

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: P860262

Luminaire Tested: **SPHB-9HE-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: P860262
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-9HE-M-L835-CD
Description: 9000 Lumen High Efficacy Select Pro High Bay with Medium Lens and,
3500K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

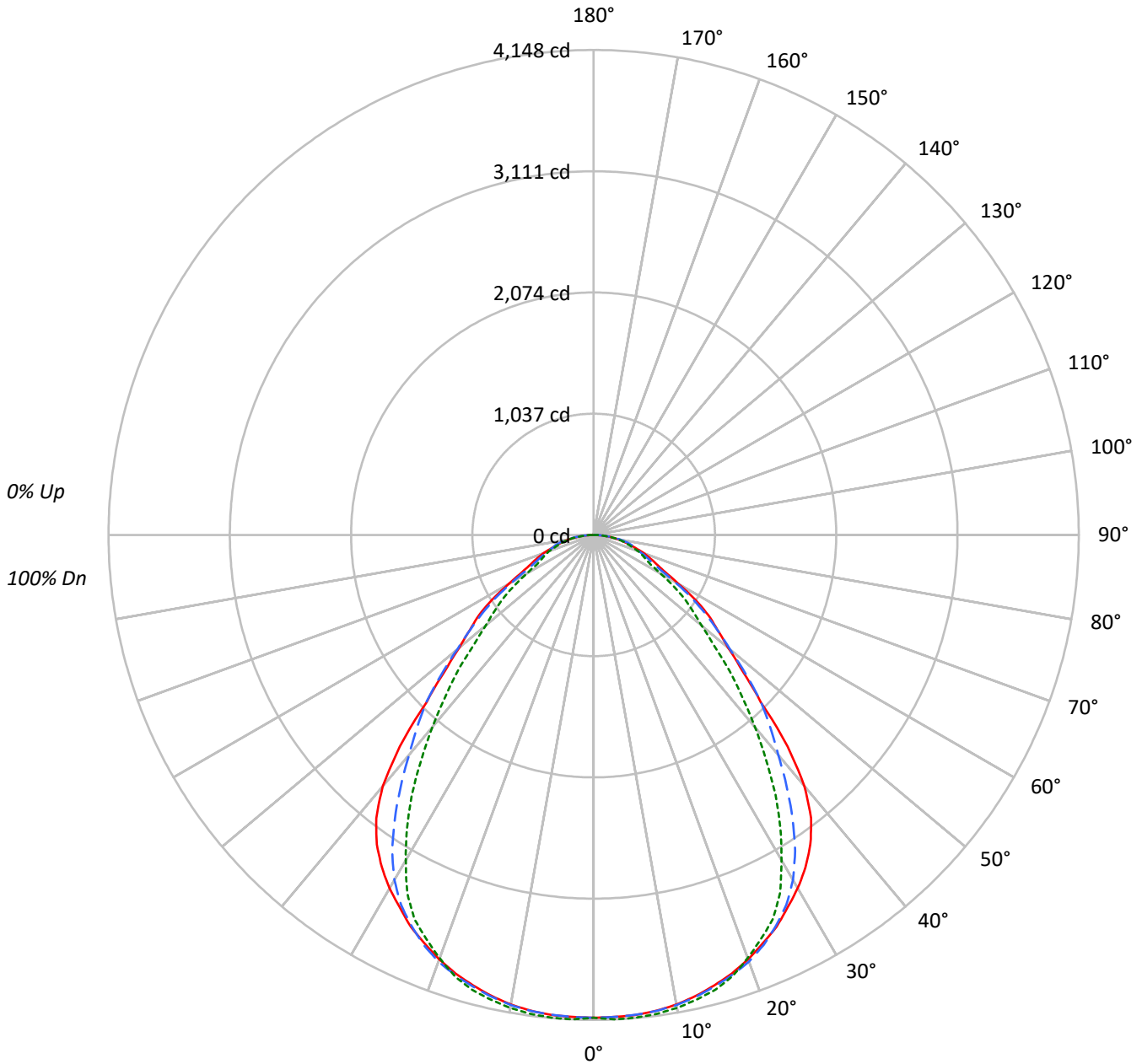
Lumens per Lamp: N/A
Luminaire Lumens: 8571.0 lumens
Efficiency: N/A
Efficacy: 160.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

Input Watts (W): 53.3
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	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°	32208	32208	32208
5°	32272	32263	32447
10°	32300	32334	32533
15°	32206	32289	32514
20°	32065	32228	31970
25°	31830	31742	31203
30°	31428	30687	28935
35°	30768	28232	25789
40°	28554	24988	21844
45°	22277	22336	18077
50°	18195	18452	14599
55°	16301	15686	12828
60°	13049	12354	10263
65°	10937	10011	9077
70°	10383	9540	9241
75°	9421	10126	8911
80°	9469	10349	9392
85°	8233	9647	7849



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	392.6	4.6
10°-20°	1129.2	13.2
20°-30°	1685.7	19.7
30°-40°	1839.4	21.5
40°-50°	1504.7	17.6
50°-60°	989.3	11.5
60°-70°	567.6	6.6
70°-80°	343.9	4.0
80°-90°	115.5	1.3
90°-100°	3.0	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°	3207.5	37.4
0°-40°	5046.9	58.9
0°-60°	7540.9	88.0
0°-90°	8568.0	100.0
90°-120°	3.0	0.0
90°-150°	3.0	0.0
90°-180°	3.0	0.0
0°-180°	8571.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4129	4129	4129	4129	4129	
5°	4122	4115	4121	4138	4144	392
15°	3988	3988	3999	4024	4026	1126
25°	3698	3707	3688	3644	3626	1701
35°	3231	3158	2965	2763	2708	2003
45°	2020	2170	2025	1788	1639	1603
55°	1199	1166	1154	991	943	1056
65°	593	584	542	528	492	606
75°	313	338	336	322	296	338
85°	92	105	108	94	88	100
90°	0	8	15	18	19	4
95°	0	1	2	2	1	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°	4129.3	4129.3	4129.3	4129.3	4129.3
2.5°	4126.6	4120.6	4126.1	4143.0	4147.9
5°	4121.7	4115.2	4120.6	4137.5	4144.1
7.5°	4104.8	4101.0	4106.5	4123.4	4131.5
10°	4078.2	4073.8	4082.5	4097.2	4107.6
12.5°	4038.4	4036.8	4044.9	4066.2	4070.5
15°	3988.3	3987.7	3998.6	4024.2	4026.4
17.5°	3931.6	3931.1	3944.7	3961.6	3955.6
20°	3863.0	3866.8	3882.6	3866.8	3851.6
22.5°	3780.8	3792.8	3796.6	3747.0	3739.4
25°	3698.5	3707.3	3688.2	3643.5	3625.6
27.5°	3592.3	3602.7	3567.3	3503.6	3452.4
30°	3489.4	3479.6	3407.2	3284.1	3212.7
32.5°	3371.2	3336.4	3206.2	3036.3	2971.5
35°	3231.3	3158.3	2964.9	2762.9	2708.4
37.5°	3054.3	2920.8	2709.5	2498.7	2416.5
40°	2804.3	2650.1	2454.1	2236.2	2145.3
42.5°	2454.1	2396.9	2234.6	1989.5	1881.1
45°	2019.5	2170.3	2024.9	1787.5	1638.8
47.5°	1728.6	1938.3	1763.5	1591.9	1387.2
50°	1499.4	1643.7	1520.6	1365.9	1203.1
52.5°	1333.8	1377.4	1327.8	1157.9	1065.3
55°	1198.7	1166.0	1153.5	991.2	943.3
57.5°	1031.0	1013.0	980.9	864.3	801.1
60°	836.5	874.7	791.9	758.7	657.9
62.5°	687.3	724.9	636.1	633.9	550.1
65°	592.6	583.8	542.4	527.7	491.8
67.5°	524.5	497.2	483.1	464.0	451.5
70°	455.3	443.9	418.3	422.1	405.2
72.5°	379.6	394.3	368.7	375.8	345.3
75°	312.6	338.2	336.0	322.4	295.7
77.5°	257.6	284.8	289.7	277.2	255.4
80°	210.8	229.3	230.4	222.8	209.1
82.5°	154.7	165.6	173.7	160.7	152.0
85°	92.0	104.6	107.8	94.2	87.7
87.5°	30.0	41.9	46.8	48.5	49.0
90°	0.5	7.6	15.2	18.0	19.1
92.5°	0.5	2.2	3.3	4.9	5.4
95°	0.5	1.1	1.6	1.6	1.1
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)