

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: P860127

Luminaire Tested: **SPHB-36SE-M-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: P860127
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-L835-CD
Description: 36000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens
and, 3500K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

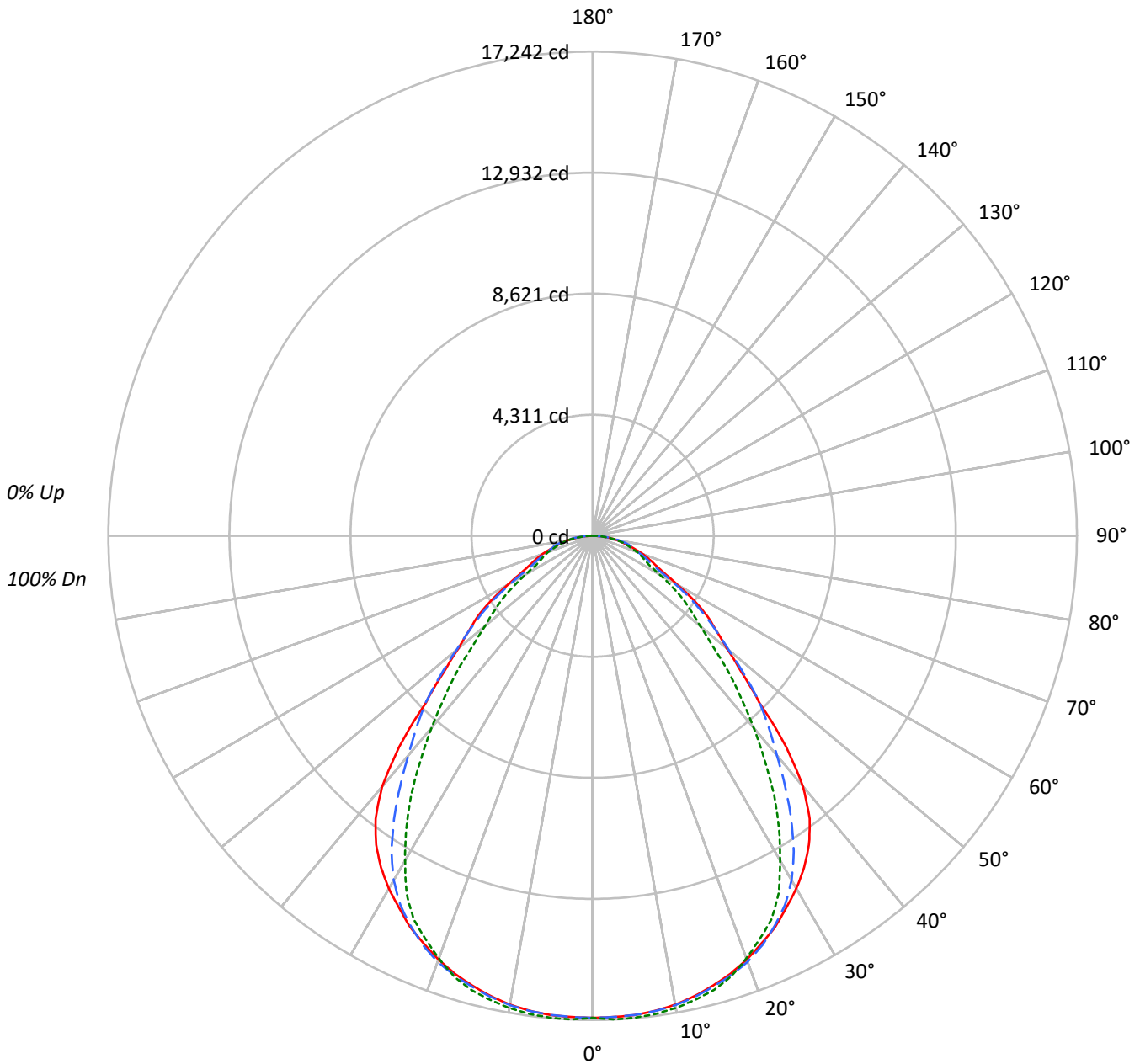
Lumens per Lamp: N/A
Luminaire Lumens: 35628.0 lumens
Efficiency: N/A
Efficacy: 148.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

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

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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	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°	90569	90569	90569
5°	90747	90724	91239
10°	90826	90923	91481
15°	90561	90797	91427
20°	90165	90623	89899
25°	89506	89256	87741
30°	88373	86291	81367
35°	86518	79387	72519
40°	80291	70264	61423
45°	62640	62809	50832
50°	51161	51885	41052
55°	45838	44109	36071
60°	36697	34737	28860
65°	30752	28151	25523
70°	29198	26823	25984
75°	26492	28476	25061
80°	26621	29097	26414
85°	23163	27140	22067



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1632.1	4.6
10°-20°	4693.8	13.2
20°-30°	7007.1	19.7
30°-40°	7646.0	21.5
40°-50°	6254.7	17.6
50°-60°	4112.5	11.5
60°-70°	2359.4	6.6
70°-80°	1429.8	4.0
80°-90°	480.1	1.3
90°-100°	12.5	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°	13333.0	37.4
0°-40°	20979.0	58.9
0°-60°	31346.2	88.0
0°-90°	35615.5	100.0
90°-120°	12.5	0.0
90°-150°	12.5	0.0
90°-180°	12.0	0.0
0°-180°	35628.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	17165	17165	17165	17165	17165	
5°	17133	17106	17129	17199	17226	###
15°	16578	16576	16622	16728	16737	4679
25°	15374	15410	15331	15146	15071	7073
35°	13432	13128	12325	11485	11258	8325
45°	8394	9022	8417	7430	6812	6663
55°	4983	4847	4795	4120	3921	4388
65°	2463	2427	2255	2194	2044	2518
75°	1300	1406	1397	1340	1229	1406
85°	383	435	448	392	364	415
90°	2	32	63	75	79	18
95°	2	4	7	7	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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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	17164.9	17164.9	17164.9	17164.9	17164.9
2.5°	17153.6	17128.7	17151.3	17221.5	17241.9
5°	17133.2	17106.0	17128.7	17198.9	17226.0
7.5°	17063.0	17047.2	17069.8	17140.0	17174.0
10°	16952.1	16934.0	16970.2	17031.3	17074.3
12.5°	16786.8	16780.0	16814.0	16902.3	16920.4
15°	16578.5	16576.3	16621.6	16728.0	16737.0
17.5°	16343.1	16340.8	16397.4	16467.6	16442.7
20°	16057.8	16073.7	16139.3	16073.7	16010.3
22.5°	15716.0	15765.8	15781.7	15575.6	15543.9
25°	15374.1	15410.4	15331.1	15145.5	15070.8
27.5°	14932.7	14975.7	14828.5	14563.7	14350.9
30°	14504.8	14464.1	14163.0	13651.3	13354.8
32.5°	14013.5	13868.7	13327.6	12621.2	12351.8
35°	13431.7	13128.4	12324.7	11484.8	11258.4
37.5°	12696.0	12141.3	11262.9	10386.8	10044.9
40°	11656.8	11016.1	10201.1	9295.6	8917.5
42.5°	10201.1	9963.4	9288.8	8270.0	7819.5
45°	8394.5	9021.6	8417.2	7430.1	6812.1
47.5°	7185.6	8057.2	7330.5	6617.4	5766.2
50°	6232.5	6832.5	6320.8	5677.9	5001.0
52.5°	5544.3	5725.4	5519.4	4813.1	4428.2
55°	4982.8	4847.0	4794.9	4120.3	3921.1
57.5°	4285.6	4210.9	4077.3	3592.8	3330.2
60°	3477.4	3635.8	3291.7	3153.6	2734.8
62.5°	2857.0	3013.3	2644.2	2635.2	2286.5
65°	2463.1	2426.9	2254.8	2193.7	2044.3
67.5°	2180.1	2066.9	2008.1	1928.8	1876.8
70°	1892.6	1845.1	1738.7	1754.5	1684.3
72.5°	1577.9	1639.1	1532.7	1562.1	1435.3
75°	1299.5	1405.9	1396.8	1340.2	1229.3
77.5°	1070.8	1184.0	1204.4	1152.3	1061.8
80°	876.1	953.1	957.6	925.9	869.3
82.5°	642.9	688.2	722.2	667.9	631.6
85°	382.6	434.7	448.3	391.7	364.5
87.5°	124.5	174.3	194.7	201.5	203.8
90°	2.3	31.7	63.4	74.7	79.2
92.5°	2.3	9.1	13.6	20.4	22.6
95°	2.3	4.5	6.8	6.8	4.5
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)