An application design that is generated by an application designer using Visual® lighting application software is not a professional engineering drawing, and the design, including reported data and calculated results, is for informational purposes only, without any warranty as to accuracy, completeness, safety or otherwise. Such design is the result of calculations made using the Visual software, photometric/radiometric data measured in a laboratory, and certain computational and modeling assumptions.

Far-field photometric/radiometric data may have been used to perform one or more calculations. Photometric/radiometric data is typically collected under far-field measurement conditions; far-field data is not generally representative of near-field geometric conditions. When using far-field photometric/ radiometric data, the Visual software applies certain generalizing assumptions to approximate near-field performance. These approximations may result in significant inaccuracies in individual calculated luminous and/or radiant power quantities in areas where a source is in close proximity to a particular surface or point.

The modeling of radiant flux exchange used in the Visual software requires a uniform exitance across each reflecting surface. The Visual software approximates the uniform surface exitance condition by adaptively subdividing surfaces with non-uniform exitances into subsurfaces with sufficiently uniform exitance gradients. Practical restrictions, due to computer hardware limitations, may prevent the subdivision procedure from subdividing surfaces with high exitance gradients into subsurfaces with sufficiently uniform exitance gradients, introducing potential discretization error into calculated values.

Calculations performed by the Visual software assume that all reflected flux is reflected in a perfectly diffuse (Lambertian) and spectrally uniform manner across the spectral range being analyzed. If actual reflectance characteristics differ from these assumptions, observed luminous and/or radiant power quantities may differ from predicted quantities.

Volumetric calculations to determine projected levels of pathogen inactivation assume perfect air mixing throughout the specified air volume in order to use the average fluence of the air volume as a simplifying modeling assumption. If actual air mixing conditions differ from the assumption of perfect air mixing, observed levels of pathogen inactivation may differ from projected results.

As a result of the computational limitations and simplifying modeling assumptions described above and/or variations in actual product performance from tested product samples, the accuracy of calculated output values identifying expected radiometric quantities and any resulting derived radiation dose calculations may be adversely affected.

In addition, the accuracy of the application design may be adversely affected if information about the physical space provided to the application designer is incomplete, inaccurate, outdated or not in the required format (including but not limited to floor plans, space layout, reflected ceiling plans, physical structures, electrical design or specifications), if incorrect assumptions are made because of such deficiencies in the information provided, or if typical assumptions made about the depicted physical space are not appropriate for the space. Furthermore, actual field performance may differ from performance calculated using laboratory measurements as the result of miscalculations related to deficiencies in the information provided about the physical space, degradation factors in the end- user environment (including, but not limited to, voltage variation and dirt accumulation), or other possible variations in field conditions. Finally, lamp lumen depreciation and/or depreciation in lamp radiant intensity may result in performance over time that differs from performance calculated using a new lamp. Light loss factors may

have been used in the application design to estimate such depreciation, but flaws in these estimates may also result in performance over time that differs from calculated performance.

If the application design is based on germicidal ultraviolet radiometric performance analysis, and there is any adverse effect on the derived irradiation dose predictions resulting from any of the factors described above, projected levels of pathogen inactivation provided in connection with this application design may be understated or overstated because the calculated dose of irradiation is used to determine these projected levels of inactivation. Similarly, if the calculated values are used to confirm expected operation within published guidelines for acceptable levels of exposure to UV radiation, such values may also be understated or overstated because the calculated dose of irradiation is used to determine these projected levels of inactivation. Projected levels of pathogen inactivation and calculated levels of exposure, at particular doses of irradiation, have been determined based on references in the Pathogen Inactivation Dose Reference List, published ACGIH® Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices (unless a custom inactivation dose and/or exposure limit has been requested), and lab testing results available from Acuity Brands Lighting. All projections are subject to the limitations stated in the lab testing results and published references.

It is the obligation of the end-user to consult with appropriately qualified Professional Engineer(s), a Certified Infection Control professional and/or a Certified Industrial Hygienist, as applicable, to evaluate, interpret and apply the information available in the referenced resources and to determine whether the application design meets the applicable requirements for performance, code compliance, safety, suitability and effectiveness for use in a particular application. In no event will Acuity Brands Lighting be responsible for any loss resulting from any use of an application design.