

| Performance (STRESS values) for Small Colour Difference data (SCD)  |                                                                     |                                |       |       |       |                                            |                                 |                            |                                |                             |
|---------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------|-------|-------|-------|--------------------------------------------|---------------------------------|----------------------------|--------------------------------|-----------------------------|
| data set                                                            | Calculations with data for grey backgrounds (chromaticity near D65) |                                |       |       |       |                                            |                                 |                            |                                |                             |
|                                                                     | Colour difference $\Delta E^*_{\text{CIELAB}}$                      |                                |       |       |       | Colour difference formula and STRESS value |                                 |                            |                                |                             |
| Name                                                                | Pairs                                                               | $\Delta E^*_{\text{ab}}$ range | min   | max   | mean  | CIELAB<br>$\Delta E^*_{\text{ab}}$         | CMC<br>$\Delta E^*_{\text{CM}}$ | CIE94<br>$\Delta E^*_{94}$ | CIEDE2000<br>$\Delta E^*_{00}$ | LABJND<br>$\Delta E^*_{85}$ |
| WI_0418                                                             | 418                                                                 | 0.0 to <99.0                   | 0.11  | 10.62 | 1.86  | 51.7                                       | 35.0                            | 31.6                       | 30.1                           | 55.1                        |
| RD_0312                                                             | 312                                                                 | 0.0 to <99.0                   | 0.77  | 4.4   | 1.43  | 33.4                                       | 27.3                            | 20.3                       | 19.5                           | 38.3                        |
| LE_0307                                                             | 307                                                                 | 0.0 to <99.0                   | 0.39  | 4.73  | 1.63  | 40.0                                       | 24.8                            | 30.4                       | 19.2                           | 45.1                        |
| BF_2776                                                             | 2776                                                                | 0.0 to <99.0                   | 0.03  | 18.2  | 3.0   | 42.4                                       | 30.6                            | 33.7                       | 29.5                           | 52.9                        |
| SS_0446                                                             | 446                                                                 | 0.0 to <99.0                   | 0.17  | 7.97  | 3.03  | 42.1                                       | 31.7                            | 28.7                       | 29.3                           | 45.8                        |
| WI_0418                                                             | 400                                                                 | 0.0 to <5.0                    | 0.11  | 4.94  | 1.67  | 50.6                                       | 35.9                            | 32.4                       | 30.7                           | 55.9                        |
| RD_0312                                                             | 312                                                                 | 0.0 to <5.0                    | 0.77  | 4.4   | 1.43  | 33.4                                       | 27.3                            | 20.3                       | 19.5                           | 38.3                        |
| LE_0307                                                             | 307                                                                 | 0.0 to <5.0                    | 0.39  | 4.73  | 1.63  | 40.0                                       | 24.8                            | 30.4                       | 19.2                           | 45.1                        |
| BF_2776                                                             | 2325                                                                | 0.0 to <5.0                    | 0.03  | 4.99  | 2.14  | 40.0                                       | 28.7                            | 33.3                       | 27.7                           | 55.0                        |
| SS_0446                                                             | 385                                                                 | 0.0 to <5.0                    | 0.17  | 4.96  | 2.57  | 38.9                                       | 32.1                            | 28.6                       | 28.2                           | 47.2                        |
| WI_0418                                                             | 18                                                                  | 5.0 to <99.0                   | 5.03  | 10.62 | 6.15  | 21.8                                       | 24.0                            | 23.2                       | 22.1                           | 47.4                        |
| RD_0312                                                             | 0                                                                   |                                |       |       |       |                                            |                                 |                            |                                |                             |
| LE_0307                                                             | 0                                                                   |                                |       |       |       |                                            |                                 |                            |                                |                             |
| BF_2776                                                             | 451                                                                 | 5.0 to <99.0                   | 5.0   | 18.2  | 7.43  | 37.4                                       | 30.6                            | 31.8                       | 29.8                           | 49.4                        |
| SS_0446                                                             | 61                                                                  | 5.0 to <99.0                   | 5.0   | 7.97  | 5.93  | 33.2                                       | 20.0                            | 16.7                       | 17.4                           | 36.7                        |
| WI_0418                                                             | 17                                                                  | 5.0 to <10.0                   | 5.03  | 8.75  | 5.89  | 21.8                                       | 25.2                            | 24.5                       | 23.1                           | 49.3                        |
| RD_0312                                                             | 0                                                                   |                                |       |       |       |                                            |                                 |                            |                                |                             |
| LE_0307                                                             | 0                                                                   |                                |       |       |       |                                            |                                 |                            |                                |                             |
| BF_2776                                                             | 389                                                                 | 5.0 to <10.0                   | 5.0   | 9.91  | 6.65  | 35.4                                       | 29.8                            | 32.4                       | 28.9                           | 51.1                        |
| SS_0446                                                             | 61                                                                  | 5.0 to <10.0                   | 5.0   | 7.97  | 5.93  | 33.2                                       | 20.0                            | 16.7                       | 17.4                           | 36.7                        |
| WI_0418                                                             | 1                                                                   | 10.0 to <20.0                  | 10.62 | 10.62 | 10.62 | 0.1                                        | 0.1                             | 0.1                        | 0.1                            | 0.1                         |
| RD_0312                                                             | 0                                                                   |                                |       |       |       |                                            |                                 |                            |                                |                             |
| LE_0307                                                             | 0                                                                   |                                |       |       |       |                                            |                                 |                            |                                |                             |
| BF_2776                                                             | 62                                                                  | 10.0 to <20.0                  | 10.05 | 18.2  | 12.35 | 32.4                                       | 29.6                            | 27.3                       | 29.0                           | 41.7                        |
| SS_0446                                                             | 0                                                                   |                                |       |       |       |                                            |                                 |                            |                                |                             |
| WI_0418                                                             | 0                                                                   |                                |       |       |       |                                            |                                 |                            |                                |                             |
| RD_0312                                                             | 0                                                                   |                                |       |       |       |                                            |                                 |                            |                                |                             |
| LE_0307                                                             | 0                                                                   |                                |       |       |       |                                            |                                 |                            |                                |                             |
| BF_2776                                                             | 0                                                                   |                                |       |       |       |                                            |                                 |                            |                                |                             |
| SS_0446                                                             | 0                                                                   |                                |       |       |       |                                            |                                 |                            |                                |                             |
| WI_0418                                                             | 0                                                                   |                                |       |       |       |                                            |                                 |                            |                                |                             |
| RD_0312                                                             | 0                                                                   |                                |       |       |       |                                            |                                 |                            |                                |                             |
| LE_0307                                                             | 0                                                                   |                                |       |       |       |                                            |                                 |                            |                                |                             |
| BF_2776                                                             | 0                                                                   |                                |       |       |       |                                            |                                 |                            |                                |                             |
| SS_0446                                                             | 0                                                                   |                                |       |       |       |                                            |                                 |                            |                                |                             |
| data sets: WI=WITT, RD=RIT-DUPONT, LE=LEEDS, BF=BFD_P, SS=BIGC-S-SG |                                                                     |                                |       |       |       |                                            |                                 |                            |                                |                             |