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## *News Release*

### **FOR IMMEDIATE RELEASE**

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### **ASABE PUBLISHES NEW STANDARD FOR DESIGN OF ELECTROMAGNETIC RADIATION SYSTEMS FOR PLANTS**

ST JOSEPH, MICHIGAN— The American Society of Agricultural and Biological Engineers (ASABE) has published a new standard ANSI/ASABE S644, Design of Electromagnetic Radiation Systems for Plants.

The new standard is one of three developed by ASABE in response to the rapid developments in LED technology and the increased use of LED devices in plant growth applications.

The new standard establishes appropriate performance criteria for designs of electromagnetic radiation systems intended for horticultural applications. This standard requires a minimum set of criteria and recommends optional, advanced criteria. This standard also provides methodologies to compare the anticipated plant responses and energy performance among alternative devices and installed systems when applied to diverse horticultural operations.

Two other standards precede this standard:

- Quantities and Units of Electromagnetic Radiation for Plants (Photosynthetic Organisms) (ANSI/ASABE S640 JUL2017); and
- Recommended Methods for Measurements and Testing of LED Products for Plant Growth and Development (ANSI/ASABE S642 SEP2018).

This standard establishes appropriate performance criteria for designs of electromagnetic radiation systems intended for horticultural applications. This standard requires a minimum set of criteria and recommends optional, advanced criteria. This standard also provides methodologies to compare the anticipated plant responses and energy performance among alternative devices and installed systems when applied to diverse horticultural operations.

ASABE members with standards access and those with site-license privileges can access the full-text via electronic download on the ASABE online Technical Library at [elibrary.asabe.org/](http://elibrary.asabe.org/). Others

American Society of Agricultural and Biological Engineers

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can obtain a download for a fee directly from the library or by contacting ASABE headquarters at [OrderStandard@asabe.org](mailto:OrderStandard@asabe.org).

ASABE is recognized worldwide as a standards-developing organization for food, agricultural, and biological systems, with more than 280 standards currently in publication. Conformance to ASABE standards is voluntary, except where required by state, provincial, or other governmental requirements, and the documents are developed by consensus in accordance with procedures approved by the American National Standards Institute. For information on this or any other ASABE standard, contact Scott Cedarquist at 269-932-7031, [cedarq@asabe.org](mailto:cedarq@asabe.org). A current listing of all ASABE standards projects can be found on the ASABE web site at [www.asabe.org/projects](http://www.asabe.org/projects).

ASABE is an international scientific and educational organization dedicated to the advancement of engineering applicable to agricultural, food, and biological systems. Further information on the Society can be obtained by contacting ASABE at (269) 429-0300, emailing [hq@asabe.org](mailto:hq@asabe.org) or visiting [www.asabe.org](http://www.asabe.org).

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