 | Munsell 7.5PB | 69 / 90 / 167 | #455aa7 | 39.43 | 10.75 | -45.17 |
| H5 | Munsell 2.5R | 197 / 80 / 95 | #c5505f | 50.57 | 48.64 | 16.67 |
| I5 | Munsell 5.0P | 93 / 58 / 104 | #5d3a68 | 30.10 | 22.54 | -20.87 |
| J5 | Munsell 5.0GY | 156 / 187 / 58 | #9cbb3a | 71.77 | -24.13 | 58.19 |
| K5 | Munsell 10.0YR | 227 / 161 / 39 | #e3a127 | 71.51 | 18.24 | 67.37 |
| L5 | 2Y07 SP | 181 / 146 / 123 | #b5927b | 63.62 | 12.68 | 17.29 |
| M5 | 3Y07 SP | 180 / 146 / 119 | #b49277 | 63.39 | 12.08 | 19.04 |
| N5 | 4Y07 SP | 179 / 146 / 118 | #b39276 | 63.36 | 11.44 | 19.93 |
| O5 | 5Y07 SP | 177 / 145 / 117 | #b19175 | 62.89 | 10.68 | 19.59 |
| P5 | 1R08 SP | 179 / 136 / 110 | #b3886e | 60.73 | 15.02 | 21.41 |
| A6 | 2R08 SP | 179 / 134 / 114 | #b38672 | 60.40 | 16.72 | 18.04 |
| B6 | 3R08 SP | 181 / 133 / 118 | #b58576 | 60.43 | 18.83 | 15.79 |
| C6 | 4R08 SP | 181 / 134 / 120 | #b58678 | 60.50 | 19.25 | 14.88 |
| D6 | 1Y08 SP | 177 / 136 / 108 | #b1886c | 60.45 | 14.08 | 21.89 |
| E6 | 2Y08 SP | 175 / 136 / 112 | #af8870 | 60.33 | 14.16 | 19.03 |
| F6 | Munsell 7.PB | 40 / 62 / 145 | #283e91 | 28.37 | 15.42 | -49.80 |
| G6 | Munsell 0.25G | 61 / 147 / 70 | #3d9346 | 54.38 | -39.72 | 32.27 |
| H6 | Munsell 5.0R | 178 / 54 / 57 | #b23639 | 42.43 | 51.05 | 28.62 |
| I6 | Munsell 5.0Y | 236 / 200 / 15 | #ecc80f | 81.80 | 2.67 | 80.41 |
| J6 | Munsell 2.5RP | 191 / 79 / 146 | #bf4f92 | 50.63 | 51.28 | -14.12 |
| K6 | Munsell 5.0B | 0 / 133 / 165 | #0085a5 | 49.57 | -29.71 | -28.32 |
| L6 | 3Y08 SP | 176 / 137 / 110 | #b0896e | 60.58 | 13.93 | 20.75 |
| M6 | 4Y08 SP | 173 / 139 / 111 | #ad8b6f | 60.63 | 11.87 | 20.09 |
| N6 | 5Y08SP | 170 / 139 / 109 | #aa8b6d | 60.26 | 10.44 | 20.48 |
| O6 | 1R09 SP | 171 / 129 / 103 | #ab8167 | 57.79 | 14.79 | 21.26 |
| P6 | 2R09 SP | 172 / 126 / 105 | #ac7e69 | 57.49 | 17.50 | 19.05 |

| Patch | PANTONE | sRGB | HEX | L* | a | b |
|---|---|---|---|---|---|---|
| A7 | 3R09 SP | 174 / 127 / 110 | #ae7f6e | 57.99 | 18.43 | 17.09 |
| B7 | 4R09 SP | 173 / 126 / 113 | #ad7e71 | 57.73 | 19.24 | 14.90 |
| C7 | 1Y09 SP | 168 / 127 / 100 | #a87f64 | 57.14 | 14.21 | 21.99 |
| D7 | 2Y09 SP | 169 / 129 / 103 | #a98167 | 57.72 | 14.58 | 20.35 |
| E7 | 3Y09 SP | 166 / 130 / 102 | #a68266 | 57.53 | 12.74 | 20.64 |
| F7 | Munsell 9.5 | 241 / 242 / 235 | #f1f2eb | 95.19 | -1.03 | 2.93 |
| G7 | Munsell 8.0 | 201 / 202 / 201 | #c9cac9 | 81.29 | -0.57 | 0.44 |
| H7 | Munsell 6.5 | 161 / 163 / 163 | #a1a3a3 | 66.89 | -0.75 | -0.06 |
| I7 | Munsell 5.0 | 121 / 121 / 121 | #797979 | 50.76 | -0.13 | 0.14 |
| J7 | Munsell 3.5 | 83 / 84 / 85 | #535455 | 35.63 | -0.46 | -0.48 |
| K7 | Munsell 2.0 | 50 / 50 / 50 | #323232 | 20.64 | 0.07 | -0.46 |
| L7 | 4Y09 SP | 165 / 129 / 99 | #a58163 | 57.21 | 12.67 | 21.84 |
| M7 | 5Y09 SP | 163 / 130 / 100 | #a38264 | 57.14 | 11.12 | 21.24 |
| N7 | 1R10 SP | 162 / 120 / 93 | #a2785d | 54.43 | 15.20 | 22.31 |
| O7 | 2R10 SP | 165 / 117 / 95 | #a5755f | 54.15 | 18.83 | 20.47 |
| P7 | 3R10 SP | 165 / 116 / 97 | #a57461 | 53.94 | 20.07 | 18.84 |
| A8 | 4R10SP | 168 / 119 / 100 | #a87764 | 55.13 | 19.94 | 18.90 |
| B8 | 1Y10 SP | 160 / 118 / 90 | #a0765a | 53.79 | 15.15 | 22.84 |
| C8 | 2Y10 SP | 160 / 121 / 95 | #a0795f | 54.34 | 14.57 | 20.28 |
| D8 | 3Y10 SP | 155 / 119 / 93 | #9b775d | 53.41 | 12.94 | 20.02 |
| E8 | 4Y10 SP | 153 / 121 / 93 | #99795d | 53.76 | 11.31 | 20.40 |
| F8 | 5Y10 SP | 155 / 125 / 93 | #9b7d5d | 54.80 | 9.70 | 21.77 |
| G8 | 1R11 SP | 151 / 108 / 82 | #976c52 | 50.09 | 15.76 | 22.38 |
| H8 | 2R11 SP | 154 / 107 / 84 | #9a6b54 | 50.06 | 18.61 | 20.83 |
| I8 | 3R11 SP | 153 / 106 / 88 | #996a58 | 49.91 | 19.08 | 18.25 |
| J8 | 4R11 SP | 152 / 107 / 91 | #986b5b | 49.87 | 18.70 | 16.52 |
| K8 | 1Y11 SP | 148 / 108 / 81 | #946c51 | 49.61 | 14.89 | 22.43 |
| L8 | 2Y11 SP | 152 / 111 / 84 | #986f54 | 50.84 | 15.40 | 21.73 |
| M8 | 3Y11 SP | 144 / 111 / 84 | #906f54 | 49.82 | 12.22 | 20.50 |
| N8 | 4Y11 SP | 143 / 112 / 84 | #8f7054 | 50.05 | 10.81 | 20.85 |
| O8 | 1R12 SP | 134 / 96 / 72 | #866048 | 44.68 | 14.41 | 20.42 |
| P8 | 2R12 SP | 140 / 98 / 78 | #8c624e | 45.85 | 17.10 | 18.76 |
| A9 | 3R12 SP | 137 / 95 / 77 | #895f4d | 44.86 | 17.11 | 17.78 |
| B9 | 4R12 SP | 137 / 96 / 79 | #89604f | 45.15 | 16.65 | 17.03 |
| C9 | 1Y12 SP | 135 / 98 / 73 | #876249 | 45.19 | 14.06 | 20.98 |
| D9 | 2Y12 SP | 137 / 99 / 76 | #89634c | 45.81 | 14.83 | 19.70 |
| E9 | 3Y12 SP | 132 / 99 / 73 | #846349 | 45.31 | 12.01 | 20.78 |
| F9 | 4Y12 SP | 131 / 101 / 72 | #836548 | 45.51 | 10.81 | 21.21 |
| G9 | 1R13 SP | 119 / 86 / 66 | #775642 | 39.95 | 12.72 | 17.73 |
| H9 | 2R13 SP | 120 / 84 / 68 | #785444 | 39.69 | 14.75 | 15.61 |
| I9 | 3R13 SP | 119 / 84 / 69 | #775445 | 39.52 | 14.70 | 15.19 |
| J9 | 4R13 SP | 118 / 83 / 70 | #765346 | 39.12 | 14.34 | 14.33 |
| K9 | 1Y13 SP | 119 / 87 / 65 | #775741 | 40.12 | 12.48 | 18.17 |
| L9 | 2Y13 SP | 121 / 89 / 69 | #795945 | 41.21 | 12.81 | 16.98 |
| M9 | 3Y13 SP | 118 / 87 / 63 | #76573f | 40.03 | 11.15 | 19.58 |
| N9 | 1R14 SP | 100 / 75 / 60 | #644b3c | 34.47 | 9.90 | 13.74 |
| O9 | 2R14 SP | 99 / 75 / 63 | #634b3f | 34.28 | 9.85 | 11.04 |
| P9 | 3R14 SP | 102 / 76 / 65 | #664c41 | 35.09 | 11.27 | 11.32 |
| A10 | 4R14 SP | 99 / 72 / 62 | #63483e | 33.64 | 11.68 | 10.81 |
| B10 | 1Y14 SP | 101 / 77 / 62 | #654d3e | 35.07 | 9.50 | 13.37 |
| C10 | 2Y14 SP | 109 / 80 / 57 | #6d5039 | 37.04 | 9.80 | 18.71 |
| D10 | 3Y14 SP | 108 / 82 / 58 | #6c523a | 37.21 | 8.97 | 18.72 |
| E10 | 1R14.5 SP | 95 / 74 / 58 | #5f4a3a | 33.41 | 7.66 | 13.23 |
| F10 | 2R14.5 SP | 92 / 72 / 60 | #5c483c | 32.58 | 7.76 | 10.96 |
| G10 | 3R14.5 SP | 94 / 73 / 60 | #5e493c | 33.05 | 8.16 | 11.22 |
| H10 | 4R14.5 SP | 93 / 71 / 61 | #5d473d | 32.33 | 9.24 | 10.05 |
| I10 | 1Y14.5 SP | 100 / 73 / 60 | #64493c | 33.83 | 10.70 | 12.73 |
| J10 | 2Y14.5 SP | 103 / 76 / 60 | #674c3c | 35.27 | 10.32 | 14.92 |
| K10 | 3Y14.5 SP | 107 / 80 / 58 | #6b503a | 36.69 | 9.82 | 17.93 |
| L10 | 1R15 SP | 84 / 67 / 56 | #544338 | 30.09 | 6.04 | 9.64 |
| M10 | 2R15 SP | 81 / 66 / 57 | #514239 | 29.39 | 5.64 | 8.36 |
| N10 | 3R15 SP | 83 / 67 / 58 | #53433a | 29.97 | 6.55 | 8.18 |
| O10 | 4R15 SP | 84 / 66 / 57 | #544239 | 29.72 | 7.34 | 8.55 |
| P10 | 1Y15 SP | 102 / 77 / 60 | #664d3c | 35.28 | 9.62 | 14.83 |

## Color Values – IE measurement with X-Rite eXact*

| Patch | X | Y | Z | L* | a | b |
|---|---|---|---|---|---|---|
| A1 | 48,0822 | 47,3738 | 34,3439 | 74,4292 | 6,7172 | 6,5917 |
| B1 | 47,2441 | 45,8872 | 31,0816 | 73,4732 | 8,5206 | 9,8296 |
| C1 | 48,7074 | 46,4858 | 28,8434 | 73,8605 | 10,879 | 14,051 |
| D1 | 45,9784 | 44,6349 | 31,2694 | 72,6517 | 8,509 | 8,123 |
| E1 | 45,6271 | 44,2596 | 27,6104 | 72,4026 | 8,5857 | 13,5741 |
| F1 | 46,436 | 44,2782 | 27,1851 | 72,4149 | 10,8213 | 14,3121 |
| G1 | 45,6593 | 43,8479 | 26,4274 | 72,1276 | 9,8625 | 15,112 |
| H1 | 46,3865 | 44,6159 | 26,1083 | 72,6392 | 9,7157 | 16,547 |
| I1 | 45,6212 | 44,2312 | 25,8965 | 72,3836 | 8,6505 | 16,476 |
| J1 | 48,2478 | 46,7009 | 26,8396 | 73,999 | 9,0259 | 17,6308 |
| K1 | 44,5641 | 42,8344 | 26,2744 | 71,4433 | 9,671 | 14,1968 |
| L1 | 47,3873 | 43,5787 | 26,417 | 71,9469 | 15,4972 | 14,8183 |
| M1 | 47,423 | 43,6292 | 26,4672 | 71,9808 | 15,45 | 14,7904 |
| N1 | 44,569 | 42,8725 | 25,7368 | 71,4692 | 9,5732 | 15,1792 |
| O1 | 45,0348 | 42,9611 | 26,0813 | 71,5294 | 10,6556 | 14,6807 |
| P1 | 44,7124 | 42,7654 | 25,6123 | 71,3964 | 10,3014 | 15,2728 |
| A2 | 44,8325 | 43,1029 | 25,2888 | 71,6256 | 9,6594 | 16,2406 |
| B2 | 43,3584 | 41,9855 | 24,6694 | 70,8618 | 8,6591 | 16,0335 |
| C2 | 46,7324 | 45,2681 | 25,7433 | 73,069 | 8,8343 | 17,926 |
| D2 | 43,5719 | 41,6204 | 25,1056 | 70,6093 | 10,375 | 14,8146 |
| E2 | 44,3804 | 41,5496 | 25,7386 | 70,5601 | 12,9456 | 13,6088 |
| F2 | 46,0198 | 42,3737 | 26,5821 | 71,1287 | 15,1912 | 13,1232 |
| G2 | 42,5792 | 40,8226 | 24,2314 | 70,0523 | 9,8395 | 15,4341 |
| H2 | 44,1904 | 42,0654 | 25,2222 | 70,9168 | 10,8564 | 15,1369 |
| I2 | 43,644 | 41,8086 | 24,828 | 70,7396 | 10,0248 | 15,5371 |
| J2 | 43,4636 | 41,8644 | 24,7022 | 70,7782 | 9,3289 | 15,8302 |
| K2 | 43,0396 | 41,6843 | 24,5736 | 70,6536 | 8,6152 | 15,8479 |
| L2 | 43,9488 | 42,6531 | 24,4132 | 71,3198 | 8,4158 | 17,2878 |
| M2 | 41,5028 | 39,7056 | 23,4812 | 69,2602 | 10,018 | 15,4546 |
| N2 | 42,0766 | 39,2424 | 24,3965 | 68,9274 | 13,1842 | 13,1932 |
| O2 | 43,0794 | 39,7666 | 25,3759 | 69,3038 | 14,5513 | 12,0828 |
| P2 | 42,8912 | 39,3997 | 26,3388 | 69,0407 | 15,1277 | 9,9427 |
| A3 | 43,444 | 39,9957 | 26,0376 | 69,4673 | 14,9215 | 11,2014 |
| B3 | 41,2456 | 39,5448 | 23,2229 | 69,145 | 9,7331 | 15,7402 |
| C3 | 41,5623 | 39,4241 | 23,4133 | 69,0582 | 11,0689 | 15,2333 |
| D3 | 41,6307 | 39,7041 | 23,8356 | 69,2591 | 10,4102 | 14,7942 |
| E3 | 41,3415 | 39,772 | 23,3051 | 69,3077 | 9,3236 | 15,8661 |
| F3 | 40,7788 | 39,4324 | 22,9767 | 69,0641 | 8,6549 | 16,0655 |
| G3 | 40,6961 | 39,6326 | 23,4192 | 69,2079 | 7,7815 | 15,4803 |
| H3 | 39,4325 | 37,6742 | 22,2927 | 67,7806 | 10,0109 | 15,1615 |
| I3 | 39,609 | 36,7486 | 22,1602 | 67,0888 | 13,5457 | 14,2254 |
| J3 | 40,7774 | 37,3035 | 22,8047 | 67,505 | 15,3713 | 13,7041 |
| K3 | 40,7085 | 36,7724 | 22,7588 | 67,1067 | 16,8762 | 13,1048 |
| L3 | 39,7445 | 36,0132 | 23,264 | 66,5308 | 16,3741 | 11,1556 |
| M3 | 38,7147 | 36,7557 | 20,7578 | 67,0942 | 10,7038 | 17,0161 |
| N3 | 38,3411 | 36,1564 | 20,9115 | 66,6401 | 11,4709 | 15,9223 |
| O3 | 38,4992 | 36,5207 | 21,402 | 66,9167 | 10,7831 | 15,4174 |
| P3 | 37,9408 | 36,1741 | 20,8883 | 66,6536 | 10,1287 | 15,9925 |

| Patch | X | Y | Z | L* | a | b |
|---|---|---|---|---|---|---|
| A4 | 38,3348 | 36,8107 | 21,0257 | 67,1356 | 9,3148 | 16,5467 |
| B4 | 36,7345 | 34,693 | 19,5201 | 65,5098 | 11,1335 | 16,8453 |
| C4 | 36,6655 | 33,7274 | 19,6703 | 64,7464 | 14,1972 | 15,2127 |
| D4 | 40,0219 | 35,9079 | 21,1948 | 66,4503 | 17,5849 | 15,0261 |
| E4 | 39,1285 | 34,851 | 20,9376 | 65,6333 | 18,3103 | 14,134 |
| F4 | 37,9538 | 34,0416 | 21,6032 | 64,9964 | 17,3135 | 11,7081 |
| G4 | 37,1028 | 34,6938 | 19,5763 | 65,5104 | 12,3384 | 16,7278 |
| H4 | 17,2518 | 18,6693 | 26,1922 | 50,2986 | -4,0241 | -22,1169 |
| I4 | 11,3615 | 13,8302 | 5,3458 | 43,989 | -13,4463 | 23,1059 |
| J4 | 25,6565 | 24,5236 | 34,3966 | 56,609 | 8,6271 | -24,209 |
| K4 | 31,273 | 42,8059 | 35,5161 | 71,4239 | -33,2933 | -0,2697 |
| L4 | 36,479 | 34,3333 | 18,945 | 65,2271 | 11,5099 | 17,5848 |
| M4 | 36,3156 | 34,2965 | 19,3681 | 65,1981 | 11,0943 | 16,6298 |
| N4 | 36,4073 | 34,6403 | 19,076 | 65,4685 | 10,2321 | 17,7194 |
| O4 | 35,8118 | 34,3182 | 18,5902 | 65,2152 | 9,343 | 18,3335 |
| P4 | 34,2966 | 32,0181 | 17,3372 | 63,3586 | 12,2032 | 17,9304 |
| A5 | 33,8152 | 30,8263 | 17,4793 | 62,3615 | 14,8357 | 15,8874 |
| B5 | 35,7978 | 31,7897 | 18,3621 | 63,1695 | 18,1139 | 15,306 |
| C5 | 35,7606 | 31,5782 | 18,5805 | 62,9935 | 18,7477 | 14,5242 |
| D5 | 36,7311 | 32,8726 | 20,2601 | 64,0584 | 17,3784 | 12,7991 |
| E5 | 33,8779 | 31,6783 | 17,0208 | 63,0769 | 11,97 | 18,1725 |
| F5 | 42,0033 | 32,4172 | 5,5348 | 63,687 | 35,5516 | 56,1325 |
| G5 | 13,0237 | 11,8873 | 31,31 | 41,037 | 10,6924 | -46,4477 |
| H5 | 31,5032 | 20,6097 | 10,525 | 52,5204 | 49,0279 | 17,4662 |
| I5 | 9,117 | 6,8115 | 11,2745 | 31,3744 | 23,5871 | -21,3275 |
| J5 | 36,3802 | 45,945 | 9,2174 | 73,5107 | -24,5222 | 58,0112 |
| K5 | 50,0146 | 44,7745 | 6,0791 | 72,7441 | 19,2224 | 69,1673 |
| L5 | 34,1334 | 31,7706 | 17,4782 | 63,1536 | 12,524 | 17,2556 |
| M5 | 34,0403 | 31,8892 | 16,8665 | 63,252 | 11,7782 | 18,8324 |
| N5 | 33,6394 | 31,7689 | 16,3841 | 63,1523 | 10,8151 | 19,7945 |
| O5 | 32,6947 | 31,0258 | 16,1662 | 62,5302 | 10,1705 | 19,2414 |
| P5 | 31,454 | 28,7426 | 14,1202 | 60,5546 | 14,2186 | 20,9583 |
| A6 | 31,5343 | 28,2086 | 14,9804 | 60,0775 | 16,5676 | 17,9253 |
| B6 | 32,5649 | 28,5684 | 15,8879 | 60,3995 | 18,8921 | 16,2384 |
| C6 | 27,5069 | 25,0055 | 11,6705 | 57,0815 | 14,1429 | 21,803 |
| D6 | 31,0101 | 28,3882 | 13,6857 | 60,2386 | 13,9534 | 21,5642 |
| E6 | 30,5668 | 27,9997 | 14,48 | 59,8892 | 13,8192 | 18,8757 |
| F6 | 7,299 | 6,0171 | 22,0085 | 29,456 | 15,5807 | -50,3636 |
| G6 | 15,1293 | 23,7782 | 7,9764 | 55,8657 | -40,0834 | 32,1211 |
| H6 | 22,9462 | 13,6175 | 4,0971 | 43,6799 | 52,6078 | 29,3895 |
| I6 | 62,1758 | 63,1893 | 7,3505 | 83,5428 | 2,9056 | 82,3071 |
| J6 | 31,8091 | 20,7923 | 23,72 | 52,7221 | 49,2696 | -13,5037 |
| K6 | 13,5319 | 19,1052 | 31,1389 | 50,8107 | -28,1415 | -29,3324 |
| L6 | 30,5691 | 28,1506 | 14,0089 | 60,0254 | 13,2411 | 20,3382 |
| M6 | 30,3105 | 28,3712 | 14,3443 | 60,2234 | 11,4235 | 19,8027 |
| N6 | 29,2411 | 27,8213 | 14,0381 | 59,7277 | 9,5139 | 19,7482 |
| O6 | 28,2223 | 25,5779 | 12,1634 | 57,635 | 14,5867 | 21,3104 |
| P6 | 28,5805 | 25,2194 | 12,7812 | 57,2893 | 17,475 | 18,9554 |

| Patch | X | Y | Z | L* | a | b |
|---|---|---|---|---|---|---|
| A7 | 29,537 | 25,797 | 13,7444 | 57,8446 | 18,7598 | 17,2798 |
| B7 | 29,7322 | 25,8669 | 14,5107 | 57,9112 | 19,2134 | 15,3863 |
| C7 | 27,4922 | 25,0006 | 11,6473 | 57,0767 | 14,1052 | 21,8637 |
| D7 | 28,0457 | 25,4976 | 12,4936 | 57,5578 | 14,2253 | 20,2298 |
| E7 | 27,2948 | 25,2433 | 12,3726 | 57,3125 | 12,2995 | 20,1522 |
| F7 | 89,2784 | 92,9058 | 72,4976 | 97,1905 | -0,5542 | 3,6079 |
| G7 | 58,6978 | 61,1901 | 50,1998 | 82,4818 | -0,7305 | 0,3349 |
| H7 | 36,472 | 38,0284 | 31,4079 | 68,0424 | -0,648 | -0,0376 |
| I7 | 18,9781 | 19,7191 | 16,2125 | 51,5188 | -0,1824 | 0,1455 |
| J7 | 8,7054 | 9,0904 | 7,3865 | 36,1583 | -0,5137 | 0,464 |
| K7 | 3,4338 | 3,5688 | 2,9533 | 22,1917 | -0,1171 | -0,0607 |
| L7 | 26,8112 | 24,8207 | 11,6441 | 56,901 | 12,1223 | 21,5703 |
| M7 | 26,2849 | 24,7359 | 11,8559 | 56,8179 | 10,3311 | 20,7996 |
| N7 | 24,5678 | 22,0671 | 10,0022 | 54,0988 | 14,832 | 21,8829 |
| O7 | 25,3655 | 22,0216 | 10,4302 | 54,0506 | 18,4341 | 20,4076 |
| P7 | 25,6596 | 21,9639 | 10,8224 | 53,9893 | 19,9316 | 19,0593 |
| A8 | 27,3439 | 23,452 | 11,7036 | 55,5356 | 20,1549 | 19,0392 |
| B8 | 24,1333 | 21,6231 | 9,5274 | 53,6255 | 14,9925 | 22,6586 |
| C8 | 24,6015 | 22,2176 | 10,6202 | 54,2579 | 14,2914 | 20,1592 |
| D8 | 23,2516 | 21,3786 | 10,2927 | 53,3621 | 12,2427 | 19,6635 |
| E8 | 23,2552 | 21,6907 | 10,2396 | 53,698 | 10,8112 | 20,4149 |
| F8 | 24,3307 | 22,9564 | 10,4915 | 55,0281 | 9,8036 | 21,8966 |
| G8 | 20,7739 | 18,3857 | 7,7591 | 49,9612 | 15,4296 | 22,7822 |
| H8 | 21,2423 | 18,3031 | 8,2111 | 49,8624 | 18,0916 | 20,8792 |
| I8 | 21,957 | 18,7789 | 9,0322 | 50,4281 | 19,0024 | 18,8631 |
| J8 | 21,6614 | 18,5779 | 9,5981 | 50,1903 | 18,6511 | 16,4952 |
| K8 | 20,2261 | 18,0289 | 7,6904 | 49,5318 | 14,6222 | 22,3112 |
| L8 | 21,3631 | 19,0347 | 8,3528 | 50,7285 | 14,93 | 21,8423 |
| M8 | 19,632 | 18,0551 | 8,2443 | 49,5635 | 11,5479 | 20,239 |
| N8 | 19,7053 | 18,3689 | 8,258 | 49,9412 | 10,2856 | 20,8388 |
| O8 | 16,067 | 14,2472 | 6,1807 | 44,586 | 13,996 | 20,1542 |
| P8 | 17,7571 | 15,3995 | 7,171 | 46,1771 | 16,4652 | 18,6164 |
| A9 | 17,2729 | 14,84 | 6,8122 | 45,4149 | 17,1416 | 18,8051 |
| B9 | 17,3288 | 14,8947 | 7,1842 | 45,4903 | 17,12 | 17,3777 |
| C9 | 16,611 | 14,7672 | 6,2266 | 45,3143 | 13,9276 | 21,202 |
| D9 | 17,1778 | 15,2757 | 6,8353 | 46,0101 | 14,0579 | 19,733 |
| E9 | 16,3055 | 14,9793 | 6,424 | 45,6064 | 10,9525 | 20,8218 |
| F9 | 16,6212 | 15,2257 | 6,4331 | 45,9424 | 11,2774 | 21,3606 |
| G9 | 12,752 | 11,3481 | 5,0459 | 40,1612 | 12,6706 | 18,0379 |
| H9 | 12,9987 | 11,3686 | 5,4453 | 40,195 | 14,1572 | 16,0694 |
| I9 | 12,7681 | 11,0785 | 5,3508 | 39,7129 | 14,7106 | 15,7084 |
| J9 | 12,5534 | 10,893 | 5,412 | 39,4002 | 14,6216 | 14,8642 |
| K9 | 12,721 | 11,4007 | 5,0372 | 40,2479 | 12,0903 | 18,2324 |
| L9 | 13,4849 | 12,1131 | 5,4665 | 41,3958 | 12,139 | 18,0351 |
| M9 | 12,3662 | 11,2755 | 4,7085 | 40,0412 | 10,5928 | 19,6273 |
| N9 | 9,1729 | 8,388 | 4,1144 | 34,7788 | 9,3777 | 13,9392 |
| O9 | 9,1559 | 8,3681 | 4,6024 | 34,7385 | 9,4111 | 11,0677 |
| P9 | 9,3844 | 8,4293 | 4,4934 | 34,862 | 10,7606 | 11,8884 |
| A10 | 9,5247 | 8,3391 | 4,5057 | 34,6799 | 12,6854 | 11,5054 |
| B10 | 9,3158 | 8,5659 | 4,3057 | 35,1352 | 9,0212 | 13,4301 |
| C10 | 10,5079 | 9,6104 | 3,994 | 37,1344 | 9,8003 | 18,726 |
| D10 | 10,1601 | 9,4289 | 4,0561 | 36,7979 | 8,586 | 17,7697 |
| E10 | 8,4501 | 7,8626 | 3,8511 | 33,6956 | 7,8869 | 13,6767 |
| F10 | 7,9648 | 7,3872 | 3,942 | 32,6732 | 7,9587 | 11,3515 |
| G10 | 8,1665 | 7,542 | 4,0601 | 33,0106 | 8,3264 | 11,216 |
| H10 | 7,7635 | 7,0493 | 4,0342 | 31,9194 | 9,357 | 9,4908 |
| I10 | 9,1775 | 8,208 | 4,0475 | 34,4129 | 10,9934 | 13,7099 |
| J10 | 9,4893 | 8,5874 | 4,102 | 35,178 | 10,2519 | 14,7019 |
| K10 | 10,4268 | 9,506 | 4,0152 | 36,9413 | 10,0169 | 18,2643 |
| L10 | 6,7466 | 6,4372 | 3,661 | 30,4903 | 5,6459 | 9,3548 |
| M10 | 6,2594 | 5,9814 | 3,3413 | 29,366 | 5,4081 | 9,5408 |
| N10 | 6,2661 | 5,9209 | 3,3782 | 29,2126 | 6,1413 | 9,0243 |
| O10 | 6,5446 | 6,1485 | 3,4899 | 29,7845 | 6,6116 | 9,2591 |
| P10 | 9,6209 | 8,7708 | 4,1507 | 35,5398 | 9,755 | 15,0355 |

* https://www.image-engineering.de/content/products/charts/IE_reference_data_accuracy.pdf