

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: P860126

Luminaire Tested: **SPHB-36SE-M-L750-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: P860126
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-L750-CD
Description: 36000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens and, 5000K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

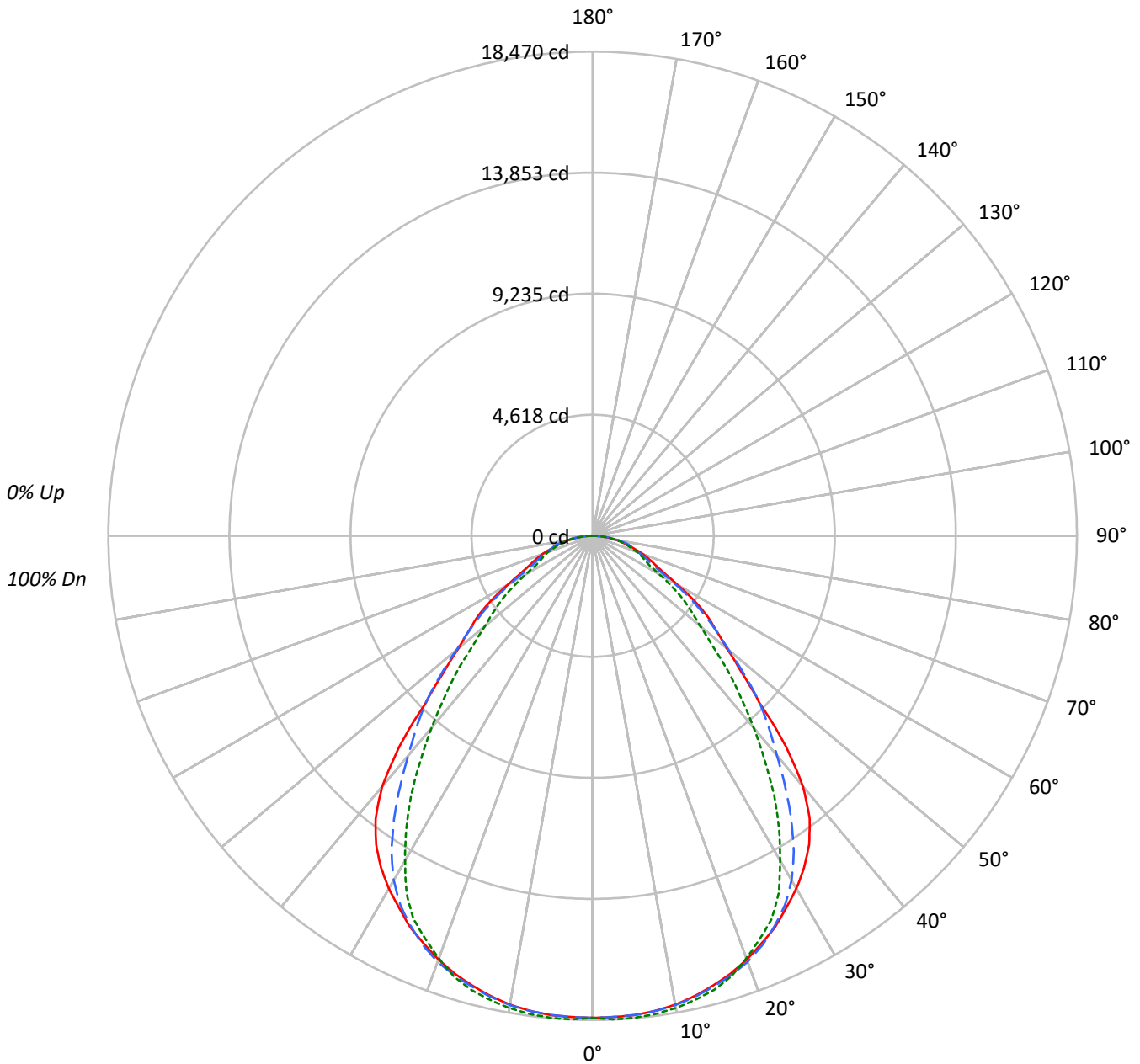
Lumens per Lamp: N/A
Luminaire Lumens: 38166.0 lumens
Efficiency: N/A
Efficacy: 158.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

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°	97021	97021	97021
5°	97212	97186	97738
10°	97297	97400	97998
15°	97012	97264	97940
20°	96589	97079	96303
25°	95883	95615	93991
30°	94669	92438	87163
35°	92681	85042	77685
40°	86010	75269	65799
45°	67102	67283	54452
50°	54805	55582	43975
55°	49103	47252	38640
60°	39310	37211	30916
65°	32943	30158	27341
70°	31277	28733	27835
75°	28378	30504	26847
80°	28517	31170	28298
85°	24815	29071	23641



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1748.3	4.6
10°-20°	5028.2	13.2
20°-30°	7506.3	19.7
30°-40°	8190.6	21.5
40°-50°	6700.3	17.6
50°-60°	4405.4	11.5
60°-70°	2527.5	6.6
70°-80°	1531.6	4.0
80°-90°	514.3	1.3
90°-100°	13.4	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°	14282.8	37.4
0°-40°	22473.5	58.9
0°-60°	33579.2	88.0
0°-90°	38152.6	100.0
90°-120°	13.4	0.0
90°-150°	13.4	0.0
90°-180°	13.0	0.0
0°-180°	38166.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	18388	18388	18388	18388	18388	
5°	18354	18325	18349	18424	18453	###
15°	17760	17757	17806	17920	17929	5013
25°	16469	16508	16423	16224	16144	7577
35°	14388	14064	13203	12303	12060	8918
45°	8992	9664	9017	7959	7297	7138
55°	5338	5192	5136	4414	4200	4701
65°	2639	2600	2416	2350	2190	2697
75°	1392	1506	1496	1436	1317	1507
85°	410	466	480	420	390	444
90°	2	34	68	80	85	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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	18387.7	18387.7	18387.7	18387.7	18387.7
2.5°	18375.5	18348.9	18373.1	18448.3	18470.1
5°	18353.7	18324.6	18348.9	18424.0	18453.1
7.5°	18278.5	18261.5	18285.8	18361.0	18397.4
10°	18159.7	18140.3	18179.1	18244.6	18290.6
12.5°	17982.7	17975.4	18011.8	18106.3	18125.7
15°	17759.5	17757.1	17805.6	17919.6	17929.3
17.5°	17507.3	17504.9	17565.5	17640.7	17614.0
20°	17201.7	17218.7	17289.1	17218.7	17150.8
22.5°	16835.5	16888.9	16905.9	16685.2	16651.2
25°	16469.3	16508.1	16423.3	16224.4	16144.4
27.5°	15996.4	16042.5	15884.9	15601.1	15373.2
30°	15538.1	15494.4	15171.9	14623.8	14306.1
32.5°	15011.8	14856.6	14277.0	13520.3	13231.7
35°	14388.5	14063.6	13202.6	12302.9	12060.4
37.5°	13600.4	13006.2	12065.2	11126.7	10760.5
40°	12487.2	11800.9	10927.8	9957.8	9552.8
42.5°	10927.8	10673.2	9950.5	8859.2	8376.5
45°	8992.5	9664.3	9016.8	7959.4	7297.3
47.5°	7697.5	8631.2	7852.7	7088.8	6176.9
50°	6676.5	7319.2	6771.1	6082.3	5357.2
52.5°	5939.2	6133.3	5912.6	5155.9	4743.6
55°	5337.8	5192.3	5136.5	4413.8	4200.4
57.5°	4590.9	4510.8	4367.7	3848.7	3567.4
60°	3725.1	3894.8	3526.2	3378.3	2929.6
62.5°	3060.6	3227.9	2832.6	2822.9	2449.4
65°	2638.6	2599.8	2415.5	2350.0	2189.9
67.5°	2335.4	2214.2	2151.1	2066.2	2010.5
70°	2027.4	1976.5	1862.5	1879.5	1804.3
72.5°	1690.3	1755.8	1641.8	1673.4	1537.6
75°	1392.0	1506.0	1496.3	1435.7	1316.9
77.5°	1147.1	1268.4	1290.2	1234.4	1137.4
80°	938.5	1021.0	1025.8	991.9	931.3
82.5°	688.7	737.3	773.6	715.4	676.6
85°	409.9	465.6	480.2	419.6	390.5
87.5°	133.4	186.7	208.6	215.8	218.3
90°	2.4	34.0	67.9	80.0	84.9
92.5°	2.4	9.7	14.6	21.8	24.3
95°	2.4	4.9	7.3	7.3	4.9
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)