

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: P860295

Luminaire Tested: **SPHB-9SE-N-L735-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: P860295
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SPHB-9SE-N-L735-CD
Description: 9000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens
and, 3500K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

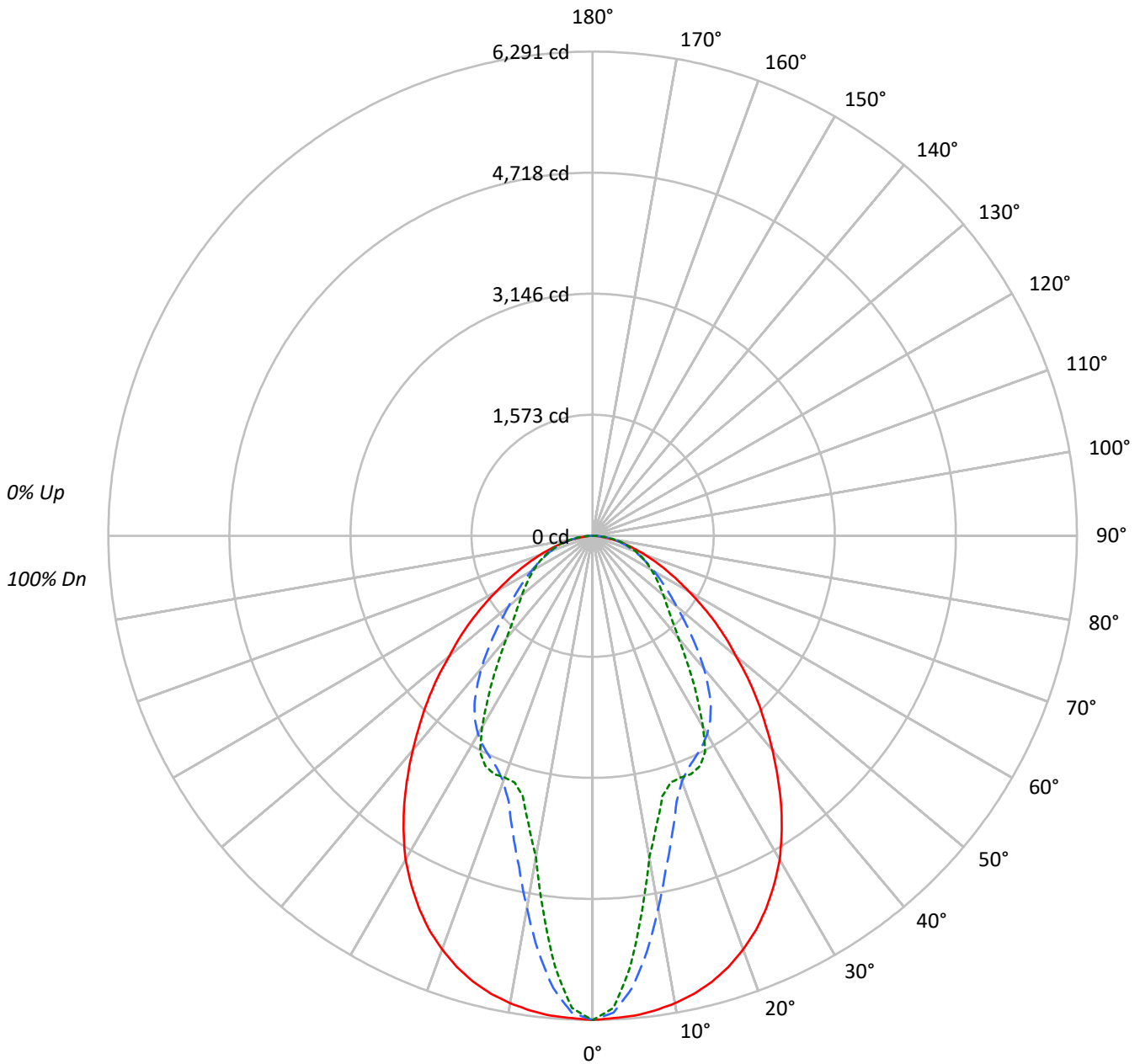
Lumens per Lamp: N/A
Luminaire Lumens: 9220.0 lumens
Efficiency: N/A
Efficacy: 168.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86								
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74								
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64								
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56								
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50								
6	74	62	54	48	73	61	54	48	60	53	47	58	52	47	56	51	47	45								
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	46	42	40								
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37								
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34								
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	49069	49069	49069
5°	49012	46170	43984
10°	48845	38917	33549
15°	48438	32305	28272
20°	47462	28160	27754
25°	45937	27247	28404
30°	43766	26810	25850
35°	40636	25476	21421
40°	37004	22871	17687
45°	33402	19845	15528
50°	29477	17257	14541
55°	26157	15564	13996
60°	22415	14392	13711
65°	19403	13527	13641
70°	16605	13013	13624
75°	13938	12636	13504
80°	10637	12209	13224
85°	6963	10829	10184



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	536.4	5.8
10°-20°	1231.6	13.4
20°-30°	1664.4	18.1
30°-40°	1751.7	19.0
40°-50°	1486.4	16.1
50°-60°	1151.4	12.5
60°-70°	801.9	8.7
70°-80°	459.2	5.0
80°-90°	133.6	1.4
90°-100°	3.6	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°	3432.3	37.2
0°-40°	5184.0	56.2
0°-60°	7821.7	84.8
0°-90°	9216.4	100.0
90°-120°	3.6	0.0
90°-150°	3.6	0.0
90°-180°	4.0	0.0
0°-180°	9220.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6291	6291	6291	6291	6291	
5°	6260	6145	5897	5670	5618	594
15°	5998	5091	4001	3601	3501	1688
25°	5338	3770	3166	3258	3300	2450
35°	4268	2900	2676	2417	2250	2660
45°	3028	2178	1799	1478	1408	2332
55°	1924	1467	1144	1040	1029	1720
65°	1051	861	733	733	739	1050
75°	462	411	419	446	448	493
85°	78	101	121	114	114	99
90°	0	9	18	23	24	4
95°	0	1	3	3	2	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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CATALOG NUMBER: SPHB-9SE-N-L735-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6291.0	6291.0	6291.0	6291.0	6291.0
2.5°	6272.7	6252.1	6201.6	6169.0	6143.5
5°	6259.7	6145.0	5896.7	5670.5	5617.6
7.5°	6220.8	5968.7	5438.0	5019.7	4914.1
10°	6167.1	5715.6	4913.6	4389.6	4235.9
12.5°	6095.5	5445.2	4411.2	3917.5	3842.1
15°	5998.5	5091.3	4000.6	3601.0	3501.1
17.5°	5872.7	4725.3	3621.7	3390.7	3362.8
20°	5718.0	4389.6	3392.6	3313.8	3343.6
22.5°	5544.2	4063.5	3259.5	3292.7	3348.4
25°	5337.6	3770.5	3165.9	3257.6	3300.4
27.5°	5105.7	3505.9	3079.9	3164.0	3164.0
30°	4859.3	3285.5	2976.7	2969.0	2870.1
32.5°	4571.6	3098.2	2841.7	2689.5	2542.5
35°	4267.6	2899.8	2675.5	2416.7	2249.6
37.5°	3948.7	2715.4	2465.2	2123.7	1968.1
40°	3634.2	2533.4	2246.2	1860.5	1737.1
42.5°	3321.0	2348.0	2018.1	1647.3	1549.8
45°	3028.1	2177.5	1799.1	1478.2	1407.7
47.5°	2730.3	1996.5	1596.9	1342.3	1293.3
50°	2429.2	1813.0	1422.1	1234.3	1198.3
52.5°	2175.6	1642.0	1273.7	1132.0	1110.4
55°	1923.5	1466.7	1144.5	1040.2	1029.2
57.5°	1673.2	1303.4	1026.3	956.2	953.8
60°	1436.9	1150.7	922.6	884.2	878.9
62.5°	1235.7	998.9	824.1	805.9	808.3
65°	1051.3	860.6	732.9	732.9	739.1
67.5°	880.3	733.4	649.3	660.4	669.0
70°	728.1	618.1	570.6	589.8	597.4
72.5°	584.0	511.0	495.2	516.3	522.5
75°	462.5	411.1	419.3	445.7	448.1
77.5°	342.9	323.7	344.8	373.6	378.9
80°	236.8	238.7	271.8	292.0	294.4
82.5°	152.7	166.7	203.6	214.2	210.4
85°	77.8	100.9	121.0	113.8	113.8
87.5°	29.8	43.7	51.4	60.5	63.9
90°	0.5	9.1	17.8	22.6	23.5
92.5°	0.5	2.4	3.8	4.3	3.8
95°	0.5	1.4	2.9	2.9	2.4
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)