



# Editorial Checklist

## for the EWG

Revised January 2024

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# FORMAT

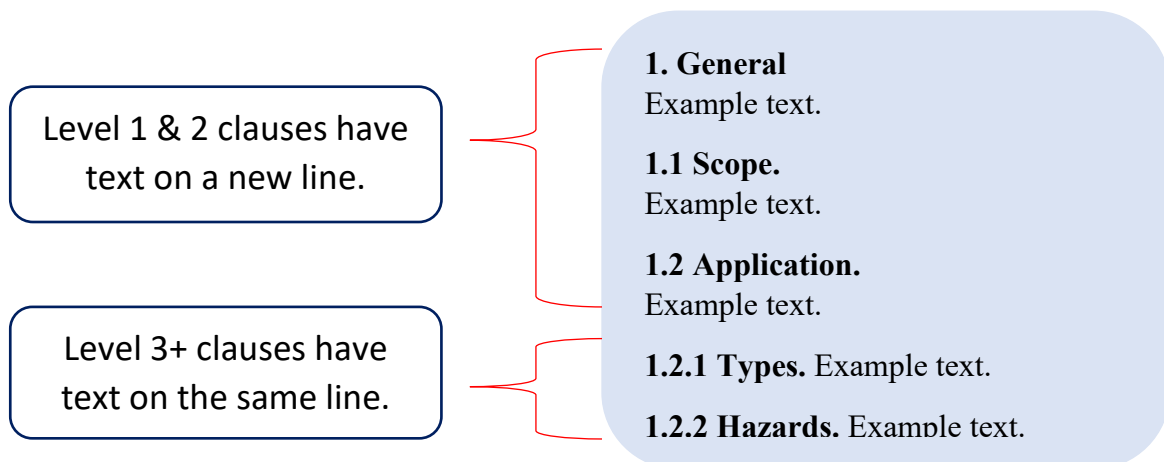
## General formatting

- ❑ **Line Numbers** on CDV1 are continuous
- ❑ **Page numbers** in the footer of all pages
- ❑ **Track Changes** is used for any changes to the text
- ❑ Draft does not include cover, front matter, or full table of contents or index.

## Clauses & sub-clauses

For readability, clauses and sub-clauses must be **bold**. Do *not* use MS Word heading styles, those will be added later.

- ❑ Clause numbers and sub-clause numbers are consecutive (no missing numbers)
- ❑ All sub-clauses are followed by at least one other sub-clauses of the same level (for example, 1.1 should only exist if there is a 1.2)
- ❑ Level 1 and level 2 clauses are followed by text that begins on a new line.
- ❑ Level 3+ clauses are followed by text beginning on the same line.



## Acronyms & Definitions

Acronyms and Definitions *always* appear in section 2.

- Terms are lower-case and end in a period unless followed by an abbreviation.
- Not capitalized unless a formal term or title
- Terms are bold
- Definitions are sentence case, not bold.
- Each term has a hanging indent (0.25")
- Abbreviations are in parentheses following the term. A period follows the parentheses.
- Terms are in alphabetical order

### 2.1 Abbreviations and Acronyms.

AEL – accessible emission limit

### 2.2 Definitions.

**accessible emission limit (AEL).** The maximum accessible emission level permitted within a particular laser hazard class.

- Acronyms and definitions must have the same wording as Z136.1 (latest revision).
- Only acronyms and definitions used in the standard shall be listed.
- For synonyms not in the definitions, the word “*Syn*” is used, followed by a colon; both are italicized. The word(s) following the colon are bold, not italic, followed by a period.
- For units (e.g., Watt (W)), the word “*Unit*” is used, followed by a colon; both are italicized. Following the colon is the unit abbreviation in parentheses, not italic, then followed by a period. “Unit” is listed before synonym.
- Symbols are placed after cross-references. The word “*Symbol*” is italicized, followed by a colon.
- When a synonym appears in the definitions, a “See” reference can be used to redirect the reader to the matching definition rather than duplicating the definition.
- When a closely related term appears in the definitions, a “See also” reference may be used to direct readers to the definition.



## Acronyms & Definitions continued

**average power.** The total energy in an exposure or emission divided by the duration of that exposure or emission. *Symbol:*  $\Phi$

**controlled area.** An area where the occupancy and activity of those within is subject to control and supervision. *See also:* **laser controlled area.**

**reflectance.** The ratio of total reflected radiant power to total incident power.  
*Unit:* (dimensionless). *Syn:* **reflectivity.**

**reflectivity.** *See:* **reflectance.**

## Examples

- Example labels are bold and italic
- Example text is bold
- Begin on the same line as the label
- Text following the example is bold

***Example 1. The optical density is...***

## Notes

- Never bold or italic
- Always informative
- Never mandatory (no “shalls”)
- Multiple notes in sequence are numbered
- Each note immediately follows the table, figure, or paragraph to which it belongs on a new line.
- Aligned left justified, never centered.

NOTE—This is a note.

NOTE 1—This is the first note.

NOTE 2—This is the second

## Solutions & Steps

- Solution, step, and number are bold
- Text following solution or step on the same line and not bolded

**Solution.** The MPE for a single 100 fs ( $100 \times 10^{-15}$  s) pulse at

**Step 1.** Determine and evaluate the NHZ of...

**Step 2.** Determine the extent of...

## Rules

- Rule number and label are bold
- Text following is not bold.

**Rule 3. Pulse Correction Factor,  $C_P$ .**  $C_P$  does not apply for corneal exposure.

## Lists

- Review for correct information
- First level is a lowercase letter followed by parenthesis
- Second level is an Arabic numeral followed by a period.
- Third level is a lowercase Roman numeral, followed by a period.

Sample List:

- a) First item in list.
  - 1. First sub-item.
    - i. Last item.

## Footnotes

- Footnotes in Text body
  - Informative
  - Never include mandatory requirements
  - Footnotes are not used for citations or references

Here is a sentence with a footnote<sup>1</sup>.

- Footnotes in Tables & Figures
  - Normative when in a normative table
  - Placed immediately below the table or figure
  - Uses letters instead of numbers

Column Heading <sup>a</sup>	Column Heading
Column Text	Column Text <sup>b</sup>
<sup>a</sup> Example footnote. <sup>b</sup> Example footnote.	

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## REFERENCES

### In-text citations

- Refer to the current edition of the Publication Manual of the American Psychological Association (APA)
- All in-text citations should have a corresponding reference
- All references should have a corresponding in-text citation
- All references should be reviewed to ensure the most current information is being provided
  
- **Normative Reference**
  - Any document cited in the standard that is essential to the application of the standard is listed in “References”
- **Informative Reference**
  - All non-normative references are cited in the “Bibliography”

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<sup>1</sup> This is the text for the footnote. Footnotes can be generated using the “References” tab in MS Word.

## Referring to other standards

- ❑ Referring to standard **without** the year (undated standard)
  - Used when referring to broad subject matter or scope of a standard.
- ❑ Referring to a standard **with** the year
  - Dated references should be used when specificity is required, such as reference to a specific clause, sub-clause, figure, or table of another standard.

### Undated reference to a standard

“...see Z136.3 (latest revision) for MPEs for the eye and skin.”

### Dated reference to a standard

“...see Example B7.2 in Z136.1-2014”  
“...requires the use of a limited aperture diameter of 7 and 3.5 for the eye and skin, respectively (Z136.1-2014).”

## Cross References

- ❑ Includes section number
- ❑ The words “Section”, Figure, Table begins with an uppercase letter, followed by the number and period.
- ❑ May be used in parentheses if not part of the sentence.
- ❑ Used infrequently

“For more information, see Section 2.”

“For examples, see Figure D4.”

“Classification of highly diverging beam lasers (for example, many laser diode emitters) requires determination of effective power or energy at the specified distance (see Section 9).”



# CONVENTIONS

## Numbers

- ❑ Numbers spelled out if:
  - 1 – 9
  - Common fractions
  - Begins a heading or sentence
- ❑ Numerals used if:
  - Numbers 0, 10 and above
  - When number immediately precedes a unit of measurement
- ❑ Use commas between groups of three digits in
- ❑ most figures of 1,000 or more. For additional clarification, see the APA manual

“There are two factors...”

“When there are two-thirds...”

“Fifteen lists...”

“There are at least 11...”

“With 1.54 cm of space...”

“The number of digits is 1,025,042 ...”

## Should, Shall, May, Can

- ❑ Should
  - Indicates a recommendation, but is not required
- ❑ Shall
  - Indicates mandatory action to comply with the standard
  - Is not to be used in informative Appendices, Appendiceal Supplements, Glossary, or Notes; only “should” is used
- ❑ May
  - Indicates a course of action permissible within the limits of a standard
- ❑ Can
  - Used for statements of capability and possibility, whether causal, material, or physical
  - Comparable to “is able to”



**Changing ‘should’ to ‘shall’, or ‘shall’ to ‘should’ or adding a ‘shall’ in a standard is considered a substantive change.**

## Since, Because & Due To

- “Since” refers to time and is used to mean “after” chronologically. In other words, something already occurred.
- In most instances, “because” or “because of” should be used to indicate a rationale for something. “Because of” modifies a verb.
- “Due to” modifies a noun and is usually preceded by the verb “to be” (is, are, were...). If you are unsure if it has been used correctly, you can substitute “due to” with “caused by” as a test. If the substitution does not work, then “because of” may be more appropriate.

“**Since** last week, we’ve performed the same service on that laser 500 times.”

“**Because** the system is still not working, we need to continue to perform the same service.”

“It was noisy **because of** the heavy construction.”

“The noise **is due to** the heavy construction.”

## In Order To

- Reduce using only the word “to”; the full phrase is a waste of words and space in a document.

“Activate the laser **in order to**...”

*is revised to* “Activate the laser **to**...”

## e.g., i.e., and etc.

- ❑ The acronyms e.g. and i.e. shall not be used
- ❑ Any instances of e.g. must be spelled out as “For example,”
- ❑ Any instances of i.e. must be spelled out as “that is”
- ❑ The abbreviation “etc.” shall not be used.
- ❑ For additional clarification, see the APA Manual

**Incorrect:** This situation may be appropriate (e.g., medical or research and development environments).

**Correct:** This situation may be appropriate, for example, in medical or research and development environments

**Incorrect:** (i.e., the total radiant exposure of all pulses within any time T shall not exceed the MPE for the time T.)

**Correct:** That is, the total radiant exposure of all pulses within any time T shall not exceed the MPE for the time T.

## That and Which

- ❑ The two words are **not** interchangeable
- ❑ “That”
  - Creates an essential/restrictive clause that is ‘essential’ to the meaning of the sentence
  - Is not preceded by a comma
- ❑ “Which”
  - Creates a non-restrictive clause that can be left off a sentence without changing its meaning
  - A comma always precedes “which”

**Tip:** *if the words following “which” can be removed without changing the meaning of the sentence, it’s non-restrictive. If the words are essential, use “that”*

**Restrictive clause:** “Dogs **that bark** are noisy.”

**Nonrestrictive clause:** “Dogs, **which are furry**, can bark.”

“Defining the beam parameters provides a better understanding of the steps **that are necessary to complete the process.**”

“Defining the beam paramters provides a better understanding of these steps, **which are explained in A1.3 through A1.7**”

## Classes

- In most circumstances, “Class” is singular when describing multiple lasers. “Class 1” is an adjective phrase describing the noun “laser”. Adjectives cannot be plural, but nouns can be.
- The plural, “classes”, is used to describe multiple lasers when it follows the word “laser”. “Laser classes” is a noun phrase and may be plural.

“This standard applies to Class 3b and 4 laser systems...”

“Laser classes 2, 2M, and 4 were...”

## Equations

- Check equation for accuracy
- Check solution for accuracy
- Note if any equation is outdated
- Only variables are italicized
- Subscripts are not italicized unless it is a variable.
- Units and words are not italicized
- The symbol “•” is used for the multiplication sign.
- Each equation is consecutively numbered. The number is placed on the right side of the page in parentheses.

$$\text{Pupil length} = \sqrt{(8/2)^2 + 11.3^2} \cdot \cos(35.5) = 9.76 \quad (17)$$

## Figures

- Figure labels and captions are bold and centered **BELOW** figure
- Figures referred to in the text (example, “See Figure 1”).
- Figure label numbers are in correct sequence
- Figures section follow Tables section



**Figure 1c. Sample ANSI Z535.2 Compliant Class 4 Laser Controlled Area Danger Sign Format.**

## Tables

- Table label and caption bold and center **ABOVE** table
- Column headers are bold
- Notes are part of the table
- Footnotes are numerical and follow the alphabetical footnotes
- Tables section must precede Figures section
- Tables referred to in the normative text

**Table 6a. Wavelength Dependent Parameters and Correction Factors**

Parameter/Correction Factor		Wavelength $\lambda$ (nm)	Graph	Notes
$C_A$	1.0	400 to	Fig. 8a	NOTE 2
	$10^{0.002(\lambda-700)}$	700 to 1050		
	5.0	1050		
$C_B$	1.0	400 to	Fig. 8b	NOTE 2
	$10^{0.02(\lambda-450)}$	450 to		
$C_C$	1.0	1050	Fig. 8c	NOTE 2
	$10^{0.018(\lambda-1150)}$	1150		
	$8 + 10^{0.04(\lambda-1200)}$	1200		
$T_1$	$10 \times$	450 to	Fig. 9a	NOTES 1, 2
$K\lambda$	$10^{0.01(1400-\lambda)}$	1200	Fig. 15	NOTE 2
NOTE 1— $T_1 = 10$ s for $\lambda = 450$ nm and $T_1 = 100$ s for $\lambda = 500$ nm.				
NOTE 2—Wavelengths must be expressed in nanometers for calculations.				

## General Abbreviations

<b>ACLS</b>	advanced cardiac life support	<b>MPE</b>	maximum permissible exposure
<b>AEL</b>	accessible emission limit	<b>MSDS</b>	see "SDS"
<b>BLS</b>	basic life support	<b>NBH</b>	non-beam hazard
<b>CFR</b>	Code of Federal Regulations	<b>Nd:YAG</b>	neodymium doped yttrium-aluminum garnet
<b>CPR</b>	cardio-pulmonary resuscitation	<b>NEC</b>	National Electric Code
<b>CW</b>	continuous wave	<b>NHZ</b>	nominal hazard zone
<b>DLSO</b>	deputy laser safety officer	<b>NLR</b>	non-laser radiation
<b>FLPPS</b>	Federal Laser Product Performance Standard	<b>NOHD</b>	nominal ocular hazard distance
<b>Hz</b>	hertz	<b>OD</b>	optical density
<b>IR</b>	infrared	<b>OFCS</b>	optical fiber communication system
<b>J</b>	joule	<b>PPE</b>	personal protective equipment
<b>JO</b>	joint order	<b>PRF</b>	pulse repetition frequency
<b>LASER</b>	light amplification by stimulated emission of radiation	<b>SDS</b>	safety data sheet
<b>LCA</b>	laser-controlled area	<b>SI</b>	International System of Units (metric system)
<b>LGAC</b>	laser generated airborne contamination	<b>SOP</b>	standard operating procedure
<b>LIDT</b>	laser-induced damage threshold	<b>TL</b>	threshold limit
<b>LEP*</b>	laser eye protection	<b>UV</b>	ultraviolet
<b>LPE**</b>	laser protective eyewear	<b>VLT</b>	visible luminous transmission
<b>LSO</b>	laser safety officer	<b>W</b>	watt
<b>LTIR</b>	laser-targeted interaction radiation		

\* LEP is a generic, generalized term used to refer to anything used to protect the eyes from lasers

\*\* LPE should be used when referring specifically to protective eyewear such as goggles and spectacles.

## Government and Professional Organization Abbreviations

<b>ACS</b>	American College of Surgeons	<b>FDA</b>	Food and Drug Administration
<b>ANSI</b>	American National Standards Institute	<b>IEC</b>	International Electrotechnical Commission
<b>AORN</b>	Association of periOperative Registered Nurses	<b>IEEE</b>	Institute of Electrical and Electronics Engineers
<b>ASLMS</b>	American Society for Laser Medicine & Surgery	<b>ILSC</b>	International Laser Safety Conference
<b>AST</b>	Association of Surgical Technologists	<b>LIA</b>	Laser Institute of America
<b>BLS</b>	Board of Laser Safety	<b>NCLS</b>	National Council on Laser Certification
<b>CDRH</b>	Center for Devices and Radiological Health	<b>NFPA</b>	National Fire Protection Association
<b>FAA</b>	Federal Aviation Administration	<b>OSHA</b>	Occupational Safety and Health Administration



## Z136 Procedural Abbreviations

<b>ADCOM</b>	Administrative Committee	<b>PINS</b>	Project Initiation Notification System
<b>ASC</b>	Accredited Standards Committee	<b>SCDV</b>	Subcommittee Draft for Vote
<b>BSR</b>	Board of Standards Review	<b>SPIR</b>	Subcommittee Project Initiation Request
<b>CBBG</b>	Consensus Body Balloting Groups	<b>SSC</b>	Standards Subcommittee
<b>CDV</b>	Committee Draft for Vote	<b>TSC</b>	Technical Subcommittee
<b>EWG</b>	Editorial Working Group		

## Compound Words (Reference Guide)

<b>Incorrect</b>	<b>Correct</b>
<b>beamsplitter; beam-splitter</b>	beam splitter
<b>multipulse</b>	multiple pulse
<b>post-exposure; post exposure</b>	postexposure
<b>pre-exposure</b>	preexposure
<b>pulsewidth; pulse-width</b>	pulse width
<b>repetitively pulsed laser</b>	repetitive pulsed laser
<b>spotsize; spot-size</b>	spot size
<b>ultra short; ultra-short</b>	ultrashort
<b>wave length; wave-length</b>	wavelength