



8165 E Kaiser Blvd. Anaheim, CA 92808
www.lightlaboratory.com

Report No: L012510701



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Issue Date: 1/20/2025

Report Prepared For: 1st Source Lighting
1730 Industrial Dr., Auburn, CA 95603

Reference: N/A

Amendment: N/A

Model Number: BAY-LHB4-3-19000-50K-DAC-U-(PCS)

Test: Photometric/Electrical Test

Standards Used: Appropriate part or all test guidelines were used for test performed:

IESNA LM79: 2019 Approved Methods for Electrical and Photometric Measurements of Solid-State Lighting Products

ANSI NEMA ANSLG C78.377: 2017 Specification of the Chromaticity of Solid State Lighting Products

ANSI C82.77-10:2014: Harmonic Emission Limits-Related Quality Requirements for Lighting Equipment

Description of Sample: Client submitted the sample. Received in working and undamaged condition. No modifications were necessary.

Special Test Condition: Fixture is tested with no special conditions.

Date of Tests: 1/17/25

Seasoning of Sample: No seasoning was performed in accordance with IESNA LM-79.

Equipment List

Equipment Used	Model No	Stock No	Calibration Due Date
Chroma Programmable AC Source	61604	PS-AC02	--
Yokogawa Digital Power Meter	WT210	MT-EL06-S3	6/21/26
HP Power Supply	6032A	PS-DC05-S2	--
Fluke Digital Thermometer	52K/J	MT-TP05	6/25/26
LLI Type C Goniophotometer System	RMG-C-MKII	CD-LL04-GC	--
LLI 2M Sphere	2MR97	CD-SN03-S2	--
LLI Spectroradiometer	SPR-3000	MT-SC01-S2	Before Use

General Information

Manufacturer:	1st Source Lighting
Model Number:	BAY-LHB4-3-19000-50K-DAC-U-(PCS)
Driver Model Number:	KTLD-100-UV-SC3000-56-VDIM-U4

Photometric & Electrical Test Results

Total Lumens:	17054.00
Efficacy:	154.08
Input Voltage (VAC/60Hz):	277.01
Input Current (Amp):	0.4120
Input Power (W):	110.68
Input Power Factor:	0.9699
Current ATHD (%):	5.0%

Test Condition

Ambient Temperature (°C):	25.0
Stabilization Time (Hours):	0:40
Total Operating Time (Hours):	1:10

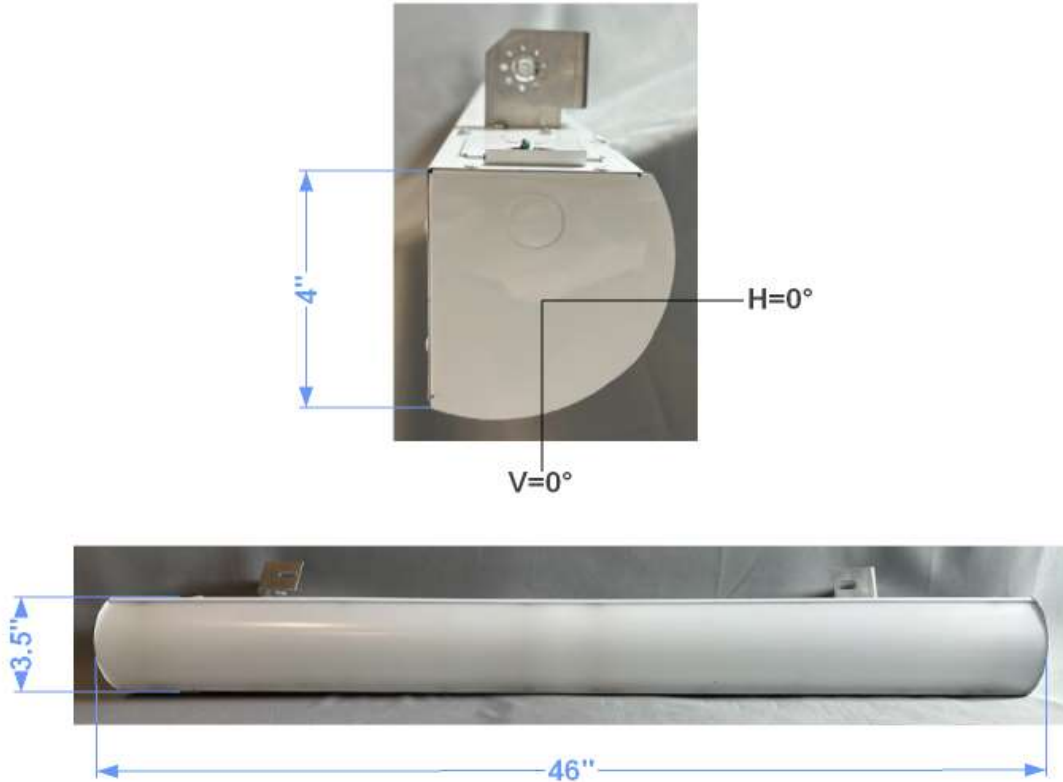


FIG. 1 LUMINAIRE

Test Methods

Photometric Measurements - Goniophotometer

A Custom Light Laboratory Type C Rotating Mirror Goniophotometer was used to measure candelas(intensity) at each angle of distribution as defined by IESNA for the appropriate fixture type.

Ambient temperature is set to 25°C and is measured from the center of the fixture, within 1ft from the outside of the fixture. Temperature is maintained at 25°C throughout the testing process and the sample is stabilized for at least 30mins and longer as necessary for the sample to achieve stabilization.

Electrical measurements are measured using the listed equipment.

Spectral Measurements - Integrating Sphere

A Sensing Spectroradiometer SPR-3000, in conjunction with Light Laboratory 2 meter integrating sphere was used to measure chromaticity coordinates, correlated color temperature(CCT) and the color rendering index(CRI) for each sample.

Ambient temperature is set to 25°C and is measured from the center of the fixture, within 1ft from the outside of the fixture. Temperature is maintained at 25°C throughout the testing process and the sample is stabilized for at least 30mins and longer as necessary for the sample to achieve stabilization.

Electrical measurements are measured using the listed equipment.

Disclaimers:

The results related only to the samples as received and tested. This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the Federal Government.

Report Prepared by : JG

Test Report Reviewed by:



Steve Kang
Quality Assurance

**Attached are photometric data reports.*



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Photometric Test Report

IES INDOOR REPORT
PHOTOMETRIC FILENAME : L012510701.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] L012510701
[TESTLAB] LIGHT LABORATORY, INC. (www.lightlaboratory.com)
[ISSUE DATE] 1/17/2025
[MANUFAC] 1st Source Lighting
[LUMCAT] BAY-LHB4-3-19000-50K-DAC-U-(PCS)
[LUMINAIRE] 4ft Pickleball 100w Fixture
[BALLASTCAT] KTL D-100-UV-SC3000-56-VDIM-U4
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.
[INPUT] 277 VAC
[TEST PROCEDURE] IESNA:LM-79-19

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	17054
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	154
Total Luminaire Watts	110.68
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	2.08
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.50
Basic Luminous Shape	Hor. Cylinder Along Width
Luminous Length (0-180)	0.38 ft (Diameter)
Luminous Width (90-270)	3.83 ft
Luminous Height	0.38 ft (Diameter)

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	37425	39397	286567
55	37240	36874	187177
65	35873	33175	113308
75	33258	29018	55464
85	29777	24329	11517

IES INDOOR REPORT
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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0	3409	3409	3409	3409	3409	3409	3409	3409	3409
5	3682	3620	3600	3497	3448	3301	3252	3158	3195
10	3936	3837	3734	3542	3373	3153	3050	2906	2922
15	4171	4056	3862	3551	3295	2978	2817	2646	2645
20	4407	4257	3960	3531	3166	2774	2573	2377	2382
25	4614	4426	4024	3477	3007	2555	2334	2111	2102
30	4781	4570	4061	3392	2814	2324	2075	1850	1832
35	4920	4677	4064	3283	2611	2084	1818	1591	1586
40	5014	4741	4038	3139	2371	1826	1580	1350	1338
45	5065	4767	3978	2987	2137	1585	1335	1123	1118
50	5075	4752	3880	2805	1890	1334	1102	913	904
55	5040	4698	3754	2609	1617	1086	894	712	710
60	4966	4607	3602	2408	1362	860	686	530	531
65	4855	4475	3399	2177	1083	634	492	330	369
70	4699	4310	3218	1948	818	412	332	230	230
75	4501	4116	2986	1719	565	257	189	116	122
80	4285	3885	2756	1467	327	115	88	37	39
85	4030	3641	2509	1235	121	19	15	15	16
90	3770	3394	2281	1036	8	7	12	15	16
95	3522	3150	2090	894	8	8	12	15	16
100	3267	2927	1924	805	0	0	0	0	0
105	3029	2708	1763	725	0	0	0	0	0
110	2767	2482	1612	652	0	0	0	0	0
115	2510	2245	1456	466	0	0	0	0	0
120	2235	2012	1299	290	0	0	0	0	0
125	1962	1780	1126	427	0	0	0	0	0
130	1709	1537	676	398	0	0	0	0	0
135	1435	1307	324	345	0	0	0	0	0
140	794	788	564	285	0	0	0	0	0
145	391	502	537	231	0	0	0	0	0
150	718	708	429	103	0	0	0	0	0
155	612	557	324	18	0	0	0	0	0
160	460	404	217	15	0	0	0	0	0
165	303	255	19	0	0	0	0	0	0
170	17	16	16	0	0	0	0	0	0
175	17	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0

IES INDOOR REPORT
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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1264.61	N.A.	7.40
0-30	2723.43	N.A.	16.00
0-40	4553.85	N.A.	26.70
0-60	8624.54	N.A.	50.60
0-80	12134.65	N.A.	71.20
0-90	13451.79	N.A.	78.90
10-90	13127.23	N.A.	77.00
20-40	3289.24	N.A.	19.30
20-50	5316.88	N.A.	31.20
40-70	5959.06	N.A.	34.90
60-80	3510.11	N.A.	20.60
70-80	1621.73	N.A.	9.50
80-90	1317.14	N.A.	7.70
90-110	1973.13	N.A.	11.60
90-120	2646.89	N.A.	15.50
90-130	3119.31	N.A.	18.30
90-150	3513.69	N.A.	20.60
90-180	3602.18	N.A.	21.10
110-180	1629.05	N.A.	9.60
0-180	17053.97	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	324.55
10-20	940.05
20-30	1458.83
30-40	1830.42
40-50	2027.64
50-60	2043.05
60-70	1888.37
70-80	1621.73
80-90	1317.14
90-100	1085.36
100-110	887.77
110-120	673.76
120-130	472.42
130-140	264.98
140-150	129.39
150-160	71.51
160-170	16.76
170-180	0.23

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	114	114	114	114	109	109	109	109	99	99	99	91	91	91	83	83	83	79
1	101	95	89	84	96	90	85	81	82	78	75	75	71	69	68	65	63	59
2	90	81	73	66	86	77	70	64	70	64	59	64	59	55	57	54	50	47
3	82	70	61	54	77	67	59	52	61	54	48	55	50	45	50	45	41	38
4	74	61	52	45	70	59	50	43	53	46	40	49	43	38	44	39	35	32
5	68	54	45	38	64	52	43	37	48	40	34	43	37	32	39	34	30	27
6	63	49	39	33	59	47	38	32	43	35	30	39	33	28	35	30	26	23
7	58	44	35	29	55	42	34	28	39	31	26	35	29	24	32	27	23	20
8	54	40	31	25	51	38	30	24	35	28	23	32	26	22	30	24	20	18
9	50	36	28	22	48	35	27	22	32	25	21	30	24	19	27	22	18	16
10	47	33	25	20	45	32	25	20	30	23	19	27	22	17	25	20	16	15

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UGR TABLE - CORRECTED

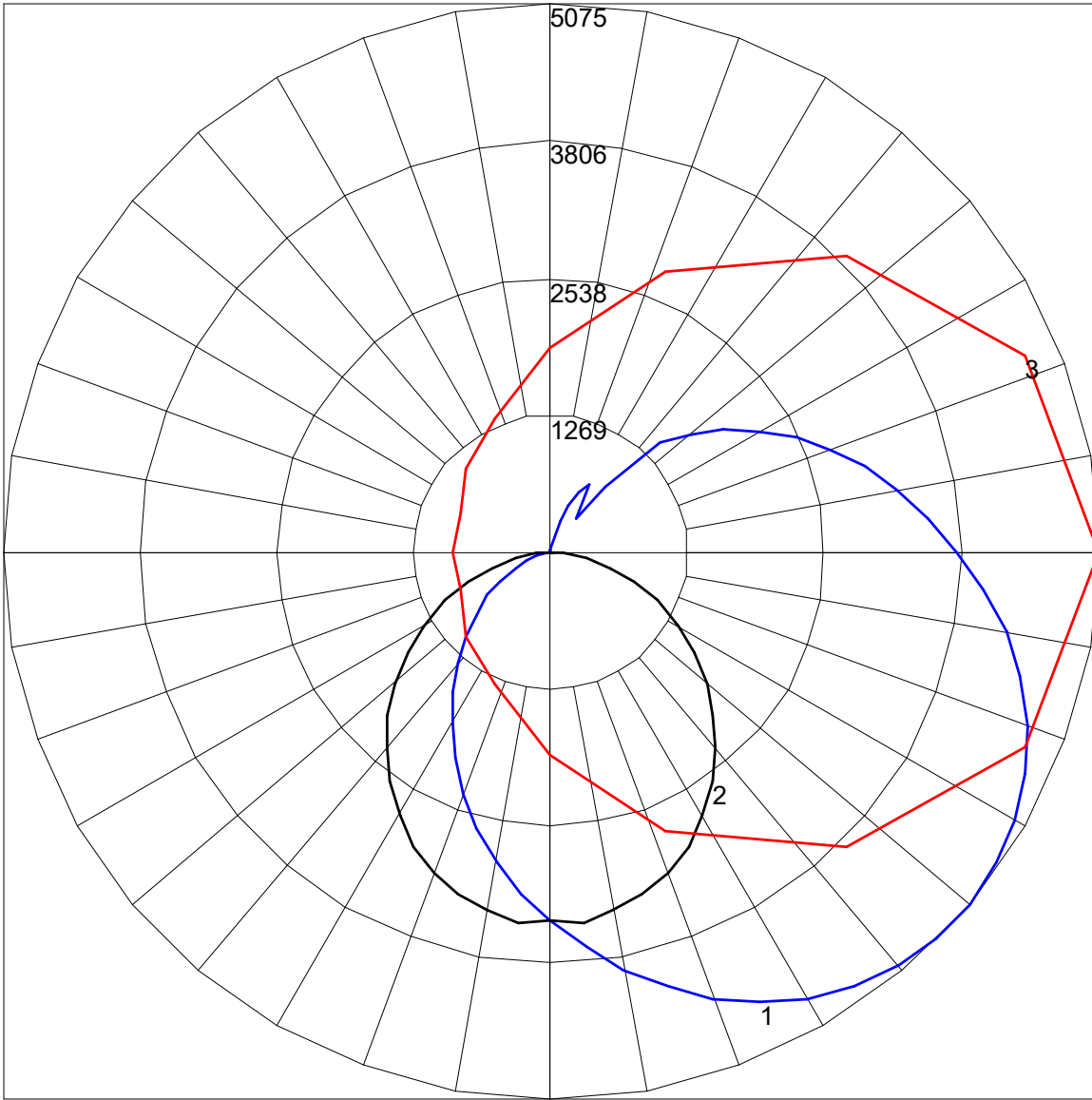
Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	26.0	27.3	26.7	28.0	28.8	17.8	19.1	18.5	19.8	20.6
	3H	29.3	30.5	30.0	31.2	32.0	19.2	20.4	19.8	21.1	21.9
	4H	30.9	32.1	31.6	32.8	33.6	19.6	20.8	20.3	21.5	22.3
	6H	32.7	33.8	33.4	34.5	35.3	19.9	20.9	20.5	21.6	22.5
	8H	33.6	34.6	34.3	35.3	36.2	19.9	21.0	20.6	21.7	22.5
	12H	34.5	35.5	35.2	36.2	37.1	19.9	20.9	20.6	21.6	22.5
4H	2H	26.3	27.4	26.9	28.1	28.9	19.7	20.8	20.3	21.5	22.4
	3H	29.8	30.8	30.5	31.5	32.3	21.3	22.4	22.0	23.1	23.9
	4H	31.6	32.5	32.3	33.3	34.2	22.0	22.9	22.7	23.6	24.5
	6H	33.6	34.4	34.3	35.1	36.0	22.4	23.2	23.1	23.9	24.8
	8H	34.6	35.3	35.3	36.1	37.0	22.5	23.2	23.2	24.0	24.9
	12H	35.6	36.4	36.4	37.1	38.0	22.5	23.2	23.3	24.0	24.9
8H	4H	31.8	32.5	32.5	33.3	34.2	23.6	24.3	24.3	25.1	26.0
	6H	33.9	34.5	34.6	35.3	36.2	24.2	24.9	25.0	25.7	26.6
	8H	35.0	35.6	35.8	36.4	37.3	24.5	25.1	25.3	25.9	26.8
	12H	36.3	36.8	37.1	37.6	38.6	24.7	25.2	25.4	26.0	26.9
12H	4H	31.7	32.5	32.5	33.2	34.1	24.1	24.8	24.8	25.6	26.5
	6H	33.9	34.5	34.7	35.3	36.2	25.0	25.6	25.8	26.3	27.3
	8H	35.1	35.6	35.9	36.4	37.4	25.4	25.9	26.1	26.7	27.6

Maximum UGR = 38.6

POLAR GRAPH



Maximum Candela = 5075 Located At Horizontal Angle = 0, Vertical Angle = 50
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Vertical Plane Through Horizontal Angles (90 - 270)
3 - Horizontal Cone Through Vertical Angle (50) (Through Max. Cd.)