

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: P859893

Luminaire Tested: **SPHB-15HE-N-L835-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: P859893
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-15HE-N-L835-CD
Description: 15000 Lumen High Efficacy Select Pro High Bay with Narrow Lens and, 3500K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

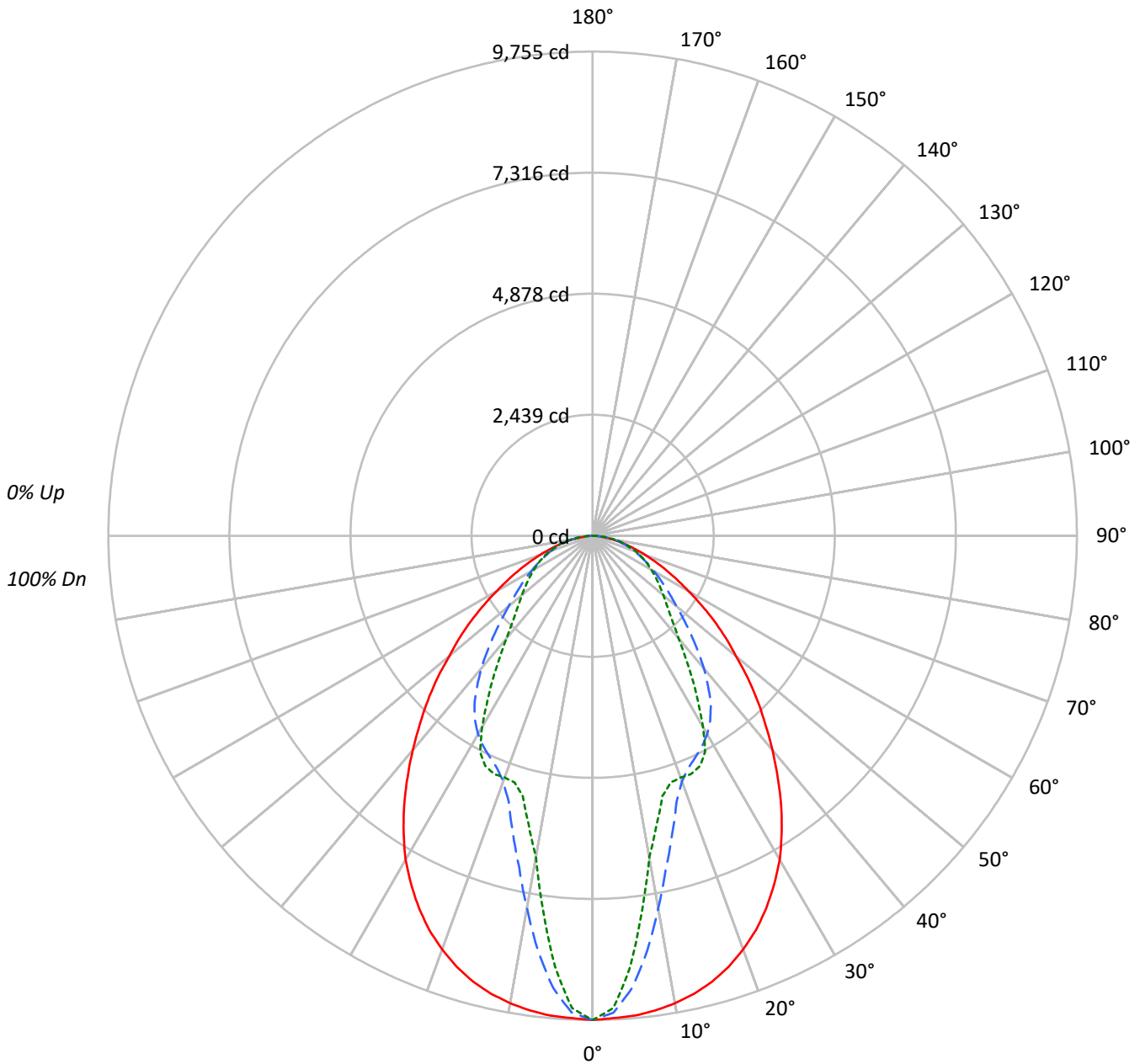
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14297.0 lumens
Efficiency: N/A
Efficacy: 161.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

Input Watts (W): 88.3
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

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Luminous Intensity Polar Plot





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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°	76089	76089	76089
5°	76001	71593	68205
10°	75741	60346	52023
15°	75111	50094	43840
20°	73597	43667	43036
25°	71232	42250	44044
30°	67866	41573	40083
35°	63013	39505	33215
40°	57379	35465	27428
45°	51795	30773	24078
50°	45708	26758	22547
55°	40560	24134	21702
60°	34760	22317	21260
65°	30087	20974	21153
70°	25747	20176	21127
75°	21614	19592	20939
80°	16489	18933	20505
85°	10793	16798	15796



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	831.7	5.8
10°-20°	1909.7	13.4
20°-30°	2580.9	18.1
30°-40°	2716.2	19.0
40°-50°	2304.8	16.1
50°-60°	1785.4	12.5
60°-70°	1243.5	8.7
70°-80°	712.0	5.0
80°-90°	207.2	1.4
90°-100°	5.5	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°	5322.3	37.2
0°-40°	8038.5	56.2
0°-60°	12128.7	84.8
0°-90°	14291.4	100.0
90°-120°	5.5	0.0
90°-150°	5.5	0.0
90°-180°	6.0	0.0
0°-180°	14297.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9755	9755	9755	9755	9755	
5°	9707	9529	9144	8793	8711	922
15°	9302	7895	6204	5584	5429	2617
25°	8277	5847	4909	5051	5118	3800
35°	6618	4497	4149	3747	3488	4125
45°	4696	3377	2790	2292	2183	3616
55°	2983	2274	1775	1613	1596	2667
65°	1630	1334	1136	1136	1146	1628
75°	717	638	650	691	695	765
85°	121	156	188	176	176	153
90°	1	14	28	35	36	7
95°	1	2	4	4	4	0
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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9755.1	9755.1	9755.1	9755.1	9755.1
2.5°	9726.8	9694.8	9616.6	9565.9	9526.5
5°	9706.7	9528.7	9143.7	8792.9	8711.0
7.5°	9646.4	9255.4	8432.5	7783.8	7620.0
10°	9563.0	8862.9	7619.2	6806.7	6568.4
12.5°	9452.0	8443.6	6840.3	6074.7	5957.8
15°	9301.6	7894.8	6203.5	5583.9	5429.0
17.5°	9106.4	7327.3	5615.9	5257.7	5214.5
20°	8866.6	6806.7	5260.7	5138.6	5184.7
22.5°	8597.1	6301.1	5054.4	5105.8	5192.2
25°	8276.8	5846.8	4909.2	5051.4	5117.7
27.5°	7917.1	5436.5	4775.9	4906.2	4906.2
30°	7535.1	5094.6	4615.8	4603.9	4450.4
32.5°	7089.0	4804.2	4406.5	4170.4	3942.5
35°	6617.6	4496.6	4148.8	3747.4	3488.3
37.5°	6123.1	4210.6	3822.6	3293.2	3051.9
40°	5635.3	3928.4	3483.1	2885.0	2693.7
42.5°	5149.7	3640.9	3129.3	2554.4	2403.2
45°	4695.5	3376.6	2789.7	2292.2	2182.8
47.5°	4233.7	3095.8	2476.2	2081.5	2005.5
50°	3766.8	2811.3	2205.1	1913.9	1858.1
52.5°	3373.6	2546.2	1975.0	1755.3	1721.8
55°	2982.6	2274.4	1774.7	1613.1	1595.9
57.5°	2594.6	2021.2	1591.5	1482.7	1479.0
60°	2228.2	1784.3	1430.6	1371.0	1362.8
62.5°	1916.2	1549.0	1277.9	1249.6	1253.4
65°	1630.2	1334.5	1136.4	1136.4	1146.1
67.5°	1365.1	1137.2	1006.9	1024.0	1037.4
70°	1129.0	958.5	884.7	914.5	926.4
72.5°	905.6	792.4	767.8	800.6	810.3
75°	717.2	637.5	650.1	691.1	694.8
77.5°	531.7	501.9	534.7	579.4	587.6
80°	367.1	370.1	421.5	452.8	456.5
82.5°	236.8	258.4	315.8	332.1	326.2
85°	120.6	156.4	187.7	176.5	176.5
87.5°	46.2	67.8	79.7	93.8	99.0
90°	0.7	14.1	27.6	35.0	36.5
92.5°	0.7	3.7	6.0	6.7	6.0
95°	0.7	2.2	4.5	4.5	3.7
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



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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)