

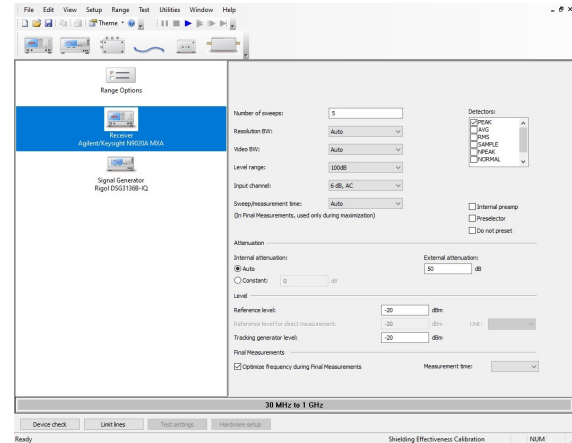
# SE-LAB Shielding Effectiveness Lab Software

## Product Overview

**Ease of Use** TDK Shielding Effectiveness Lab makes it simple to perform the procedures for measuring the effectiveness of electromagnetic shielding enclosures.

**Performance** Enhance test lab performance by maximizing repeatability of automated measurements using consistent, proven algorithms. TDK Shielding Effectiveness Lab includes support for shielding effectiveness measurements and calculations per IEEE 299 & MIL-STD-188-125-2.

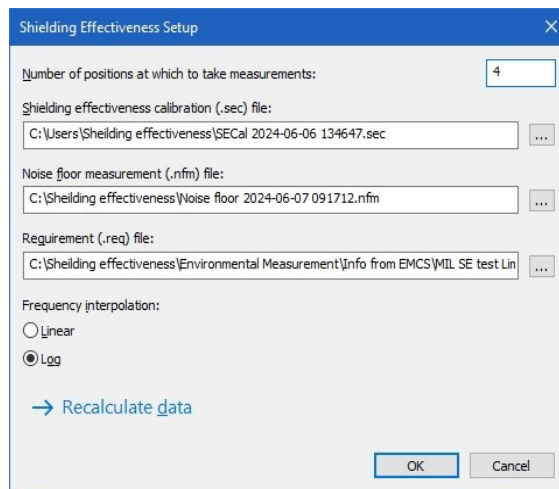
**Flexibility** Enables you to create simple test files for others to run, or you can interact with the test process every step of the way.



**Shielding Effectiveness Lab features a powerful yet easy-to-use set of tools to determining the shielding effectiveness (SE) of shielding enclosures.**

## Test Sequences

- Shielding Effectiveness Calibration** The purpose of this sequence is to take measurements at the reference position for each test frequency. At the end, the software creates a file containing the reference values to be used in the Shielding Effectiveness sequence to calculate the dynamic range and the shielding effectiveness.
- Noise Floor Measurement** The purpose of this sequence is to take measurements of the noise floor at each test frequency. At the end, the software creates a file containing the noise floor values to be used in the Shielding Effectiveness sequence to calculate the dynamic range.
- Shielding Effectiveness** The purpose of this sequence is to automate the measurement and calculation of the dynamic range and shielding effectiveness values at multiple locations of the chamber.



## Minimum System Requirements

- Windows 10 (64-bit) or Windows 11
- 6th generation Intel Core i5 CPU (i5-6xxx) / AMD Ryzen 7 (or better)
- 4 GB RAM

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## Testing Features

- Calibration sequence: automates the measurement and storage of the direct measurement.
- Noise Floor sequence: automates the measurement and storage of the noise floor.
- Shielding Effectiveness sequence:
  - ◇ Uses the data from the Calibration and Noise Floor sequences to automate the measurement and calculation of the dynamic range and shielding effectiveness values at multiple locations of the chamber.
  - ◇ Calculates the margin of the shielding effectiveness values to the requirements specified by the standard.
- Graphs and data tables for displaying the data generated by each test sequence.
- Ability to export data tables and graphs to spreadsheets or documents.

Freq (MHz)	Requirement (dB)	Reference (dBm)	Noise Floor (dBm)	Dynamic Range (dB)	Measurement (1) (dBm)	SE (1) (dB)	Margin (1) (dB)	Measurement (2) (dBm)
30.27	80.00	35.32	-104.00	139.32	-47.84	83.16	3.16	-47.83
30.74	80.00	35.16	-103.78	138.94	-47.85	83.17	3.17	-47.84
31.21	80.00	35.00	-104.05	139.05	-47.86	83.18	3.18	-47.85
31.70	80.00	34.84	-103.82	137.89	-47.87	83.19	3.19	-47.86
32.19	80.00	34.68	-97.63	132.31	-47.88	83.20	3.20	-47.87
32.69	80.00	34.52	-93.57	128.09	-47.89	83.20	3.20	-47.88
33.19	80.00	34.36	-101.77	135.14	-47.90	83.22	3.22	-47.88
33.71	80.00	34.21	-97.46	131.68	-47.91	83.23	3.23	-47.89

## Graph Features

- Flexible configuration allowing any data parameters to be plotted on any axis (x-axis, left y-axis, right y-axis)
- Linear or logarithmic axes
- Automatic or user-defined scaling of axes
- Configurable measurement units, trace thickness, color, and labels
- Graphs may be copied and pasted into documents in other applications (e.g. Word)
- Zoom, multiple zooms, nested zooms
- Add/delete color-coded data markers automatically or manually

## Data Table Features

- Configurable data display format
- Flexible configuration allowing any data parameters to be displayed in the table
- Export data to a text file
- Data tables may be copied and pasted into documents in other applications (e.g. Word, etc.)
- Add/delete/move columns
- Color coding of data values to indicate markers
- Sort data on any data parameter
- "Find" feature to locate data

## Ordering Information

Product: TDK Shielding Effectiveness Lab  
 Model Number: SE-LAB

**To place an order or to learn more about the TDK products that best meet your needs, contact your TDK sales representative:**

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