

Quality Assurance for Off-Grid Lighting Program Decisions Regarding the Lighting Global Minimum Quality Standards and Performance Targets

Stakeholder Outreach Webinar
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Presenting Today



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Agenda

- **Background** on Lighting Global QA
- Overview of **stakeholder process** (June - Oct. 2013)
- Summary of **comments** and **program decisions** related to the **Standards and Targets**
- **Next Steps:** How to report performance metrics?



Lighting Global Quality Assurance Program

- Joint initiative of **IFC and World Bank**; supports Lighting Africa and Lighting Asia
- **Testing and verification program** for LED-based off-grid lighting products (including pico-PV systems)
- QA framework recently institutionalized through the **International Electrotechnical Commission (IEC)** (TS 62257-9-5, Ed. 2.0)



Stakeholder Process

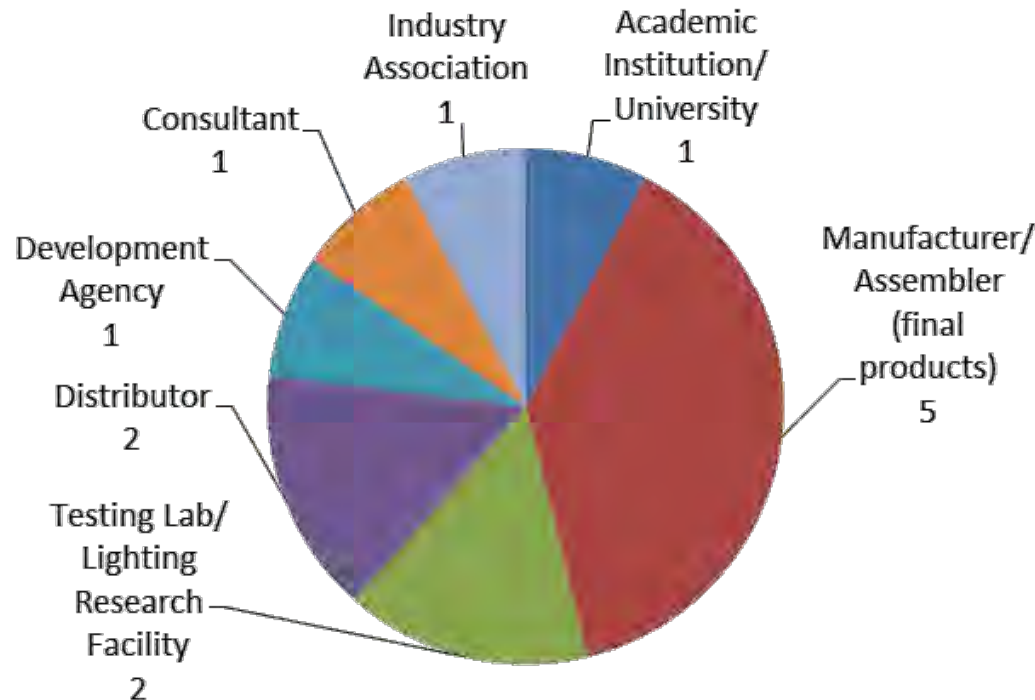


Stakeholder process was used to receive and address feedback from members throughout the value chain

- Original memo describing proposed updates, program history, and motivation for changes was released on June 7: this memo is still available on the Lighting Global stakeholder webpage
- Proposed updates and process discussed at GOGLA meeting in Germany in June
- Previous webinar held on July 10 to describe process and answer questions (22 participants)
- Online form for stakeholder feedback was open between June 10 and August 23

Stakeholder Feedback

- We received responses from 13 different and diverse stakeholder organizations



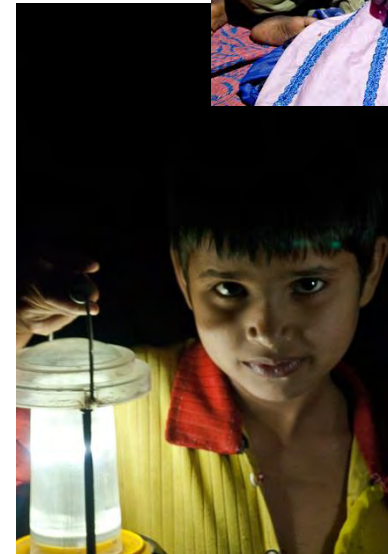
- We grouped your feedback into 42 distinct comments

Thank You!

Your constructive feedback offered support and direction for the program updates.

We received:

- **Broad support** for the proposed changes to the Standards
- **Useful comments** and suggestions to further improve the Standards
- **Many concerns** regarding the Targets, which resulted in major changes to this framework



Where we are now:

Program decisions and responses to stakeholder comments are presented in a memo posted on the stakeholder website on October 7th, 2013:

www.lightingglobal.org/activities/qa/stakeholder-engagement

Revisions go into effect January 1, 2014.
Existing products maintain status until test results expire
(2 years from receipt of results).

Accepted Changes to Lighting Global Minimum Quality Standards



Aspect	Accepted Change
Lumen Maintenance	Increase requirement from L70 @ 2000 hrs to L85 @ 2000 hrs
Battery Durability	Batteries must pass storage test that simulates deep discharge in supply chain
Hazardous Materials (battery only)	Ban batteries with cadmium or mercury
Ingress Protection	Water ingress requirements extended to PV module junction box (closes loophole)
Warranty	Warranty requirement extended to 1 year (was 6 months)

Highlighted Comments Regarding the Minimum Quality Standards



Aspect	Highlighted Comments or Suggestions
Lumen Maintenance	Conduct tests at higher temperatures
Battery Durability	Also conduct battery cycling tests
Hazardous Materials (battery only)	1) Adopt RoHS and REACH guidelines 2) Ban lead-acid batteries
PV Ingress Protection	Need to determine appropriate method
Warranty	1) Clarify warranty terms 2) Not all warranties are equal or enforceable
<i>Standby Loss</i>	Create new Standard for standby loss
<i>Mobile Charging Capability</i>	Develop a method for assessing and reporting auxiliary power capabilities



Comments on Hazardous Materials Ban

Comments:

- Adopt RoHS and REACH
- Ban lead-acid batteries

Response:

- We have concerns about the cost implications of requiring RoHS or REACH and are doing research to learn more
- Lead-acid are widely used, the most cost effective for certain product designs and recyclable in some markets



Comments on Warranty Requirement



Comments: We received comments ranging from “you should eliminate the requirement” to “you should require a 2-year no-questions-asked warranty.”

Response: We clarified the terms of the warranty and the reporting requirements:

- 1 year from time of purchase
- Cover entire product, including battery
- At a minimum, cover manufacturing defects and early component failure
- Full warranty terms available to customer prior to purchase that detail how to access



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Open for
@questions



Open floor for questions on Accepted Changes to Standards

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Major Update:

Elimination of Public Performance Targets and Addition of Performance Reporting



Summary of updates:

- **Public Performance Targets essentially eliminated**
 - No longer part of QA framework descriptions
 - Not displayed on the SSS web page or SSS
- **Replaced internally** with *eligibility criteria* for participation in consumer awareness campaigns for Lighting Africa and Lighting Asia programs
- **Introduced new Standard:** performance reporting requirement for light output and daily run time.

Details: Consumer Awareness Eligibility Criteria

- **Brightness:** 25 lumens | 50 lux over 0.1 m²
Criteria same as proposed update
- **Run Time:** 4 hours solar run time | 8 hours central charging
Criteria duration same as before, though now all products with PV panels must meet the solar run time criteria



Rationale



Why Eliminate Public-Facing Performance Targets?

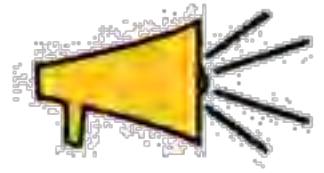
- **Eliminate confusion** about role of Standards and Targets
- Served initial purpose, but now market has matured
- **Encourage diversity of products** by eliminating what had become an artificial threshold.



Why Require Performance Reporting?

- Ensure buyers have **reliable information** available to compare product performance on an equal basis
- Research shows that **end-users care about light output and run time**
- These reported measures are already measured and will still be monitored for **“truth-in-advertising”**

Upcoming Stakeholder Process



Plan to pursue a 2-part process that engages both industry and end-users:

- End-users
 - Crucial information about how to best communicate information about these performance metrics to end-users gathered through focus groups and other field methods
- Industry and other stakeholders
 - Engaged in detailed stakeholder process



Next Steps



Now	No more public Targets.
Soon	Kick off Performance Reporting Requirements stakeholder outreach process
May '14	(Planned) Announce new framework for reporting
Aug '14	(Planned) New framework for reporting in effect as part of the Minimum Standards.

(Some of) the challenges for setting reporting requirements:

- What information to include?
 - Light output and run time are obvious metrics; should other information be included as well?
- Communication of information
 - Literacy and numeracy diversity
 - Use graphics?
 - What concepts will end users understand?
 - e.g. most people don't understand what a lumen is, but they can compare values to see which number is larger.
 - An alternative is to present info in terms of an equivalence that many people will know, e.g., the light output from a standard candle.
- Degree of standardization of design
 - Spectrum of options from branded “label” format to flexible format that gives manufacturers discretion about how to report the information (within limited guidelines)
 - Counterfeit label concerns are significant

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@questions



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Will launch stakeholder process for reporting requirements soon; plan to require performance reporting in August 2014

Thank you for participating

Open for
@questions



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