

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: P860075

Luminaire Tested: **SPHB-30SE-M-L850-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: P860075
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SPHB-30SE-M-L850-CD
Description: 30000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens and, 5000K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

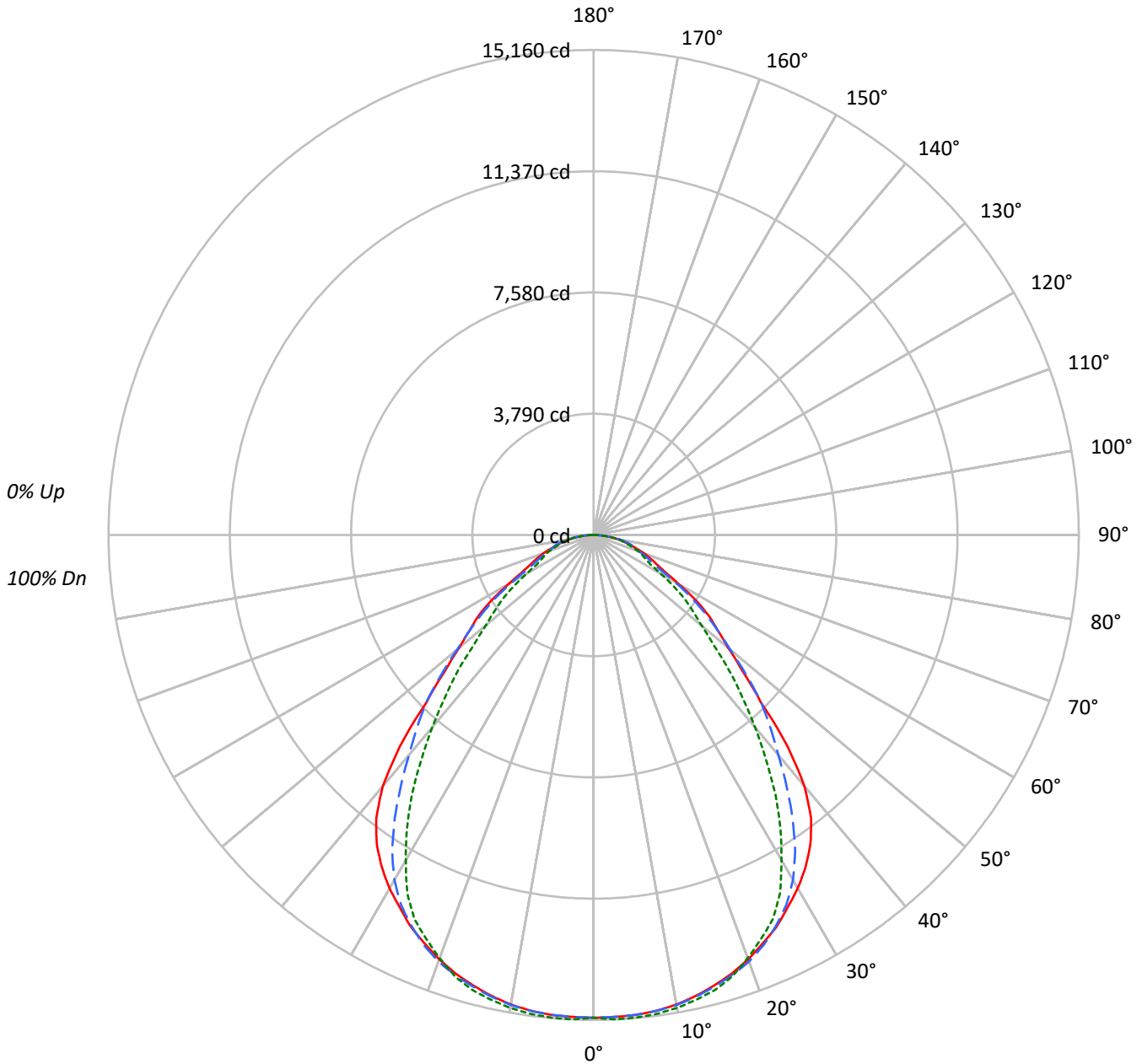
Lumens per Lamp: N/A
Luminaire Lumens: 31325.0 lumens
Efficiency: N/A
Efficacy: 160.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

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: P860075

CATALOG NUMBER: SPHB-30SE-M-L850-CD

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	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					100			
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87					87			
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75					75			
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66					66			
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58					58			
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51					51			
6	75	63	55	49	73	62	54	49	60	54	48	59	53	48	57	52	48	46					46			
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41					41			
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37					37			
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34					34			
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31					31			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	79631	79631	79631
5°	79787	79766	80219
10°	79857	79942	80433
15°	79624	79830	80385
20°	79276	79678	79041
25°	78696	78476	77144
30°	77700	75869	71539
35°	76069	69800	63760
40°	70594	61778	54004
45°	55075	55223	44692
50°	44982	45619	36094
55°	40302	38782	31714
60°	32264	30542	25374
65°	27038	24752	22441
70°	25671	23584	22846
75°	23292	25037	22034
80°	23406	25585	23224
85°	20366	23859	19403



TEST NUMBER: P860075

CATALOG NUMBER: SPHB-30SE-M-L850-CD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1435.0	4.6
10°-20°	4126.9	13.2
20°-30°	6160.8	19.7
30°-40°	6722.5	21.5
40°-50°	5499.3	17.6
50°-60°	3615.8	11.5
60°-70°	2074.5	6.6
70°-80°	1257.1	4.0
80°-90°	422.1	1.3
90°-100°	11.0	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°	11722.7	37.4
0°-40°	18445.2	58.9
0°-60°	27560.4	88.0
0°-90°	31314.1	100.0
90°-120°	11.0	0.0
90°-150°	11.0	0.0
90°-180°	11.0	0.0
0°-180°	31325.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15092	15092	15092	15092	15092	
5°	15064	15040	15060	15122	15146	###
15°	14576	14574	14614	14708	14716	4114
25°	13517	13549	13480	13316	13251	6219
35°	11810	11543	10836	10098	9899	7319
45°	7381	7932	7401	6533	5989	5859
55°	4381	4262	4216	3623	3448	3858
65°	2166	2134	1982	1929	1797	2214
75°	1142	1236	1228	1178	1081	1237
85°	336	382	394	344	320	365
90°	2	28	56	66	70	16
95°	2	4	6	6	4	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



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CATALOG NUMBER: SPHB-30SE-M-L850-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	15091.8	15091.8	15091.8	15091.8	15091.8
2.5°	15081.8	15059.9	15079.8	15141.6	15159.5
5°	15063.9	15040.0	15059.9	15121.6	15145.5
7.5°	15002.2	14988.3	15008.2	15069.9	15099.8
10°	14904.7	14888.8	14920.6	14974.4	15012.2
12.5°	14759.4	14753.4	14783.3	14860.9	14876.8
15°	14576.3	14574.3	14614.1	14707.6	14715.6
17.5°	14369.2	14367.3	14417.0	14478.7	14456.8
20°	14118.4	14132.4	14190.1	14132.4	14076.6
22.5°	13817.9	13861.7	13875.6	13694.5	13666.6
25°	13517.3	13549.2	13479.5	13316.3	13250.6
27.5°	13129.2	13167.0	13037.6	12804.7	12617.6
30°	12753.0	12717.2	12452.4	12002.6	11741.8
32.5°	12321.0	12193.7	11717.9	11096.9	10860.0
35°	11809.5	11542.8	10836.2	10097.7	9898.6
37.5°	11162.6	10674.9	9902.6	9132.3	8831.7
40°	10249.0	9685.7	8969.1	8172.9	7840.5
42.5°	8969.1	8760.1	8166.9	7271.2	6875.1
45°	7380.7	7932.0	7400.6	6532.7	5989.3
47.5°	6317.8	7084.1	6445.2	5818.2	5069.7
50°	5479.8	6007.3	5557.4	4992.1	4397.0
52.5°	4874.7	5033.9	4852.8	4231.8	3893.4
55°	4381.0	4261.6	4215.8	3622.7	3447.5
57.5°	3768.0	3702.3	3584.8	3158.9	2928.0
60°	3057.4	3196.7	2894.2	2772.7	2404.5
62.5°	2512.0	2649.3	2324.9	2316.9	2010.4
65°	2165.6	2133.8	1982.5	1928.8	1797.4
67.5°	1916.8	1817.3	1765.6	1695.9	1650.1
70°	1664.0	1622.2	1528.7	1542.6	1480.9
72.5°	1387.4	1441.1	1347.6	1373.4	1262.0
75°	1142.5	1236.1	1228.1	1178.4	1080.8
77.5°	941.5	1041.0	1058.9	1013.2	933.5
80°	770.3	838.0	842.0	814.1	764.3
82.5°	565.3	605.1	635.0	587.2	555.3
85°	336.4	382.2	394.1	344.4	320.5
87.5°	109.5	153.3	171.2	177.2	179.1
90°	2.0	27.9	55.7	65.7	69.7
92.5°	2.0	8.0	11.9	17.9	19.9
95°	2.0	4.0	6.0	6.0	4.0
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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CATALOG NUMBER: SPHB-30SE-M-L850-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)