

LIGHTING SERVICES INC. TEST REPORT

SCOPE OF WORK LED Performance Testing

MODEL NUMBER LZ-C0619-8030ZM-PT2-TE120W

PROJECT NUMBER G104404589

REPORT NUMBER 104404589CRT-003

ISSUE DATE 8/4/2020 REVISED DATE

TEST DATES 8/3/2020

DOCUMENT CONTROL NUMBER RTTDS-R-AMER-Test-3407 © 2017 INTERTEK







REPORT NUMBER

104404589CRT-003

MODEL NUMBER(s)

LZ-C0619-8030ZM-PT2-TE120W

REPORT RENDERED TO:

LIGHTING SERVICES INC. 2 HOLT DR STONY POINT, NY 10980-1920

STATEMENT OF LIMITATION

NVLAP Lab Code 100402-0. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

AUTHORIZATION

The testing performed was authorized by signed quote number Qu-01095858-0.

TEST STANDARDS

IESNA LM-79 - 2008: Electrical and Photometric Measurements of Solid State Lighting

In Charge of Testing:

Melanie Brittain

Melanie Brittain Senior Associate Engineer Lighting Division

Reviewer:

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Jacki Swiernik Staff Engineer Lighting Division

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SAMPLE INFORMATION

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ITEMS RECEIVED

Control No.	Model No.	Description	Туре	Received
CRT2007291011-001	LZ-C0619-8030ZM-PT2- TE120W	LED Track Light	Production	7/29/2020

TESTED SAMPLE CONFIGURATIONS

Config	Tested Model No.
35°	LZ-C0619-8030ZM-PT2-TE120W

SAMPLE PHOTOS - TESTED CONFIGURATIONS





SUMMARY

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PRODUCT INFORMATION AND SUMMARY OF DATA

Product Model No.:	LZ-C0619-8030ZM-PT2-TE120W
Product Description:	LED Track Light
LED Model No.:	Cree CXB1310
Driver Model No.:	Magtech MD22
Light Source:	LED

Criteria	Results
Light Output (lumens)	726.4
Input Power (W) @ 120 (Vac)	19.40
Lumen Efficacy (lm/W)	37.45
Input Power Factor () @ 120 (Vac)	0.994

TEST METHODS

SEASONING IN SAMPLE ORIENTATION - LED PRODUCTS

No seasoning was performed in accordance with IESNA LM-79.

TYPE C GONIOPHOTOMETER DISTRIBUTION TESTING

A Type C Mirror Goniophotometer system was used to measure the luminous intensity (candela) at each angle of distribution for the EUT. Electrical measurements of the unit were measured using a power analyzer. Each EUT was operated at the rated input voltage of the system in its designated orientation. The ambient temperature was measured at a position near the EUT at equal height and stabilization procedures to LM-79 were followed.

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TYPE C GONIOPHOTOMETER DISTRIBUTION TESTING

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Test Configuration	Tested Model No.	Pass/Fail/NA
35°	LZ-C0619-8030ZM-PT2-TE120W	NA

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS (25°C +/- 1°C)

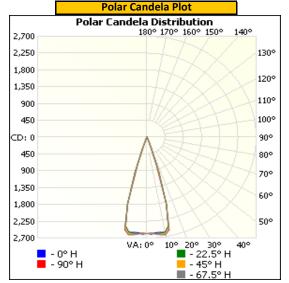
Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (W)	Input Power Factor ()
Up	120.08	162.5	19.40	0.994

Light Output (Im)	Lumen Efficacy (Im/W)
726.4	37.5

INTENSITY SUMMARY - CANDELA

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Angle	0	22.5	45	67.5	90
0	2580	2580	2580	2580	2580
5	2563	2588	2605	2602	2578
10	2581	2580	2612	2649	2650
15	1852	1853	1847	1854	1846
20	306	340	278	234	189
25	53	58	50	50	46
30	25	24	24	24	23
35	15	14	14	14	15
40	8	8	8	8	8
45	4	4	4	4	4
50	1	1	1	1	1
55	0	0	0	0	0
60	0	0	0	0	0
65	0	0	0	0	0
70	0	0	0	0	0
75	0	0	0	0	0
80	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0
95	0	0	0	0	0
100	0	0	0	0	0
105	0	0	0	0	0
110	0	0	0	0	0
115	0	0	0	0	0
120	0	0	0	0	0
125	0	0	0	0	0
130	0	0	0	0	0
135	0	0	0	0	0
140	0	0	0	0	0
145	0	0	0	0	0
150	0	0	0	0	0
155	0	0	0	0	0
160	0	0	0	0	0
165	0	0	0	0	0
170	0	0	0	0	0
175	0	0	0	0	0
180	0	0	0	0	0



Entire luminous intensity matrix found in .IES file

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ILLUMINANCE SUMMARY

		Μοι	unting Height: 10ft
Illuminance - Cor	e Of Light		Isoillumination Plot
Illuminance at a Center Beam fc	Distance Beam Widt	:h	Isofootcandle Plot
Center Beam Fc 893 fc 237 fc 103 fc 57.5 fc 37.4 fc 25.8 fc Vert. Spread: 26.3° Horiz. Spread: 32.4°	Beam Widt 0.8 ft 1.5 ft 2.3 ft 3.1 ft 3.9 ft 4.7 ft	1.0 ft 1.9 ft 2.9 ft 3.9 ft 4.8 ft 5.8 ft	
AENIS			1 2C fc 2.5 fc 0.2 ic 1C fc 1 fc 0.1 ic 5 fc 0.5 fc Distance in units of me are baieth (10fb)

ZONAL LUMENS

Zone	Lumens	Luminaire
0-30	713.9	98.3%
0-40	723.0	99.5%
0-60	726.4	100.0%
60-90	0.0	0.0%
70-100	0.0	0.0%
90-120	0.0	0.0%
0-90	726.4	100.0%
90-180	0.0	0.0%
0-180	726.4	100.0%

Zonal Lumen Summary

Zone	Lumens	Total	Zone	Lumens	Total
0-10	248.3	34.2%	90-100	0.0	0.0%
10-20	430.3	59.2%	100-110	0.0	0.0%
20-30	35.3	4.9%	110-120	0.0	0.0%
30-40	9.1	1.3%	120-130	0.0	0.0%
40-50	3.2	0.4%	130-140	0.0	0.0%
50-60	0.1	0.0%	140-150	0.0	0.0%
60-70	0.0	0.0%	150-160	0.0	0.0%
70-80	0.0	0.0%	160-170	0.0	0.0%
80-90	0.0	0.0%	170-180	0.0	0.0%

Distance in units of mount height (10ft)

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EQUIPMENT LIST

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#	Equipment	Model No	Control No.	Last Cal	Cal Due
1	LSI High Speed Mirror Goniometer	6440		7/21/2020	8/21/2020
2	Elgar AC Power Supply	CW1251		VBU	VBU
3	Yokogawa Power Analyzer	WT210	E464	5/11/2020	5/11/2021
4	Traceable Hygrothermometer	4800	L203	2/17/2020	2/17/2021
5	M-D Building Products Digital Level	Smart Tool	307-L112	5/14/2020	5/14/2021
6	NIST Luminous Intensity Standard Source	NBS10322	N1427	2/11/2019	2/11/2021
7	NIST Luminous Intensity Standard Source	NBS10332	N1435	2/11/2019	2/11/2021
8	NIST Luminous Intensity Standard Source	NBS10265	N1437	2/11/2019	2/11/2021
9	NIST Luminous Flux Standard Source	NBS10428	N1424	1/3/2019	1/3/2021
10	Sorenson DC Power Supply	XG 150-10		VBU	VBU
11	Omega Thermometer	DPi8-C24	M263	2/27/2020	2/27/2021

Note: Standard sources listed above are traceable to NIST: National Institute of Standards and Technology

REVISION HISTORY

#	Revision Date	Updated By	Reviewed By	Description of Change
	None			