

## Methods for S-ICD Eligibility User Interface

1. Install notepad ++ for free, <https://notepad-plus-plus.org/>
2. If you do not have matlab, download matlab runtime (R2018a, 9.4) <https://www.mathworks.com/products/compiler/matlab-runtime.html> and use .exe file. If you have MATLAB use ECGReaderGUI.m, ECGReaderGUI.fig, bw.m, and screenshot.m.
3. Save the .exe file to the same folder with the patient ECG files. All files will be saved to this folder.
4. Click the “Load ECG File” to open Windows Explorer.
5. Open a 3-Lead ECG matlab file by selecting a desired file and pressing the open button on the lower right corner of the Windows Explorer window.
6. Click the “Create Report” button to create a text file.
7. Click the Lead number you want to plot using the Lead 1, Lead 2, or Lead 3 buttons
8. Once button is clicked, the S-ICD eligibility tester will create a graph using the points in the file.
9. Click the desired shape with buttons labeled shapes (there is also a clear graph option). All shapes will give you a better guess into which shape is the most appropriate for the graph.
10. Once the shape is clicked, two sliders will appear on the bottom left of the slider. The vertical slider will move the plot up/down while the horizontal slider will move the plot left/right.
11. Align the graph with the shape given.
12. After aligning the plot, you can determine if the shape passes or fails. Once fail is clicked, reasons for failure will appear.
13. Zoom in and out feature is available in the toolbar at the top to help (Other buttons are data cursor, print, and pan).
14. Take a screenshot of the pass/fail.
15. Click the “Save Information” button to save all the buttons that were clicked during the gui.
16. The pass/(fail + reason) will be linked to a text file that you will be able to access later if needed.
17. Click the another lead to review all the leads (total of 3 leads)
18. Repeat steps 7-17 for each lead
19. Repeat steps 7-18 for every file.
20. The close button will clear the figure as well as the command window.