

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: P860287

Luminaire Tested: **SPHB-9SE-M-L740-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: P860287
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-9SE-M-L740-CD
Description: 9000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens and, 4000K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

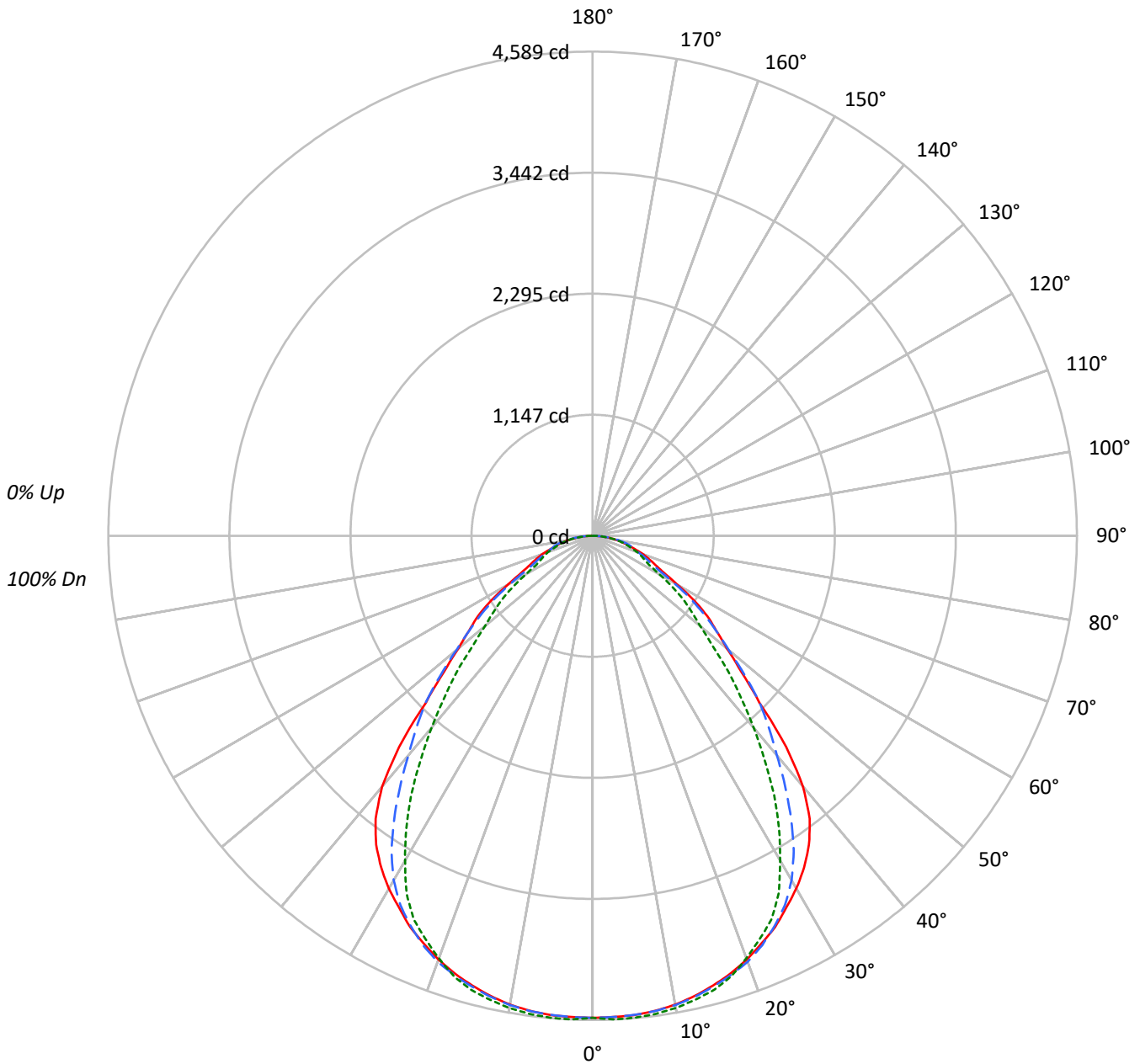
Lumens per Lamp: N/A
Luminaire Lumens: 9482.0 lumens
Efficiency: N/A
Efficacy: 173.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

Input Watts (W): 54.8
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	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°	35632	35632	35632
5°	35702	35693	35895
10°	35733	35771	35990
15°	35629	35721	35970
20°	35473	35653	35369
25°	35214	35115	34519
30°	34768	33949	32011
35°	34038	31233	28531
40°	31588	27643	24165
45°	24644	24710	19999
50°	20128	20413	16150
55°	18033	17353	14192
60°	14438	13667	11354
65°	12098	11076	10042
70°	11487	10552	10224
75°	10421	11205	9861
80°	10475	11450	10394
85°	9111	10677	8681



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	434.4	4.6
10°-20°	1249.2	13.2
20°-30°	1864.9	19.7
30°-40°	2034.9	21.5
40°-50°	1664.6	17.6
50°-60°	1094.5	11.5
60°-70°	627.9	6.6
70°-80°	380.5	4.0
80°-90°	127.8	1.3
90°-100°	3.3	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°	3548.4	37.4
0°-40°	5583.3	58.9
0°-60°	8342.4	88.0
0°-90°	9478.7	100.0
90°-120°	3.3	0.0
90°-150°	3.3	0.0
90°-180°	3.0	0.0
0°-180°	9482.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4568	4568	4568	4568	4568	
5°	4560	4553	4559	4577	4584	434
15°	4412	4412	4424	4452	4454	1245
25°	4092	4101	4080	4031	4011	1882
35°	3575	3494	3280	3056	2996	2216
45°	2234	2401	2240	1977	1813	1773
55°	1326	1290	1276	1097	1044	1168
65°	656	646	600	584	544	670
75°	346	374	372	357	327	374
85°	102	116	119	104	97	110
90°	1	8	17	20	21	5
95°	1	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°	4568.2	4568.2	4568.2	4568.2	4568.2
2.5°	4565.2	4558.6	4564.6	4583.3	4588.7
5°	4559.8	4552.6	4558.6	4577.3	4584.5
7.5°	4541.1	4536.9	4542.9	4561.6	4570.7
10°	4511.6	4506.8	4516.4	4532.7	4544.1
12.5°	4467.6	4465.8	4474.9	4498.4	4503.2
15°	4412.2	4411.6	4423.6	4452.0	4454.4
17.5°	4349.5	4348.9	4364.0	4382.7	4376.0
20°	4273.6	4277.8	4295.3	4277.8	4261.0
22.5°	4182.6	4195.9	4200.1	4145.3	4136.8
25°	4091.7	4101.3	4080.2	4030.8	4010.9
27.5°	3974.2	3985.6	3946.5	3876.0	3819.3
30°	3860.3	3849.5	3769.3	3633.1	3554.2
32.5°	3729.6	3691.0	3547.0	3359.0	3287.3
35°	3574.7	3494.0	3280.1	3056.5	2996.3
37.5°	3378.9	3231.3	2997.5	2764.3	2673.3
40°	3102.3	2931.8	2714.9	2473.9	2373.3
42.5°	2714.9	2651.7	2472.1	2201.0	2081.1
45°	2234.1	2401.0	2240.1	1977.4	1813.0
47.5°	1912.4	2144.3	1950.9	1761.1	1534.6
50°	1658.7	1818.4	1682.2	1511.1	1330.9
52.5°	1475.6	1523.8	1468.9	1280.9	1178.5
55°	1326.1	1290.0	1276.1	1096.6	1043.6
57.5°	1140.6	1120.7	1085.1	956.2	886.3
60°	925.5	967.6	876.1	839.3	727.8
62.5°	760.4	801.9	703.7	701.3	608.5
65°	655.5	645.9	600.1	583.8	544.1
67.5°	580.2	550.1	534.4	513.3	499.5
70°	503.7	491.0	462.7	466.9	448.3
72.5°	420.0	436.2	407.9	415.7	382.0
75°	345.8	374.2	371.8	356.7	327.2
77.5°	285.0	315.1	320.5	306.7	282.6
80°	233.2	253.7	254.9	246.4	231.4
82.5°	171.1	183.2	192.2	177.7	168.1
85°	101.8	115.7	119.3	104.2	97.0
87.5°	33.1	46.4	51.8	53.6	54.2
90°	0.6	8.4	16.9	19.9	21.1
92.5°	0.6	2.4	3.6	5.4	6.0
95°	0.6	1.2	1.8	1.8	1.2
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)