



DLC LM-79 Testing Lab Requirements

The DLC will accept LM-79 results from laboratories that meet the following requirements:

Labs Accredited by NVLAP:

The DLC accepts LM-79 reports from testing laboratories accredited by NVLAP. At this time, the NIST NVLAP LM-79 accreditation process is known to fulfill all of the requirements, including proficiency testing and handbooks describing lighting testing accreditation processes. A testing laboratory accredited to LM-79 through the complete NVLAP process needs to submit the following documentation to become a DLC Approved Lab:

- A document proving the laboratory's accreditation, including the subsections of LM-79 testing covered by the accreditation and the effective and expiration dates of the accreditation.

Labs Accredited by other Accreditation Bodies:

A testing laboratory accredited for LM-79 testing by an accreditation body other than NVLAP must meet the following requirements:

1. The chosen accreditation body must be listed on the [DLC Testing Lab Requirements webpage](#) (see the next section for details).
2. The testing laboratory must submit a document proving the laboratory's accreditation, including the subsections of LM-79 testing covered by the accreditation and the effective and expiration dates of the accreditation.
3. The testing laboratory must submit proof that proficiency testing has been completed through the NIST LM-79 Measurement Assurance Program (M.A.P.) service. Effective and expiration dates of proficiency testing must be detailed.

Because of the challenges involved with maintaining measurement traceability for a wide range of SSL products and the potential for measurement uncertainty in SSL

testing in general, the accreditation must include or be accompanied by proof of proficiency testing (addressing challenges such as particular spectral distributions, remote phosphors, particular intensity distributions, and particular electrical characteristics of samples). As defined in ISO/IEC Guide 43 on proficiency testing, the accreditation process for LM-79 must include periodic repetition and revalidation of proficiency testing (through a documented and regularly scheduled round-robin testing and verification process). The DLC will recognize proficiency testing fulfilled through the LM-79 M.A.P. service available from NIST.

Recognition of Other Accreditation Bodies

The DLC recognizes LM-79 accreditation granted by bodies other than NVLAP, provided the accreditation bodies meet the following requirements:

1. The accreditation body must have a Mutual Recognition Arrangement (MRA) in place with international oversight traceable to the International Laboratory Accreditation Cooperation (ILAC). Proof of this agreement must be submitted to the DLC.
2. A document describing the LM-79 accreditation process must be published or provided by the accreditation body.
3. A document describing the experience and competence of the quality assessor teams for LM-79 accreditation with regard to absolute photometry and SSL testing must be provided. This includes competencies listed in section 2.2.3 of the ILAC Guidelines on Qualifications and Competence of Assessors and Technical Experts, articles 2.2.3.1 and 2.2.3.2 concerning estimation of measurement uncertainties and analysis of proficiency testing needs and results.

The DLC lists additional recognized LM-79 accreditation bodies on its [Testing Lab Requirements webpage](#). Accreditation bodies wishing to be listed must submit documentation of the items above to info@designlights.org. The testing laboratory may submit this information on behalf of the accreditation body. The DLC team will review the documentation and determine whether the accreditation body meets the recognition requirements before listing it on the [DLC Approved LM-79 Testing Labs](#) list. Updates to the approved labs list will be made within 2 business days of approving documentation from the lab.