

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: P860129

Luminaire Tested: **SPHB-36SE-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: P860129
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-36SE-M-L850-CD
Description: 36000 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

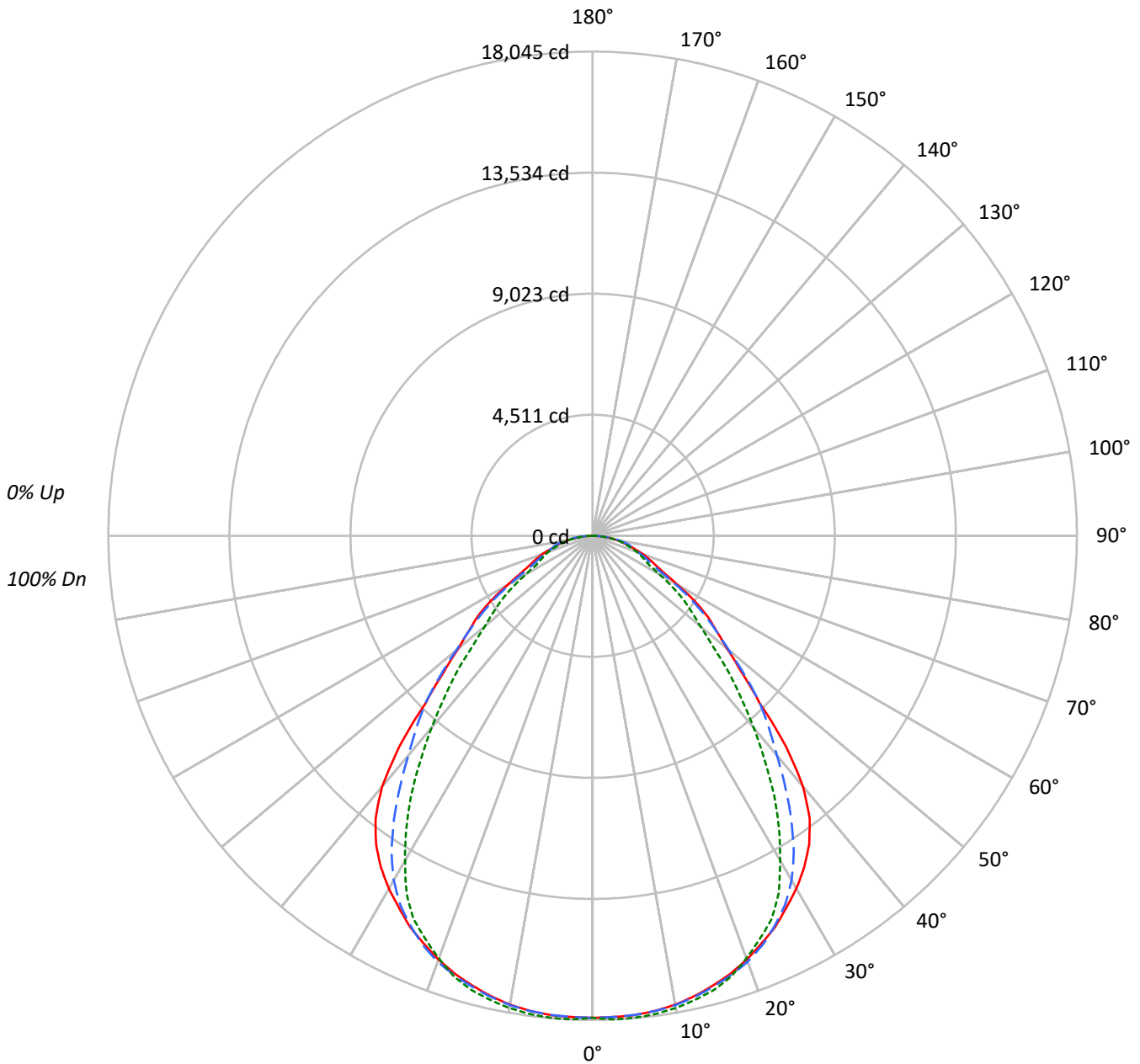
Lumens per Lamp: N/A
Luminaire Lumens: 37288.0 lumens
Efficiency: N/A
Efficacy: 154.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

Input Watts (W): 240.8
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: P860129

CATALOG NUMBER: SPHB-36SE-M-L850-CD

Luminous Intensity Polar Plot





TEST NUMBER: P860129

CATALOG NUMBER: SPHB-36SE-M-L850-CD

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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87								
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75								
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66								
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58								
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51								
6	75	63	55	49	73	62	54	49	60	54	48	59	53	48	57	52	48	46								
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41								
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37								
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34								
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	94789	94789	94789
5°	94976	94950	95490
10°	95058	95160	95744
15°	94781	95027	95687
20°	94367	94846	94088
25°	93677	93415	91829
30°	92491	90311	85158
35°	90549	83086	75898
40°	84032	73538	64285
45°	65559	65736	53200
50°	53544	54303	42964
55°	47974	46165	37752
60°	38406	36356	30204
65°	32185	29464	26713
70°	30558	28073	27195
75°	27726	29803	26229
80°	27864	30453	27645
85°	24240	28399	23096



TEST NUMBER: P860129

CATALOG NUMBER: SPHB-36SE-M-L850-CD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1708.1	4.6
10°-20°	4912.5	13.2
20°-30°	7333.6	19.7
30°-40°	8002.2	21.5
40°-50°	6546.2	17.6
50°-60°	4304.1	11.5
60°-70°	2469.4	6.6
70°-80°	1496.4	4.0
80°-90°	502.5	1.3
90°-100°	13.1	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°	13954.3	37.4
0°-40°	21956.5	58.9
0°-60°	32806.7	88.0
0°-90°	37274.9	100.0
90°-120°	13.1	0.0
90°-150°	13.1	0.0
90°-180°	13.0	0.0
0°-180°	37288.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	17965	17965	17965	17965	17965	
5°	17932	17903	17927	18000	18029	###
15°	17351	17349	17396	17507	17517	4897
25°	16090	16128	16046	15851	15773	7402
35°	14058	13740	12899	12020	11783	8713
45°	8786	9442	8809	7776	7130	6974
55°	5215	5073	5018	4312	4104	4593
65°	2578	2540	2360	2296	2140	2635
75°	1360	1471	1462	1403	1287	1472
85°	400	455	469	410	382	434
90°	2	33	66	78	83	19
95°	2	5	7	7	5	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: P860129

CATALOG NUMBER: SPHB-36SE-M-L850-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	17964.7	17964.7	17964.7	17964.7	17964.7
2.5°	17952.8	17926.7	17950.4	18023.9	18045.2
5°	17931.5	17903.0	17926.7	18000.2	18028.6
7.5°	17858.0	17841.4	17865.1	17938.6	17974.1
10°	17741.9	17723.0	17760.9	17824.9	17869.9
12.5°	17569.0	17561.9	17597.4	17689.8	17708.8
15°	17351.0	17348.6	17396.0	17507.4	17516.8
17.5°	17104.6	17102.2	17161.4	17234.9	17208.8
20°	16806.0	16822.6	16891.3	16822.6	16756.3
22.5°	16448.2	16500.4	16517.0	16301.3	16268.2
25°	16090.5	16128.4	16045.5	15851.2	15773.0
27.5°	15628.4	15673.5	15519.5	15242.2	15019.5
30°	15180.6	15138.0	14822.9	14287.4	13977.0
32.5°	14666.5	14514.8	13948.5	13209.3	12927.3
35°	14057.5	13740.0	12898.9	12019.9	11782.9
37.5°	13287.5	12707.0	11787.7	10870.7	10512.9
40°	12199.9	11529.4	10676.4	9728.7	9333.0
42.5°	10676.4	10427.6	9721.6	8655.4	8183.8
45°	8785.7	9442.0	8809.4	7776.3	7129.5
47.5°	7520.4	8432.6	7672.1	6925.7	6034.8
50°	6522.9	7150.8	6615.3	5942.4	5234.0
52.5°	5802.6	5992.2	5776.6	5037.3	4634.5
55°	5215.0	5072.8	5018.4	4312.3	4103.8
57.5°	4485.2	4407.0	4267.3	3760.2	3485.4
60°	3639.4	3805.2	3445.1	3300.5	2862.2
62.5°	2990.2	3153.6	2767.4	2758.0	2393.1
65°	2577.9	2540.0	2359.9	2295.9	2139.6
67.5°	2281.7	2163.2	2101.6	2018.7	1964.2
70°	1980.8	1931.0	1819.7	1836.3	1762.8
72.5°	1651.5	1715.4	1604.1	1634.9	1502.2
75°	1360.0	1471.4	1461.9	1402.7	1286.6
77.5°	1120.7	1239.2	1260.5	1206.0	1111.2
80°	917.0	997.5	1002.2	969.1	909.8
82.5°	672.9	720.3	755.8	699.0	661.1
85°	400.4	454.9	469.1	409.9	381.5
87.5°	130.3	182.4	203.8	210.9	213.2
90°	2.4	33.2	66.3	78.2	82.9
92.5°	2.4	9.5	14.2	21.3	23.7
95°	2.4	4.7	7.1	7.1	4.7
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



TEST NUMBER: P860129

CATALOG NUMBER: SPHB-36SE-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)