

**Achromatic colours white for eight illuminants; colour space CIEXYZ; K=25:1**

| Code                   | X      | Y    | Z     | x      | y      | z      | $h_{xy}$ | illuminant |
|------------------------|--------|------|-------|--------|--------|--------|----------|------------|
| W <sub>1</sub> 380_770 | 87.36  | 90.0 | 94.11 | 0.3218 | 0.3315 | 0.3466 | 225.8    | P60        |
| W <sub>1</sub> 380_770 | 87.71  | 90.0 | 86.38 | 0.3321 | 0.3407 | 0.327  | 225.7    | P55        |
| W <sub>1</sub> 380_770 | 88.31  | 90.0 | 77.85 | 0.3447 | 0.3513 | 0.3039 | 225.5    | P50        |
| W <sub>1</sub> 380_770 | 89.28  | 90.0 | 68.46 | 0.3603 | 0.3632 | 0.2763 | 225.2    | P45        |
| W <sub>1</sub> 380_770 | 90.83  | 90.0 | 58.22 | 0.3799 | 0.3764 | 0.2435 | 224.7    | P40        |
| W <sub>1</sub> 380_770 | 93.3   | 90.0 | 47.19 | 0.4047 | 0.3904 | 0.2047 | 223.9    | P35        |
| W <sub>1</sub> 380_770 | 97.23  | 90.0 | 35.59 | 0.4363 | 0.4038 | 0.1597 | 222.7    | P30        |
| W <sub>1</sub> 380_770 | 103.66 | 90.0 | 23.93 | 0.4764 | 0.4136 | 0.1099 | 220.9    | P25        |

BE670-1A

**Achromatic colours white for eight illuminants; colour space YAB\_77; K=25:1**

| Code                   | Y    | A   | B   | C <sub>AB</sub> | a      | b       | $h_{AB}$ | illuminant |
|------------------------|------|-----|-----|-----------------|--------|---------|----------|------------|
| W <sub>1</sub> 380_770 | 90.0 | 0.0 | 0.0 | 0.01            | 0.9706 | -0.4182 | 19.5     | P60        |
| W <sub>1</sub> 380_770 | 90.0 | 0.0 | 0.0 | 0.01            | 0.9745 | -0.3839 | 350.8    | P55        |
| W <sub>1</sub> 380_770 | 90.0 | 0.0 | 0.0 | 0.01            | 0.9812 | -0.346  | 0.0      | P50        |
| W <sub>1</sub> 380_770 | 90.0 | 0.0 | 0.0 | 0.01            | 0.992  | -0.3042 | 355.4    | P45        |
| W <sub>1</sub> 380_770 | 90.0 | 0.0 | 0.0 | 0.01            | 1.0093 | -0.2587 | 2.2      | P40        |
| W <sub>1</sub> 380_770 | 90.0 | 0.0 | 0.0 | 0.01            | 1.0366 | -0.2097 | 8.7      | P35        |
| W <sub>1</sub> 380_770 | 90.0 | 0.0 | 0.0 | 0.01            | 1.0804 | -0.1582 | 0.7      | P30        |
| W <sub>1</sub> 380_770 | 90.0 | 0.0 | 0.0 | 0.01            | 1.1518 | -0.1063 | 0.5      | P25        |

BE670-1A

**Achromatic colours white for eight illuminants; colour space CIELAB; K=25:1**

| Code                   | L*   | a*  | b*  | C* <sub>ab</sub> | a'     | b'      | $h_{ab}$ | illuminant |
|------------------------|------|-----|-----|------------------|--------|---------|----------|------------|
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.2154 | -0.0861 | 140.8    | P60        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.2154 | -0.0861 | 271.6    | P55        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.2154 | -0.0861 | 180.0    | P50        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.2154 | -0.0861 | 219.6    | P45        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.2154 | -0.0861 | 180.0    | P40        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.2154 | -0.0861 | 121.1    | P35        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.2154 | -0.0861 | 0.0      | P30        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.2154 | -0.0861 | 0.0      | P25        |

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**Achromatic colours white for eight illuminants; colour space LABHNU1\_79; K=25:1**

| CodeD65                | L*   | a*  | b*  | C* <sub>ab</sub> | a'     | b'      | $h_{ab}$ | illuminant |
|------------------------|------|-----|-----|------------------|--------|---------|----------|------------|
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.1313 | -0.0888 | 56.4     | P60        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.1316 | -0.0867 | 350.5    | P55        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.132  | -0.0842 | 0.0      | P50        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.1328 | -0.0812 | 333.3    | P45        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.1339 | -0.0777 | 90.5     | P40        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.1357 | -0.0736 | 45.1     | P35        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.1386 | -0.0687 | 0.0      | P30        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.1434 | -0.063  | 0.0      | P25        |

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1-000130-L0

BE670-7N

**Achromatic colours white for eight illuminants; colour space CIEXYZ; K=25:1**

| Code                   | X     | Y     | Z      | x      | y      | z      | $h_{xy}$ | illuminant |
|------------------------|-------|-------|--------|--------|--------|--------|----------|------------|
| W <sub>1</sub> 380_770 | 85.53 | 90.0  | 98.0   | 0.3127 | 0.329  | 0.3582 | 226.4    | D65        |
| W <sub>1</sub> 380_770 | 86.78 | 89.99 | 74.24  | 0.3457 | 0.3585 | 0.2957 | 226.0    | D50        |
| W <sub>1</sub> 380_770 | 89.28 | 90.0  | 68.46  | 0.3603 | 0.3632 | 0.2763 | 225.2    | P45        |
| W <sub>1</sub> 380_770 | 98.86 | 89.99 | 32.02  | 0.4475 | 0.4074 | 0.1449 | 222.3    | A00        |
| W <sub>1</sub> 380_770 | 90.0  | 90.0  | 90.0   | 0.3333 | 0.3333 | 0.3333 | 225.0    | E00        |
| W <sub>1</sub> 380_770 | 88.26 | 90.0  | 106.4  | 0.31   | 0.3161 | 0.3737 | 225.0    | C00        |
| W <sub>1</sub> 380_770 | 91.86 | 90.0  | 72.95  | 0.3604 | 0.3531 | 0.2863 | 224.4    | P00        |
| W <sub>1</sub> 380_770 | 88.13 | 90.0  | 107.05 | 0.309  | 0.3155 | 0.3753 | 225.5    | Q00        |

BE670-1A

**Achromatic colours white for eight illuminants; colour space YAB\_77; K=25:1**

| Code                   | Y     | A   | B   | C <sub>AB</sub> | a      | b       | $h_{AB}$ | illuminant |
|------------------------|-------|-----|-----|-----------------|--------|---------|----------|------------|
| W <sub>1</sub> 380_770 | 90.0  | 0.0 | 0.0 | 0.01            | 0.9504 | -0.4355 | 353.4    | D65        |
| W <sub>1</sub> 380_770 | 89.99 | 0.0 | 0.0 | 0.01            | 0.9642 | -0.3299 | 354.2    | D50        |
| W <sub>1</sub> 380_770 | 90.0  | 0.0 | 0.0 | 0.01            | 0.992  | -0.3042 | 355.4    | P45        |
| W <sub>1</sub> 380_770 | 89.99 | 0.0 | 0.0 | 0.01            | 1.0984 | -0.1423 | 0.0      | A00        |
| W <sub>1</sub> 380_770 | 90.0  | 0.0 | 0.0 | 0.01            | 1.0    | -0.4    | 7.7      | E00        |
| W <sub>1</sub> 380_770 | 90.0  | 0.0 | 0.0 | 0.01            | 0.9807 | -0.4729 | 358.3    | C00        |
| W <sub>1</sub> 380_770 | 90.0  | 0.0 | 0.0 | 0.01            | 1.0206 | -0.3242 | 4.6      | P00        |
| W <sub>1</sub> 380_770 | 90.0  | 0.0 | 0.0 | 0.01            | 0.9793 | -0.4758 | 4.1      | Q00        |

BE670-1A

**Achromatic colours white for eight illuminants; colour space CIELAB; K=25:1**

| Code                   | L*   | a*  | b*  | C* <sub>ab</sub> | a'     | b'      | $h_{ab}$ | illuminant |
|------------------------|------|-----|-----|------------------|--------|---------|----------|------------|
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.2154 | -0.0861 | 329.4    | D65        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.2154 | -0.0861 | 343.4    | D50        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.2154 | -0.0861 | 219.6    | P45        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.2154 | -0.0861 | 272.4    | A00        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.2154 | -0.0861 | 157.5    | E00        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.2154 | -0.0861 | 274.7    | C00        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.2154 | -0.0861 | 85.2     | P00        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.2154 | -0.0861 | 21.1     | Q00        |

BE670-1A

**Achromatic colours white for eight illuminants; colour space LABHNU1\_79; K=25:1**

| CodeD65                | L*   | a*  | b*  | C* <sub>ab</sub> | a'     | b'      | $h_{ab}$ | illuminant |
|------------------------|------|-----|-----|------------------|--------|---------|----------|------------|
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.13   | -0.0899 | 345.9    | D65        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.1309 | -0.0831 | 350.5    | D50        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.1328 | -0.0812 | 333.3    | P45        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.1398 | -0.0671 | 0.0      | A00        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.1333 | -0.0877 | 0.0      | E00        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.132  | -0.092  | 350.5    | C00        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.1347 | -0.0826 | 9.4      | P00        |
| W <sub>1</sub> 380_770 | 96.0 | 0.0 | 0.0 | 0.0              | 0.1319 | -0.0922 | 0.0      | Q00        |

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1-000130-L0

BE671-7N

TUB-test chart BE67; Achromatic colorimetric data; K=25:1

colour spaces CIEXYZ, YAB\_77, CIELAB, LABHNU1\_79; 16 illuminants; 2 degree observer

input: w/rgb/cmyk -> rgb