

Topic	Section	Subtopic	Comment	Response
Title and Scope	1	Scope	Two industry associations recommended removing "Recessed" from the title of this specification since EPA proposed allowing alternate mounting configurations as allowable variations.	The original "Recessed Downlights" title was in response to the industry's proposal to continue covering recessed lighting. Recognizing the potential for scope confusion with the existing title and allowable variations, EPA agrees that renaming along with additional adjustments to definitions can help clarify scope and maximize the opportunity for delivering savings.
Test Criteria	5.2	Testing LED Light Engines	An EPA-recognized Certification Body commented that this section should be removed since luminaire-level testing is required for this specification.	EPA appreciates this feedback and has removed this section from the final draft specification.
Product Certification	6.1	Product Families	An EPA-recognized Certification Body expressed concern that the family grouping methodology proposed in draft 2 could necessitate retesting. Two industry associations requested clarification on the Diffuser allowable variation and requested that an allowance for variations in product finish similar to the "Luminaire body color/pigment" allowance included in the Luminaires V2.2 specification.	EPA appreciates this feedback and wants to ensure that currently certified models are able to be reevaluated and recertified without additional testing. Based on these comments and subsequent conversations with multiple partners, in the final draft EPA has clarified the light source, LED driver, input power, and diffuser variations that are allowed within a product family and added an allowable variation for exterior housing finish applicable to suspended, surface-, and wall-mounted models.
Product Certification	6.1	Product Families	An EPA-recognized Certification Body commented that footnote #1 should be modified or removed because the CCT of the tested representative model is now determined based on highest input power.	EPA appreciates this feedback and has removed the CCT example from footnote #1.
Performance Requirements	8.1	Luminous Efficacy	Two industry associations proposed that the efficacy requirement be lowered to 80 lumens per watt (lm/W) for all products to accommodate consumer preferences. Stakeholders argued that the 90 lumens per watt level would increase product cost and a threshold of 80 lm/w would increase engagement and compete better against economical recessed can and low performing A-line lamp combinations.	In response to this request EPA requested additional photometric data to review all possible baseline options and compare luminaire efficacy of all possible options, including using a commonly available light bulb in a recessed can. Today, a typical ENERGY STAR certified BR or PAR lamp installed in a common residential downlight would result in a luminaire efficacy of about 72 lumens per watt (lm/W). EPA estimates the luminaire efficacy drops to 30 lm/W if a CFL lamp were used. Based on proposed general service lamp standards that are anticipated to take effect in 2028, EPA estimates that the least efficient compliant LED A-lamp installed in a common existing residential downlight would result in a luminaire efficacy of 82 lumens per watt (lm/W). 82 lm/W also represents the 75th percentile luminaire efficacy of currently certified downlights and downlight retrofit kits and accommodates a wider variety of products to serve consumer preferences. This level offers savings over all baseline options up until the federal minimum takes effect. Therefore, EPA has chosen this level for version 1 noting that the program will need to be re-evaluated prior to the general service lamp enactment. Additionally, EPA continues to seek out reliable market data to better assess the complete downlight market in the U.S. for ongoing program assessments and future program decisions.

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Electrical Performance Requirements	10.2	Power Factor	Two industry associations proposed that EPA consider compliance with the requirements of ANSI C82.77-10 as sufficient for meeting the power factor requirement of this specification.	EPA cannot accept this proposal because ANSI C82.77-10 allows a minimum power factor of 0.5 for residential indoor hard-wired luminaires which is significantly lower than the minimum power factor requirement (≥ 0.7) for ENERGY STAR certification. Recognizing multiple industry-accepted methods of measurement for certain electrical performance metrics allows partners a measure of flexibility to use existing test data or test data based on the latest standards. The measurement of these metrics does not impact input power or luminous efficacy, nor do they significantly impact consumer experience. For these reasons and because doing so would not put any partners at a competitive disadvantage, EPA is incorporating the proposed alternative methods of measurement and reference documents in the final draft of this specification.
Electrical Performance Requirements	10.1	Start Time	Two industry associations proposed allowing ANSI C82.16-2022, sections 3.7 and 13 as an alternative method of measurement of start time.	
Electrical Performance Requirements	10.3	Transient Protection	Two industry associations proposed allowing ANSI C82.77-5 as a reference document for testing related to transient protection.	
Electrical Performance Requirements	10.4	Standby Power Consumption	Two industry associations proposed allowing ANSI C82.16-2022, sections 15 as an allowable method of measurement of standby power.	
Electrical Performance Requirements	10.5	Operating Frequency	Two industry associations proposed allowing ANSI C82.18 as an alternative method of measurement for operating frequency.	
Electrical Performance Requirements	10.6	Flicker	Two industry associations proposed allowing ANSI C82.18 as an alternative method of measurement for flicker.	
Thermal Performance Requirements	12		Two industry associations recommended removing Section 12 since they believe these requirements are redundant in Section 13.	In this draft final specification, Section 12 remains in place. Safety and performance requirements are different and not redundant, and the program consistently sees issues with luminaire thermal management through its verification testing program.
Product Labeling & Packaging Requirements	15.1	Packaging Requirements	Multiple stakeholders suggested that EPA allow the requirements of this section to be satisfied with the submission of a supplemental performance summary for all sales channels for which product packaging does not inform the consumer's decision-making process.	In this draft EPA has clarified that a supplemental performance summary would satisfy the requirements of this section for units of certified models not intended for stocking on retail shelves.
General		Editorial	Two industry associations offered many editorial suggestions.	EPA appreciates the thoroughness with which stakeholders reviewed the second draft of this specification, especially recommendations for harmonizing terminology to be consistent with industry maturation. Most of the proposed edits have been included in the draft final specification.