

# SONNEMAN - A WAY OF LIGHT TEST REPORT

## SCOPE OF WORK

LED Performance Testing

## MODEL NUMBER

23QxxL130B120PHA

## PROJECT NUMBER

G104393027

## REPORT NUMBER

104393027CRT-046

## ISSUE DATE

8/11/2021

## REVISED DATE

None

## TEST DATES

8/10/2021

## DOCUMENT CONTROL NUMBER

RTTDS-R-AMER-Test-3407

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**REPORT NUMBER**

104393027CRT-046

**MODEL NUMBER(s)**

23QXXL130B120PHA

**REPORT RENDERED TO:**

SONNEMAN - A WAY OF LIGHT  
151 AIRPORT DRIVE  
WAPPINGERS FALLS, NY 12590  
USA

**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-01089188-0.

**TEST STANDARDS**

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

In Charge of Testing:



Gerald Gray  
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Reviewer:



Melanie Brittain  
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**SAMPLE INFORMATION**

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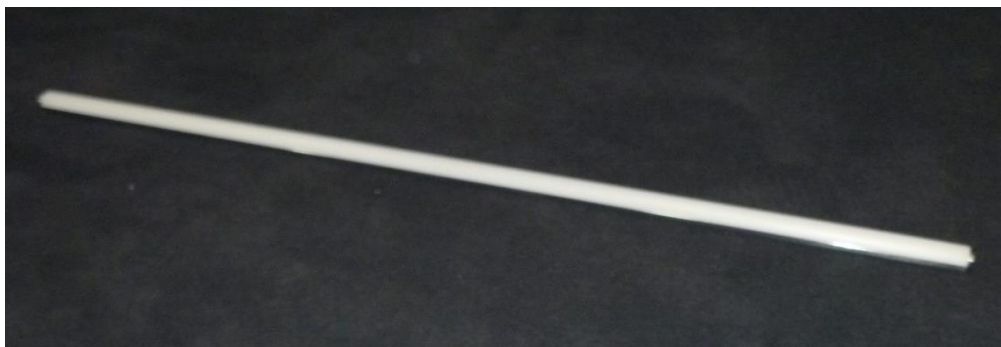
**ITEMS RECEIVED**

Item No.	Control No.	Model No.	Description	Type	Received
1	CRT2107191345-013	23QxxL130B120PHA	Purolinear360 36" Single Linear LED Wall Bar	Production	7/19/2021
xx denotes exterior finish and does not impact performance.					

**TESTED SAMPLE CONFIGURATIONS**

Config No.	Tested Model No.	Item Nos. Utilized
1	23QxxL130B120PHA	1

**SAMPLE PHOTOS - TESTED CONFIGURATIONS**



## SUMMARY

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### PRODUCT INFORMATION AND SUMMARY OF DATA

Product Model No.:	23QxxL130B120PHA
Product Description:	Purolinear360 36" Single Linear LED Wall Bar
LED Model No.:	Not Provided
Driver Model No.:	LTF DS25W24VBF1UD
Light Source:	LED

Criteria	Results
Light Output (lumens)	666.7
Input Power (W) @ 120 (Vac)	12.35
Lumen Efficacy (lm/W)	54.0
Input Power Factor ( ) @ 120 (Vac)	0.956

## 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.

**TYPE C GONIOPHOTOMETER DISTRIBUTION TESTING**

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Test Configuration	Tested Model No.	Pass/Fail/NA
1	23QxxL130B120PHA	NA

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

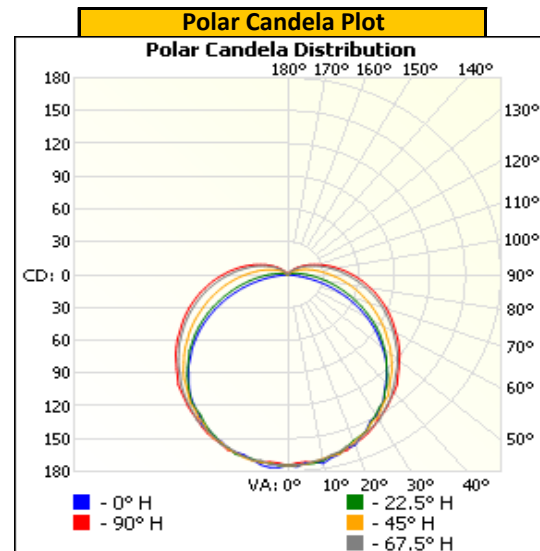
Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (W)	Input Power Factor ( )
Horizontal	120.00	107.7	12.35	0.956

Light Output (lm)	Lumen Efficacy (lm/W)
666.7	54.0

**INTENSITY SUMMARY - CANDELA**

Angle	0	22.5	45	67.5	90
0	174	174	174	174	174
5	173	174	174	174	172
10	175	172	171	172	172
15	170	168	170	168	168
20	166	162	163	165	165
25	157	158	158	159	160
30	150	148	151	154	152
35	141	141	142	146	147
40	129	130	133	138	140
45	118	118	124	129	131
50	105	107	114	121	123
55	91	95	103	112	114
60	77	82	93	103	105
65	62	69	82	93	97
70	46	56	72	84	88
75	31	44	62	76	80
80	16	33	53	66	71
85	5	24	44	58	63
90	0	17	36	50	55
95	0	11	29	43	47
100	0	7	24	36	40
105	0	5	18	30	33
110	0	3	14	24	27
115	0	2	10	19	22
120	0	1	8	14	17
125	0	0	5	11	13
130	0	0	3	8	10
135	0	0	2	5	6
140	0	0	1	3	4
145	0	0	0	1	2
150	0	0	0	0	1
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



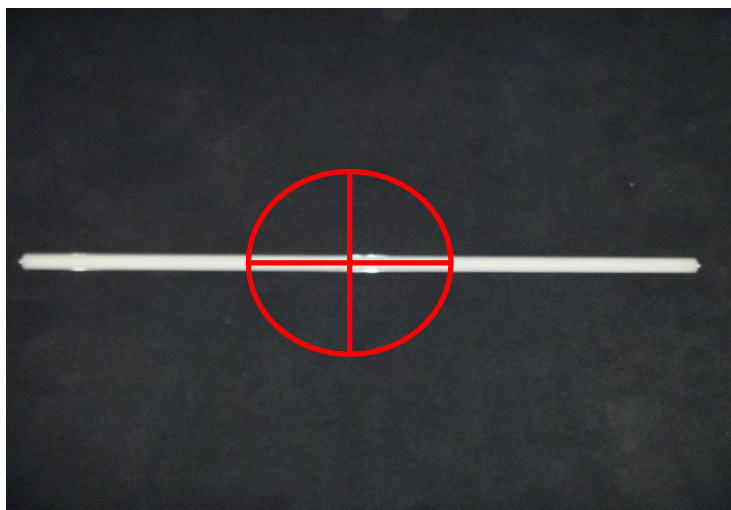
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ORIENTATION AND ALIGNMENT OF EUT

Luminous Opening		
Length (ft)	Width (ft)	Height (ft)
2.93	0.06	0.00
0°-180° H	90°-270° H	0°-180° V

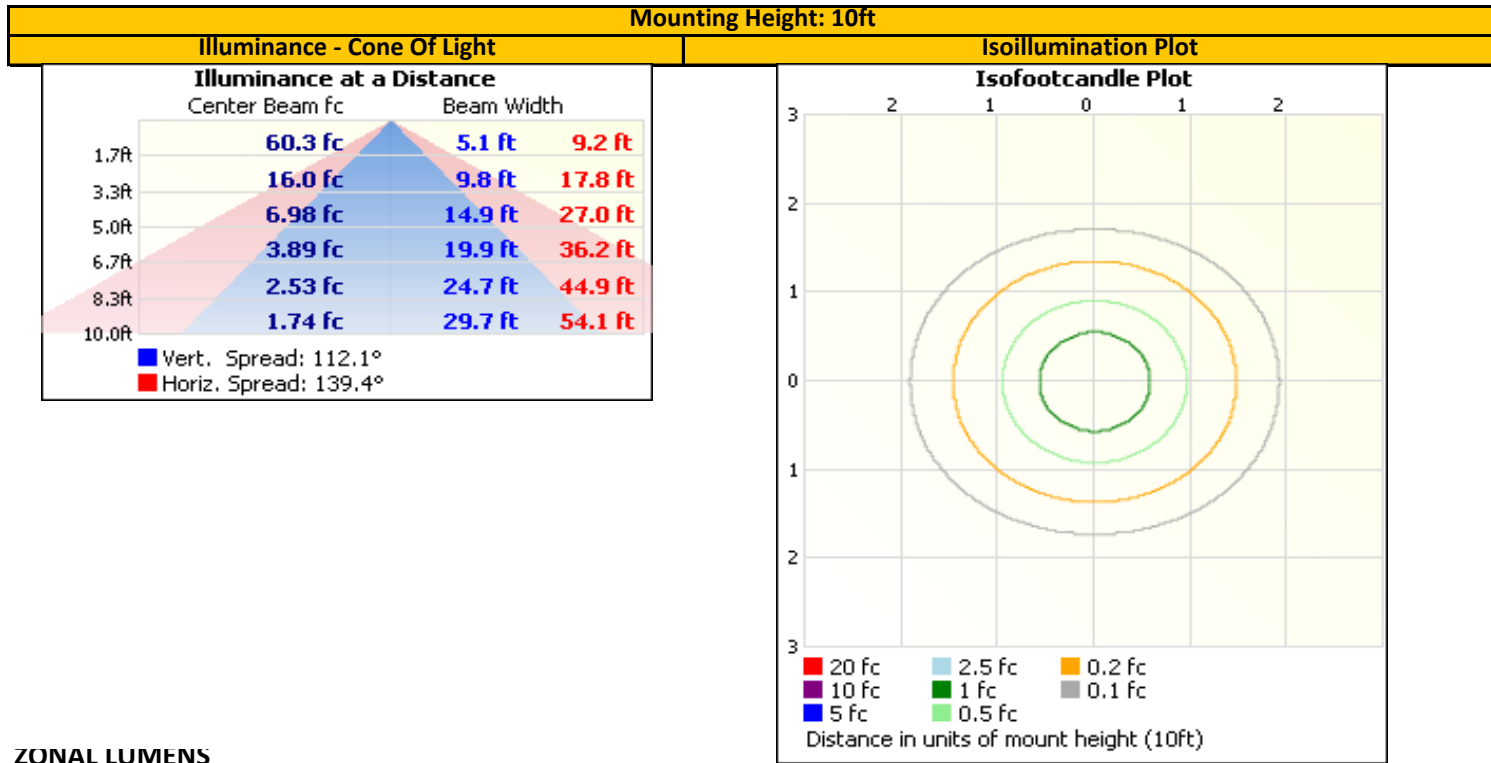
Test Distance (ft)
29.6

PHOTOMETRIC CENTER OF EUT



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ILLUMINANCE SUMMARY



ZONAL LUMENS

Zonal Lumen Summary										
<div></div>	Zone	Lumens	Luminaire	<div></div>	Zone	Lumens	Total	Zone	Lumens	Total
	0-30	136.8	20.5%		0-10	16.5	2.5%	90-100	29.1	4.4%
	0-40	226.3	33.9%		10-20	47.5	7.1%	100-110	18.3	2.7%
	0-60	414.5	62.2%		20-30	72.7	10.9%	110-120	10.4	1.6%
	60-90	186.9	28.0%		30-40	89.5	13.4%	120-130	5.1	0.8%
	70-100	135.8	20.4%		40-50	95.9	14.4%	130-140	2.0	0.3%
	90-120	57.8	8.7%		50-60	92.3	13.9%	140-150	0.4	0.1%
	0-90	601.4	90.2%		60-70	80.2	12.0%	150-160	0.0	0.0%
	90-180	65.3	9.8%		70-80	62.8	9.4%	160-170	0.0	0.0%
	0-180	666.7	100.0%		80-90	43.9	6.6%	170-180	0.0	0.0%

## EQUIPMENT LIST

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#	Equipment	Model No	Control No.	Last Cal	Cal Due
1	LSI High Speed Mirror Goniophotometer	6440	---	5/14/2021	8/14/2021
2	Elgar AC Power Supply	CW1251	---	VBU	VBU
3	Yokogawa Power Analyzer	WT210	E464	5/11/2021	5/11/2022
4	Traceable Hygrothermometer	4800	L204	2/21/2021	2/21/2022
5	Sorenson DC Power Supply	XG 150-10	---	VBU	VBU
6	Omega Thermometer	DPi8-C24	M263	3/23/2021	3/23/2022
7	Bosch Distance Laser	Pro GLM 20	L211	3/3/2021	3/3/2022
8	M-D Building Products Digital Level	Smart Tool	L112	5/26/2021	5/26/2022

## REVISION HISTORY

#	Revision Date	Updated By	Reviewed By	Description of Change
---	None	---	---	---
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