The Edward S. Rogers Sr. Department
of Electrical & Computer Engineering
UNIVERSITY OF TORONTO

ECE320H1F: Fields and Waves
Laboratory 2: Standing Waves and Waveguides

Marking Scheme

Show your calculations for *all* work, including theoretical diagrams and plots. **Include the full name, student number and PRA session for all group members on the laboratory report.**

4.2
- [2] Measured width of the transmission line.
- [2] Theoretical characteristic impedance.
- [2] Theoretical effective dielectric constant.
- [2] Theoretical phase velocity.
- [2] Experimental VSWR.
- [2] Comparison of experimental VSWR to theoretical value.
- [2] Experimental wavelength.
- [2] Experimental effective dielectric constant.
- [2] Comparison of experimental wavelength and effective dielectric constant to theoretical values.
- [12] Plotting the experimental standing wave pattern.

4.3
- [5] Impedance of the load found from experimental standing wave measurement data.
- [5] Impedance of the load measured using the vector network analyzer (VNA).
- [5] Comparison of results.
- [15] Plotting the experimental standing wave pattern.

- [10] Presentation and neatness.

[ ] Indicates the number of marks out of **70 total marks**