

LM-79-08 Test Report

For

Hocan Group Co.,Ltd**(Brand Name: SEPICN LED Lighting)**

Rm 1902, Easey Comm Bldg
253-261 Hennessy Rd
Wanchai, HONG KONG

LED Tube

Model name(s): HC-T8-8FT-44W-ID(Clear,5000K)

Representative (Tested) Model: HC-T8-8FT-44W-ID(Clear,5000K)

Model Different: All construction and rating are the same, except CCT

Test & Report By:

Charman Chen

Engineer: Charman Chen

Date: Jan.11,2017

Review By:

Tommy Liang

Manager: Tommy Liang

Note: This report does not imply product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Laboratory: Standard-Tech Co. Ltd Testing Center**NVLAP CODE: 201011-0**

Report Format Number STD/QR4909-A/2

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<http://www.standard-tech.com>

1.1 Product Information:

Organization Name	Hocan Group Co.,Ltd	
Brand Name	SEPICN LED Lighting	
Model Number	HC-T8-8FT-44W-ID(Clear,5000K)	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	LED Tube	
Rated Voltage / Frequency	100~277Vac, 50/60 Hz	
Nominal Power	44W	
Rated Initial Lamp Lumen	--	
Declared CCT	5000K	
LED Manufacturer	SANAN	
LED Model	2835	
Sample Number	GZE170123-B1(5000K)	
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	s

Photo



1.2 Test Specifications:

Date of Receipt	Jan.07,2017
Date of Test	Jan.08,2017
Test item	<ol style="list-style-type: none"> 1. Total Luminous Flux 2. Luminous Efficacy 3. Correlated Color Temperature 4. Color Rendering Index 5. Chromaticity Coordinate 6. Electrical Parameters
Reference Standard	<ol style="list-style-type: none"> 1. IES LM-79-2008 Electrical and Photometric Measurements of Solid-State Lighting Products 2. ANSI C78.377-2008 Specifications for the Chromaticity of Solid State Lighting Products 3. CIE 13.3-1995 Method of Measuring and Specifying Colour Rendering Properties of Light Sources 4. CIE 15-2004 Technical Report Colorimetry 5. IESNA LM-16-93 Practical Guide to Colorimetry of Light Source 6. IESNA TM-16-05 Technical Memorandum on Light Emitting Diode (LED) Sources and Systems
Reference Work Instruction	QD25

1.3 Test Methods

<p>1) Chromaticity Measurement – Sphere-Spectroradiometer Method: Chromaticity parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25 °C ± 1 °C. The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere. The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral power distribution taken at 5 nm intervals over the range of 380 to 780 nm.</p>
<p>2) Electrical Measurements: Electrical parameters were measured using power meters incorporated in goniophotometer or sphere-spectroradiometer system. The ambient temperature surrounding the sample was maintained at 25 °C ± 1 °C. The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Voltage, frequency, current, power, power factor and total harmonic distortion were measured by and read from the power meter.</p>

2.1 Electrical, Photometric and Chromaticity Measurements

(Refer to Work Instruction QD25)

Test date	2017-01-08	Test Ambient:	25.2 °C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	HC-T8-8FT-44W-ID(Clear,5000K)		

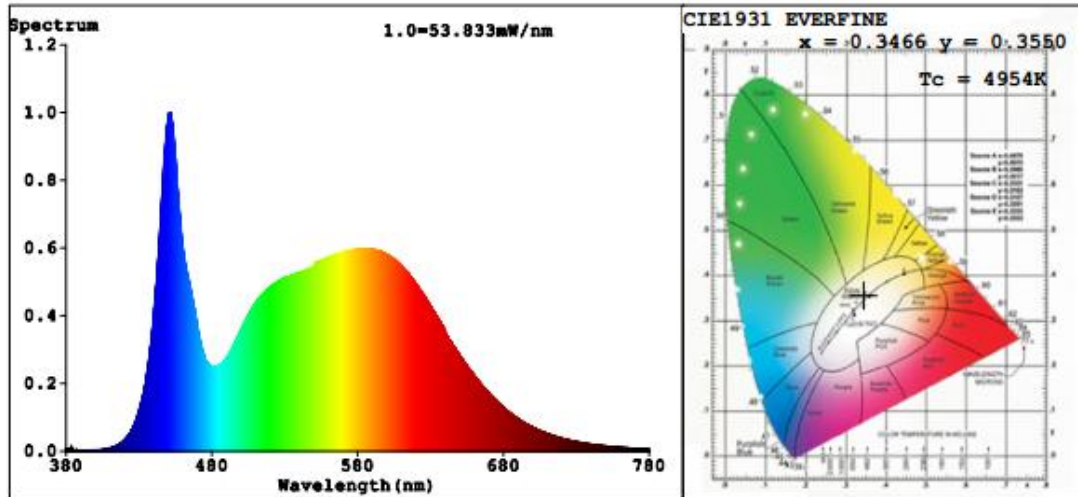
Electrical Measurement :

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE170123-B1	120.0	60	0.3653	40.75	0.9296	8.67

Chromaticity Measurement - Sphere-Spectroradiometer Method:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	83	R9	14
Frequency (Hz)	60	R2	90	R10	74
CCT (K)	4954	R3	94	R11	82
Duv	0.0011	R4	83	R12	58
Chromaticity (x, y)	x=0.3466 y=0.3550	R5	82	R13	85
Chromaticity (u', v')	u'=0.2111 v'=0.4866	R6	84	R14	97
Color Rendering Index (CRI)	84.1	R7	88	R15	78
R9	14	R8	69	--	--
Total Luminous (lm)	5422				
Luminous Efficacy (lm/W)	133.06				

Spectral Power Distribution & Chromaticity Diagram



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3. Test Equipment

Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
ST-R-336	2 meter Integrating Sphere	2016-07-01	2017-06-30
ST-R-331	Spectral analysis system HAAS-2000	2016-07-01	2017-06-30
D204	Standard Lamp	2016-07-01	2017-06-30
PF2010	Power Meter for Integrating Sphere	2016-07-01	2017-06-30
EE-09	Goniophotometer system	2016-07-01	2017-06-30
D908S	Standard Lamp	2016-07-01	2017-06-30
PF210	Power Meter for Goniophotometer	2016-07-01	2017-06-30
ST-R-181A	Temperature Tester	2016-07-01	2017-06-30
Uncertainty: Photometric Measurement (Sphere):1.74% Chromaticity Measurement(Sphere):14.3K Photometric Measurement(Goniophotometer):1.62%			

******* END OF REPORT *******

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