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Pre-Announcement
IEA 4E SSL Annex 2017 Interlaboratory Comparison of Goniophotometer Measurements
(IC 2017)

To whom it may concern:

Following the previous 2013 interlaboratory comparison¹ where 110 labs from around the world were compared for measurements of LED lighting products, the International Energy Agency's Energy-Efficient End-use Equipment Solid State Lighting Annex (IEA 4E SSL Annex) is preparing to launch the 2017 Interlaboratory Comparison (IC 2017) for goniophotometer measurements.

IC 2017 is open to all photometric labs that use goniophotometers for testing LED lighting products. The formal announcement and the Protocol for IC 2017 describing detailed test specifications will be posted in June 2017 and registration will be open for a few months (a discount will be offered for "early bird" registrations). Participant measurement rounds will start in July and continue until early 2018.

Lighting laboratories that use or plan to use their goniophotometer systems for testing of LED lamps and luminaires are encouraged to participate in this global interlaboratory comparison. IC 2017 is being organised primarily to compare goniophotometric measurements of LED luminaires (including street lighting luminaires) and narrow-beam LED lamps, which were not covered in the SSL Annex's previous interlaboratory comparison in 2013 (IC 2013)¹. This new interlaboratory comparison will study the equivalence of different types of goniophotometers, e.g., near-field goniophotometers and far-field goniophotometers, and investigate the measurement variations and the capability of participating laboratories using goniophotometers to measure SSL products.

IC 2017 is not only a technical study, it is designed in compliance with ISO/IEC 17043 to serve as a proficiency test for SSL testing accreditation programmes that recognise this

¹ The Final Report of IC 2013 is available at <http://ssl.iea-4e.org/news/2013-ic-final-report>

comparison, as was done in IC 2013. IC 2017 will use CIE S 025/E:2015² as the test method for measurement, and if recognised by accreditation bodies, the participant results reports may be used as a proficiency test not only for CIE S 025 but also as regional test methods such as EN 13032-4 (Europe, equivalent to CIE S 025); LM-79 (USA); KS C 7653 and KS C 7651 (Korea) and possibly also for the test methods in China and Japan, for LED lighting products. Near-field goniophotometers and non-standard goniophotometers that rotate the operating position of the luminaire with a correction technique (allowed in CIE S 025) will also be covered in this interlaboratory comparison, and their results may be used for the validation requirement for such goniophotometers in CIE S 025 or to assist in an accreditation application. The results can also be used for benchmarking.

The comparison will be conducted in a similar way to the SSL Annex's previous comparison, IC 2013. Participating laboratories will be asked to measure a set of four SSL product artefacts (a narrow-beam LED directional lamp, an indoor LED panel luminaire, an indoor linear LED luminaire, and an LED street lighting luminaire) using their goniophotometer or gonio-spectroradiometer for 14 measurement quantities. These quantities include electrical quantities, total luminous flux, luminous efficacy, colour quantities (spatially-averaged) as covered in IC 2013, as well as goniophotometric quantities such as luminous intensity distribution, partial luminous flux, centre-beam intensity, beam angle, and angular colour uniformity. Colour quantities may be measured with an integrated sphere system. Participants will be asked to use CIE S 025 as test method but those who are not in full compliance with the CIE test method and/or those who do not measure all the quantities above will also be accepted as participants. After completion of all participants' measurements, each participant will receive an individual test report that could serve as a proficiency test (PT) report, as well as a preliminary IC 2017 final report at the end of the comparison that will analyse all the results anonymously for a technical study as was done in IC 2013. Labs that are not interested in PT for accreditation may still find participation in IC2017 of interest for benchmarking purposes.

The formal announcement and the Protocol for IC 2017 describing detailed test specifications will be posted in June 2017. Registration will be open from June, and the participant measurement rounds may start in July 2017 for early-registered labs and continue till February 2018. Participants will be assigned to one of the SSL Annex's IC 2017 Nucleus Laboratories, which will conduct measurement rounds for labs in different regions of the world. The price for participants in IC 2017 will be approximately €5000 per lab and there will be a discount offered for early registration (first 30 days) and for labs located in SSL Annex member countries.

² For information on CIE S 025/E:2015, visit: http://cie.co.at/index.php?i_ca_id=973

If you are interested in participating in IC 2017, we would greatly appreciate receiving an indication of your interest. Please send us your contact information to ssl.annex@gmail.com as soon as possible with any questions you may have. This indication of interest is *non-binding*, but it will help us prepare sufficient artefact sets and resources needed to ensure IC 2017 runs on schedule, and it will ensure that we have your contact information so we can send you further information when available.

Thank you in advance for your interest and we look forward to hearing from you.

Best regards,



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About the IEA 4E Solid State Lighting Annex

The Solid-State Lighting (SSL) Annex was established in 2010 under the framework of the International Energy Agency's (IEA) Energy Efficient End-Use Equipment (4E) Implementing Agreement. The SSL Annex works internationally to assist governments of member countries in promoting SSL as an effective means to reduce energy consumption worldwide. The Annex member countries believe there are significant advantages in engaging in an international collaboration in order to develop a consensus on harmonised approaches to SSL performance and quality. Sponsoring governments of the SSL Annex include Australia, Denmark, France, Korea, Sweden, the United Kingdom and the United States. China also participates as an expert member of the SSL Annex. The work of the SSL Annex spans a wide range of initiatives which can be found on the Annex's website (<http://ssl.iea-4e.org/>), including guidance for policy makers, quality and performance tiers and support for laboratory accreditation.