# Vernier Software & Technology

# Accessibility Conformance Report

# Revised Section 508 Edition – VPAT® Version 2.4

## Name of Product/Version: Spectral Analysis®, version 4.8

## Product Description: Data collection and analysis software for use with Vernier Spectrometers.

## Report Date: June 15, 2020

## Contact Information: [support@vernier.com](mailto:support@vernier.com)

## Notes: This software has not optimized for use by the blind. For blind users we recommend the [Talking Logger Pro](http://independencescience.com/product/talking-logger-pro/) software. Windows® computers with a JAWS® screen reader utilize JAWS scripts to provide voice navigation and non-visual access when using Vernier Logger *Pro*®3 software. The Talking Logger Pro software is available from Independence Science. For more information, contact Independence Science at 1-866-862-9665 or visit their web site <http://independencescience.com>.

## Evaluation Methods Used: Testing is based on general product knowledge

## Applicable Standards/Guidelines

This report covers the degree of conformance for the following accessibility standard/guidelines:

|  |
| --- |
| Standard/Guideline |
| [Web Content Accessibility Guidelines 2.0](http://www.w3.org/TR/2008/REC-WCAG20-20081211) for levels A and AA |
| [Revised Section 508 standards published January 18, 2017 and corrected January 22, 2018](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/text-of-the-standards-and-guidelines) |

## Terms

The terms used in the Conformance Level information are defined as follows:

* **Supports**: The functionality of the product has at least one method that meets the criterion without known defects or meets with equivalent facilitation.
* **Partially Supports**: Some functionality of the product does not meet the criterion.
* **Does Not Support**: The majority of product functionality does not meet the criterion.
* **Not Applicable**: The criterion is not relevant to the product.

## WCAG 2.0 Report

This information also documents conformance with the following:

* Chapter 5 – 501.1 Scope, 504.2 Content Creation or Editing
* Chapter 6 – 602.3 Electronic Support Documentation

Note: When reporting on conformance with the WCAG 2.0 Success Criteria, they are scoped for full pages, complete processes, and accessibility-Supports ways of using technology as documented in the [WCAG 2.0 Conformance Requirements](https://www.w3.org/TR/WCAG20/#conformance-reqs).

### Success Criteria, Levels A and AA

Notes: This entry is for software and Supports documents. Spectral Analysis is not a Web or Authoring tool.

| **Criteria** | **Conformance Level** | **Remarks and Explanations** |
| --- | --- | --- |
| [**1.1.1 Non-text Content**](http://www.w3.org/TR/WCAG20/#text-equiv-all) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Not Applicable  Software: Does Not Support | Graph objects are not made readable in the software. Data would need to be read from the data table instead. |
| [**1.2.1 Audio-only and Video-only (Prerecorded)**](http://www.w3.org/TR/WCAG20/#media-equiv-av-only-alt) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Not Applicable  Software: Not Applicable | There is no prerecorded audio or video content used in the software or user documentation of Spectral Analysis. |
| [**1.2.2 Captions (Prerecorded)**](http://www.w3.org/TR/WCAG20/#media-equiv-captions) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Not Applicable  Software: Not Applicable | There is no prerecorded audio content used in the software or user documentation of Spectral Analysis. |
| [**1.2.3 Audio Description or Media Alternative (Prerecorded)**](http://www.w3.org/TR/WCAG20/#media-equiv-audio-desc) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Not Applicable  Software: Not Applicable | There is no prerecorded audio content used in the software or user documentation of Spectral Analysis. |
| [**1.2.4 Captions (Live)**](http://www.w3.org/TR/WCAG20/#media-equiv-real-time-captions) (Level AA)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Not Applicable  Software: Not Applicable | There is no live audio content or synchronized media used in the software or user documentation of Spectral Analysis. |
| [**1.2.5 Audio Description (Prerecorded)**](http://www.w3.org/TR/WCAG20/#media-equiv-audio-desc-only) (Level AA)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Not Applicable  Software: Does Not Support | There is no video content used in the software or user documentation of Spectral Analysis. |
| [**1.3.1 Info and Relationships**](http://www.w3.org/TR/WCAG20/#content-structure-separation-programmatic) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Partially Supports | Information and relationships can be programmatically determined in Spectral Analysis with the exception of the data table. |
| [**1.3.2 Meaningful Sequence**](http://www.w3.org/TR/WCAG20/#content-structure-separation-sequence) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Supports | Correct reading sequences are programmatically determined in Spectral Analysis. |
| [**1.3.3 Sensory Characteristics**](http://www.w3.org/TR/WCAG20/#content-structure-separation-understanding)(Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Supports | Instructions do not rely on sensory characteristics in Spectral Analysis. |
| [**1.4.1 Use of Color**](http://www.w3.org/TR/WCAG20/#visual-audio-contrast-without-color) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Does Not Support | Spectral Analysis uses color only to differentiate objects on a graph. The colors were chosen to ensure they can be differentiated by colorblind individuals. |
| [**1.4.2 Audio Control**](http://www.w3.org/TR/WCAG20/#visual-audio-contrast-dis-audio) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Not Applicable  Software: Not Applicable | Spectral Analysis does not include any audio output. |
| [**1.4.3 Contrast (Minimum)**](http://www.w3.org/TR/WCAG20/#visual-audio-contrast-contrast) (Level AA)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Supports | Spectral Analysis adheres to the contrast rule. |
| [**1.4.4 Resize text**](http://www.w3.org/TR/WCAG20/#visual-audio-contrast-scale) (Level AA)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Supports | Spectral Analysis allows resizing of text using the presentation tool accessed from the Other Options menu. |
| [**1.4.5 Images of Text**](http://www.w3.org/TR/WCAG20/#visual-audio-contrast-text-presentation) (Level AA)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Supports | Spectral Analysis does not use images of text in its display. |
| [2.1.1 Keyboard](http://www.w3.org/TR/WCAG20/#keyboard-operation-keyboard-operable) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Partially Supports | Spectral Analysis supports standard keyboard shortcuts and navigation on most objects. Graphs do not provide keyboard navigation. |
| [**2.1.2 No Keyboard Trap**](http://www.w3.org/TR/WCAG20/#keyboard-operation-trapping) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Supports | Spectral Analysis does limit focus inside of some elements, but users are advised as to how to exit them and regain full control of focus. |
| [**2.2.1 Timing Adjustable**](http://www.w3.org/TR/WCAG20/#time-limits-required-behaviors) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Not Applicable  Software: Supports | Spectral Analysis supports user setting of data collection duration. Data Collection is the only time-adjustable action. Users can restart data collection as often as needed. |
| [**2.2.2 Pause, Stop, Hide**](http://www.w3.org/TR/WCAG20/#time-limits-pause) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Not Applicable  Software: Supports | Spectral Analysis only has automatic updates of information during data collection. The rate of updates is controlled through user settings and must be applied prior to initiating data collection. |
| [**2.3.1 Three Flashes or Below Threshold**](http://www.w3.org/TR/WCAG20/#seizure-does-not-violate) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Supports | Spectral Analysis does not use flashing to convey user information. |
| [**2.4.1 Bypass Blocks**](http://www.w3.org/TR/WCAG20/#navigation-mechanisms-skip) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) – Does not apply to non-web software * 602.3 (Support Docs) – Does not apply to non-web docs | Electronic Docs: Supports  Software: Not Applicable | Spectral Analysis user documentation does not knowingly use repeated blocks of content. |
| [**2.4.2 Page Titled**](http://www.w3.org/TR/WCAG20/#navigation-mechanisms-title) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Supports | Spectral Analysis user documentation pages are titled.  Spectral Analysis is a single-page application. |
| [**2.4.3 Focus Order**](http://www.w3.org/TR/WCAG20/#navigation-mechanisms-focus-order) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Partially Supports | Some Spectral Analysis popover navigation items are incorrectly sequenced. |
| [**2.4.4 Link Purpose (In Context)**](http://www.w3.org/TR/WCAG20/#navigation-mechanisms-refs) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Not Applicable | Spectral Analysis user documentation links use readable link text.  Spectral Analysis software does not utilize links. |
| [**2.4.5 Multiple Ways**](http://www.w3.org/TR/WCAG20/#navigation-mechanisms-mult-loc) (Level AA)  Also applies to:  Revised Section 508   * 501 (Software) – Does not apply to non-web software * 602.3 (Support Docs) – Does not apply to non-web docs | Electronic Docs: Not Applicable  Software: Not Applicable | Spectral Analysis is not web-based software and Help is not web-based content. |
| [**2.4.6 Headings and Labels**](http://www.w3.org/TR/WCAG20/#navigation-mechanisms-descriptive) (Level AA)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Supports | Spectral Analysis uses descriptive heading labels when used in the software. |
| [**2.4.7 Focus Visible**](http://www.w3.org/TR/WCAG20/#navigation-mechanisms-focus-visible) (Level AA)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Supports | Spectral Analysis uses visual indicators to represent which section of the software has focus. |
| [**3.1.1 Language of Page**](http://www.w3.org/TR/WCAG20/#meaning-doc-lang-id) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Does Not Support  Software: Supports | Spectral Analysis user documents are always in English. The language has not been programmatically set.  Spectral Analysis programmatically uses the default language of the operating system of the platform it is running on. |
| [**3.1.2 Language of Parts**](http://www.w3.org/TR/WCAG20/#meaning-other-lang-id) (Level AA)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Does Not Support  Software: Supports | The language of the Spectral Analysis user documents cannot be determined programmatically. It is always in English.  Spectral Analysis uses a single language throughout the software. Only user input of information can be in some other language. |
| [**3.2.1 On Focus**](http://www.w3.org/TR/WCAG20/#consistent-behavior-receive-focus) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Supports | Spectral Analysis does not change the context of an object when it receives focus in the software or in the user documentation. |
| [**3.2.2 On Input**](http://www.w3.org/TR/WCAG20/#consistent-behavior-unpredictable-change) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Supports | Spectral Analysis does not automatically change the context of a user interface component when a setting within the user interface component is changed. |
| [**3.2.3 Consistent Navigation**](http://www.w3.org/TR/WCAG20/#consistent-behavior-consistent-locations) (Level AA)  Also applies to:  Revised Section 508   * 501 (Software) – Does not apply to non-web software * 602.3 (Support Docs) – Does not apply to non-web docs | Electronic Docs: Not Applicable  Software: Not Applicable | Spectral Analysis is not web-based software and user documentation is not web-based content. |
| [**3.2.4 Consistent Identification**](http://www.w3.org/TR/WCAG20/#consistent-behavior-consistent-functionality) (Level AA)  Also applies to:  Revised Section 508   * 501 (Software) – Does not apply to non-web software * 602.3 (Support Docs) – Does not apply to non-web docs | Electronic Docs: Not Applicable  Software: Not Applicable | Spectral Analysis is not web-based software and user documentation is not web-based content. |
| [**3.3.1 Error Identification**](http://www.w3.org/TR/WCAG20/#minimize-error-identified) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Supports | Spectral Analysis identifies error conditions and the error is described in text. |
| [**3.3.2 Labels or Instructions**](http://www.w3.org/TR/WCAG20/#minimize-error-cues) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Supports | Spectral Analysis includes labels on all user input fields. |
| [**3.3.3 Error Suggestion**](http://www.w3.org/TR/WCAG20/#minimize-error-suggestions) (Level AA)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Supports | Spectral Analysis provides error information whenever an error condition is automatically detected and suggested corrections are known. |
| [**3.3.4 Error Prevention (Legal, Financial, Data)**](http://www.w3.org/TR/WCAG20/#minimize-error-reversible) (Level AA)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Supports | Spectral Analysis does not interact with any systems or web pages that would have a user make a legal commitment or financial transaction of any kind. Spectral Analysis does not link to user-controllable data in any database. |
| [**4.1.1 Parsing**](http://www.w3.org/TR/WCAG20/#ensure-compat-parses) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Supports | Spectral Analysis follows all rules involving parsing of content provided using markup languages throughout the application. |
| [**4.1.2 Name, Role, Value**](http://www.w3.org/TR/WCAG20/#ensure-compat-rsv) (Level A)  Also applies to:  Revised Section 508   * 501 (Software) * 602.3 (Support Docs) | Electronic Docs: Supports  Software: Partially Supports | Spectral Analysis adheres to name guidelines for all UI elements. Spectral Analysis does not adhere to role guidelines and notification of changes to these items are not available to assistive technologies. |

## Revised Section 508 Report

### Chapter 3: [Functional Performance Criteria](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/text-of-the-standards-and-guidelines#302-functional-performance-criteria) (FPC)

| **Criteria** | **Conformance Level** | **Remarks and Explanations** |
| --- | --- | --- |
| 302.1Without Vision | Does Not Support | Spectral Analysis depends on operating system functionality to provide voice-over support for blind users. |
| 302.2 With Limited Vision | Does Not Support | Spectral Analysis depends on operating system functionality to provide voice-over support for limited vision users that require an auditory mode of operation. |
| 302.3Without Perception of Color | Does Not Support | Spectral Analysis does not provide user control over the color choice for elements that use color for display. The default color choices were selected to support users that are colorblind. |
| 302.4Without Hearing | Supports | Perception of sound is not required when using Spectral Analysis. |
| 302.5With Limited Hearing | Supports | Perception of sound is not required when using Spectral Analysis. |
| 302.6Without Speech | Supports | Speech is not used for input with Spectral Analysis. |
| 302.7With Limited Manipulation | Supports | Software is operable with a keyboard that supports operation with users having limited fine-motor skills. |
| 302.8With Limited Reach and Strength | Supports | Reach and Strength not required when using Spectral Analysis. |
| 302.9With Limited Language, Cognitive, and Learning Abilities | Not Applicable | Spectral Analysis is not intended for use by K-5 level students. |

### Chapter 4: [Hardware](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/text-of-the-standards-and-guidelines#401-general)

Notes: Spectral Analysis is computer software. Hardware standards do not apply to this product.

### Chapter 5: [Software](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/text-of-the-standards-and-guidelines#501-general)

| **Criteria** | **Conformance Level** | **Remarks and Explanations** |
| --- | --- | --- |
| 501.1 Scope – Incorporation of WCAG 2.0 AA | See [WCAG 2.0](#bookmark) section | See information in WCAG 2.0 section |
| [*502 Interoperability with Assistive Technology*](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/text-of-the-standards-and-guidelines#502-interoperability-assistive-technology) | Heading cell – no response required | Heading cell – no response required |
| 502.2.1 User Control of Accessibility Features | Not Applicable | Spectral Analysis does not include any accessibility features. |
| 502.2.2 No Disruption of Accessibility Features | Supports | Spectral Analysis does not disrupt platform features designated accessibility features. |
| ***502.3 Accessibility Services*** | Heading cell – no response required | Heading cell – no response required |
| 502.3.1 Object Information | Supports | In Spectral Analysis, an object role, state(s), properties, boundary, name, and description are programmatically determinable. |
| 502.3.2 Modification of Object Information | Supports | States and properties that can be set by the user are capable of being set programmatically, including through assistive technology. |
| 502.3.3 Row, Column, and Headers | Does Not Support | Data tables in Spectral Analysis do not conform to this standard. |
| 502.3.4 Values | Supports | Any value(s), and any set or range of allowable values associated with an object, are programmatically determinable. |
| 502.3.5 Modification of Values | Supports | Values that can be set by the user can be set programmatically, including through assistive technology. |
| 502.3.6 Label Relationships | Supports | Any relationship that a component has as a label for another component, or of being labeled by another component, is programmatically determinable. |
| 502.3.7 Hierarchical Relationships | Supports | Any hierarchical (parent-child) relationship that a component has as a container for, or being contained by, another component is programmatically determinable. |
| 502.3.8 Text | Supports | The content of text objects, text attributes, and the boundary of text rendered to the screen, are programmatically determinable. |
| 502.3.9 Modification of Text | Supports | Text that can be set by the user is capable of being set programmatically, including through assistive technology. |
| 502.3.10 List of Actions | Supports | A list of all actions that can be executed on an object is programmatically determinable. |
| 502.3.11 Actions on Objects | Supports | Spectral Analysis allows assistive technology to programmatically execute available actions on objects. |
| 502.3.12 Focus Cursor | Supports | Spectral Analysis exposes information and mechanisms necessary to track focus, text insertion point, and selection attributes of user interface components. |
| 502.3.13 Modification of Focus Cursor | Supports | Focus, text insertion point, and selection attributes that can be set by the user can be set programmatically, including through the use of assistive technology. |
| 502.3.14 Event Notification | Supports | Notification of events relevant to user interactions, including but not limited to, changes in the component’s state(s), value, name, description, or boundary, are available to assistive technology. |
| 502.4 Platform Accessibility Features | Not Applicable | Spectral Analysis is not platform software. |
| [***503 Applications***](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/text-of-the-standards-and-guidelines#503-applications) | Heading cell – no response required | Heading cell – no response required |
| 503.2 User Preferences | Partially Supports | Spectral Analysis permits user preferences from platform settings for color and focus cursor only. |
| 503.3 Alternative User Interfaces | Not Applicable | Spectral Analysis does not use alternative user interfaces. |
| ***503.4 User Controls for Captions and Audio Description*** | Heading cell – no response required | Heading cell – no response required |
| 503.4.1 Caption Controls | Not Applicable | Spectral Analysis does not display videos with synchronized audio. |
| 503.4.2 Audio Description Controls | Not Applicable | Spectral Analysis does not provide audio description user controls. |
| [*504 Authoring Tools*](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/text-of-the-standards-and-guidelines#504-authoring-tools) | Not Applicable | Video Analysis is not an authoring tool. |

### Chapter 6: [Support Documentation and Services](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/text-of-the-standards-and-guidelines#601-general)

| **Criteria** | **Conformance Level** | **Remarks and Explanations** |
| --- | --- | --- |
| ***601.1 Scope*** | Heading cell – no response required | Heading cell – no response required |
| [***602 Support Documentation***](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/text-of-the-standards-and-guidelines#602-support-documentation) | Heading cell – no response required | Heading cell – no response required |
| 602.2 Accessibility and Compatibility Features | Does Not Support | Spectral Analysis documentation does not include accessibility and compatibility information. |
| 602.3 Electronic Support Documentation | See [WCAG 2.0](#bookmark1) section | See information in WCAG 2.0 section |
| 602.4 Alternate Formats for Non-Electronic Support Documentation | Supports | Support documentation is provided in electronic format. |
| [***603 Support Services***](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/text-of-the-standards-and-guidelines#603-support-services) | Heading cell – no response required | Heading cell – no response required |
| 603.2 Information on Accessibility and Compatibility Features | Does Not Support | Support services do not include information on accessibility and compatibility features. |
| 603.3 Accommodation of Communication Needs | Does Not Support | Support services do not include accommodation of communication needs. |