

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: P860292

Luminaire Tested: **SPHB-9SE-M-L935-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: P860292
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-L935-CD
Description: 9000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens
and, 3500K 90CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

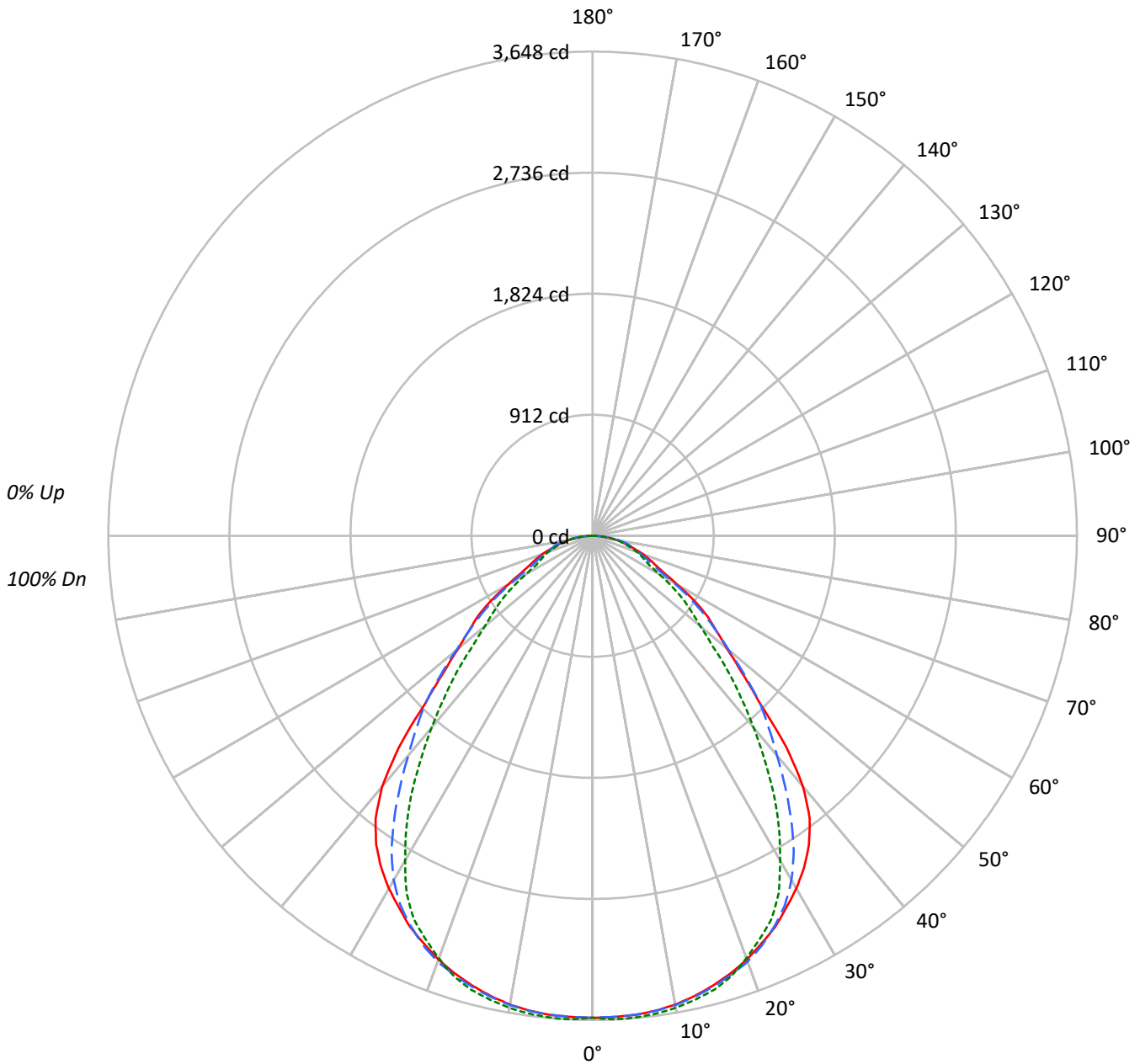
Lumens per Lamp: N/A
Luminaire Lumens: 7537.0 lumens
Efficiency: N/A
Efficacy: 137.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

Input Watts (W): 54.8
Input Voltage (V): NR
Input Current (Ain): 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°	28323	28323	28323
5°	28379	28371	28532
10°	28404	28434	28608
15°	28320	28394	28591
20°	28197	28340	28113
25°	27991	27913	27439
30°	27637	26985	25445
35°	27056	24826	22678
40°	25109	21973	19209
45°	19588	19641	15896
50°	15999	16225	12837
55°	14334	13795	11280
60°	11475	10864	9025
65°	9618	8804	7982
70°	9131	8388	8126
75°	8285	8905	7839
80°	8323	9100	8260
85°	7240	8484	6900



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	345.3	4.6
10°-20°	993.0	13.2
20°-30°	1482.3	19.7
30°-40°	1617.5	21.5
40°-50°	1323.2	17.6
50°-60°	870.0	11.5
60°-70°	499.1	6.6
70°-80°	302.5	4.0
80°-90°	101.6	1.3
90°-100°	2.6	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°	2820.6	37.4
0°-40°	4438.1	58.9
0°-60°	6631.2	88.0
0°-90°	7534.4	100.0
90°-120°	2.6	0.0
90°-150°	2.6	0.0
90°-180°	3.0	0.0
0°-180°	7537.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3631	3631	3631	3631	3631	
5°	3624	3619	3624	3638	3644	345
15°	3507	3507	3516	3539	3541	990
25°	3252	3260	3243	3204	3188	1496
35°	2841	2777	2607	2430	2382	1761
45°	1776	1908	1781	1572	1441	1410
55°	1054	1025	1014	872	830	928
65°	521	513	477	464	432	533
75°	275	297	296	284	260	298
85°	81	92	95	83	77	88
90°	0	7	13	16	17	4
95°	0	1	1	1	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°	3631.2	3631.2	3631.2	3631.2	3631.2
2.5°	3628.8	3623.5	3628.3	3643.2	3647.5
5°	3624.5	3618.7	3623.5	3638.4	3644.1
7.5°	3609.6	3606.3	3611.1	3625.9	3633.1
10°	3586.2	3582.3	3590.0	3602.9	3612.0
12.5°	3551.2	3549.8	3557.0	3575.6	3579.5
15°	3507.1	3506.7	3516.2	3538.8	3540.7
17.5°	3457.3	3456.9	3468.8	3483.7	3478.4
20°	3397.0	3400.3	3414.2	3400.3	3386.9
22.5°	3324.7	3335.2	3338.6	3295.0	3288.3
25°	3252.4	3260.0	3243.3	3204.0	3188.2
27.5°	3159.0	3168.1	3136.9	3080.9	3035.9
30°	3068.5	3059.8	2996.1	2887.9	2825.2
32.5°	2964.5	2933.9	2819.4	2670.0	2613.0
35°	2841.4	2777.3	2607.2	2429.6	2381.7
37.5°	2685.8	2568.5	2382.6	2197.3	2125.0
40°	2466.0	2330.4	2158.0	1966.5	1886.5
42.5°	2158.0	2107.7	1965.0	1749.5	1654.2
45°	1775.8	1908.5	1780.6	1571.8	1441.1
47.5°	1520.1	1704.5	1550.7	1399.9	1219.8
50°	1318.5	1445.4	1337.1	1201.1	1057.9
52.5°	1172.9	1211.2	1167.6	1018.2	936.8
55°	1054.1	1025.4	1014.4	871.6	829.5
57.5°	906.6	890.8	862.5	760.0	704.5
60°	735.6	769.1	696.4	667.1	578.5
62.5°	604.4	637.4	559.4	557.5	483.7
65°	521.1	513.4	477.0	464.1	432.5
67.5°	461.2	437.3	424.8	408.0	397.0
70°	400.4	390.3	367.8	371.2	356.3
72.5°	333.8	346.7	324.2	330.5	303.6
75°	274.9	297.4	295.5	283.5	260.1
77.5°	226.5	250.5	254.8	243.8	224.6
80°	185.3	201.6	202.6	195.9	183.9
82.5°	136.0	145.6	152.8	141.3	133.6
85°	80.9	92.0	94.8	82.9	77.1
87.5°	26.3	36.9	41.2	42.6	43.1
90°	0.5	6.7	13.4	15.8	16.8
92.5°	0.5	1.9	2.9	4.3	4.8
95°	0.5	1.0	1.4	1.4	1.0
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)