NVLAP LAB CODE 201011-0

LM-79-08 Test Report

For

L-TECH CORPORTION

(Brand Name: L-TECH CORP)

SHAOGANGTOU DISTRICT.QIAOTOU TOWN.DONGGUAN
CITY.GUANGDONG PROVINCE,CHINA

LED DOWNLIGHT

Model name(s): CLED6A/P/R-28 WITH TCLD628HZ(CLKT628)

Representative (Tested) Model: CLED6A/P/R-28 WITH TCLD628HZ(CLKT628)(3000K)
CLED6A/P/R-28 WITH TCLD628HZ(CLKT628)(4000K)

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

Test & Report By:

Johnson Sun

Engineer: Johnson Sun
Date: Jan.13,2016

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.

NVLAP LAB CODE 201011-0

U.S. Department of Energy

Lighting Facts™ Uniform LM-79 Reporting Template

Laboratory Information:

Name of Test Laboratory	Standard-Tech Co. Ltd
Date of Test Report	Jan.13, 2016
Test Report No.	GZE160118-C
Laboratory Contact Name	Tommy Liang

Product Information:

Organization Name	L-TECH CORPORTION	
Brand Name	L-TECH CORP	
Model Number	CLED6A/P/R-28 WITH TCLD628HZ(CLKT628)(3000K)	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	LED DOWNLIGHT	
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	s

Electrical Measurements:	**Integrating Sphere Output**	**Goniophotometer Output**	
Input Wattage	--	31.02	W
Input Current	--	0.2607	A
Input Voltage (ac)	--	120.0	V
Power Factor	--	0.9916	
Off-State Power	--	0	W
Photometric Characteristics			
Total Initial Lumen Output	--	2159.6	lm
Initial Lumen Efficacy	--	69.62	lm/w
Correlated color temperature / CCT	3009	--	K
Color rendering index / CRI	85.0	--	
R9 Value	21	--	
Duv	0.0027	--	
Luminous Intensity Distribution			
Center beam candlepower (if applicable)	-----	1346	cd
Beam angle (if applicable)		76.8	°
Zonal lumens in the 0 °-60 °zone		91.7	%
Zonal lumens in the 60 °-90 °zone		8.3	%
Zonal lumens in the 90 °-120 °zone		0	%
Zonal lumens in the 120 °-180 °zone		0	%

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Lighting Facts™ Uniform LM-79 Reporting Template

Laboratory Information:

Name of Test Laboratory	Standard-Tech Co. Ltd
Date of Test Report	Jan.13, 2016
Test Report No.	GZE160118-C
Laboratory Contact Name	Tommy Liang

Product Information:

Organization Name	L-TECH CORPORTION	
Brand Name	L-TECH CORP	
Model Number	CLED6A/P/R-28 WITH TCLD628HZ(CLKT628)(4000K)	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	LED DOWNLIGHT	
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	s

Electrical Measurements:	**Integrating Sphere Output**	**Goniophotometer Output**	
Input Wattage	31.08	--	W
Input Current	0.2611	--	A
Input Voltage (ac)	120.0	--	V
Power Factor	0.9918	--	
Off-State Power	0	--	W
Photometric Characteristics			
Total Initial Lumen Output	2206	--	lm
Initial Lumen Efficacy	70.98	--	lm/w
Correlated color temperature / CCT	3967	--	K
Color rendering index / CRI	82.8	--	
R9 Value	12	--	
Duv	0.0021	--	
Luminous Intensity Distribution			
Center beam candlepower (if applicable)	-----	-----	cd
Beam angle (if applicable)			°
Zonal lumens in the 0 °-60 °zone			%
Zonal lumens in the 60 °-90 °zone			%
Zonal lumens in the 90 °-120 °zone			%
Zonal lumens in the 120 °-180 °zone			%

Test Specifications:	
Date of Receipt	Jan.11,2016
Date of Test	Jan.12,2016
Test item	: Total Luminous Flux, Luminous Distribution Intensity, Luminous Efficacy, Correlated Color Temperature, Color Rendering Index, Chromaticity Coordinate, Electrical parameters
Reference Standard	IES LM-79-2008 Electrical and Photometric Measurements of Solid-State Lighting Products ANSI C78.377-2008 Specifications for the Chromaticity of Solid State Lighting Products CIE 13.3-1995 Method of Measuring and Specifying Colour Rendering Properties of Light Sources CIE 15-2004 Technical Report Colorimetry IESNA LM-16-93 Practical Guide to Colorimetry of Light Source IESNA TM-16-05 Technical Memorandum on Light Emitting Diode (LED) Sources and Systems UL1993 4th Edition, Self-Ballasted Lamps and Lamp Adapters ENERGY STAR® Program Requirements Product Specification for Luminaires (Light Fixtures) – Version 2.0
Reference Work Instruction	QD25
Remark	Below test and data are not covered by NVLAP accreditation: - Operating Frequency

Test Methods

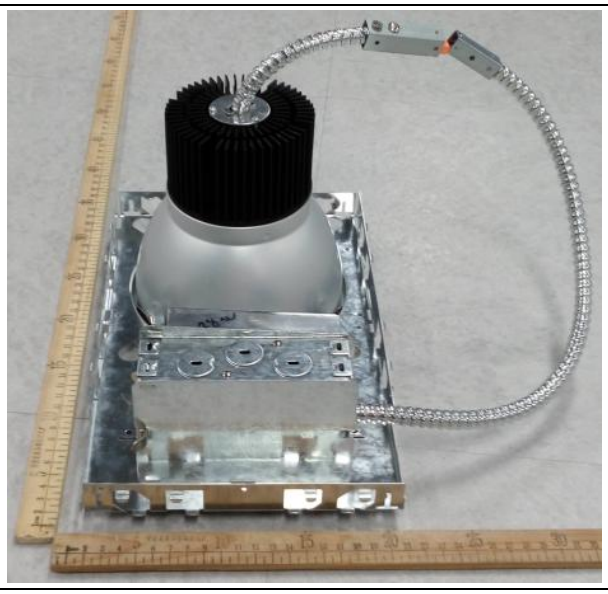
1. Photometric and Electrical measurements – Light Distribution Method:

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 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. Photometric and Electrical Measurements – Integrating Sphere Method:

Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25 ºC ±1 ºC. 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 Volts AC, 60Hz. It was stabilized before measurement was made. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at least 5 nm intervals over the range of 380 to 780 nm.

1. Product Information:

Brand Name	L-TECH CORP
Model Number	GZE160118-C
Luminaire Type	LED DOWNLIGHT
Rated Voltage / Frequency	120Vac, 60 Hz
Nominal Power	32W
Rated Initial Lamp Lumen	--
Declared CCT	3000K,4000K
LED Manufacturer	Seoul Semiconductor Co.,Ltd
LED Model	STWxC2SB
Sample Receipt Date	Jan.11,2015
Sample Number	GZE160118-C1,C2,C3(3000K),C4(4000K)
Photo	
	

2.1 Electrical, Photometric and Chromaticity Measurements *(Refer to Work Instruction QD25)*	IES LM-79 2008

Test date	2016-01-12	Test Ambient:	25.0 ℃
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	CLED6A/P/R-28 WITH TCLD628HZ(CLKT628)(3000K)		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
GZE160118-C1	120.0	60	0.2607	31.02	0.9916
GZE160118-C2	120.0	60	0.2615	31.13	0.9922
GZE160118-C3	120.0	60	0.2611	31.08	0.9919
Average			0.2611	31.08	0.9919

Sphere-Spectroradiometer Method:

Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
Color Rendering Index (CRI)	85.0
R9	21
CCT (K)	3009
Chromaticity (x, y)	x=0.4403 y=0.4120
Chromaticity (u', v')	u'=0.2493 v'=0.5250
Duv	0.0027

Special Color Rendering Indices			
R1	83	R9	21
R2	92	R10	81
R3	98	R11	82
R4	83	R12	70
R5	83	R13	85
R6	90	R14	99
R7	86	R15	77
R8	65	--	--

Goniophotometer Method:

Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
Total Luminous (lm)	2159.6
Luminous Efficacy (lm/W)	69.62
Beam Angle °	76.8
Center Beam Candle Power (cd)	1346

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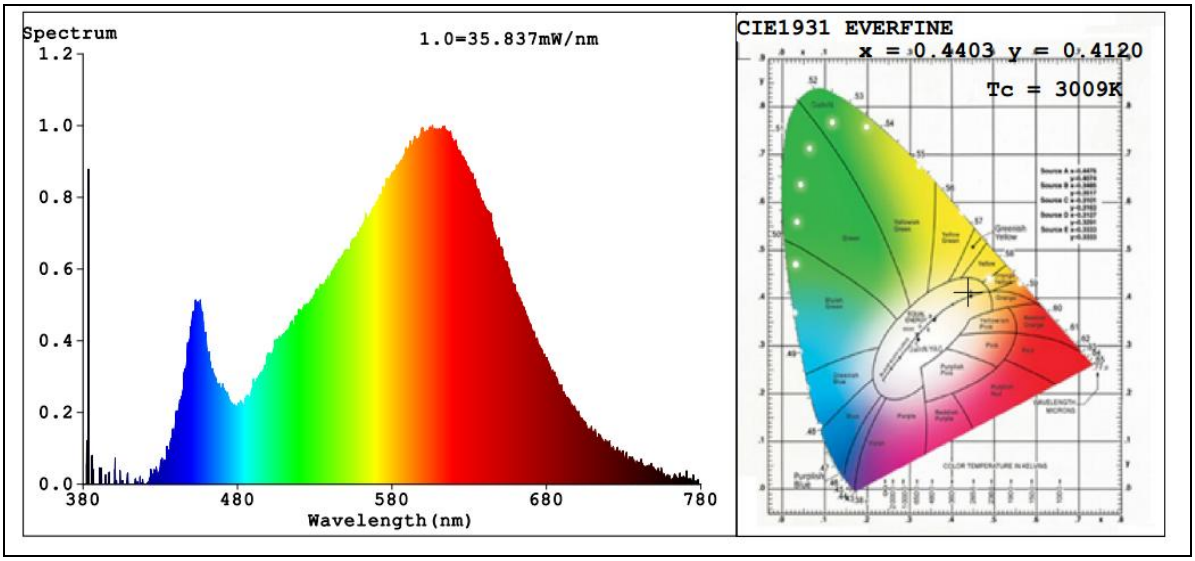
Spectral Power Distribution and Chromaticity Diagram



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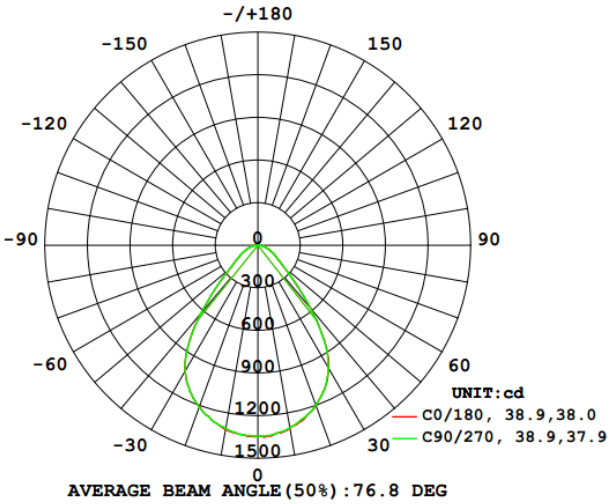
Zonal Lumen Tabulation



Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	996.9	46.2%
0-40	1,508.2	69.8%
0-60	1,980.9	91.7%
60-90	178.4	8.3%
70-100	71.2	3.3%
90-120	0.0	0%
0-90	2,159.2	100%
90-180	0.1	0%
0-180	2,159.3	100%

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	126.6	5.9%	90-100	0.0	0%
10-20	355.8	16.5%	100-110	0.0	0%
20-30	514.5	23.8%	110-120	0.0	0%
30-40	511.3	23.7%	120-130	0.0	0%
40-50	306.9	14.2%	130-140	0.0	0%
50-60	165.8	7.7%	140-150	0.0	0%
60-70	107.1	5.0%	150-160	0.0	0%
70-80	57.2	2.6%	160-170	0.0	0%
80-90	14.1	0.7%	170-180	0.0	0%

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2.2 Electrical, Photometric and Chromaticity Measurements *(Refer to Work Instruction QD25)*	IES LM-79 2008

Test date	2016-01-12	Test Ambient:	25.0 ℃
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	CLED6A/P/R-28 WITH TCLD628HZ(CLKT628)(4000K)		

Electrical Measurement:

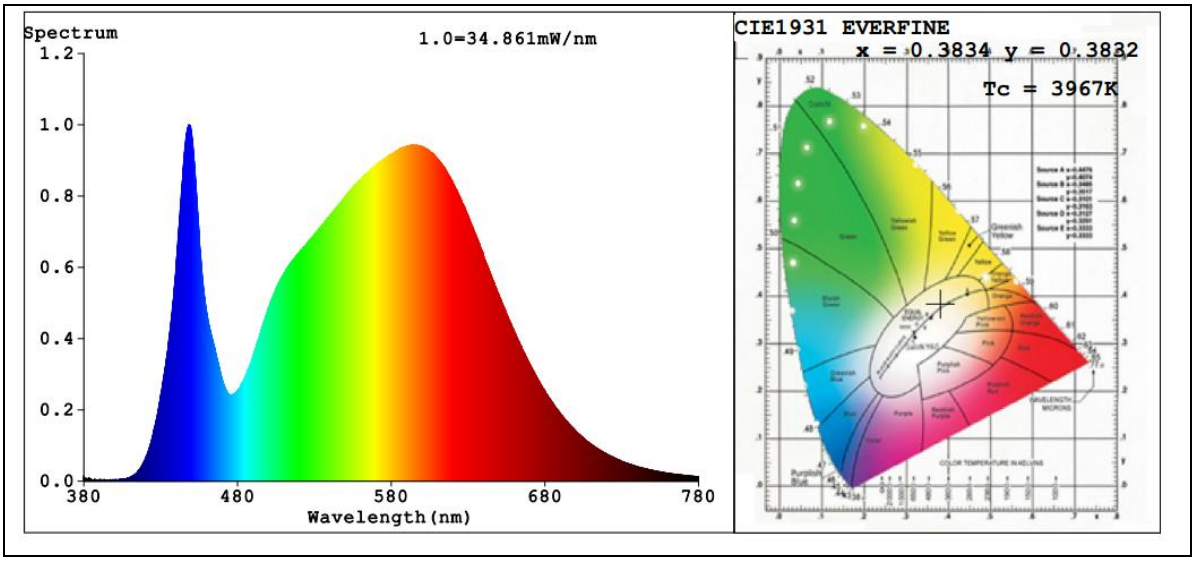
Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
GZE160118-C4	120.0	60	0.2611	31.08	0.9918

Sphere-Spectroradiometer Method:

Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
Color Rendering Index (CRI)	82.8
R9	12
CCT (K)	3967
Chromaticity (x, y)	x=0.3834 y=0.3832
Chromaticity (u', v')	u'=0.2245 v'=0.5048
Duv	0.0021
Total Luminous (lm)	2206
Luminous Efficacy (lm/W)	70.98

Special Color Rendering Indices			
R1	81	R9	12
R2	87	R10	71
R3	93	R11	82
R4	83	R12	64
R5	81	R13	82
R6	83	R14	96
R7	87	R15	75
R8	67	--	--

Spectral Power Distribution and Chromaticity Diagram



2.2 Color Spatial Uniformity	IES LM-79 2008 ENERGY STAR® Program Requirements Product Specification for Luminaires (Light Fixtures) - Version 2.0

Test Data (Model CLED6A/P/R-28 WITH TCLD628HZ(CLKT628)(3000K)):

Test date	2016-01-12	Test Ambient	25.1°C
Sample No.		Maximum Δu'v'	
GZE160118-C1		0.0037	

Gamma\C	CIE u'	CIE v'	du'v'	CIE u'	CIE v'	du'v'
-62	0.2442	0.5204	0.0037	0.2443	0.5204	0.0037
-61	0.2443	0.5205	0.0036	0.2444	0.5205	0.0036
-60	0.2444	0.5206	0.0035	0.2444	0.5205	0.0035
-59	0.2446	0.5207	0.0033	0.2446	0.5207	0.0032
-58	0.2446	0.5208	0.0032	0.2447	0.5208	0.0031
-57	0.2447	0.5209	0.0031	0.2448	0.5209	0.003
-56	0.2451	0.5211	0.0027	0.2449	0.5209	0.0029
-55	0.2452	0.5211	0.0026	0.2452	0.521	0.0026
-54	0.2452	0.5212	0.0025	0.2452	0.521	0.0026
-53	0.2453	0.5212	0.0025	0.2452	0.5211	0.0026
-52	0.2453	0.5212	0.0025	0.2454	0.521	0.0024
-51	0.2455	0.5212	0.0022	0.2453	0.5209	0.0025

-50	0.2454	0.5212	0.0023	0.2452	0.5208	0.0026
-49	0.2454	0.521	0.0024	0.2453	0.5207	0.0026
-48	0.2453	0.5208	0.0026	0.2453	0.5206	0.0027
-47	0.2454	0.5208	0.0024	0.2455	0.5205	0.0025
-46	0.2455	0.5207	0.0024	0.2455	0.5205	0.0025
-45	0.2455	0.5206	0.0024	0.2459	0.5205	0.0022
-44	0.2458	0.5207	0.0022	0.246	0.5206	0.002
-43	0.2459	0.5207	0.0021	0.2464	0.5207	0.0016
-42	0.2463	0.5208	0.0017	0.2465	0.5208	0.0015
-41	0.2465	0.5209	0.0014	0.2469	0.5209	0.0011
-40	0.2468	0.521	0.0012	0.2471	0.521	0.0008
-39	0.2471	0.5212	0.0008	0.2475	0.5212	0.0005
-38	0.2473	0.5213	0.0005	0.2476	0.5213	0.0004
-37	0.2478	0.5215	0.0002	0.2478	0.5214	0.0003
-36	0.2479	0.5216	0.0002	0.2479	0.5215	0.0003
-35	0.248	0.5217	0.0003	0.2483	0.5217	0.0006
-34	0.2483	0.5218	0.0006	0.2484	0.5218	0.0007
-33	0.2484	0.5219	0.0007	0.2485	0.5219	0.0008
-32	0.2484	0.5219	0.0008	0.2487	0.522	0.001
-31	0.2487	0.5221	0.0011	0.2487	0.522	0.001

-30	0.2487	0.5221	0.0011	0.2486	0.522	0.001
-29	0.2487	0.5221	0.0011	0.2486	0.522	0.001
-28	0.2486	0.5221	0.001	0.2486	0.522	0.001
-27	0.2487	0.5221	0.001	0.2487	0.5221	0.0011
-26	0.2486	0.5221	0.001	0.2487	0.5221	0.001
-25	0.2486	0.5221	0.0009	0.2487	0.522	0.0011
-24	0.2485	0.5221	0.0009	0.2486	0.522	0.001
-23	0.2485	0.5221	0.0009	0.2486	0.522	0.001
-22	0.2485	0.522	0.0009	0.2486	0.5221	0.001
-21	0.2484	0.522	0.0008	0.2486	0.522	0.001
-20	0.2485	0.522	0.0009	0.2486	0.522	0.0009
-19	0.2485	0.5221	0.0009	0.2486	0.522	0.001
-18	0.2486	0.5221	0.001	0.2486	0.522	0.0009
-17	0.2486	0.5221	0.001	0.2486	0.522	0.001
-16	0.2486	0.5221	0.001	0.2485	0.522	0.0009
-15	0.2485	0.5221	0.0009	0.2486	0.522	0.001
-14	0.2486	0.5221	0.001	0.2485	0.522	0.0009
-13	0.2485	0.5221	0.0009	0.2486	0.522	0.0009
-12	0.2486	0.5221	0.0009	0.2486	0.522	0.0009
-11	0.2485	0.5221	0.0009	0.2485	0.522	0.0008

-10	0.2485	0.5221	0.0009	0.2486	0.522	0.0009
-9	0.2486	0.5221	0.0009	0.2485	0.522	0.0009
-8	0.2485	0.5221	0.0009	0.2486	0.522	0.0009
-7	0.2486	0.5221	0.001	0.2485	0.522	0.0008
-6	0.2485	0.5221	0.0009	0.2485	0.522	0.0009
-5	0.2486	0.5221	0.001	0.2485	0.522	0.0008
-4	0.2485	0.5221	0.0009	0.2485	0.522	0.0008
-3	0.2486	0.522	0.001	0.2485	0.522	0.0008
-2	0.2486	0.522	0.0009	0.2485	0.522	0.0008
-1	0.2485	0.522	0.0009	0.2485	0.522	0.0009
0	0.2486	0.5221	0.001	0.2486	0.5221	0.001
1	0.2486	0.522	0.0009	0.2485	0.522	0.0008
2	0.2486	0.522	0.0009	0.2484	0.522	0.0008
3	0.2486	0.522	0.001	0.2484	0.522	0.0008
4	0.2485	0.522	0.0008	0.2485	0.522	0.0009
5	0.2486	0.522	0.0009	0.2485	0.522	0.0008
6	0.2485	0.522	0.0008	0.2486	0.522	0.0009
7	0.2486	0.522	0.001	0.2486	0.522	0.0009
8	0.2485	0.522	0.0009	0.2486	0.522	0.0009
9	0.2485	0.522	0.0008	0.2485	0.522	0.0009

10	0.2486	0.522	0.0009	0.2485	0.522	0.0008
11	0.2486	0.522	0.001	0.2485	0.522	0.0008
12	0.2486	0.522	0.0009	0.2485	0.522	0.0009
13	0.2486	0.522	0.0009	0.2486	0.522	0.0009
14	0.2485	0.522	0.0009	0.2485	0.522	0.0009
15	0.2484	0.522	0.0008	0.2485	0.522	0.0008
16	0.2484	0.522	0.0008	0.2485	0.522	0.0008
17	0.2484	0.522	0.0008	0.2485	0.522	0.0009
18	0.2485	0.522	0.0009	0.2485	0.522	0.0009
19	0.2485	0.522	0.0008	0.2485	0.522	0.0009
20	0.2484	0.522	0.0008	0.2485	0.522	0.0008
21	0.2486	0.522	0.0009	0.2485	0.522	0.0009
22	0.2484	0.522	0.0008	0.2484	0.522	0.0007
23	0.2486	0.522	0.0009	0.2484	0.522	0.0008
24	0.2485	0.522	0.0009	0.2484	0.522	0.0008
25	0.2485	0.522	0.0009	0.2484	0.522	0.0008
26	0.2485	0.522	0.0009	0.2485	0.522	0.0009
27	0.2484	0.522	0.0008	0.2485	0.522	0.0008
28	0.2485	0.522	0.0008	0.2485	0.522	0.0009
29	0.2484	0.522	0.0008	0.2486	0.5221	0.0009

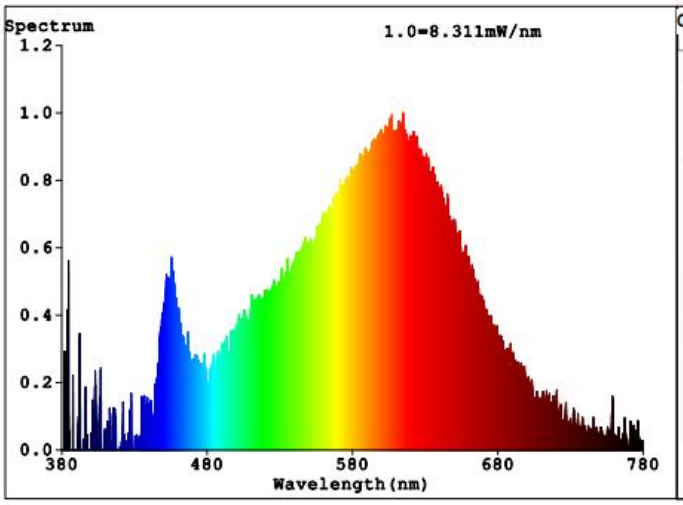
30	0.2485	0.522	0.0009	0.2485	0.522	0.0009
31	0.2485	0.522	0.0008	0.2485	0.522	0.0009
32	0.2485	0.5219	0.0008	0.2485	0.522	0.0009
33	0.2485	0.5219	0.0008	0.2482	0.5218	0.0005
34	0.2483	0.5219	0.0007	0.2481	0.5218	0.0004
35	0.2482	0.5217	0.0005	0.248	0.5217	0.0003
36	0.2481	0.5216	0.0004	0.2479	0.5216	0.0002
37	0.2477	0.5215	0.0002	0.2476	0.5215	0.0001
38	0.2476	0.5214	0.0003	0.2472	0.5213	0.0006
39	0.2474	0.5212	0.0006	0.2471	0.5212	0.0007
40	0.247	0.5211	0.0009	0.2469	0.5211	0.001
41	0.2468	0.521	0.0011	0.2465	0.521	0.0013
42	0.2464	0.5208	0.0016	0.2462	0.5209	0.0017
43	0.2463	0.5207	0.0017	0.2461	0.5208	0.0018
44	0.2459	0.5206	0.0021	0.2459	0.5208	0.002
45	0.2457	0.5206	0.0022	0.2455	0.5207	0.0024
46	0.2455	0.5206	0.0025	0.2455	0.5207	0.0024
47	0.2455	0.5206	0.0025	0.2454	0.5207	0.0025
48	0.2454	0.5207	0.0025	0.2455	0.5209	0.0024
49	0.2455	0.5208	0.0024	0.2455	0.521	0.0023

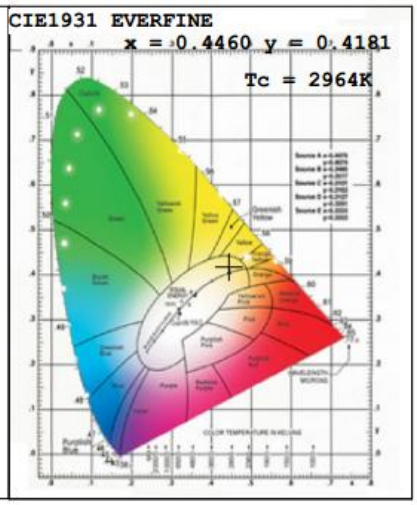
50	0.2454	0.521	0.0024	0.2454	0.521	0.0024
51	0.2455	0.5211	0.0023	0.2455	0.5211	0.0022
52	0.2456	0.5213	0.0021	0.2455	0.5212	0.0022
53	0.2455	0.5213	0.0023	0.2456	0.5212	0.0022
54	0.2455	0.5213	0.0022	0.2456	0.5212	0.0022
55	0.2455	0.5213	0.0023	0.2456	0.5211	0.0022
56	0.2453	0.5212	0.0025	0.2453	0.521	0.0025
57	0.2452	0.5211	0.0025	0.2453	0.5209	0.0026
58	0.2451	0.521	0.0027	0.2452	0.5208	0.0027
59	0.245	0.5209	0.0028	0.245	0.5206	0.0029
60	0.2448	0.5208	0.0031	0.245	0.5205	0.003
61	0.2447	0.5207	0.0032	0.2448	0.5204	0.0032
62	0.2446	0.5206	0.0033	0.2448	0.5203	0.0033

3. Electrical and Photometric Measurements, with dimming	IES LM-79 2008 ENERGY STAR® Program Requirements Product Specification for Luminaires (Light Fixtures) - Version 2.0

Test date	2015-11-11	Test Ambient:	25.1°C
Dimmer Model		LEVITON MFG CO INC (E31373), Cat. No. 6681	

Sample No.	Input	Luminous flux (lm)	CCT (K)	CRI	P.F.
GZE160118-C1	120.0 V / 60 Hz	423.1	2964	85.7	0.3839
GZE160118-C2	120.0 V / 60 Hz	414.7	2951	85.1	0.3775
GZE160118-C3	120.0 V / 60 Hz	389.6	3007	86.6	0.3692
Average		409.1	2974	85.8	0.3769





Color Parameters:

Chromaticity Coordinate:x=0.4460 y=0.4181/u'=0.2504 v'=0.5281

Tc=2964K(Duv=0.0043) Dominant WL:Ld =581.6nm Purity=59.4%

Peak WL:Lp=614.9nm HWL:Lhd=127.6nm

Render Index:Ra=85.7 CRI=80.7

R1 =84	R2 =93	R3 =98	R4 =83	R5 =84	R6 =91	R7 =86	
R8 =66	R9 =24	R10=83	R11=83	R12=68	R13=86	R14=99	R15=77

The luminaires [can] ~~[can not]~~ provide less than 20% of total light output with continuous dimmer.

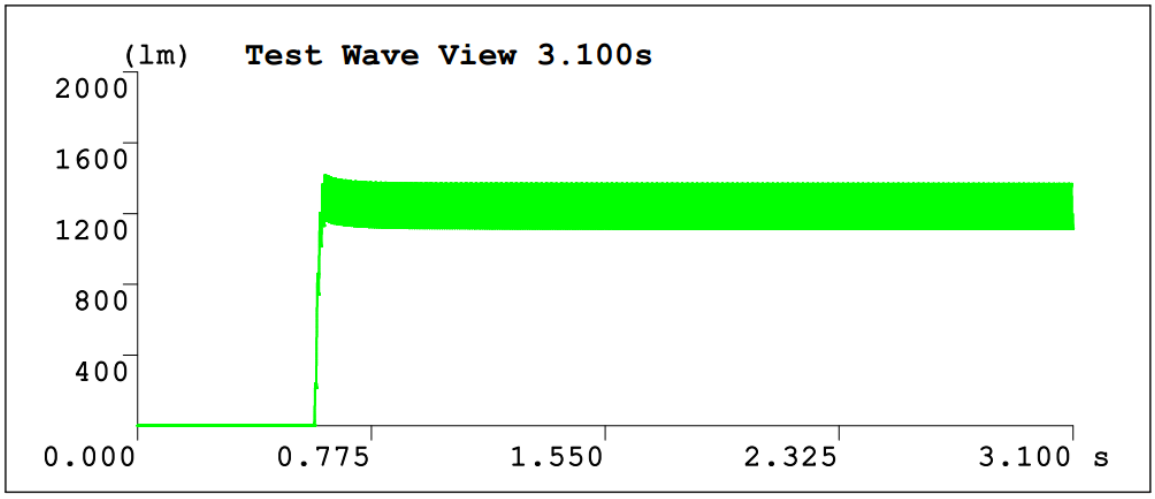
Dimmer	Peak Noise Reading (dBA)	Test Condition	Distance between the microphone and the UUT
LEVITON MFG CO INC (E31373), Cat. No. 6681	19.9	Dimmer adjusted to lowest light output	< 1 m

4 Operating Frequency	ENERGY STAR® Program Requirements Product Specification for Luminaires (Light Fixtures) - Version 2.0
Noted: This test and data are not covered by NVLAP accreditation	

Test date	2016-01-12	Test Ambient:	25.1°C

Sample No.	Operating Frequency (Hz)
GZE160118-C1	120.12
GZE160118-C2	120.14
GZE160118-C3	120.06
Average	120.11

Graph:



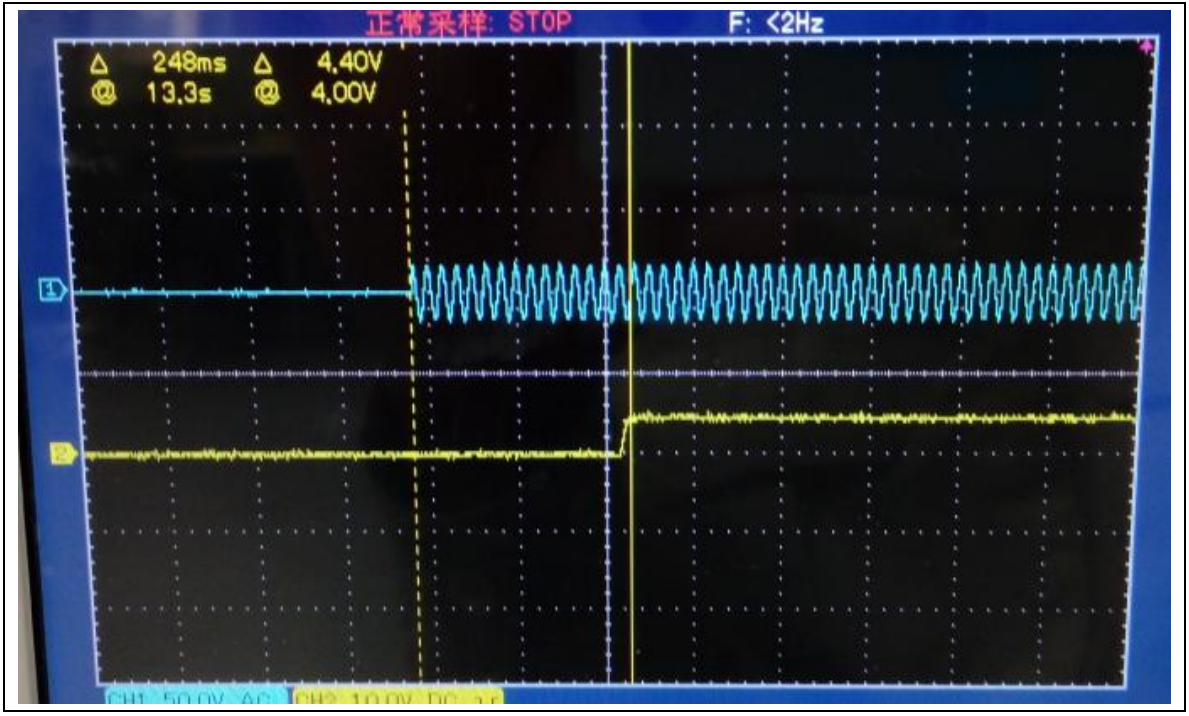
Time:2.000s 1130.1lm
Luminous Flux: 1004 lm Integral: 3111 lm.s Peak : 1415 lm
Frequency: 120.12 Hz

5 Starting Time *(Refer to Work Instruction QD28)*	ENERGY STAR® Program Requirements Product Specification for Luminaires (Light Fixtures) - Version 2.0

Test date	2016-01-12	Test Ambient:	25.1°C

Sample No.	Start Time (ms)
GZE160118-C1	248
GZE160118-C2	253
GZE160118-C3	261
Average	254

Graph (Start Time):



6. Transient Protection Test *(Refer to Work Instruction QD34)*	ANSI/IEEE C62.41 ENERGY STAR® Program Requirements for Luminaires – Version 2.0

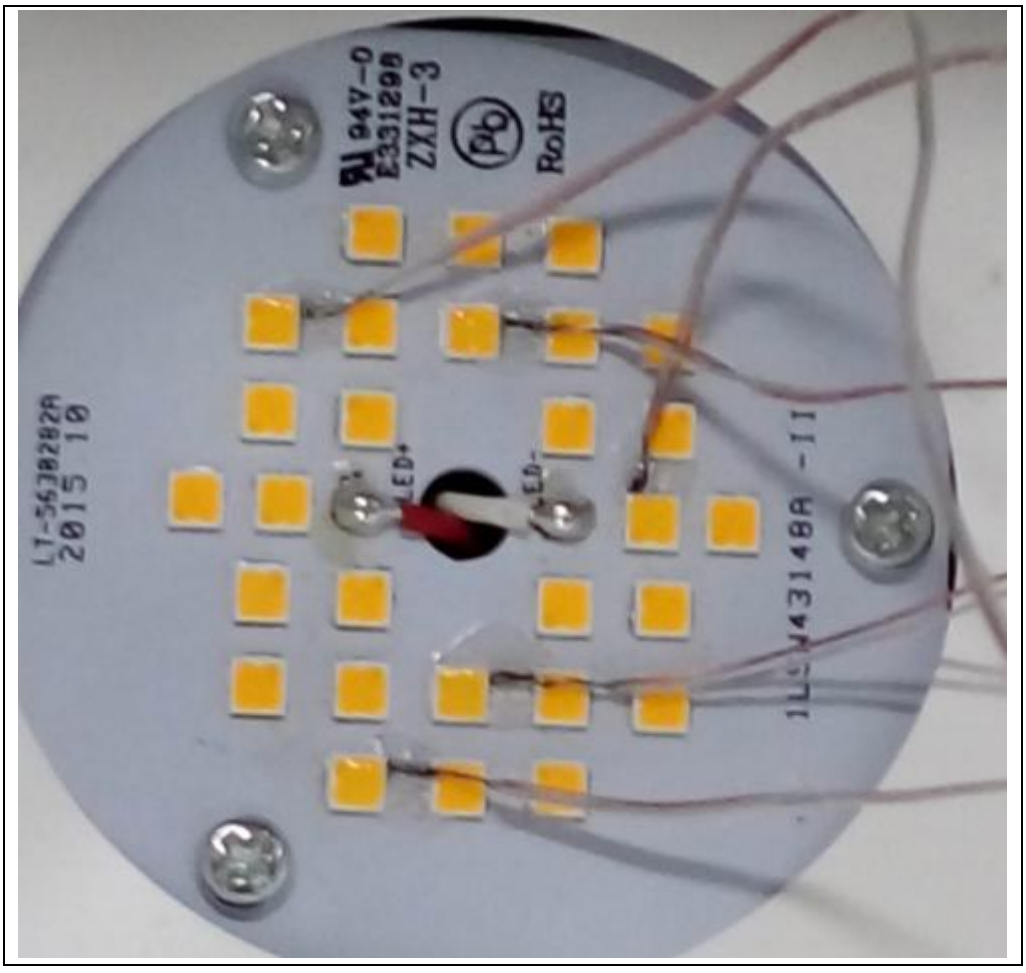
Test voltage: 120V,60Hz

Test date	2016-01-16	Test Ambient	25.1°C
Sample No.		Transient Protection Test - Seven Strikes	
GZE160118-C1		Pass	
GZE160118-C2		Pass	
GZE160118-C3		Pass	

7.1 In-Situ Temperature Measurement Test (ISTMT)	UL1993-2012, 4th Edition

Test date	2016-01-12	Test Ambient	25.1°C
Input Vol./Frequency	120 V / 60 Hz	Output Current of Driver(mA)	151
Sample No.	LED Package Model	Maximum Measured LED Ts Point Temperature (°C)	Maximum LED Ts Point Temperature Limited (°C)
GZE160118-C1	STWxC2SB	63.9	105

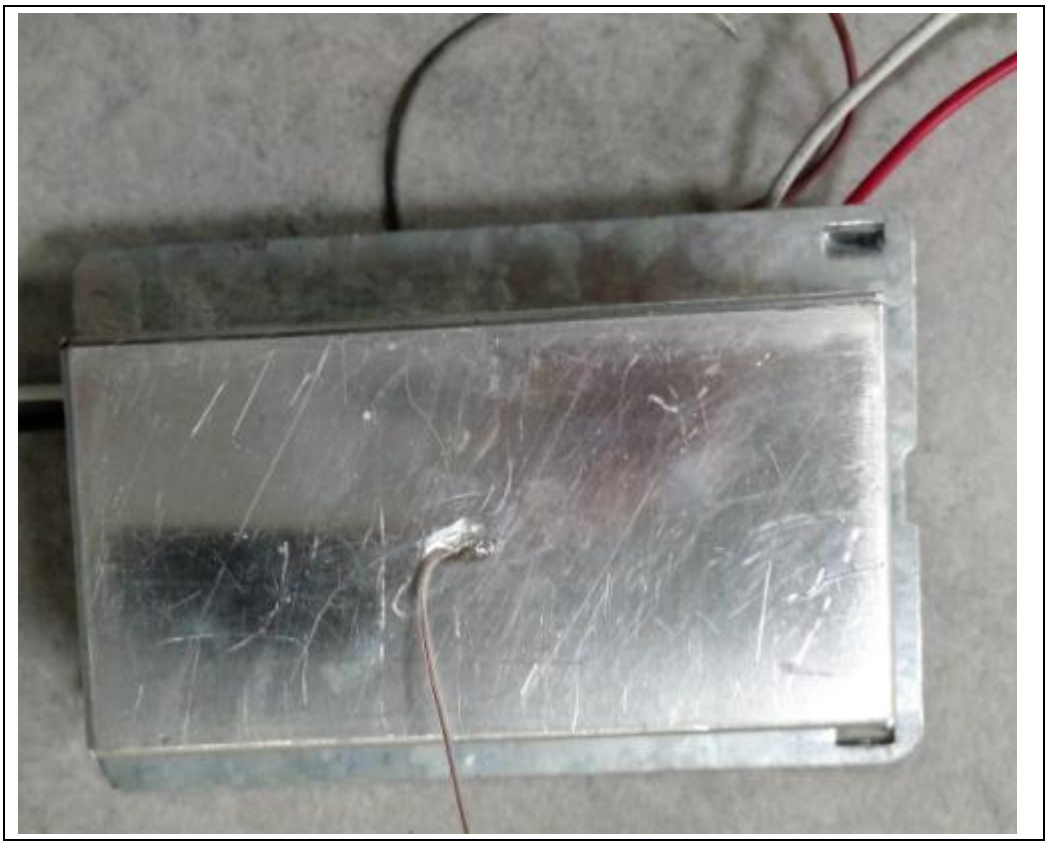
In-Situ Picture - Ts:



7.2 Maximum Measured Ballast or Driver Case Temperature	UL1598-2008, 3rd Edition UL1993-2012, 4th Edition

Test date	2016-01-12	Test Ambient	25.1°C
Sample No.	Maximum Measured Driver Case Temperature (°C)	Maximum Driver Case Temperature Limited (°C)	
GZE160118-C1	68.7	105	

In-Situ Picture - Ts:



8. Test Equipment

Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
ST-R-336	2 meter Integrating Sphere	2015-07-01	2016-06-30
ST-R-331	Spectral analysis system HAAS-2000	2015-07-01	2016-06-30
EE-09	Goniophotometer system	2015-07-01	2016-06-30
D908S	Standard Lamp	2015-07-01	2016-06-30
D204	Standard Lamp	2015-07-01	2016-06-30
PF2010	Power Meter for Integrating Sphere	2015-07-01	2016-06-30
PF210	Power Meter for Goniophotometer	2015-07-01	2016-06-30
EE-015	Flux Meter	2015-07-01	2016-06-30
ST-R-277	Oscillograph	2015-07-01	2016-06-30
ST-R-EM01	Surge Generator	2015-07-01	2016-06-30
ST-R-EM02	EMC Coupler/Decoupler Module	2015-07-01	2016-06-30
Uncertainty Photometric Measurement (Sphere):1.74% Chromaticity Measurement(Sphere):14.3K Photometric Measurement(Goniophotometer):1.62%			

****** END OF DATASHEET PACKAGE ******