Name: Hangzhou ETA Testing Technology Co., Ltd.

Address: Floor 8, Building A, The Western Science Park, Yuhang District, Hangzhou City, Zhejiang Province,

China

Registration No. CNAS L9458

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

CNAS

Date of Issue: 2016-11-21 Date of Expiry: 2022-11-20

SCHEDULE 6 ACCREDITED ENERGY STAR TESTING SCOPE

D.C.	T. A OL: A	Item/Parameter		
№	Test Object	№	Item/ Parameter	Standard or Method Note
	5	1	light output	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause
	Non-directional SSL luminaires and Subcomponents	1		Characterization of LED Light Engines and LED Lamps for Electrical and Photometric IES LM-82-12 all clause
1		2	efficacy	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause
1				Characterization of LED Light Engines and LED Lamps for Electrical and Photometric IES LM-82-12 all clause
			lumen maintenance	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause
		3		Characterization of LED Light Engines and LED Lamps for Electrical and Photometric IES LM-82-12 all clause



No. CNAS L9458 第 1 页 共 11 页

200	Total Object		Item/Parameter		N-4-
№	Test Object	№	Item/ Parameter	Standard or Method	Note
				Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
		4	CCT	Characterization of LED Light Engines and LED Lamps for Electrical and Photometric IES LM-82-12 all clause	
	CHI	NA NA	TIONAL ACCREDITATI	Colorimetry CIE Pub.No.15-2004 all clause	
			331123322 31	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
		5	CRI	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	•
	. 5		color maintenance	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
		9	color maintenance	Characterization of LED Light Engines and LED Lamps for Electrical and Photometric IES LM-82-12 all clause	2//
		10	light source life	Characterization of LED Light Engines and LED Lamps for Electrical and Photometric IES LM-82-12 all clause	THE PARTY
		11	Lumen Maintenance	Measuring Luminous Flux and Color Maintenance of LED Lamps ,Light Engines and Luminaires IES LM-84-14 all clause	贝头

第 2 页 共 11 页

30	T. A OL: A	Item/Parameter			NT.
Nº	Test Object	N₂	Item/ Parameter	Standard or Method	Note
)	СНІ	NA I NA	Tlight output CREDITATI	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	only for: luminous flux (50- 8000) lm;luminai res dimention ≤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	
2	directional SSL luminaires and	4	ССТ	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause Colorimetry CIE Pub.No.15-2004 all clause	5
	Subcomponents	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	家沙
		7	power factor	Harmonic Emission Limits—Related Power Quality Requirements ANSI C82.77-10:2014 all clause	TANK I
		8	standby power consumption	Household electrical appliances - Measurement of standby power IEC 62301:2011 all clause	HK
		9	zonal lumen distribution	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	专用草
	6	10	color angular uniformity	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	

□ No. CNAS L9458

第 3 页 共 11 页

3.0	Test Object		Item/Parameter	Standard or Method	N T (
№	Test Object	№	Item/ Parameter		Note
				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	6
	CHI	NA NA	TIONAL ACCREDITATI	ON SERVICE FOR CONFORMITY ASSESSMENT	only for:
			SCHEDULE OF	ACCREDITATION CERTIFICATE	luminous flux (50-
	5	1	light output	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	8000) lm;luminai res
				5 6	dimention ≤1.2m
		2	efficacy	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	G
		3	lumen maintenance	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	
3	CFL Directional Lamps			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	
		4	CCT	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	就沙
				Colorimetry CIE Pub.No.15-2004 all clause	HEAR
		_	CRI	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	HV
		5		Method of Measuring and Specifying Color Rendering of Light Sources CIE Pub.No.13.3-1995 all clause	Ħ章
		6	light source life	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	

第 4 页 共 11 页

30	T-4 OL: 4		Item/Parameter	Standard or Method	NI-4-
№	Test Object	№	Item/ Parameter		Note
				Life Testing of Compact Fluorescent Lamps IES LM-65-10 all clause	
			Thinland)	ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Elevated Temperature Life Testing all clause	G
	CHI	NA NA 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	5
	CFL Omnidirectional	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;luminai res dimention
4	and Decorative Lamps			Electrical and Distance tric Managements of Ginals Ended Courses	≤1.2m
		2	efficacy	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	一
		3	lumen maintenance	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	专用章
		_		Life Testing of Compact Fluorescent Lamps IES LM-65-10 all clause	1111

第 5 页 共 11 页

NG.	Tost Object		Item/Parameter	Standard or Method	Note
№	Test Object	N₂	Item/ Parameter		Note
				ENERGY STAR Program Requirements Product Specification for Lamps Version 1.0: Elevated Temperature Life Testing all clause	
		4	TCCTAL ACCREDITATION	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	
	CHII	NATNA	SCHEDULE OF	Colorimetry CIE Pub.No.15-2004 all clause	
		5	5 CIPL	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	
		3	CRI	Method of Measuring and Specifying Color Rendering of Light Sources CIE Pub.No.13.3-1995 all clause	
				Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps IES LM-66-14 all clause	
		6	light source life	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	
	6	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	27
		10	rapid cycle stress test	Life Testing of Compact Fluorescent Lamps IES LM-65-10 all clause	A THE

高等。 No. CNAS L9458

第6页共11页

30	T-401:-4	Item/Parameter			NI 4
№	Test Object	No	Item/ Parameter	Standard or Method	Note
	СНІ	NA I NA	Tlight output CREDITATI	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	only for: luminous flux (50- 8000) lm;luminai res dimention ≤1.2m
		2	efficacy	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	
5	Solid State LED Directional Lamps	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	5
		4	ССТ	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	R L
		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	開章

□ No. CNAS L9458

第7页共11页

	•	T. (0): (Item/Parameter	Standard or Method	N
•	No	Test Object	№	Item/ Parameter		Note
			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	
		CHI	NA NA 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	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;luminai res dimention \$1.2m
	Ü	Decorative Lamps	2	efficacy	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	N ZI
			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	知意

第 8 页 共 11 页

30	Total Object	Item/Parameter			NI 4
Nº	Test Object	№	Item/ Parameter	Standard or Method	Note
	C	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	6
	СНІ	NA NA 5	CRI SCHEDULE OF	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	<u> </u>
		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	
	G	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	家沙
		11	color maintenance	Electrical and Photometric Measurements of Solid-State Lighting Products IES LM-79-08 all clause	HAR.
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	4K

■ No. CNAS L9458

第 9 页 共 11 页

30	T. A OLIVA	Item/Parameter			N
№	Test Object	N₂	Item/ Parameter	Standard or Method	Note
	СНІ	NA NA	TIONAL ACCREDITATIONAL SCHEDULE OF	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;luminai res dimention ≤1.2m
		2	light output	The Measurement of Luminous Flux CIE 084-1989 all clause	only for: luminous flux (50- 8000) lm;luminai res dimention ≤1.2m
	5	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	\$ 11
		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	加黄
				The Measurement of Luminous Flux CIE 084-1989 all clause	

□ No. CNAS L9458

第 10 页 共 11 页

NC-	Tost Object		Item/Parameter		Standard or Method	Note
№	Test Object	№	Item/ Parameter	r	Standard or Method	Note
	5 sa	safety test	gafaty tagt	Standard for Seasonal and Holiday Decorative Products UL588 all clause		
			safety test	Christmas Tree and Other Decorative Lighting Outfits CSA C22.2 No.37 all clause	5	
	CHI	NA NA	TIONAL ACCREDI	TAT	ON SERVICE FOR CONFORMITY ASSESSMENT	

SCHEDULE OF ACCREDITATION CERTIFICATE



第 11 页 共 11 页

■ No. CNAS L9458

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