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Registration No. CNAS L9458

Accreditation Criteria: ISO/IEC 17025, requirements of EPA ENERGY STAR® Program and relevant requirements of CNAS

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SCHEDULE 6 ACCREDITED ENERGY STAR TESTING SCOPE

№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
1	Non-directional SSL luminaires and Subcomponents	1	light output	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
				Characterization of LED Light Engines and LED Lamps for Electrical and Photometric IES LM-82-12 all clause	
		2	efficacy	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
				Characterization of LED Light Engines and LED Lamps for Electrical and Photometric IES LM-82-12 all clause	
		3	lumen maintenance	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
				Characterization of LED Light Engines and LED Lamps for Electrical and Photometric IES LM-82-12 all clause	



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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
		4	CCT	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
				Characterization of LED Light Engines and LED Lamps for Electrical and Photometric IES LM-82-12 all clause	
				Colorimetry CIE Pub.No.15-2004 all clause	
		5	CRI	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
				Characterization of LED Light Engines and LED Lamps for Electrical and Photometric IES LM-82-12 all clause	
				Method of Measuring and Specifying Color Rendering of Light Sources CIE Pub.No.13.3-1995 all clause	
		6	source start time	ENERGY STAR Start Time Test Method all clause	
		7	power factor	Harmonic Emission Limits—Related Power Quality Requirements ANSI C82.77-10:2014 all clause	
		8	standby power consumption	Household electrical appliances - Measurement of standby power IEC 62301:2011 all clause	
		9	color maintenance	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
				Characterization of LED Light Engines and LED Lamps for Electrical and Photometric IES LM-82-12 all clause	
10	light source life	Characterization of LED Light Engines and LED Lamps for Electrical and Photometric IES LM-82-12 all clause			
11	Lumen Maintenance	Measuring Luminous Flux and Color Maintenance of LED Lamps ,Light Engines and Luminaires IES LM-84-14 all clause			



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The scope of the accreditation in Chinese remains the definitive version.

№	Test Object	Item/Parameter		Standard or Method	Note
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2	directional SSL luminaires and Subcomponents	1	light output	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	only for: luminous flux (50-8000) lm;luminaires dimension ≤1.2m
		2	efficacy	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
		3	lumen maintenance	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
		4	CCT	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
				Colorimetry CIE Pub.No.15-2004 all clause	
		5	CRI	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
				Method of Measuring and Specifying Color Rendering of Light Sources CIE Pub.No.13.3-1995 all clause	
		6	source start time	ENERGY STAR Start Time Test Method all clause	
		7	power factor	Harmonic Emission Limits—Related Power Quality Requirements ANSI C82.77-10:2014 all clause	
		8	standby power consumption	Household electrical appliances - Measurement of standby power IEC 62301:2011 all clause	
9	zonal lumen distribution	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause			
10	color angular uniformity	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause			



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				Guide to Spectroradiometric Measurements IES LM-58-13 all clause	
		11	color maintenance	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
3	CFL Directional Lamps	1	light output	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	only for: luminous flux (50-8000) lm;luminaires dimension ≤1.2m
		2	efficacy	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	
		3	lumen maintenance	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	
				Life Testing of Compact Fluorescent Lamps IES LM-65-10 all clause	
		4	CCT	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	
				Colorimetry CIE Pub.No.15-2004 all clause	
		5	CRI	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	
				Method of Measuring and Specifying Color Rendering of Light Sources CIE Pub.No.13.3-1995 all clause	
6	light source life	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause			



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№	Test Object	Item/Parameter		Standard or Method	Note
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				Life Testing of Compact Fluorescent Lamps IES LM-65-10 all clause	
				ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Elevated Temperature Life Testing all clause	
		7	source start time	ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Start Time all clause	
		8	source run-up time	ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Run-up Time all clause	
		9	center beam intensity	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	
		10	rapid cycle stress test	Life Testing of Compact Fluorescent Lamps IES LM-65-10 all clause	
		11	elevated temperature light output ratio	ENERGY STAR Program Requirements Product Specification for Lamps Version 2.0: Elevated Temperature Light Output Ratio all clause	
4	CFL Omnidirectional and Decorative Lamps	1	light output	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	only for: luminous flux (50-8000) lm;luminaires dimension ≤1.2m
				2	
		3	lumen maintenance	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	
				Life Testing of Compact Fluorescent Lamps IES LM-65-10 all clause	



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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
				ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Elevated Temperature Life Testing all clause	
		4	CCT	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause Colorimetry CIE Pub.No.15-2004 all clause	
		5	CRI	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	
				Method of Measuring and Specifying Color Rendering of Light Sources CIE Pub.No.13.3-1995 all clause	
		6	light source life	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	
				Life Testing of Compact Fluorescent Lamps IES LM-65-10 all clause	
				ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Elevated Temperature Life Testing all clause	
		7	source start time	ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Start Time all clause	
		8	source run-up time	ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Run-up Time all clause	
		9	center beam intensity	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	
		10	rapid cycle stress test	Life Testing of Compact Fluorescent Lamps IES LM-65-10 all clause	



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5	Solid State LED Directional Lamps	1	light output	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	only for: luminous flux (50-8000) lm;luminaires dimension ≤1.2m
		2	efficacy	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
		3	lumen maintenance	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
				ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Elevated Temperature Life Testing all clause	
				ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Ambient Temperature Life Testing all clause	
		4	CCT	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
				Colorimetry CIE Pub.No.15-2004 all clause	
		5	CRI	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
				Method of Measuring and Specifying Color Rendering of Light Sources CIE Pub.No.13.3-1995 all clause	
		6	lifetime	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
				ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Elevated Temperature Life Testing all clause	
				ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Ambient Temperature Life Testing all clause	



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		7	source start time	ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Start Time all clause	
		8	center beam intensity	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
		9	luminous intensity distribution	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
		10	color angular uniformity	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
		11	color maintenance	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
		12	elevated temperature light output ratio	ENERGY STAR Program Requirements Product Specification for Lamps Version 2.0: Elevated Temperature Light Output Ratio all clause	
6	Solid State LED Omnidirectional and Decorative Lamps	1	light output	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	only for: luminous flux (50-8000) lm;luminaires dimension ≤1.2m
		2	efficacy	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
		3	lumen maintenance	ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Elevated Temperature Life Testing all clause	
ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Ambient Temperature Life Testing all clause					



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		4	CCT	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
				Colorimetry CIE Pub.No.15-2004 all clause	
		5	CRI	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
				Method of Measuring and Specifying Color Rendering of Light Sources CIE Pub.No.13.3-1995 all clause	
		6	lifetime	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
				ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Elevated Temperature Life Testing all clause	
				ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Ambient Temperature Life Testing all clause	
		7	source start time	ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Start Time all clause	
		8	center beam intensity	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
		9	luminous intensity distribution	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
		10	color angular uniformity	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
11	color maintenance	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause			
7	Decorative Light Strings	1	electrical requirements	ENERGY STAR Program Requirements for Decorative Light Strings, ENERGY STAR Test Method for Decorative Light Strings, December 2011 (Annex A) all clause	



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		2	light output	ENERGY STAR Program Requirements for Decorative Light Strings, ENERGY STAR Test Method for Decorative Light Strings, December 2011 (Annex A) all clause	only for: luminous flux (50-8000) lm;luminaires dimension ≤1.2m
				The Measurement of Luminous Flux CIE 084-1989 all clause	only for: luminous flux (50-8000) lm;luminaires dimension ≤1.2m
		3	reliability requirement	ENERGY STAR Program Requirements for Decorative Light Strings, ENERGY STAR Test Method for Decorative Light Strings, December 2011 (Annex A) all clause	
				The Measurement of Luminous Flux CIE 084-1989 all clause	
		4	weathering requirements	ENERGY STAR Program Requirements for Decorative Light Strings, ENERGY STAR Test Method for Decorative Light Strings, December 2011 (Annex A) all clause	
				Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials ASTM G 154-06 Table X2.1 Cycle 7	
				The Measurement of Luminous Flux CIE 084-1989 all clause	



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		5	safety test	Standard for Seasonal and Holiday Decorative Products UL588 all clause	
				Christmas Tree and Other Decorative Lighting Outfits CSA C22.2 No.37 all clause	

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SCHEDULE OF ACCREDITATION CERTIFICATE



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