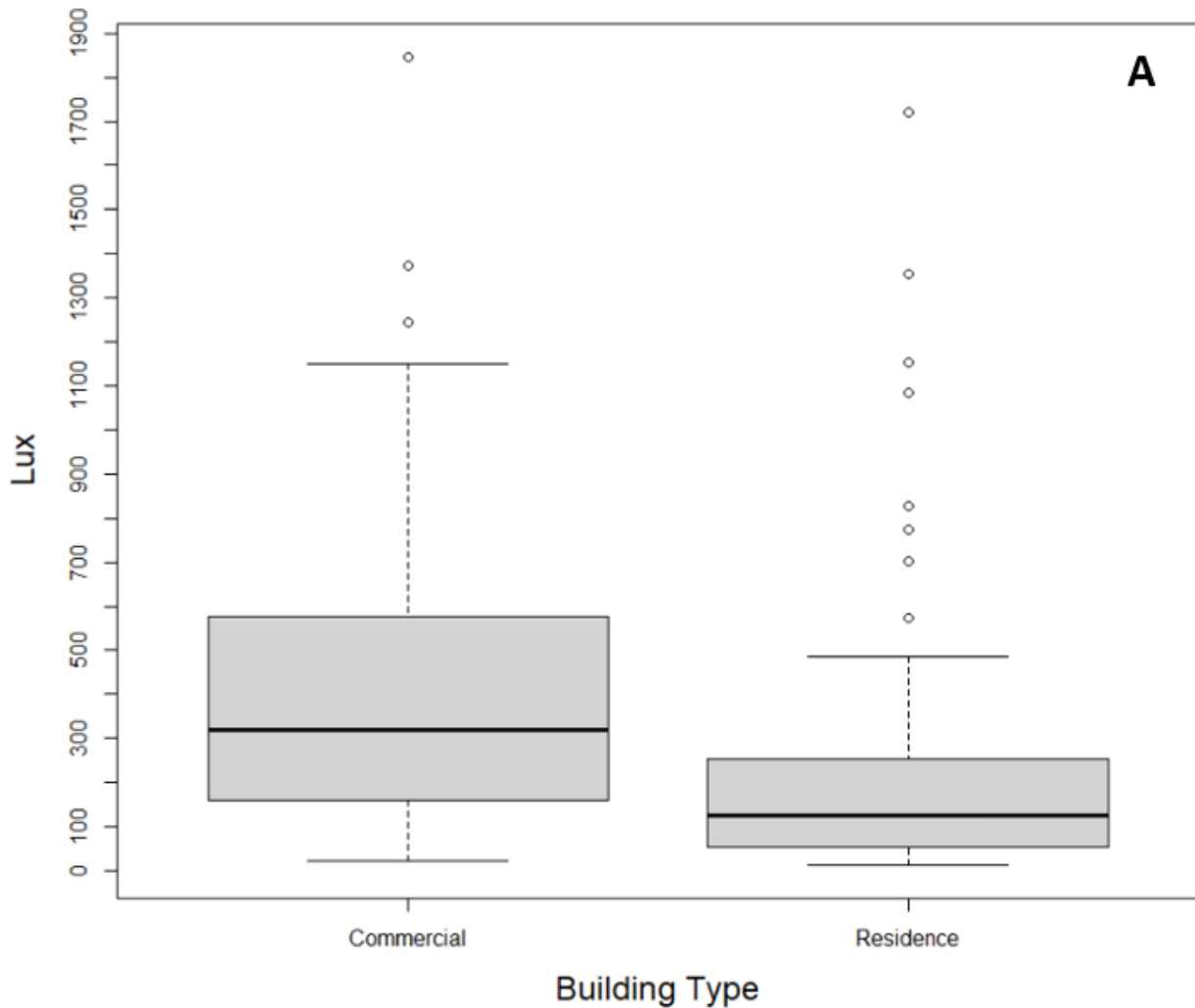


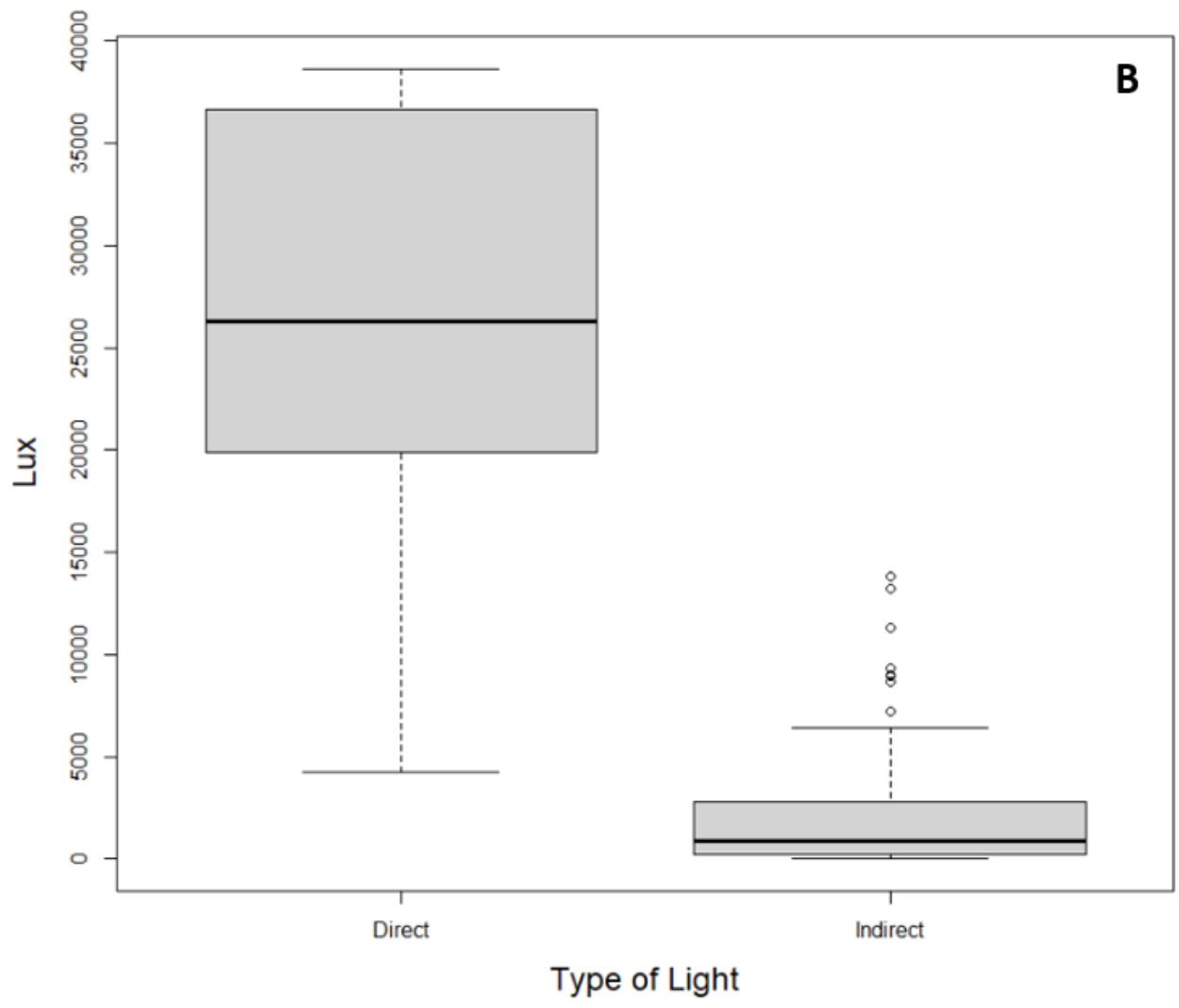
**Appendix 1.** Data collected to determine window type as well as interior and exterior light intensity treatments. Spectra typical of the interior and exterior lighting conditions are also included.

**Figure A1.1.** Most common types of window structures in commercial buildings (A-E) and residences (F-J) in Williamsburg, VA. Single-hung windows (E-J) are the most commonly used windows in the area and thus, were selected for use in our study.



**Figure A1.2.** (A) Artificial lux measurements were taken at 30 commercial buildings and 16 residences in the Williamsburg, VA area during the month of December (2019). Measurements were taken in 4 separate rooms within each building or home as far from windows as possible, to minimize the influence of natural light on interior measurements. Data is plotted based on commercial vs. residential classification. (B) Exterior lux measurements were taken in the constructed flight tunnel during December (2019). Light measurements were taken at 3 time points (30 mins after sunrise, midday and 30 mins before sunset) and were classified by whether sunlight was directly or indirectly hitting the sensor of the WaveGo spectrometer.





**Figure A1.3.** Irradiance spectra were obtained while holding the spectrometer with the sensor facing directly upwards on the interior (A and B) or exterior (C and D) of the window. Each irradiance spectrum indicates the absolute irradiance at each wavelength, with the accompanying visual spectrum atop the chart. Example irradiance spectra from trials are provided for the two interior intensity conditions: low (A) and high (B). Additionally, example irradiance spectra are provided for the two exterior intensity conditions: low (C) and high (D). These two interior and exterior lighting conditions were combined pairwise to form the 6 overall treatments. Low intensity interior (A) and exterior (C) conditions are richer in the UV and blue wavelengths of light relative to other wavelengths of light. High intensity interior (B) and exterior (D) spectra show a greater irradiance of all wavelengths of light, but notably contain a greater irradiance of orange and red wavelengths of light relative to low intensity conditions. The target interior spectrum for trials (E) was determined by visually inspecting the spectra typical of artificial light in residences and commercial buildings to find the most common pattern. We chose the light bulbs that best mimic this spectrum (see 'B').

