ENERGY EFFICIENCY CERTIFICATION (EEC): Test Report

Project Number:	GZE160118-D1
Customer Name:	L-TECH CORPORTION
Address:	SHAOGANGTOU DISTRICT.QIAOTOU TOWN.
	DONGGUAN CITY.GUANGDONG PROVINCE,CHINA
Brand name(s):	L-TECH CORP
Model name(s):	CLED6A/P/R-40 WITH TCLD640HZ(CLKT640)
Product category:	LED DOWNLIGHT
Electrical Ratings:	120Vac,60Hz 42W
Representative (Tested) Model:	CLED6A/P/R-40 WITH TCLD640HZ(CLKT640)(3000K) CLED6A/P/R-40 WITH TCLD640HZ(CLKT640)(4000K)
Model differences:	All construction and rating are the same, except CCT
LED Manufacturer:	Seoul Semiconductor Co.,Ltd
LED Model	6 STWxC2SB

The Sample(s) tested is(are) compliant with the following applied standards/regulations:
ENERGY STAR ® : ENERGY STAR® Program Requirements Product Specification for Luminaires - Version 2.0

Test & Report By:

Johnson Sun

Engineer: Johnson Sun

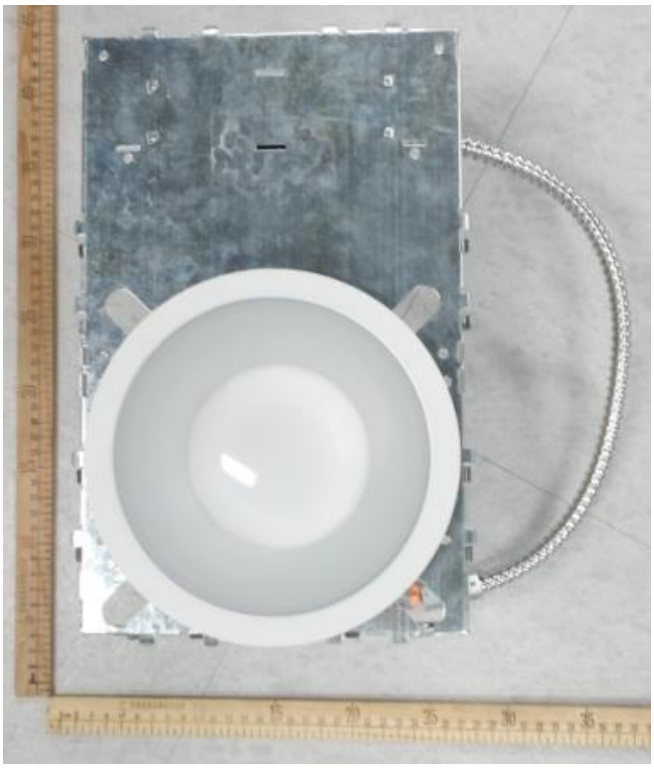
Date: Jan.13,2016

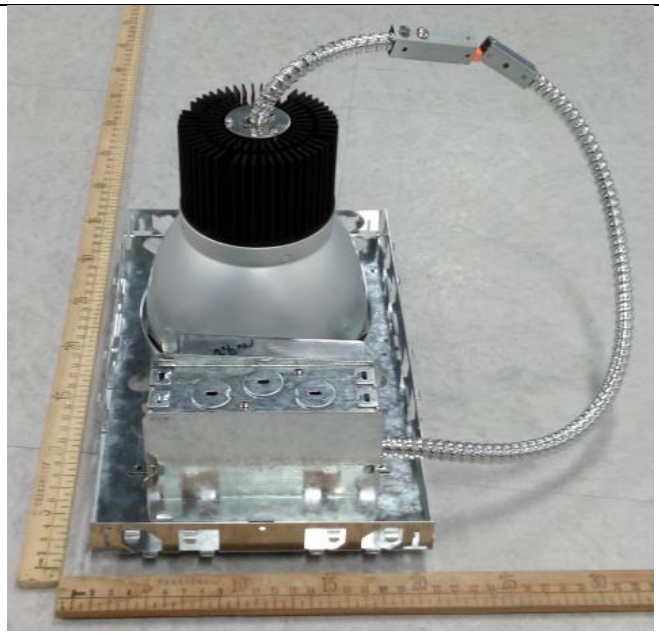
Review By:

Tommy Liang

Manager: Tommy Liang

Attachment
Photo





Annex

Regulatory Body	Tests to Determine Compliance	The Type Luminaires	Test Limit per Regulation or Program Requirement	Measured Efficiency or Limit Level	Pass / Or Fail
ENERGY STAR	Luminaire Minimum Light Output	SSL downlight	≤ 4.5" aperture: 345 lumens > 4.5" aperture: 575 lumens	3000K:2924.7lm 4000K: 2982 lm	Pass
ENERGY STAR	**Input Wattage**	**All**	**≤ Rated Wattage**	**3000K:41.37W 4000K:41.06W**	**Pass**
ENERGY STAR	**Luminous Efficacy**	**SSL downlight**	**⩾55 lm/W**	**3000K:70.70lm/W 4000K:72.63lm/W**	**Pass**
ENERGY STAR	Zonal Lumen Density	SSL downlight	⩾75% of total initial lumens within the 0-60° zone	91.6%	Pass
ENERGY STAR	Correlated Color Temperature (CCT)	Shall be capable of providing at least one of the following nominal correlated color temperatures (CCTs): 2700 Kelvin 3000 Kelvin 3500 Kelvin 4000 Kelvin 5000 Kelvin	3045 ± 175 K Duv 0.0001± 0.006 3985 ± 275 K Duv 0.0009± 0.006	3000K:3016K Duv=0.0014 4000K:4046K Duv=0.0013	Pass
ENERGY STAR	Color Rendering Index (CRI)	All	Ra ⩾ 80 R9 > 0	3000K:Ra = 85.1 R9 = 22 4000K:Ra = 83.3 R9 = 15	Pass
ENERGY STAR	Color Maintenance	Solid State	Δu'v' ≤ 0.007	See LM80	Pass

ENERGY STAR	**Color Angular Uniform**	**SSL downlight**	**The variation of chromaticity shall be within 0.006 from the weighted average point on the CIE 1976 (u',v') diagram**	0.0051	**Pass**
ENERGY STAR	Start Time	Solid State	< 750 ms	302ms	Pass
ENERGY STAR	Power Factor	Solid State	Total luminaire input power ≤ 5 watts: PF ≥ 0.5 Total luminaire input power > 5 watts: PF ≥ 0.7	3000K:0.9891 4000K:0.9902	Pass

Annex					
ENERGY STAR	Transient Protection	All Luminaires	The line transient shall consist of seven strikes of a 100 kHz ring wave, 2.5 kV level, for both common mode and differential mode.	Comply	Pass
ENERGY STAR	Dimming	Solid State	The luminaire and its components shall provide continuous dimming from 100% to 20% of total light output.	Comply	Pass
ENERGY STAR	**Operating Frequency Requirements - Directional and Non-Directional Luminaires**	Solid State	**Frequency ≥ 120 Hz**	**120.09Hz**	**Pass**
ENERGY STAR	**Driver Replaceability**	Solid State	Drivers shall be accessible and removable by an electrician without the cutting of wires and without damage to the luminaire housing, trim, decorative elements or the carpentry (e.g., ceiling drywall) to which the luminaire is attached.	N/A	Pass
ENERGY STAR	**Maximum Measured Ballast or Driver Case Temperature**	Solid State	≤ 105 °C	70.1°C	Pass
ENERGY STAR	**Maximum In-Situ Source Temperature**	Solid State	≤ 105°C	65.2°C	Pass
ENERGY STAR	**Warranty**	Solid State	≥ 3 years	3 years	Pass

ENERGY STAR	**Safety**	Solid State	N/A	N/A	Pass
ENERGY STAR	**Lighting Toxics Reduction Requirements**	Solid State	N/A	RoHS report has been verified	Pass
ENERGY STAR	Packaging Requirement				
ENERGY STAR	CCT	Solid State	Packaging shall clearly describe the nominal color designation in units of Kelvin (e.g. 2700K, 3000K).	3000K,4000K	Pass

--- End of Report ---