LM-79-08 Test Report

For

Shenzhen XinShengYang Opto-electronics Technology Co., Ltd

(Brand Name: XSY/Lite4U)

10-11/F ,No.2 Building, Hengchangrong High Tech Ind. Park, Shangnan East Rd, Hongtian, Shajing Town, Baoan District, Shenzhen, China, 518125

Application 1:Outdoor Pole/Arm-Mounted Area and Roadway Luminaires

Application 2: Architectural Flood and Spot Luminaires

Model name(s): XSY-SBFL100W-XXK-YYY-ZTA

Remark: XXK stands for different CCT as bellow: 40K=4000K, 50K=5000K, 57K=5700K. YYY stands for different lens, it can be 90=90 °lens, 713=70*135, II=TP II, III=TP III, IV=TP IV, V=TPV. Z stands for different LED chip as bellow: L=Nichia 757, S= Seoul 3030. T stands for different power supply as bellow: B=MEANWELL dimmable HLG series. D=INVENTRONICS EUD series, E=INVENTRONICS ESD series, K=INVENTRONICS EUK series, S=SOSEN series. A stands for different mounting arm: S=slip fitter arm, E=extruded arm, U=u bracket, W=wall mount arm, Y=yoke arm, F=flat arm.

Representative (Tested) Model: XSY-SBFL100W-40K-IV-SBA

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

Test & Report By: Jack Luo

Engineer: Jack Luo

Date: Nov.01,2017

Review By: Tommy Liang

Manager: Tommy Liang

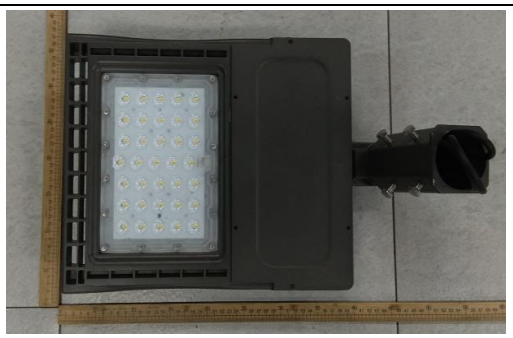
Note: 1. The results contained in this report pertain only to the rested samples.

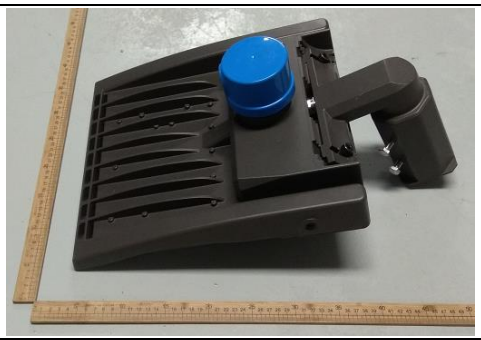
2. This report does not imply product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

1.1 Product Information:

Organization Name	Shenzhen XinShengYang Opto-electronics Technology Co., Ltd	
Brand Name	XSY/Lite4U	
Model Number	XSY-SBFL100W-XXK-YYY-ZTA	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Application 1:Outdoor Pole/Arm-Mounted Area and Roadway Luminaires Application 2: Architectural Flood and Spot Luminaires	
Rated Voltage / Frequency	120-277 Vac, 50/60 Hz	
Nominal Power	100W	
Rated Initial Lamp Lumen	--	
Declared CCT	4000K,5000K,5700K	
LED Manufacturer	Seoul Semiconductor Co., LTD	
LED Model	SAWxC22B-xx	
Sample Number	GZE1709061-AF1	
Lamp Length	--	mm
Lamp Width	--	mm
Number of Units (modular products)	N/A	s

Photo





1.2 Test Specifications:

Date of Receipt	Oct.22,2017
Date of Test	Oct.25,2017
Test item	1. Total Luminous Flux 2. Luminous Distribution Intensity 3. Luminous Efficacy 4. Electrical Parameters
Reference Standard	1. IES LM-79-2008 Electrical and Photometric Measurements of Solid-State Lighting Products 2. IESNA TM-16-05 Technical Memorandum on Light Emitting Diode (LED) Sources and Systems
Reference Work Instruction	QD25

1.3 Test Methods

1) Photometric and Light Distribution Measurement – Goniophotometer Method:

Photometric parameters were measured using the goniophotometer and software. The ambient temperature shall be maintained at 25 °C ±1 °C, measured at a point not more than 1 m from the sample and at the same height as the sample. The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 1 °vertical intervals and 22.5 °horizontal intervals.

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 ºC ±1 ºC. 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.

2.1 Electrical, Photometric and Chromaticity Measurements

(Refer to Work Instruction QD25)

Test date	2017-10-25	Test Ambient:	25.2 ºC
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	XSY-SBFL100W-40K-IV-SBA		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE170906 1-AF1	120.0	60	0.8346	99.44	0.9929	5.00
	277.0	60	0.3824	98.50	0.9298	14.92
				DLC Pass Criteria	>= 0.9(-3%)	<= 20(+5)

Photometric Measurement –Goniophotometer Method:

Parameter	Result		DLC V4.2 Pass Criteria	
Test Voltage (V)	120.0	277.0	--	
Frequency (Hz)	60	60		
Total Luminous (lm)	13804	13722	>=1000(-10%)	
Luminous Efficacy (lm/W)	138.82	139.31	Standard: >= 100(-3%)	Premium: >= 120(-3%)
Most Worst Luminous/Highest Watts	137.99			

3. Test Equipment

Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
GO-R5000	Goniophotometer system	2017-07-01	2018-06-30
D908S	Standard Lamp	2017-07-12	2018-07-11
PF210	Power Meter for Goniophotometer	2017-07-07	2018-07-06
ST-R-181A	Temperature Tester	2017-07-01	2018-06-30
Uncertainty: Photometric Measurement(Goniophotometer):1.62%			

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