



TL-749



TEST REPORT

For

LED ONE CORPORATION

12437 Bellegrave Ave Eastvale CA US 91752

Model Number:	LOC-2FTLHB-160W35KD LOC-2FTLHB-160W40KD LOC-2FTLHB-160W50KD	
Report Type:	Electrical, Photometric and ISTMT tests according to the following standards and show the compliance to DLC Program SSL Technical Requirements V5.1	
Standards:	IES LM-79-08: Approved Method: Electrical & Photometric Measurement of Solid-state Lighting Products ANSI C82.77-10-2014: Harmonic Emission Limits – Related Power Quality Requirements for Lighting ANSI/UL 1598-2008: Standard for Safety of Luminaires CIE 190:2010 Calculation and presentation of unified glare rating tables for indoor lighting luminaires IES TM-30-18: IES Method for Evaluating Light Source Color Rendition	
Test Engineer:	Bay Wang	
Report Number:	PKS210216016-10	
Sample Size:	One sample was received on 2020-08-03 and used for testing.	
Test Date:	2020-08-17	
Report Date:	2021-02-20	
Reviewed By:	Seven Xia/ EE Engineer	
Prepared By:	Bay Area Compliance Laboratories Corp. (Kunshan). No.248 Chenghu Road, Kunshan, Jiangsu province, China. Tel: +86-0512-86175000 Fax:+86-0512-88934268	

1. Product Information and Description

Product Primary Use:	High Bay Luminaires (Commercial and Industrial)
Voltage And Frequency:	120-277VAC, 50/60Hz
#LED Source Manufacturer:	Lumileds Holding B.V.
#LED Source Model:	L128-xx80RA35000Q1
Driver Model:	VDU80CC175V46DL1
Auxiliary Ballast Model:	NA
Auxiliary Housing Model:	NA
White Tunable:	No
Field-Adjustable Light Output:	No

Note:

- The applicant LED ONE CORPORATION declared that their products are the same to the product in report# RKSB200803009-10 and is authorized by original applicant to use their test data.
- All the data in previous report (RKSB200803009-10) is shared in report

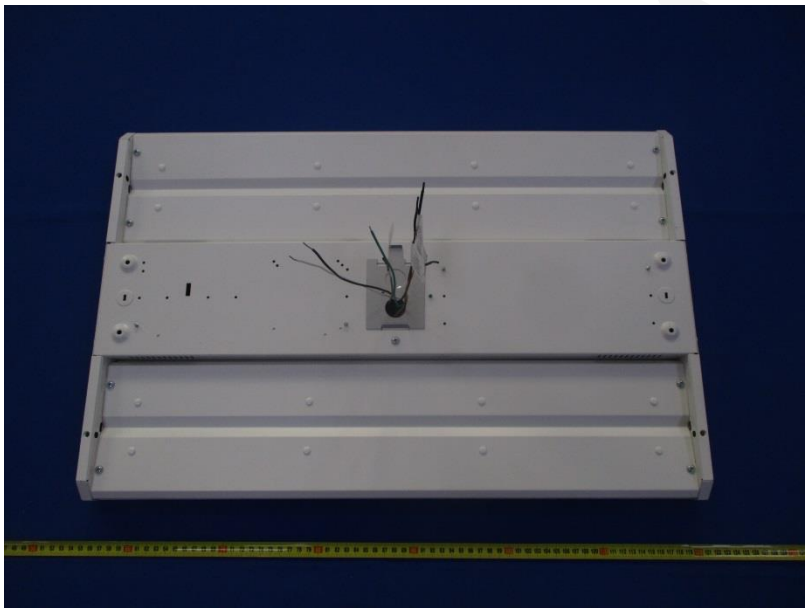
2. Product Rated Values

Test Model	CCT(K)	Light Output (lm)	Power(W)	Luminous Efficacy (lm/W)
LOC-2FTLHB-160W35KD	3500	21168	160	132.3
LOC-2FTLHB-160W40KD	4000	21600	160	135
LOC-2FTLHB-160W50KD	5000	22080	160	138

3. Test List

Test Model	Test Item			
	Goniophotometer Test	Integrating Sphere Test	THDi and PF Test	In-Situ Temperature Measurement Test
LOC-2FTLHB-160W35KD	NA	Yes	Yes	NA

4. Product Photo



5. Test Result

<u>Integrating Sphere Test; Orientation: Downward; Test Voltage: 120V 60Hz:</u>				
Test Item	Test Result	DLC Requirements	DLC Requirements(With tolerances only)	Conclusion
Light Output(lm)	21167	≥10000	≥9000	Pass
Power(W)	159.7	None.	None.	N/A
Total Efficacy(lm/W)	132.54	≥135	≥130.95	Pass
CCT(K)	3481	3220~3710	No tolerances	Pass
Duv	-0.0000742	-0.0055~0.0065	No tolerances	Pass
IES R _f	82	70	69	Pass
IES R _g	93	89	88	
IES Rcs,h1	-14%	-18%~23%	-19%~22%	
R _a	79.7	≥70	≥69	
R ₉	-9	≥-40	≥-41	

<u>Integrating Sphere THDi、PF Test; Orientation: Downward;</u>					
Test Voltage	Test Item	Test Result	DLC Requirements	DLC Requirements(With tolerances and/or allowances)	Conclusion
120	Power Factor	0.9968	≥0.9	≥0.87	Pass
120	THDi	4.68%	≤20%	≤25%	Pass
277	Power Factor	0.9623	≥0.9	≥0.87	Pass
277	THDi	6.19%	≤20%	≤25%	Pass

Note:

1. The test results were measured directly from the test equipment.
2. The DLC requirements were listed according to DLC Technical Requirements V5.1.
3. The conclusion is for reference only. Test report that indicate product performance meets DLC Technical Requirements do not represent official DLC product qualification. All decisions regarding product qualification are made by the DLC.

Test Data

[Integrating Sphere System]

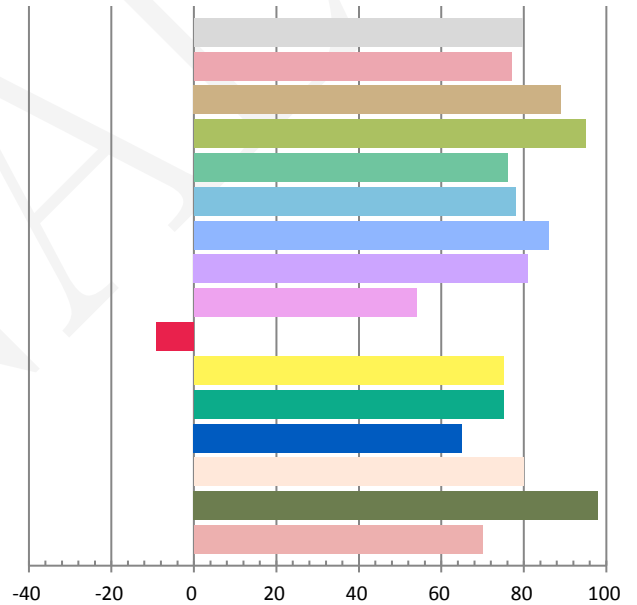
Photometric and Electrical Measurement Result

Voltage (V)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	Luminous Flux(lm)	Efficacy (lm/W)
119.9	60	1.336	159.7	0.9968	21167	132.54

Radiant Flux (W)	CCT (K)	Duv	x	y	u'	v'
62.507	3481	-0.0000742	0.4063	0.3911	0.2362	0.5115

Color Rendering Index

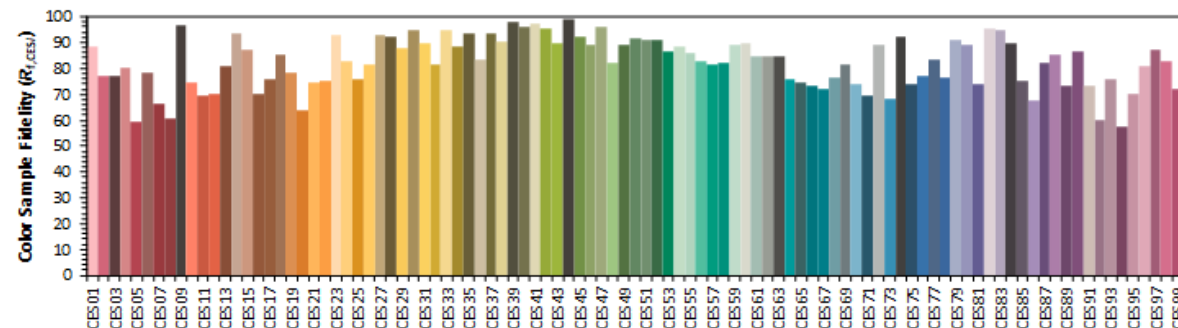
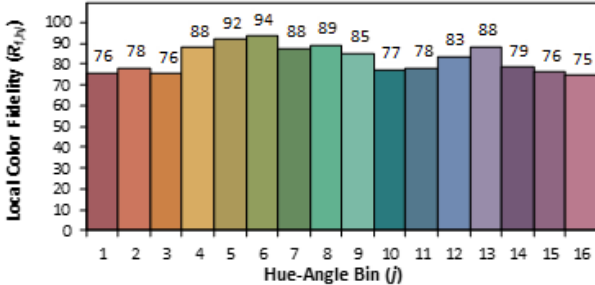
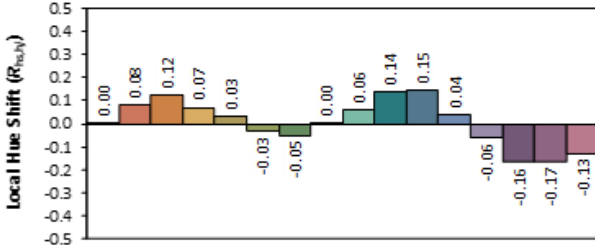
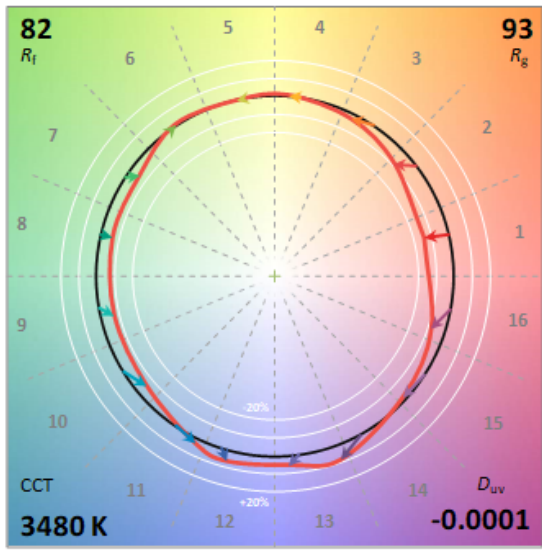
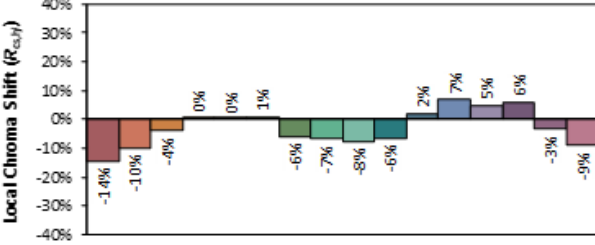
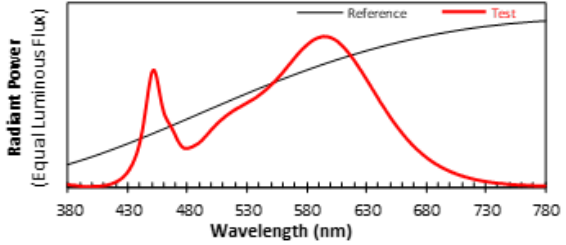
Ra			
79.7			
R1	R2	R3	R4
77	89	95	76
R5	R6	R7	R8
78	86	81	54
R9	R10	R11	R12
-9	75	75	65
R13	R14	R15	
80	98	70	



ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD
Date: 2020/8/17

Manufacturer: LED ONE CORPORATION
Model: LOC-2FTLHB-160W35KD

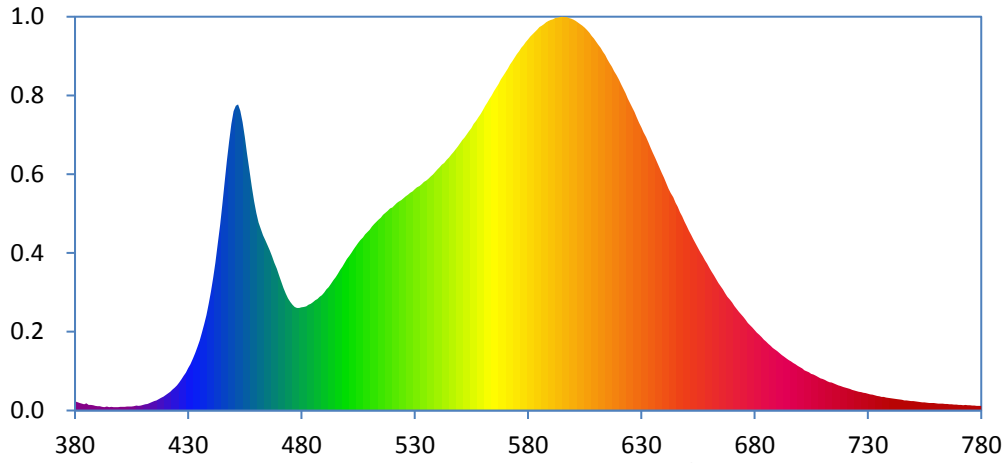


Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

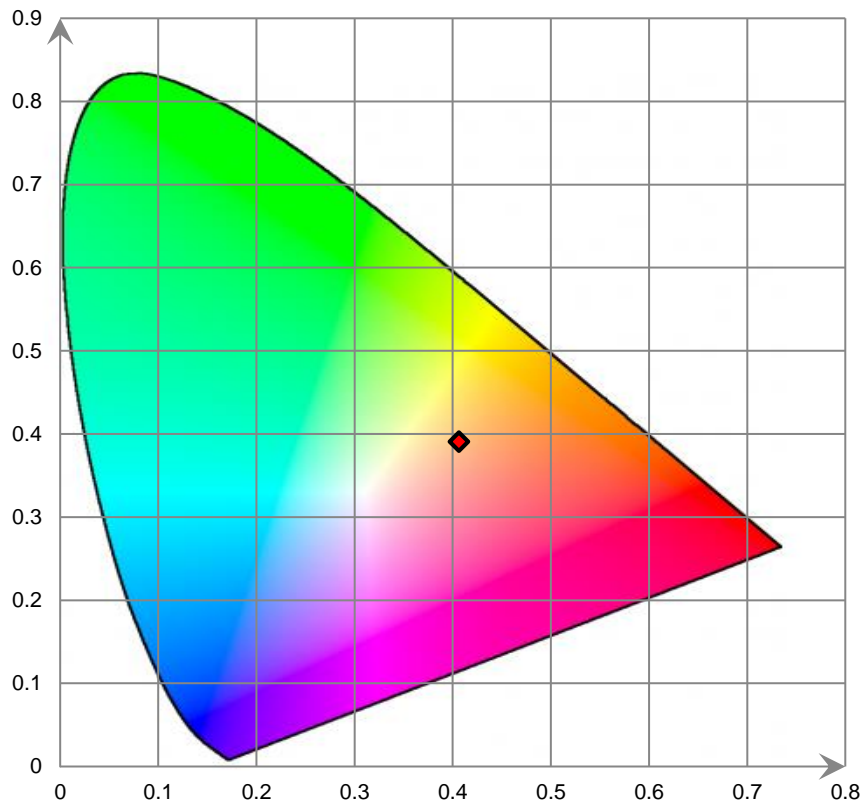
x	0.4063	CIE 13.3-1995 (CRI)	
y	0.3909		
u'	0.2363		
v'	0.5115		
		R_a	80
		R_g	-10

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

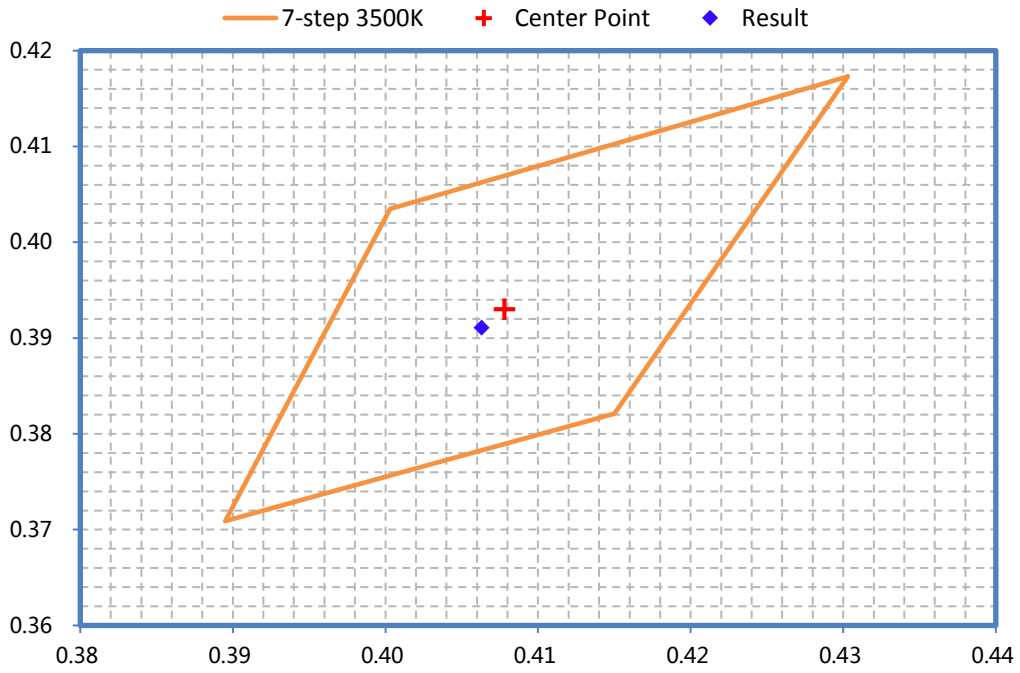
Relative Spectral Power Distribution



CIE 1931 x y Chromaticity Diagram



ANSI C78.377-2017 Chromaticity Quadrangles



6. Description of Test Equipment

Device	Manufacture	Model No	Serial No	Calibration date	Calibration due date
2.0m integrating sphere	EVERFINE	R98	G121960CS1361154D	2019-12-24	2020-12-23
spectroradiometer	EVERFINE	HAAS-2000	M12048CS1361148	2019-12-24	2020-12-23
Digital CC&CV DC Power Supply	EVERFINE	WY305	G115986CN1361134	2019-12-20	2020-12-19
Temperature/humidity/clock	KEJIAN	TA298	EE053	2019-12-02	2020-12-01
Standard Light Source	INVENTFINE	N/A	JWWCR020106	2019-11-19	2020-11-18
Digital Power Meter	YOKOGAWA	WT210	91KB35700	2020-04-02	2021-04-01
Intelligence ac power supply	EVERFINE	DPS1005	G119890CS1361121	2020-04-02	2021-04-01

Statement of Traceability: Bay Area Compliance Laboratories Corp. (Kunshan) attested that all calibration has been performed using suitable standards traceable to National Primary Standards and International System of Units (SI).

7. Test Method

Product was tested with no seasoning. All stabilization and measurements were made in compliance with IES LM-79-08. The ambient temperature of the sample was maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$ during measurement. And relative humidity is less than 65%. The product was operated in its intended orientation in application during all testing.

Integrating Sphere System

The system includes AC power source, digital power meter, DC power supply, Spectroradiometer, and integrating sphere. The integrating sphere system is calibrated by standard spectrum light source before measurement. 4 π geometry was used during measurement.

Directions

1. The information marked "superscript #" is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report.
2. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
3. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
4. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.
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*****END OF REPORT*****