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Registration No. CNAS L6454

Accreditation Criteria: ISO/IEC 17025, requirements of EPA ENERGY STAR® Program and relevant requirements of
 CHINA NATIONAL ACCREDITATION SERVICE FOR CONFORMITY ASSESSMENT
 CNAS

SCHEDULE OF ACCREDITATION CERTIFICATE

Date of Issue: 2017-04-10

Date of Expiry: 2022-10-09

SCHEDULE 6 ACCREDITED ENERGY STAR TESTING SCOPE

№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
Luminaires					
1	CFL Directional	1	Efficacy, Output, Center Beam Intensity, Lumen Maintenance, Lifetime, CCT, CRI	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps. LM-66-14	
		2	Lumen Maintenance, Lifetime, Rapid Cycle Stress Test	Life Testing of Compact Fluorescent Lamps LM-65-14	
		3	Transient Protection	IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits IEEE C62.41.2-2002	
		4	Power Factor	Harmonic Emission Limits—Related Power Quality Requirements ANSI C82.77-10:2014	
		5	CCT	Colorimetry Pub. No. 15:2004	



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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
		6	CRI	Method of Measuring and Specifying Color Rendering of Light Sources Pub. No. 13.3-1995	
		7	Lumen Maintenance, Lifetime	Elevated Temperature Life Testing Elevated Temperature Life Test,ENERGY STAR Program for Lamps Version 2.0	
		8	ETLOR	Elevated Temperature Light Output Ratio Test ENERGY STAR Elevated Temperature Light Output Ratio Test or IES LM-82-12	
		9	Start Time	Start Time ENERGY STAR Program Requirements Product Specification for Lamps Version 2.0:	
		10	Run Up Time	Run-up Time ENERGY STAR Program Requirements Product Specification for Lamps Version 2.0	
2	CFL Omnidirectional and Decorative	1	Efficacy, Output, Center Beam Intensity, Lumen Maintenance, Lifetime, CCT, CRI	Electrical and Photometric Measurements of Single-Ended Compact Fluorescent Lamps. LM-66-11	
		2	Lumen Maintenance, Lifetime, Rapid Cycle Stress Test	Life Testing of Compact Fluorescent Lamps LM-65-14	
		3	Transient Protection	IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits IEEE C62.41.2-2002	
		4	Power Factor	Harmonic Emission Limits—Related Power Quality Requirements ANSI C82.77-10:2014	
		5	CCT	Colorimetry Pub. No. 15:2004	
		6	CRI	Method of Measuring and Specifying Color Rendering of Light Sources Pub. No. 13.3-1995	
		7	Lumen Maintenance, Lifetime	Elevated Temperature Life Testing Elevated Temperature Life Test,ENERGY STAR Program for Lamps Version 2.0	
		8	Start Time	Start Time ENERGY STAR Program Requirements Product Specification for Lamps Version 2.0	



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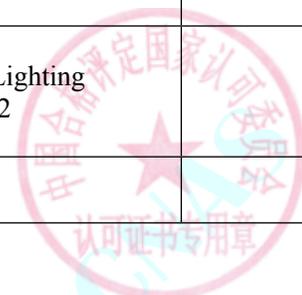
№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
		9	Run Up Time	Run-up Time ENERGY STAR Program Requirements Product Specification for Lamps Version 2.0	
3	SSL Directional	1	Efficacy, Output, Center Beam Intensity, Luminous Intensity Distribution, Lumen Maintenance, Lifetime, CCT, CRI, Color Maintenance, Color Angular Uniformity,	Electrical and Photometric Measurements of Solid-State Lighting Products LM-79-08	
		2	Transient Protection	IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits C62.41.2-2002	
		3	CCT	Colorimetry1 Pub. No. 15:2004	
		4	CRI	Method of Measuring and Specifying Color Rendering of Light Sources Pub. No. 13.3-1995	
		5	Lumen Maintenance, Lifetime	Temperature Life Testing ENERGY STAR Ambient Temperature Life Test	
		6	Lumen Maintenance, Lifetime	Elevated Temperature Life Testing ENERGY STAR Elevated Temperature Life Test	
		7	ETLOR	Elevated Temperature Light Output Ratio ENERGY STAR Elevated Temperature Light Output Ratio Test or IES LM-82-12	
		8	Start Time	Start Time ENERGY STAR Program Requirements Product Specification for Lamps Version 2.0	



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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
4	SSL Omnidirectional and Decorative	1	Efficacy, Output, Center Beam Intensity, Luminous Intensity Distribution, Lumen Maintenance, Lifetime, CCT, CRI, Color Maintenance, Color Angular Uniformity,	Electrical and Photometric Measurements of Solid-State Lighting Products LM-79-08	
		2	Transient Protection	IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits C62.41.2-2002	
		3	CCT	Colorimetry1 Pub. No. 15:2004	
		4	CRI	Method of Measuring and Specifying Color Rendering of Light Sources Pub. No. 13.3-1995	
		5	Lumen Maintenance, Lifetime	Temperature Life Testing ENERGY STAR Ambient Temperature Life Test	
		6	Lumen Maintenance, Lifetime	Elevated Temperature Life Testing ENERGY STAR Elevated Temperature Life Test	
		7	Start Time	Start Time ENERGY STAR Start Time Test Method	
5	Directional Solid State Luminaires	1	Zonal Lumen Distribution, Color Angular Uniformity, Luminaire Photometry	Electrical and Photometric Measurements of Solid-State Lighting Products (Goniophotometer) LM-79-08 sections 10 and 12	
		2	Color Angular Uniformity	Guide to Spectroradiometric Measurements LM-58-13	



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		3	CRI CCT	Method of Measuring and Specifying Color Rendering of Light Sources Colorimetry Pub. No. 13.3-1995 Pub. No. 15: 2004	
		4	Power Factor Standby Power Consumption	Harmonic Emission Limits—Related Power Quality Requirements Household electrical appliances - Measurement of standby power C82.77-10:2014 62301 Edition 2.0 2011-01	
		5	Efficacy, Light Output, Lumen Maintenance, CCT, CRI, Color Maintenance	Electrical and Photometric Measurements of Solid-State Lighting Products LM-79-08	
6	Non-directional SSL Luminaires	1	Efficacy, Output, Lumen Maintenance, CCT, CRI, Color Maintenance	Electrical and Photometric Measurements of Solid-State Lighting Products LM-79-09	
		2	Power Factor	Harmonic Emission Limits—Related Power Quality Requirements ANSI C82.77-10:2014	
		3	CRI	Method of Measuring and Specifying Color Rendering of Light Sources Pub. No. 13.3-1995	
		4	CCT	Colorimetry CIE Pub. No. 15:2004	
		5	Efficacy, Light Output, Lumen Maintenance, CCT , CRI, Color Maintenance, Light Source Life	Characterization of LED Light Engines and LED Lamps for Electrical and Photometric Properties as a Function of Temperature IES LM-82-12	



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№	Test Object	Item/Parameter		Standard or Method	Note
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		6	Standby Power Consumption Lumen Maintenance: Option 2 Source Start Time	Projecting Long Term Lumen Maintenance of LED Light Sources IES TM-21-11	Extension , MS-0013473, MS-0013474, Tracy Huang
Audio, video and similar electronic apparatus					
1	TV		All parameters	Energy Star Program Requirements for TV Ed.7.0 1	
		1	On mode power	Methods of measurement for the power consumption of audio, video and related equipment IEC 62087(Ed.3.0) 2	
		2	Sleep mode power	Household Electrical Appliances - Measurement of Standby Power IEC 62301(Ed.2.0) 3	
		3	Off mode power	Household Electrical Appliances - Measurement of Standby Power IEC 62301(Ed.2.0) 4	
		4	DAM mode power	Determination of Television Set Power Consumption CEA-2037- A CEA-2037-A:Ed.0.3 5	
Information Technology Equipment					
1	Computers		All parameters	Energy Star Program Requirements for Computers Ed.6.1 1	
		1	Energy consumption	Desktop and Notebook Computers - Measurement of Energy Consumption IEC 62623(Ed.1.0) 2	
		2	Lumiance	Methods of measurement on receivers for television broadcast transmissions - Part 1: General conditions - Measurements at radio and video frequencies IEC 60107-1 Ed. 3.0 3	
2	Display		All parameters	Energy Star Program Requirements for Displays Ed.7.0 1	



№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
		1	On mode power	Methods of measurement for the power consumption of audio, video and related equipment 62087(Ed.3.0) 3	
		2	Sleep mode power	HouseholdElectrical Appliances Measuremnet of standby power IEC 62301(Ed.2.0) 4	
		3	Off mode power	HouseholdElectrical Appliances Measuremnet of standby power IEC 62301(Ed.2.0) 5	



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