

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P860086

Luminaire Tested: **SPHB-30SE-N-L940-CD**

Issue Date: 7/11/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P860086
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SPHB-30SE-N-L940-CD
Description: 30000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens
and, 4000K 90CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

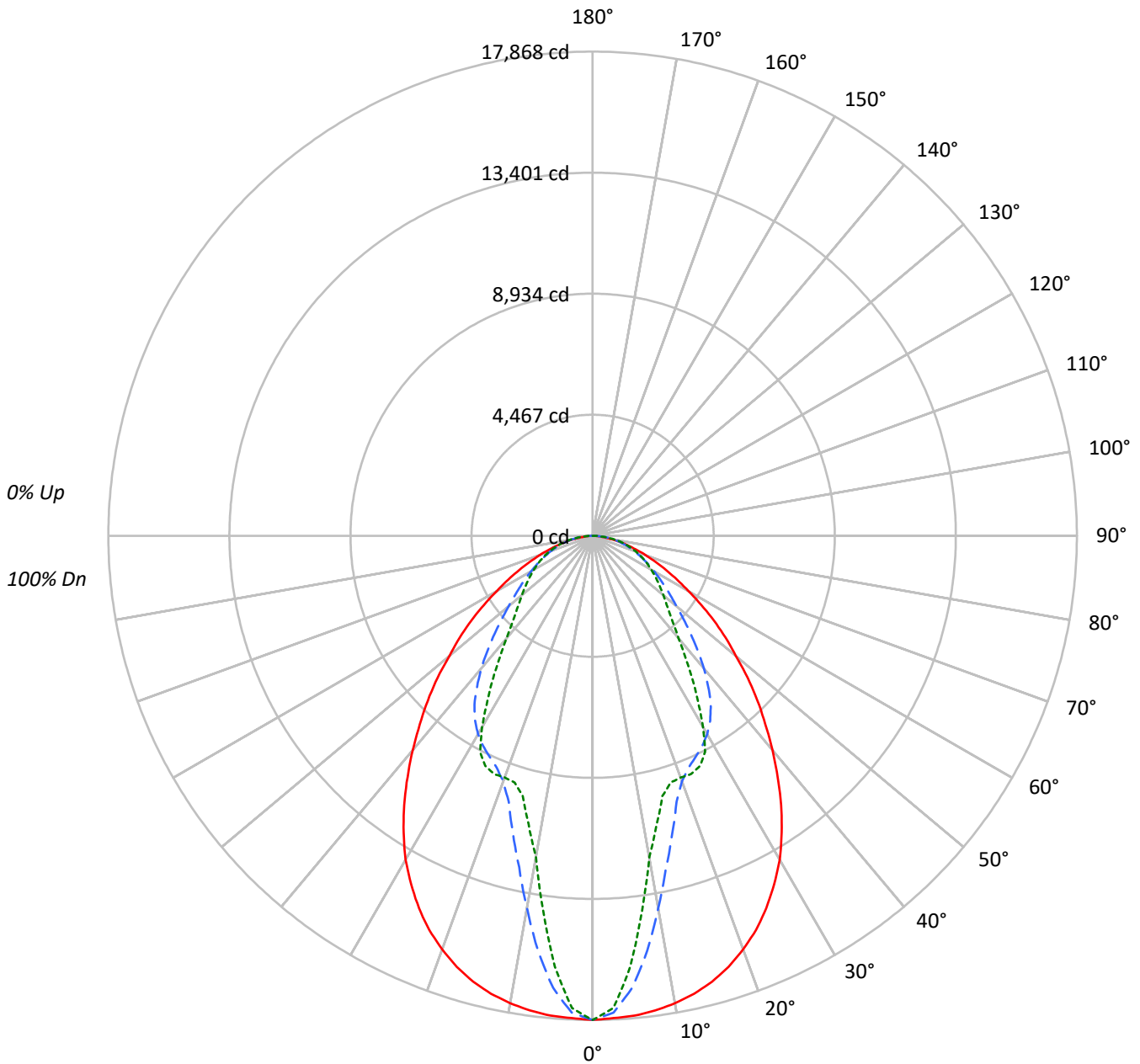
Lumens per Lamp: N/A
Luminaire Lumens: 26188.0 lumens
Efficiency: N/A
Efficacy: 134.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

Input Watts (W): 195
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

TEST NUMBER: P860086

CATALOG NUMBER: SPHB-30SE-N-L940-CD

Luminous Intensity Polar Plot





TEST NUMBER: P860086

CATALOG NUMBER: SPHB-30SE-N-L940-CD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74																			
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64																			
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56																			
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50																			
6	74	62	54	48	73	61	54	48	60	53	47	58	52	47	56	51	47	45																			
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	46	42	40																			
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37																			
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34																			
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	94282	94282	94282
5°	94173	88710	84512
10°	93851	74775	64463
15°	93070	62072	54322
20°	91195	54107	53326
25°	88265	52352	54576
30°	84092	51513	49667
35°	78079	48951	41157
40°	71098	43945	33985
45°	64178	38131	29835
50°	56637	33156	27938
55°	50258	29904	26892
60°	43070	27654	26343
65°	37280	25989	26211
70°	31904	25001	26180
75°	26780	24278	25946
80°	20434	23461	25409
85°	13379	20814	19573



TEST NUMBER: P860086

CATALOG NUMBER: SPHB-30SE-N-L940-CD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1523.4	5.8
10°-20°	3498.0	13.4
20°-30°	4727.4	18.1
30°-40°	4975.3	19.0
40°-50°	4221.8	16.1
50°-60°	3270.4	12.5
60°-70°	2277.7	8.7
70°-80°	1304.3	5.0
80°-90°	379.6	1.4
90°-100°	10.1	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	9748.9	37.2
0°-40°	14724.2	56.2
0°-60°	22216.4	84.8
0°-90°	26177.9	100.0
90°-120°	10.1	0.0
90°-150°	10.1	0.0
90°-180°	10.0	0.0
0°-180°	26188.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	17868	17868	17868	17868	17868	
5°	17780	17454	16749	16106	15956	###
15°	17038	14461	11363	10228	9944	4794
25°	15161	10710	8992	9253	9374	6960
35°	12122	8236	7600	6864	6390	7556
45°	8601	6185	5110	4199	3998	6624
55°	5463	4166	3251	2955	2923	4885
65°	2986	2444	2082	2082	2099	2983
75°	1314	1168	1191	1266	1273	1401
85°	221	286	344	323	323	281
90°	1	26	50	64	67	12
95°	1	4	8	8	7	1
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P860086

CATALOG NUMBER: SPHB-30SE-N-L940-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	17868.5	17868.5	17868.5	17868.5	17868.5
2.5°	17816.7	17758.0	17614.8	17522.0	17449.7
5°	17779.9	17453.8	16748.6	16106.1	15956.0
7.5°	17669.4	16953.2	15445.9	14257.7	13957.6
10°	17516.6	16234.3	13956.2	12468.0	12031.5
12.5°	17313.3	15466.3	12529.4	11127.1	10912.9
15°	17037.8	14461.0	11363.1	10228.1	9944.4
17.5°	16680.4	13421.5	10286.8	9630.6	9551.5
20°	16241.1	12468.0	9636.1	9412.4	9497.0
22.5°	15747.3	11541.8	9258.2	9352.4	9510.6
25°	15160.8	10709.7	8992.2	9252.8	9374.2
27.5°	14501.9	9958.0	8748.1	8986.8	8986.8
30°	13802.1	9331.9	8454.8	8433.0	8151.9
32.5°	12985.0	8799.9	8071.5	7639.0	7221.6
35°	12121.5	8236.5	7599.5	6864.2	6389.5
37.5°	11215.7	7712.7	7002.0	6032.1	5590.1
40°	10322.2	7195.7	6380.0	5284.6	4934.0
42.5°	9432.8	6669.2	5732.0	4678.9	4402.0
45°	8600.7	6184.9	5110.0	4198.7	3998.2
47.5°	7755.0	5670.6	4535.7	3812.7	3673.6
50°	6899.7	5149.5	4039.1	3505.8	3403.5
52.5°	6179.4	4663.9	3617.6	3215.2	3153.8
55°	5463.3	4166.0	3250.7	2954.7	2923.3
57.5°	4752.6	3702.2	2915.1	2716.0	2709.1
60°	4081.4	3268.4	2620.5	2511.3	2496.3
62.5°	3509.9	2837.4	2340.8	2289.0	2295.8
65°	2986.0	2444.5	2081.6	2081.6	2099.4
67.5°	2500.4	2083.0	1844.3	1875.7	1900.2
70°	2068.0	1755.6	1620.6	1675.1	1697.0
72.5°	1658.8	1451.4	1406.4	1466.4	1484.2
75°	1313.6	1167.7	1190.9	1265.9	1272.7
77.5°	974.0	919.4	979.4	1061.3	1076.3
80°	672.5	678.0	772.1	829.4	836.2
82.5°	433.8	473.3	578.4	608.4	597.5
85°	221.0	286.5	343.8	323.3	323.3
87.5°	84.6	124.1	146.0	171.9	181.4
90°	1.4	25.9	50.5	64.1	66.8
92.5°	1.4	6.8	10.9	12.3	10.9
95°	1.4	4.1	8.2	8.2	6.8
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P860086

CATALOG NUMBER: SPHB-30SE-N-L940-CD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)