

# CIE 2025 FINAL SUBMISSION GUIDANCE NOTES (UPDATED CIE 2025 AUTHOR GUIDELINES)

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## INTRODUCTION

This document provides detailed guidance for authors submitting their final contributions for the CIE 2025 Midterm Meeting in Vienna, Austria. These guidance notes (Updated CIE 2025 Author Guidelines) are split into the following main sections:

- General information for final submissions to CIE 2025
- Submitting Full-length Papers
- Resubmitting Short Papers (in case Full-length Paper is not submitted).

Additionally, the original CIE 2025 Author Guidelines are included as an Annex as they continue to be valid for CIE 2025 final submissions.

### GENERAL INFORMATION FOR FINAL SUBMISSIONS TO CIE 2025

Using only ConfTool, all authors must actively submit their final papers by May 01, 2025 after they have received a notification of acceptance.

The Full-length Paper template and the final Short Paper (if a Full-length Paper is not submitted) template now include author names and affiliation information. Re-submission of your accepted contribution using the final templates is thus necessary.

While optional, we recommend submitting a Full-length Paper:

- Only Full-length Papers are eligible for the selection process of the CIE [Best Paper/Best Poster/Best Student Paper Award](#).
- Full-length Papers will, in addition, be available as a separate document for sale on the CIE Webshop and have separate DOIs assigned.
- For Full-length Papers open access publishing options are available for purchase. Please see the dedicated open-access page with more information.

Authors must adhere to Updated CIE 2025 Author Guidelines regardless of whether authors received comments, whether they intend to publish a Full-length Paper or a Short Paper, or whether they choose to opt-out from having their Short Paper (apart from the abstract) included in the CIE 2025 Proceedings, and regardless of the presentation type (oral presentation (15-min long), presented poster presentation (5-min short presentation), poster presentation).

As part of the submission process's final steps, authors will be asked to confirm certain agreements, in particular the publishing and data use agreements, purchase of the open-access option, as well as confirmation of their fellow authors agreement to the final submission and the related agreements during the submission.

Therefore, authors should be prepared to have all confirmations from their co-authors, employers, funding bodies, etc. as required. The most relevant agreements will be available on the [CIE 2025 submissions website](#) for prior review by the authors.

### Selection criteria CIE Best Paper / Poster / Student Paper Awards

- Best Paper Award will be selected from Full-length Papers that are accepted for oral presentation (15-min long).
- Best Poster Award will be selected from Full-length Papers that are accepted as posters, including presented poster presentations (i.e. 5-min short presentation).

- Best Student Paper will be selected from Full-length Papers where the lead author is a student, who must also present the paper at CIE 2025. This must be indicated during the submission process.

**Deadline:**

The submission system will close on **May 01, 2025 at 11:59 PM Central European Time (CEST)**.

**GUIDANCE FOR SUBMITTING FULL-LENGTH PAPERS**

All accepted authors are invited to submit a Full-length Paper (or a Short Paper; Full-length Paper submissions are encouraged, see special options related to Full-length Papers above).

- **Optional Submission:** Full-length Paper submissions are not mandatory but are encouraged. Authors who submit a Full-length Paper as their final submission are not required to submit their Short Paper again. Authors must consider reviewer comments while preparing their Full-length Paper for the submission. This process ensures that the final papers are of the highest quality.
- **Length Requirements:** Full-length Papers should be between 6 and 10 pages, including all text, figures, tables, and references. See all formatting and writing instructions below in Annexes).
- **Template, name & affiliations, format, document labelling:** Full-length Papers must follow the CIE 2025 Full-length Paper template to ensure consistency.
  - **Author names & affiliations:** Authors need to include author names, affiliations, and contact email (of contacting author); examples of how to write these can be found in the updated Full-length Paper template. The author names in the template (below the title) should have the following style: family name, initial(s) of the first name(s), e.g. Smith, M.D. The name of the presenter (e.g. **Johnson, A.B.**) should be written in **bold**. Author affiliation information should have the following style: company/institution, city, COUNTRY of 1<sup>st</sup> author, e.g. <sup>1</sup> International Research Institute, Vienna, AUSTRIA.
  - **Format:** Please prepare to submit your Full-length Paper as Word file as well as PDF file.
  - **Document labelling:** A Full-length Paper file for submission should be labelled with Short Paper ID number and name of the author. When an author named Wang Chen (last name) submits a Full-length Paper, and his Short Paper ID number is 123, then the Full-length Paper file should be labelled as ID123Chen\_Wang.docx and ID123Chen\_Wang.pdf.
  - **Labelling open-access invoicing form:** When an author named Wang Chen (last name) submits a Full-length Paper with the open access option, and his Short Paper ID number is 123, then the open-access invoicing form file should be labelled as ID123Chen\_Wang\_OpenAccess\_InvoicingForm.pdf.
  - **No changes beyond reviewer’s comments:** Please do not change the title (or authors, etc.) unless the reviewers suggested to do so.
  - **No track changes or comments:** Don’t keep any comments or tracked changes in your submitted documents.

Authors submitting Full-length Papers for the CIE 2025 conference proceedings will have their papers published (in addition to being included in the complete 2025 proceedings volume) with a paper-level DOI assigned, which makes the papers findable and citable as individual papers (the DOI landing page will be a permanent landing page within the CIE domain). The Full-length Papers will also be available for individual sale via the CIE Webshop.

## OPEN ACCESS OPTION FOR FULL-LENGTH PAPERS

In addition, authors of Full-length Papers have the option to make their work available as open access (CC-BY-NC License). The open access papers will be available as a free download from the CIE Webshop and from the CIE website.

Authors will have the possibility to purchase the open access option (EUR 400) during the final submission process. As part of this invoicing information will have to be uploaded using a dedicated CIE form. Authors should note that ticking the “open access box” during the submission process constitutes a binding contract. The system closes on May 01, 2025 (payment deadlines will be as specified on CIE’s invoices, no open-access fee payment will be accepted after 16 June, 2025).

Full details (including the open-access invoicing form) are available on the [CIE open-access webpage](#).

See also section on publication agreements (above).

## GUIDANCE FOR RESUBMITTING SHORT PAPERS

All authors must resubmit their Short Paper, regardless of whether they received comments from reviewers or not and regardless of whether they want their Short Paper included in the CIE 2025 Proceedings, **unless they are submitting a Full-length Paper** as their final submission.

- **Reviewer Feedback:** Any feedback received from reviewers must be incorporated into the revised submission.
- **Length Requirements:** Short Papers are expected to be between 2-3 pages and should not exceed 4 pages (or 1,800 words), including figures, tables, and references.
- **Template, name & affiliations, format, document labelling):** Final version Short Papers must follow the final version CIE 2025 Short Paper template to ensure consistency.
  - **Author names & affiliations:** Authors must use the updated Short Paper template. Authors need to include **author names, affiliations, and contact email** (of contacting author); The author names should have the following style: family name, initial(s) of the first name(s), e.g. Smith, M.D. The name of the presenter (e.g. **Johnson, A.B.**) should be written in **bold**. Author affiliation information should have the following style: company/institution, city, COUNTRY of 1<sup>st</sup> author, e.g. <sup>1</sup> International Research Institute, Vienna, AUSTRIA.
  - **Format:** Please resubmit your Short Paper as a Word file PDF and a PDF file. Word file.
  - **Document labelling:** A Short Paper file for resubmission should be labelled with Short Paper ID number and name of the author. When an author named Wang Chen (last name) resubmits his Short Paper, and his Short Paper ID number is 123,

then the Short Paper file should be labelled as ID123Chen\_Wang.docx and ID123Chen\_Wang.pdf.

- **No changes beyond reviewer's comments:** Please do not change the title (or authors, etc.) unless the reviewers suggested to do so.
- **No track changes or comments:** Don't keep any comments or tracked changes in your submitted documents.

**Publishing Opt-out Option:** Authors who wish to not have their Short Paper published in the CIE 2025 Proceedings can opt-out (with the exemption of the abstract being published). A checkbox will be available in the submission system to indicate this choice. However, even those authors who are opting out must still upload their resubmitted Short Paper according to the guidelines, as the data is needed for the conference procedures (e.g., abstract booklet, internal review processes).

## ANNEX: ORIGINAL CIE 2025 AUTHOR GUIDELINES

### INTRODUCTION AND REFERENCES TO ALL TEMPLATES/GUIDANCE

This document provides a comprehensive guideline with detailed **instructions and information to help authors prepare and successfully submit their contributions for CIE 2025**. It includes detailed information on the submission system, Short Paper criteria (e.g. length, word limits), the double-blind review process for Short Papers, and forward-looking information such as on Full-length Paper submissions. Detailed instructions on style, such as notations (Annex A) and reference style, are also provided to assist authors in preparing their submissions. **Authors are required to use the CIE templates and carefully review and strictly adhere to these guidelines while preparing their submissions. Non-adherence to them may result in rejection of your submission.**

**Important documents and information (overview of all links you will need next these author guidelines):**

- Additional information about CIE 2025 (concept, program, etc.) can be found on the [CIE 2025 website](#)
- Please read the [CIE 2025 Call for Contributions](#) for a concise overview of all relevant details (scope, deadlines, submission process, review, etc.)
- **CIE 2025 Submission Template (Template for Short Papers and Full-length papers)**, compulsory to use
  - See also sections on style, referencing and notations in this document
  - Submission for review must include a 150-words abstract, see [guidance on how to write a good abstract](#)
- Standards of scientific integrity must be adhered to, as requested by the [CIE Code of Ethics](#), please also see:
  - [Singapore Statement on Research Integrity](#)
  - [ÖAWI Guidelines for Good Scientific Practice](#)
- [CIE 2025 Submission system \(Conftool\)](#)
  - Compulsory to use (submissions via email, fax, etc. are not accepted)
  - No data changes for authors, affiliations, titles or content after submission
- Authors will be asked to confirm adherence to standards of good scientific practice, data protection and publishing agreements during the submission process.
- Guidelines for preparing on-site Oral and Poster Presentations will be available to presenters on a later date

Contact and questions: For any questions, please contact the CIE Central Bureau at [ciecb@cie.co.at](mailto:ciecb@cie.co.at) and type "CIE 2025 + a relevant specification" into the subject line.

## INVITED CONTRIBUTIONS (SCOPE)

The CIE Midterm Meeting in Vienna 2025 (CIE 2025) invites the **submission of original scientific contributions** for an **oral or poster presentation** in line with the related **topics described in Call for Contributions**. Short Papers act as a concise summary of the research that will present (preliminary) findings, new ideas, or ongoing work, while Full-length Papers will provide a more detailed exposition of the study. Submissions must be original and not published elsewhere in full form before the conference.

## LANGUAGE REQUIREMENTS

All submissions must be written in English, and presentations at the conference will also be conducted in English to facilitate international participation and understanding.

## PAPER LENGTH AND FORMAT FOR SUBMISSION, USE OF TEMPLATES

- **Short Papers (abstract + summary):**

Short Papers are expected to be concise yet comprehensive enough to allow for a meaningful review. Short Papers would normally be expected to be **2-3 pages in length**, including an abstract of **150 words**, references, tables, and figures. The **maximum allowed length is 4 pages or 1,800 words**. Short papers consist of a compulsory (max. 150 words) abstract plus a structured and concise summary of the work you wish to present (see templates). Preliminary results, new ideas an ongoing work can be presented but should be described with relevant background and at the stage where they are at the time of submission.
- **Abstract (150 words) of the Short Paper:**

The abstract is the first part of each submission and will be also published as a stand-alone text in the abstract booklet. Abstracts and titles must be 100% identical in all documents and in the submission system.

  - **Contents of the abstract:** A scientific abstract of 150 words preceding the Short Paper is required, following the standard practice in academic work. The abstract should be concise and informative. Please see link guidance link in the introduction for writing an excellent abstract.
- **Full-length Papers:**

Full-length Papers will range from 6-10 pages (including references). Authors opting to submit Full-length Papers will first submit a Short Paper and, following the reviewer feedback, will have an opportunity to revise and expand their submission into a Full-length Paper. The final Full-length Paper submission will start on **March 3, 2025**. Additional information and instructions for Full-length Papers will be provided when the request for Full-length Papers will be open.
- **Templates for submissions:**

The CIE 2025 Submission Templates must be used for the preparation of your submission. The guidelines for structuring and formatting the document must be followed. See introduction section for all links to templates.
- **How to name your submission file:**

Your papers file for submission shall be labelled as follows (lead author name to be used): *First author's last name\_first name (serial number if more than one submission of the same author).doc(x)*. For example, when an author named David Smith (last name) submits two papers: Smith\_David\_01.docx, Smith\_David\_02.docx.
- **Document upload:**

The Submission shall be provided as DOC(X) and PDF file. The size of the DOC(X) and PDF files shall each not exceed 15 MB.

- **Tables, images, equations and formulas:**

Tables, images, equations and formulas are allowed in Short Papers (and Full-length Papers).

- **References in paper:**

The CIE publications use Harvard Style. Bibliographic references shall be indicated in the text by using the Harvard style, i.e. by stating the first author or organization and the year of publication in brackets, e.g.: (Jerome, 1974) or (CIE, 1974).

- **Product advertisement:**

Any references to specific (branded) products or even product advertisement is not allowed.

### **NO CHANGES AFTER SUBMISSION**

Changes are not possible after the submission. Therefore, please consider important issues carefully BEFORE a submission; for example, who is the first author, who will be the presenter (an author other than the first author can also be a presenter), what will be the title, how to best prepare your submission, etc. Abstracts (150 words), author names, presenter name and titles must be 100% identical in the submission system, and these cannot be changed after submission (except a revision comment from the reviewer(s) implies this change).

### **SUBMISSION SYSTEM (CONFTOOL)**

- **Platform:** The submission and review process will be managed through ConfTool, a web-based management system designed for academic conferences.
- **Account Creation:** Each submission requires the creation of a user account in the ConfTool system. If a paper has multiple authors, only one account is needed to submit the paper. Should any issues arise during the submission process, authors are encouraged to contact the CIE Central Bureau at [ciecb@cie.co.at](mailto:ciecb@cie.co.at) for assistance.
- The data, as submitted will used by the CIE in the review, organization and publication processes.
- Submissions sent by mail, e-mail or fax, i.e. other than through the CIE 2025 online submission system (ConfTool) will not be accepted.
- During the submission process, the submitting author has to confirm adherence to good scientific practices, to guarantee that the work includes relevant references and citations and that all necessary permissions to use third-party materials have been obtained; furthermore, to agree to the CIE publication agreement (e.g. publication in abstract booklet). The submitting author is responsible to ensure that all listed authors of a submission are aware and in agreement with these regulations.

### **PRESENTATION COMMITMENT**

- If the original presenting author cannot (for important reasons such as sickness) present the paper, any changes need to be communicated in the form of a written statement to the ISPC via CIE Central Bureau (CB) at: [ciecb@cie.co.at](mailto:ciecb@cie.co.at). In case of multiple authors, it is their responsibility to ensure one of the co-authors takes over this role.
- Note that the registration fees for the presenting author will not be waived. **Failure to register by the presenting author by May 1, 2025** will automatically result in **withdrawal from the final Programme**.

## REVIEW PROCESS AND REVISIONS

Short Papers will be reviewed by a panel of experts and may be selected for oral or poster presentation (or may be rejected). The identities of both the authors and the reviewers will remain concealed because of the double-blind review process. The reviewers will evaluate the Short Papers according to the relevance to the conference, standard of English, objectivity of statement, description of what was done, suitability of methods in relation to aims, conclusions confirmed by objective results, scientific value, originality and clarity of work and overall contribution to the field.

- **Revisions Based on Feedback:** Authors will receive comments from reviewers if there are any. For resubmission of Short Papers or submission of Full-length Papers (additional information and instructions for Full-length Papers will be provided at a later time) authors are expected to revise their submissions in response to these comments. Authors need to resubmit the revised Short Papers (in case an author chooses not to submit a full-length paper) or (in case a Full-length Paper is submitted) authors can regard the reviewer comments in the submission of the Full-length Paper. This process ensures that the final papers are of the highest quality.

## COPYRIGHT, PUBLICATION AND OPEN ACCESS OF FULL-LENGTH PAPERS

- All accepted contributions (Short Papers and – where available – Full-length Papers) will be published in the Publication Series (ISSN 3061-015X (Print), 3061-0168 (Online)) ***Proceedings of the CIE (International Commission on Illumination)***. The CIE 2025 will be submitted to the scientific database Scopus.
- Please note that only the Full-length Papers from the *Proceedings of the CIE (International Commission on Illumination)* will be **available for purchase as an individual paper (which is citable)**. **Only Full-length Papers will have DOI numbers**. Thus, Short Papers will be included in the *Proceedings of the CIE* will but will not be made available as an individual, citable paper with a DOI assigned to it.
- **Open access option for Full-length Papers:** This option can be requested only for Full-length Papers and at the time of the Full-length Paper submission. Full details about open access and prices will be provided before the full-length submission opens.
- Abstracts and author information will also be published by the CIE, particularly in the Programme and Abstract Booklet.

## STYLE GUIDE FOR CIE 2025 SUBMISSIONS

The following sections include instructions regarding the use of fonts, styles, citations and referencing that you need to regard to prepare your submission. The mandatory CIE 2025 submission templates already correspond to these guidelines. Instructions shall be used in conjunction with the *Guidelines for notations to be used in CIE Publications* (see Annex A below).

The following issues shall especially be taken care of in the preparation of your paper:

- Your Short Paper are expected to be between 2-3 pages (including references) and shall have no more than **4 pages** (including references) or **1,800 words**.
- It must be submitted as **DOC(X) and PDF file**. The size shall each not exceed **15 MB**.
- No author or self-revealing information is to be provided in the documents.
- Do **not change the format settings** in the template.

- Use the page and style settings as well as the structure provided in the CIE template for Short Paper for CIE 2025.
- Do not insert page numbers.
- The default font shall be **Arial, 10 pt.**
- Figures (graphs, diagrams and photographs) shall be clear and precise. They may be in colour or black and white. Any text used in the figures shall have the same font and size as the text of the paper. Figures shall be aligned centred. Use the following designation **below** the figure:

**Figure 1 – Caption of Figure 1 {centred}**

- Tables shall be aligned centred. Use the following designation **above** the table:

**Table 1 – Caption of Table 1 {centred}**

- If equations are used, they shall be numbered consecutively, with the equation number, within parentheses, positioned flush right, using a right tab stop, as in the following example:

$$a^2 + b^2 = c^2 \tag{1}$$

- Use British spelling, not American, e.g. “colour”, not “color”.
- Define abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract.
- Make sure to mark any verbatim citations and include appropriate references to material copied/used from other publications by the same or other authors.
- Prepare your submission according to the standards of scientific integrity (see links in introduction section to CIE Code of Ethics, Singapore Statement on Research Integrity, ÖAWI Guidelines for Good Scientific Practice).
- Cite references in the text by using the Harvard style, i.e. stating the author(s) or the organization and the year of publication in brackets, e.g. (Jerome, 1974) or (CIE, 1974). If there are more than two authors, the first author shall be named followed by “et al.”, e.g. (Jerome et al., 1974). If more papers from the same source and year appear in the publication, the year of publication shall be followed by a lowercase letter, e.g. (ISO, 1994a); (ISO, 1994b). The references shall be given in alphabetical order in a section **References** at the end of the document. Should any of your references include a Document Object identifier (DOI), please include this at the end of any such reference using the following format: ADRIAN, W. 1989. Visibility of Targets: Model for Calculation. *Lighting Res. Technol.*, 21, 181-188. <https://doi.org/10.1177/096032718902100404>.
- Regarding the use of symbols, units and functions consult the *Guidelines for Notation to be used in CIE Publications* (see Annex A below).

## **ANNEX A: GUIDELINES FOR NOTATION TO BE USED IN CIE PUBLICATIONS (EXTRACT OF CIE CODE OF PROCEDURE)**

### **A.1 General**

The provisions for the notation of quantities and units as given in the ISO/IEC Directives, Part 2, Annex B, Table B.1 (ISO/IEC, 2021) apply to CIE publications, too. In the following some of the respective rules are listed, and additional explanations are given.

#### **A.1.1**

The default font for CIE publications is Arial 10 pt.

#### **A.1.2**

Quantity symbols shall be in italic Times New Roman font, or italic Word 'symbol' font in the case of Greek symbols.

#### **A.1.3**

Symbols for quantities and variables shall be in italics (see also C.1.4, C.2.5, C.2.6); symbols for units and for descriptive terms (e.g. *r* for relative) shall be in upright type.

#### **A.1.4**

Where spectral quantities are expressed in the form  $X_{\lambda}(\lambda)$ , the subscript  $\lambda$  indicates the quantity  $dX/d\lambda$  and shall therefore be in italics.

#### **A.1.5**

Arabic numerals shall be used for all numbers, whether in formulae or free flowing text.

#### **A.1.6**

Every instance of a numerical value of a quantity shall be accompanied by the relevant unit for the quantity, e.g. 380 nm to 780 nm, not 380 to 780 nm.

#### **A.1.7**

Where numerical values of a quantity are given, the unit shall be expressed in abbreviated form (see also C.3.3), e.g. 380 nm, not 380 nanometres.

#### **A.1.8**

The unit symbols for degree, minute and second (for plane angle) shall follow immediately the numerical value; all other unit symbols shall be preceded by a space (also '%' and '°C').

#### **A.1.9**

Multiplication of numerical values shall be indicated by  $\times$  from the Word 'symbol' font, e.g.  $3 \times 4 = 12$  or  $1,8 \times 10^{-3}$  (not  $1,8 \cdot 10^{-3}$  or  $1,8 \cdot 10^{-3}$ ).

#### **A.1.10**

If mathematical operators are used, it shall be clear whether this applies to a quantity or a numerical value; e.g.  $20 \times 30$  m is not the same as  $20$  m  $\times$   $30$  m.

#### **A.1.11**

The decimal marker shall be a comma; for numbers less than 1 a zero shall be used before the decimal comma, e.g. 0,12.

#### **A.1.12**

Digits of numerical values either side of the decimal marker shall be split into groups of three using a fixed space e.g. 12 345,678 90; the exception is four digit numbers representing a year date, which should be written without a space, e.g. 2008.

### **A.1.13**

Where used in the index and clause headings of documents, symbols shall always be in square brackets, but abbreviations, units and additional text shall be in round brackets.

### **A.1.14**

All country abbreviations shall use the ISO country code.

## **A.2 Symbols for quantities and functions**

### **A.2.1**

Only SI quantities (BIPM, 2019), or quantities defined by the CIE in the International Lighting Vocabulary (CIE, 2020), shall be used.

### **A.2.2**

Where a quantity has a symbol that is recommended within the SI, then this symbol shall be used.

### **A.2.3**

Quantity symbols shall be single letters or symbols; multiple letters shall not be used.

### **A.2.4**

Subscripts shall be used to distinguish between related quantities; e.g. the subscript *v* is used for photometric quantities, such as illuminance, and the subscript *e* for radiometric quantities, such as irradiance.

### **A.2.5**

Subscripts shall not be italicized unless the subscript represents a variable; e.g. the symbol for illuminance is  $E_v$  (*v* not in italics).

### **A.2.6**

Multiple subscripts shall be separated by commas, with the inclusion of a space after the comma if this is required to prevent italicized characters overlapping, and shall maintain the convention for use of italics; e.g. spectral irradiance has the subscript  $e,\lambda$  with  $\lambda$  in italics.

### **A.2.7**

Where a subscripted quantity is used with a bracket, with the bracketed quantity indicating a variable, the subscript shall be placed before the bracket, e.g.  $L_e(\lambda)$ .

### **A.2.8**

Variables with both a superscript and a subscript shall be set using the equation editor so that the superscript is placed over the subscript, e.g.  $\Delta E_{ab}^*$ .

### **A.2.9**

Where symbols use a 'dash', this shall be represented by the Word 'symbol' font character ' instead of the single quote character ', e.g.  $u'$ ,  $v'$  and not  $u',v'$ .

### **A.2.10**

Symbols for mathematical functions, such as *cos* for cosine and *log* for logarithm, shall be in Arial font and should not be italicized.

### **A.2.11**

Where several quantity symbols are multiplied together, these shall be separated by a space, e.g.  $l = v t$ .

### A.2.12

Where a numerical value is multiplied with a quantity symbol, they shall be separated by a space, e.g.  $l = 3 t$ .

### A.2.13

Where quantities are divided by one another, the use of negative exponents is preferred, although the fractional form or divisor symbol may be used in cases where this cannot lead to any ambiguity or confusion; e.g. the following are all acceptable:

$$\nu = d_0 \log 0,05 (\log T)^{-1}$$

$$D = 1/\Phi_m$$

$$q = \frac{L}{E}$$

### A.2.14

Symbols for functions and function variables shall be in Arial font, or Word 'symbol' font in the case of Greek symbols.

### A.2.15

Integrals shall include a space before the integrand symbol, the 'd' in the integrand shall not be italicized, like operators in general, and all other rules for symbols shall be observed, as in the following examples:

$$H_V = \int_{\Delta t} E_V dt$$

$$\int \varphi(\lambda) \cos \varepsilon d\lambda$$

## A.3 Units

### A.3.1

Only SI units or units recognized for use with SI (BIPM 2019) shall be used.

### A.3.2

Only accepted abbreviations of units shall be used.

### A.3.3

Abbreviations for units shall only be used in association with numerical values or quantity symbols; e.g. 'the resistance is 10  $\Omega$ ', 'resistance measured in ohms' or a graph axis labelled ' $R/\Omega$ ' are all acceptable but 'resistance measured in  $\Omega$ ' is not.

### A.3.4

Names of units shall always be lowercase, e.g. watt.

### A.3.5

Abbreviations for units shall be lowercase unless the unit is named after an individual; e.g. the abbreviation for the metre is m whereas the abbreviation for the watt is W.

### A.3.6

Prefix symbols for mega and larger shall be capitalized, e.g. MHz for megahertz.

### A.3.7

Prefix symbols for kilo and smaller shall be lower case, e.g. mm for millimetre.

**A.3.8**

Names, symbols, abbreviations and prefixes for units shall all be in Arial font, non-italic.

**A.3.9**

Where several units are combined for a given quantity, the units shall be separated by a mid-centred dot, e.g. A·s.

**A.3.10**

Negative exponents shall be used in cases where units are divided by one another, e.g.  $\text{cd}\cdot\text{m}^{-2}$ ,  $\text{W}\cdot\text{m}^{-2}\cdot\text{sr}^{-1}$ .

## A.4 Checklist

**Table A.1 – Checklist for drafting CIE technical publications**

Guideline	Guideline reference(s)	Y/N?
All general text Arial 10 pt with all numbers in Arabic numerals?	A.1.1, A.1.5	
Symbols in correct font and correctly aligned? <ul style="list-style-type: none"> <li>Quantities and variables: Italic Times New Roman font or italic Word 'symbol' font for Greek symbols, and Word 'symbol' font for 'dash' symbol</li> <li>Units, descriptive terms and mathematical functions: Arial, non-italics</li> <li>Symbol 'dash' represented by ' not '</li> <li>All subscripts with comma separators if appropriate, and only in italics if they represent a variable?</li> <li>Subscripts before brackets, if used</li> <li>Superscripts placed over subscripts, if both used</li> </ul>	A.1.2, A.1.3, A.1.4, A.2.4, A.2.5, A.2.6, A.2.7, A.2.8, A.2.9, A.2.13, A.2.14, A.3.8	
Units, in abbreviated form, given for all numerical values of quantities?	A.1.6, A.1.7	
Space between numerical value and units?	A.1.8	
Multiplication of numerical values indicated by $\times$ ?	A.1.9	
Clear whether mathematical operator applies to a quantity or a numerical value?	A.1.10	
Comma used as decimal marker?	A.1.11	
Digits split into groups of three either side of decimal marker (except for year dates)?	A.1.12	
Correct use of brackets in index and clause headings?	A.1.13	
Country abbreviations use the ISO country code	A.1.14	
SI quantities and units used?	A.2.1, A.3.1	
SI symbols used for quantities where available?	A.2.2	
Quantity symbols all single letter or symbols?	A.2.3	
Space between multiplied quantities?	A.2.11, A.2.12	
Negative exponents used; fraction form or divisor symbol for simple cases only?	A.2.13	
Integrals have space before integrand symbol, with d not italicized	A.2.15	
Correct SI symbols used for units (including correct case for unit abbreviations and prefixes) and all in Arial font?	A.3.2, A.3.5, A.3.6, A.3.7, A.3.8	
Abbreviations for units only used with numerical values or quantity symbols	A.3.3	
Unit names all lowercase?	A.3.4	
Units separated by mid centred dot with negative exponents used for divided units?	A.3.9, A.3.10	

## A.5 Recommended *MathType Equation Editor* settings

Table A.2 – Recommended *MathType Equation Editor* settings

### a) Setting 1: Format / Spacing...

Line spacing	150 %
Matrix row spacing	120 %
Matrix column spacing	100 %
Superscript height	45 %
Subscript depth	25 %
Sub/superscript gap	15 %
Limit height	25 %
Limit depth	100 %
Limit line spacing	100 %
Numerator height	35 %
Denominator depth	100 %
Fraction bar overhang	1 pt
Fraction bar thickness	0,5 pt
Sub-fraction bar thickness	0,25 pt
Slash/diagonal fraction gap	8 %
Fence overhang	1 pt
Horizontal fence gap	10 %
Operator spacing (% of normal)	100 %
Non-operator spacing (% of normal)	100 %
Character width adjustment	0 %
Minimum gap	8 %
Radical gap (vertical)	17 %
Radical gap (horizontal)	8 %
Radical width (% of normal)	100 %
Embellishment gap	1,5 pt
Prime height	45 %
Box stroke thickness	5 %
Strike-through thickness	5 %
Matrix partition line thickness	5 %
Radical stroke thickness	5 %

**Table A.3 – Recommended *MathType Equation Editor* settings  
b) Setting 2: Style / Define...**

Style	Font		Character format	
	Type 1 Base 13	True Type	Bold	Italic
Text	Helvetica	Arial		
Function	Helvetica	Arial		
Variable	Times	Times New Roman		<input type="checkbox"/>
L.C. Greek	Symbol	Symbol		<input type="checkbox"/>
U.C. Greek	Symbol	Symbol		<input type="checkbox"/>
Symbol	Symbol	Symbol		
Matrix-Vector	Times	Times New Roman	<input type="checkbox"/>	<input type="checkbox"/>
Number	Helvetica	Arial		

**Table A.4 – Recommended *MathType Equation Editor* settings  
c) Setting 3: Size / Define...**

Full	10 pt
Subscript/Superscript	80 %
Sub- Subscript/Superscript	70 %
Symbol	170 %
Sub-Symbol	120 %