

EE255 - Electrical Installation, Testing, and Inspection

LAB REPORT GUIDELINES

Contents

The following are the typical contents (in the expected order) of the laboratory report:

1. Cover page

- A template for the front page is available separately. You must use it appropriately.
- The title should be centered horizontally within the page borders and vertically centered within the remaining space above the student's detail section.

2. Laboratory instruction sheet

- Ensure that you accurately complete all the required sections in the lab sheet, and make sure to include units where applicable.

3. Tabulation

- You must include the table that presents the observation data for the earth electrode test.

4. Calculations

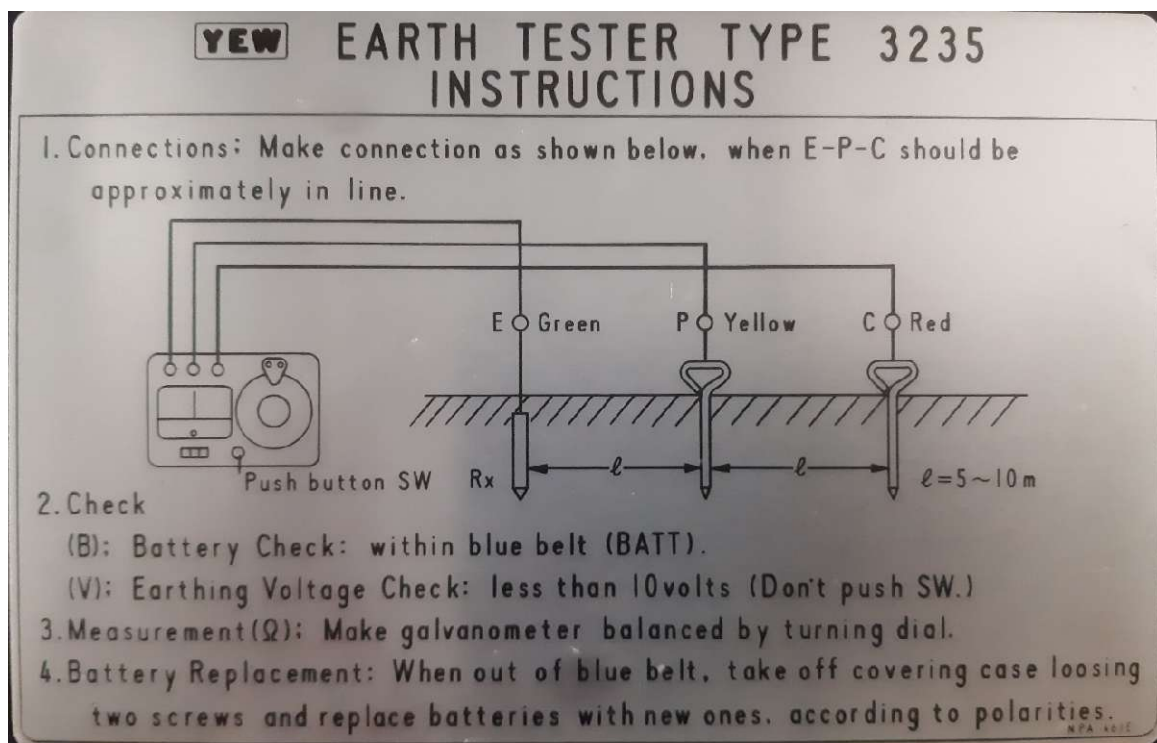
- You must attach all the calculations as a separate section of the report.
- Use appropriate diagrams to illustrate the simplified short circuits for the calculations in Parts 2.1 and 2.2.
- You must follow the guidelines mentioned below to present the calculations.
 - Clearly mention all steps involved in the calculations.
 - All the equal signs within a given page should be aligned in a vertical line.
 - Underline the final answer with two horizontal lines.
 - Correctly mention the dataset number (if any) when you are referring to a dataset for the calculations.
 - Marks are allocated for the correct unit representation throughout the calculation.
 - You are allowed to use "Equation" function in MS Word to present your calculations.

5. References

- Write at least 3 references.
- Use **IEEE Referencing format** to write the references.
- Include the date and time you accessed each resource at the end of the reference.
- If you are referring to a book, please state the page numbers along with the book name as given in the IEEE referencing format.

Important Notice

- **For Part 3.1**
 - If you were unable to perform the earth electrode test during your lab session, you must use the provided observation dataset for plotting the graph. Groups that successfully completed the test should use their own observation data.
 - For the calculation question in this section, you must follow the instructions given by the relevant instructor.
 - For the discussion question in this section, you must refer to the images provided and conduct additional research online as needed.



- The graph should be handwritten, and you should insert a clear, color-matching picture of the graph into the graph section of the lab sheet. (refer to the designated graph area under Part 3.1).
- You should mark the calculation steps on the graph as well.
- The observation data set is as follows.

Distance (L) / m	Resistance (R) / Ω
0.0	0.7
1.5	1.3
3.0	1.5
4.5	1.8
6.0	2.5
7.5	3.0
9.0	3.5
10.5	4.0
12.0	5.5
13.5	9.0
15.0	190