

CONSIDERATIONS FOR RECERTIFICATION TO ENERGY STAR SPECIFICATION FOR LUMINAIRES VERSION 2.0

This table is intended to aid ENERGY STAR® partners in assessing testing needs for luminaires certified to ENERGY STAR Luminaires V1.0-1.2 specifications for certification to the new ENERGY STAR Luminaires Version 2.0 specification and to aid discussions between partners and EPA-recognized certification bodies and testing laboratories.

Please note that this may not apply to all products and EPA-recognized certification bodies ultimately determine the applicability and acceptability of test data.

Section	Section Name	Requirement Change	Applicable Product types	Test Method Change	Retest	Re-evaluate	Notes
1	Scope & Luminaire Classification	Directional scope change	Inseparable Security lights (certified as directional)	No	No	Yes	These will already have distribution testing data so retest should not be necessary, but the distribution will need to be evaluated against the new requirement.
1	Scope & Luminaire Classification	Directional scope change	Security lights (certified as non-directional)	Yes	Possibly	Yes	These will need to be evaluated. If they are listed with The International Dark Sky Association they will not need re-testing. If they are not listed with IDSA they will need to be tested and evaluated to determine if they meet the directional requirements.
2	Effective Date	N/A					
3	Future Specification Revisions	N/A					
4	Definitions	Light engine change	LED light engines	No	No	No	No anticipated impact on currently certified product, the change simply allows for new product flexibility.
5	Test Criteria	Products tested at highest input power	Those with multiple power levels	No	Possibly	Possibly	No anticipated impact on currently certified products. Retesting and re-evaluation would only be necessary if a product has multiple power settings AND was not initially tested at full power.
5.1	Testing Color Tunable Luminaires	New requirement	Color tunable luminaires	No	Possibly	Possibly	This change is unlikely to impact existing products.
6	Product Families	N/A					
6.1	Product Families	Additional testing column	Product families	No	No	No	No impact on currently certified product. The changes are intended to allow for new product certification flexibility.

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6.2	Significant Digits & Rounding	Aligned with lamps	All products	No	No	Yes	No anticipated impact on currently certified product, the change simply allows for consistency in reporting performance.
7	Methods of Measurement and Reference Documents	N/A					
7	Methods of Measurement and Reference Documents	ANSI C78.377-2008 to 2011 CCT of LEDs	SSL indoor products	No			See Section 9.3
7	Methods of Measurement and Reference Documents	ANSI/IEC C78.901-2005 updated to ANSI C78.901-2014: Single-Based Fluorescent Lamps—Dimensional and Electrical Characteristics	Fluorescent Products	No	No	No	The reference document was updated to include new products. No impact to current certification anticipated.
7	Methods of Measurement and Reference Documents	C82.2-2002 for CFLs , and ANSI C82.77-2002 for SSL both replaced with C82.77-10:2014 (power factor)	All products	No	No	No	The reference document was updated but should not impact the way power factor has been tested. No impact to current certification anticipated.
7	Methods of Measurement and Reference Documents	IES LM-66-11 to LM-66-14	Fluorescent products : Photometrics	Yes	No	No	The reference document was updated to include new products. No impact to current certification anticipated.
7	Methods of Measurement and Reference Documents	IES LM-65-10 to LM-65-14	Fluorescent products : Life	Yes	No	No	The reference document was updated to include new products. No impact to current certification anticipated.
7	Methods of Measurement and Reference Documents	Included reference to IEC 62301 ED.2.0 B-2011 Household Electrical Appliances - Measurement of Standby Power	Products that have a standby mode	Yes			See Section 11.5
7	Methods of Measurement and Reference Documents	Replaced Option 2 with IES LM-84-14 and TM-28	SSL products certified with Option 2.	Yes			See Section 10.1
7	Methods of Measurement and Reference Documents	C82.11-2002 updated to 2011 high frequency electronic ballasts updated to latest version	Fluorescent non-self ballasted products	No	No	No	The reference document was updated to include new products. No impact to current certification anticipated.

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8	Shipping with ENERGY STAR Certified Lamps: Non-Directional Luminaires	New certification pathway replaces existing pathway for luminaires shipping with integrated lamps.	Products shipping with integrated lamps	Yes	Possibly	Yes	Enclosed fixtures will need testing. Products will need to be checked to make sure they are certified with ENERGY STAR certified lamp models.
9	Photometric Performance Requirements	N/A					
9.1	Luminous Efficacy and Output: Non-Directional Luminaires	No change to efficacy. Light output minimum change.	Non-directional luminaires	No	No	No	Light output requirement was a relaxation, no impact to currently certified products anticipated.
9.2	Luminous Efficacy, Output and Zonal Lumen Density: Directional Luminaires	Higher efficacy levels. Revised zonal lumen density requirements, guidance for testing downlight retrofits. Minimum light output requirement for inseparable luminaires.	All directional product types	No	Possibly	Yes	Light output and zonal lumen density changes will not impact certified products, but a higher efficacy requires reevaluation. Downlight retrofits may have to be retested if they were not tested according to the more specific guidance included in V2.0.
9.2	Luminous Efficacy, Output and Zonal Lumen Density: Directional Luminaires	Efficacy from 35 to 55, Zonal Lumen Density allows for wider beams	Accent Lights	No	No	Yes	Light output and zonal lumen density changes will not impact certified products, but a higher efficacy requires reevaluation.
9.2	Luminous Efficacy, Output and Zonal Lumen Density: Directional Luminaires	Efficacy from 42 to 55	Downlights	No	No	Yes	Light output and zonal lumen density changes will not impact certified products, but a higher efficacy requires reevaluation.
9.2	Luminous Efficacy, Output and Zonal Lumen Density: Directional Luminaires	Efficacy from 42 to 60, test environment clarified	SSL Downlight Retrofits	Yes	Yes	Yes	Downlight retrofits may have to be retested if they were not tested according to the more specific guidance included in V2.0.
9.2	Luminous Efficacy, Output and Zonal Lumen Density: Directional Luminaires	Efficacy from 35 to 60, Zonal Lumen Density Option	Outdoor	No	No	Yes	Light output and zonal lumen density changes will not impact certified products, but a higher efficacy requires reevaluation.
9.2	Luminous Efficacy, Output and Zonal Lumen Density: Directional Luminaires	Efficacy from 29/45 to 50, Zonal Lumen Density loosened	Undercabinet & Cove	No	No	Yes	Light output and zonal lumen density changes will not impact certified products, but a higher efficacy requires reevaluation.

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9.2	Luminous Efficacy, Output and Zonal Lumen Density: Directional Luminaires	Minimum Light Output to 200	Inseparable SSL	No	No	Yes	EPA evaluated currently certified inseparable products and found as of the release of the final draft none to have less than the minimum light output requirement. Should not impact currently certified products.
9.2	Luminous Efficacy, Output and Zonal Lumen Density: Directional Luminaires	Efficacy from 29 to 50, Zonal Lumen Density loosened	Portable Desk Task	No	No	Yes	Light output and zonal lumen density changes will not impact certified products, but a higher efficacy requires reevaluation.
9.3	Correlated Color Temperature (CCT): All Indoor Luminaires (Exemption: Outdoor Luminaires)	Updated ANSI C78.377-2008 to 2011	Indoor SSL products	No	No	Yes	While the updates to the standard were slight, some SSL products with CCTs on the upper or lower boundaries of the quadrangles in the 2008 version may not be included in the 2011 version.
9.4	Color Rendering Index: All Indoor Luminaires (Exemption: Outdoor Luminaires)	R9 >0 for SSL	SSL indoor products	No	Possibly	Yes	R9 must be evaluated for all indoor SSL products. May require a retest if not displayed on the test report.
9.4	Color Rendering Index: All Indoor Luminaires (Exemption: Outdoor Luminaires)	Reporting of R9 for all indoor products	ALL indoor products	No	Possibly	Yes	May require a retest if not displayed on the test report.
9.5	Color Angular Uniformity: Directional Solid State Indoor Luminaires Only (Exemption: Outdoor Luminaires)	Changed area of interest to the beam angle, and changed requirement from 0.004 to 0.006, and noted that this was a linear distance.	Directional SSL Luminaires	No	No	No	No impact on currently certified product anticipated as the new requirement only allows for new product flexibility.
10	Lumen Maintenance And Rated Life Requirements	N/A					
10.1	Lumen Maintenance: All Luminaires	LM-84 and TM-28 have replaced Option 2 for Lumen Maintenance	SSL products certified with Option 2.	Yes	Yes	Yes	Since Option 2 references a new test method in this version products will need to be retested to LM-84 and re-evaluated.
10.1	Lumen Maintenance: All Luminaires	Higher minimum (50,000 hour) L70 for inseparable.	Inseparable SSL	No	No	Yes	Only products with claims under 50,000 hours need to be re-evaluated.
10.2	Light Source Life: All Luminaires	Higher minimum (50,000 hour) L70 for inseparable.	Inseparable SSL	No	No	Yes	Check life claims. May need to reevaluate those with claims under 50,000 hours

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10.3	Color Maintenance: Solid State Indoor Luminaires Only (Exemption: Outdoor Luminaires)	Color maintenance is evaluated at all measured points, LM-80 or LM-84, and noted linear distance.	ALL SSL products	No	Possibly	Yes	Re-evaluation of LM-80 reports can be streamlined since many luminaires use the same data. Products that used Option 2 will need to be retested unless testing conditions align with LM84.
11	Electrical Performance Requirements	N/A					
11.1	Source Start Time: All Luminaires (Exemption: Outdoor Luminaires)	Lowered minimum start time requirement from 1 second to 750 ms exception, connected luminaires have up to 1 second.	All products	Yes	Yes	Yes	Only one sample required. If testing was performed in the same manner as the new test method, retesting may not be required.
11.2	Source Run-Up Time: All Fluorescent Luminaires (Exemption: Solid State and Outdoor Luminaires)	Lowered run up time to 45 seconds.	Fluorescent products	Yes	Yes	Yes	Only one sample required. If testing was performed in the same manner as the new test method, retesting may not be required.
11.3	Power Factor: All Luminaires	Updated test method	All products	Yes	No	No	New version of the method but no fundamental change in test method for power factor. Retesting not required.
11.4	Transient Protection: All Luminaires	No change	No change	No	No	No	No Change
11.5	Standby Power Consumption: All Luminaires	Change of requirement title. New test method. New requirement limit from 1 watt to 0.5 watts or 1 watt depending on features.	Products with standby mode.	Yes	Yes	Yes	No test method previously cited. Products with standby mode will need to be tested and re-evaluated.
11.6	Operating Frequency: All Luminaires	Additional guidance for collection of frequency.	All	Yes	Possibly	No	CB does not verify, so no re-evaluation is necessary. Partners may want to retest to sample the data in accordance with the new guidance.
12	Luminaire Serviceability Requirements	N/A					
12.1	Light Source Replaceability: Directional and Non-Directional Luminaires	No change	No change	No	No	No	No Change

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12.2	Ballast/Driver Replaceability: All Luminaires (Exemption: Inseparable SSL Luminaires)	No change	No change	No	No	No	No Change
13	Thermal Performance Requirements	N/A					
13.1	Maximum Measured Ballast or Driver Case Temperature: All Luminaires	Added ANSI/UL 1598C	Retrofit kits	Yes	Possibly	Yes	Retest if the conditions were not what is stated in their 1598C
13.2	Recessed Downlight Thermal Performance	EPA has clarified the requirements so luminaires rated for insulation contact do not need to be airtight as well, to reflect installation situations where only insulation contact rating is necessary.	No impact on currently certified product only allows for new product flexibility	No	No	No	Requirements clarification.
14	Safety Requirements	N/A					
14.1	Indoor Luminaire Safety: Portable Luminaires	Added ANSI/UL 1598C	SSL Downlight Retrofits	No	No	Yes	Make sure it has 1598C certification
14.2	Electronic Ballast or Driver Safety: Ballasts, Drivers and “Non-Edison Base Fluorescent Adapters”	No change	No change	No	No	No	No Change
15	Control Requirements: Luminaires Employing any Control Mechanism	N/A					
15.1	Dimming: All Luminaires Marketed as Dimmable (Exemption: Non-Dimmable Luminaires)	Lowered minimum dimming requirement from 35% to 20%. Noise requirement added.	Dimmable luminaires	No	Yes	Yes	Only dimmable products, will have to retest for noise.
15.2	Products with Connected Functionality – Optional	New Section	Products with connected functionality that manufacturers wish to list as connected.				
15.2.1	Connected Product Criteria:	New	Products with connected functionality that manufacturers wish to list as connected.	No	No	Optional	If a product that is currently certified wants to claim connected, then they have to be evaluated.

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15.2.2	Open-standards & Open-access	New	Products with connected functionality that manufacturers wish to list as connected.	No	No	Optional	If a product that is currently certified wants to claim connected, then they have to be evaluated.
15.2.3	Energy Consumption Reporting	New	Products with connected functionality that manufacturers wish to list as connected.	No	No	Optional	If a product that is currently certified wants to claim connected, then they have to be evaluated.
15.2.4	Operational Status Reporting	New	Products with connected functionality that manufacturers wish to list as connected.	No	No	Optional	If a product that is currently certified wants to claim connected, then they have to be evaluated.
15.2.5	Remote Management	New	Products with connected functionality that manufacturers wish to list as connected.	No	No	Optional	If a product that is currently certified wants to claim connected, then they have to be evaluated.
15.2.6	Information to Consumers	New	Products with connected functionality that manufacturers wish to list as connected.	No	No	Optional	If a product that is currently certified wants to claim connected, then they have to be evaluated.
16	Product Labeling & Packaging Requirements:	N/A					
16.1	Labeling & Packaging: All Luminaires	Zonal lumen density depiction	Directional luminaires	No	No	Yes	Marketing materials will be evaluated. Packaging not necessarily.
16.1	Labeling & Packaging: All Luminaires	Packaging and marketing claims shall represent the product consistent with its certification.	All Luminaires	No	No	Yes	Review of marketing/packaging materials needed.
16.2	Light Source Shipment: Directional and Non-Directional Luminaires	Light sources must be shipped with luminaires, No exceptions.	Luminaires with a replaceable light source	No	No	Yes	Products that did not ship with a luminaire are no longer eligible. Some products may remain eligible if shipped with light source, e.g. multi-wattage ballasted downlights.
17	Warranty Requirements: All Luminaire	No change	No change	No	No	No	No Change
18	Lighting Toxics Reduction Requirements: All Luminaires	No change	No change	No	No	No	No Change