

IES TM-30-15 Errata

If you, as a user of IES's TM-30-15, believe you have located an error not covered by the following revisions, you should e-mail your information to Pat McGillicuddy, pmcgillicuddy@ies.org or send a letter to Pat McGillicuddy, Manager of Standards Development, IES, 120 Wall St. 17th Floor, New York, NY 10005. Additions will be posted to this list online as they become available. This errata list was last updated **June 9, 2016**.

Please confine your comment to specific typographical errors or misstatements of fact in the document's text and/or graphics. Do not attempt revisions of TM-30-15.

Note: The IES TM-30-15 calculation tool files are uploaded to a specific website. The URL is found at the top of the Table of Contents for IES TM-30-15. This standard may be purchased on the IES Bookstore, www.ies.org/store.

3.3 Reference Illuminant

The constant in Equation (3.3.7) was incorrect. The correct equation is:

$$x_D = \frac{-2.0064 \times 10^9}{T_r^3} + \frac{1.9018 \times 10^6}{T_r^2} + \frac{0.24748 \times 10^3}{T_r} + 0.23704$$

3.7.1 Calculation of Color Coordinates

Equation (3.7.18) was partially concealed. The full illustration is as follows:

$$t = \frac{\frac{50000}{13} \times N_{cb} \times N_c \times e_t \sqrt{a^2 + b^2}}{R'_a + G'_a + \frac{21}{20} B'_a}$$

Equation (3.7.6), second element, M_H should be M_{HPE} . The correct equation is as follows:

$$\begin{bmatrix} R' \\ G' \\ B' \end{bmatrix} = M_{HPE} \begin{bmatrix} X_c \\ Y_c \\ Z_c \end{bmatrix} = M_{HPE} M_{CAT02}^{-1} \begin{bmatrix} R_c \\ G_c \\ B_c \end{bmatrix}$$

Equation (3.7.23) (new equation number), \ln should be used instead of \log . The correct equation is as follows:

$$M' = \left(\frac{1}{0.0228} \right) \ln (1 + 0.0228 \times M)$$

3.12 Fidelity Measures for Specific Hue Angle Bins and Color Samples

Equation (3.12.1) included an incorrect number. The correct equation is:

$$R'_{fh,j} = 100 - 7.54 \left(\frac{1}{m} \sum_{i=1}^m (\Delta E_{Jab,i}) \right)$$

4.4 Color Samples – Figure 8

In box 7, the root-mean-square average has been changed to arithmetic average.

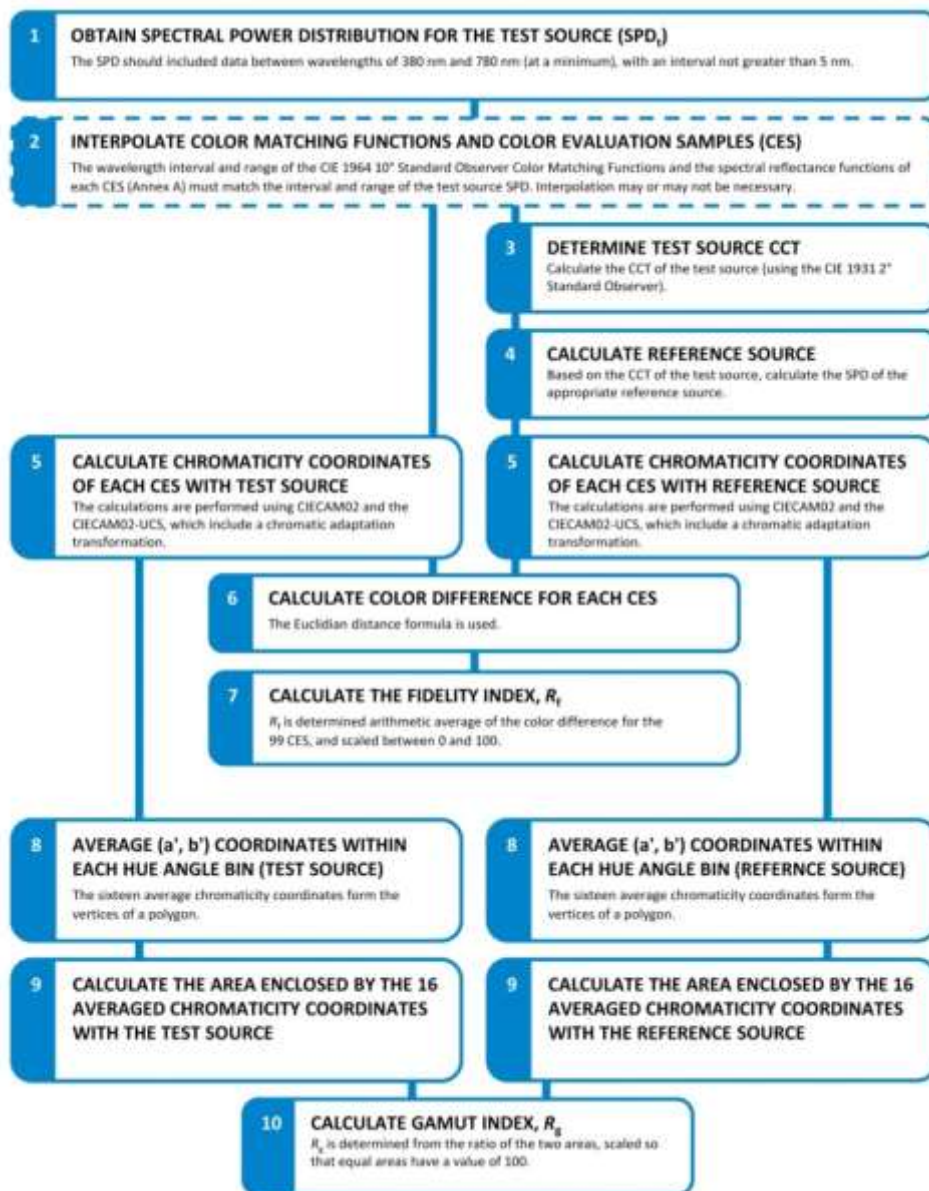


Figure 8: Flow chart for calculating R_f and R_g .

ANNEX B

CES 98 was incorrectly identified as Type A in Annex B, Figure B1. It is Type C.

CES 1 Type C	CES 2 Type C	CES 3 Type A	CES 4 Type A	CES 5 Type D	CES 6 Type C	CES 7 Type E	CES 8 Type D
CES 9 Type F	CES 10 Type G	CES 11 Type C	CES 12 Type A	CES 13 Type F	CES 14 Type E	CES 15 Type B	CES 16 Type C
CES 17 Type C	CES 18 Type B	CES 19 Type E	CES 20 Type F	CES 21 Type D	CES 22 Type D	CES 23 Type G	CES 24 Type E
CES 25 Type A	CES 26 Type C	CES 27 Type A	CES 28 Type G	CES 29 Type C	CES 30 Type A	CES 31 Type D	CES 32 Type C
CES 33 Type D	CES 34 Type G	CES 35 Type G	CES 36 Type A	CES 37 Type A	CES 38 Type A	CES 39 Type F	CES 40 Type F
CES 41 Type C	CES 42 Type F	CES 43 Type C	CES 44 Type F	CES 45 Type G	CES 46 Type E	CES 47 Type C	CES 48 Type D
CES 49 Type D	CES 50 Type F	CES 51 Type F	CES 52 Type F	CES 53 Type E	CES 54 Type F	CES 55 Type G	CES 56 Type G
CES 57 Type C	CES 58 Type D	CES 59 Type E	CES 60 Type G	CES 61 Type F	CES 62 Type C	CES 63 Type F	CES 64 Type E
CES 65 Type F	CES 66 Type E	CES 67 Type E	CES 68 Type F	CES 69 Type F	CES 70 Type F	CES 71 Type F	CES 72 Type F
CES 73 Type F	CES 74 Type C	CES 75 Type F	CES 76 Type F	CES 77 Type A	CES 78 Type F	CES 79 Type C	CES 80 Type G
CES 81 Type A	CES 82 Type C	CES 83 Type C	CES 84 Type F	CES 85 Type A	CES 86 Type C	CES 87 Type F	CES 88 Type F
CES 89 Type A	CES 90 Type E	CES 91 Type A	CES 92 Type A	CES 93 Type D	CES 94 Type C	CES 95 Type A	CES 96 Type A
CES 97 Type F	CES 98 Type C	CES 99 Type E					

Figure B1. Approximate colors for the 99 CES, calculated the TM 30-XX 5000 K reference (i.e., half 5000 K Planckian radiation and half CIE illuminant D₅₀). The samples are ordered by hue angle. The sample type is also listed (A. Nature; B. Skin; C. Textiles; D. Paints; E. Plastics; F. Printed Material; G. Color Systems).