Topic #3
To Efficacy and Beyond

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**MEMBERS**

- Ensure cost-effectiveness
- Support decarbonization
- Meet customer expectations

**STAKEHOLDERS**

- Support decarbonization
- Product differentiation
- Meet customer expectations
- Competitive pricing/profit
DOE Luminaire Efficacy Projections (2023 – 2035)
Product Efficacy (Troffer example)
Single step (constant efficacy)

- SSL V5
- DLC6 Effective
- Trail average DOE projection by x lm/W at end of 2025
- DLC7 Effective*

*DLC7 Effective date and step size is only an estimate
Product Efficacy (Troffer example)
Multiple steps (staggered efficacy)

DLC6 Effective

DLC7 Effective*

Trail average DOE projection by y lm/W at end of 2025

SSL V5

y lm/W/cycle

Efficacy (lm/W)
Discussion Questions

1. What challenges or opportunities does raising product-level efficacies present?
   a) To manufacturers?
   b) To efficiency programs? Implementers?
   c) To specifiers, distributors, etc.?

2. Beyond diminishing improvements in chip efficacy, quality of light, and controllability needs, what other factors should the DLC use in considering updates to product-level efficacy for DLC6?

3. How would a yearly or every two-year cycle for luminaire efficacy increases, associated with an efficacy forecast over the anticipated life of DLC6, impact manufacturers and efficiency programs?
   a) Should such an increase occur yearly or every two years?
      What are the benefits or consequences of each?
   b) Since the efficacy increase would be forecasted at the start of the technical requirement, should the increase also include a yearly/every two-year delist cycle of products?
      What are the benefits or consequences of this?

4. In DLC6, should the DLC begin including foundational requirements for luminaire application efficacy or is more research needed in this area? Provide your reasoning.