

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: P860306

Luminaire Tested: **SPHB-9SE-W-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: P860306
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-6)
Test Lab: INNOVATION CENTER
Issue Date: 7/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SPHB-9SE-W-L750-CD
Description: 9000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens and, 5000K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

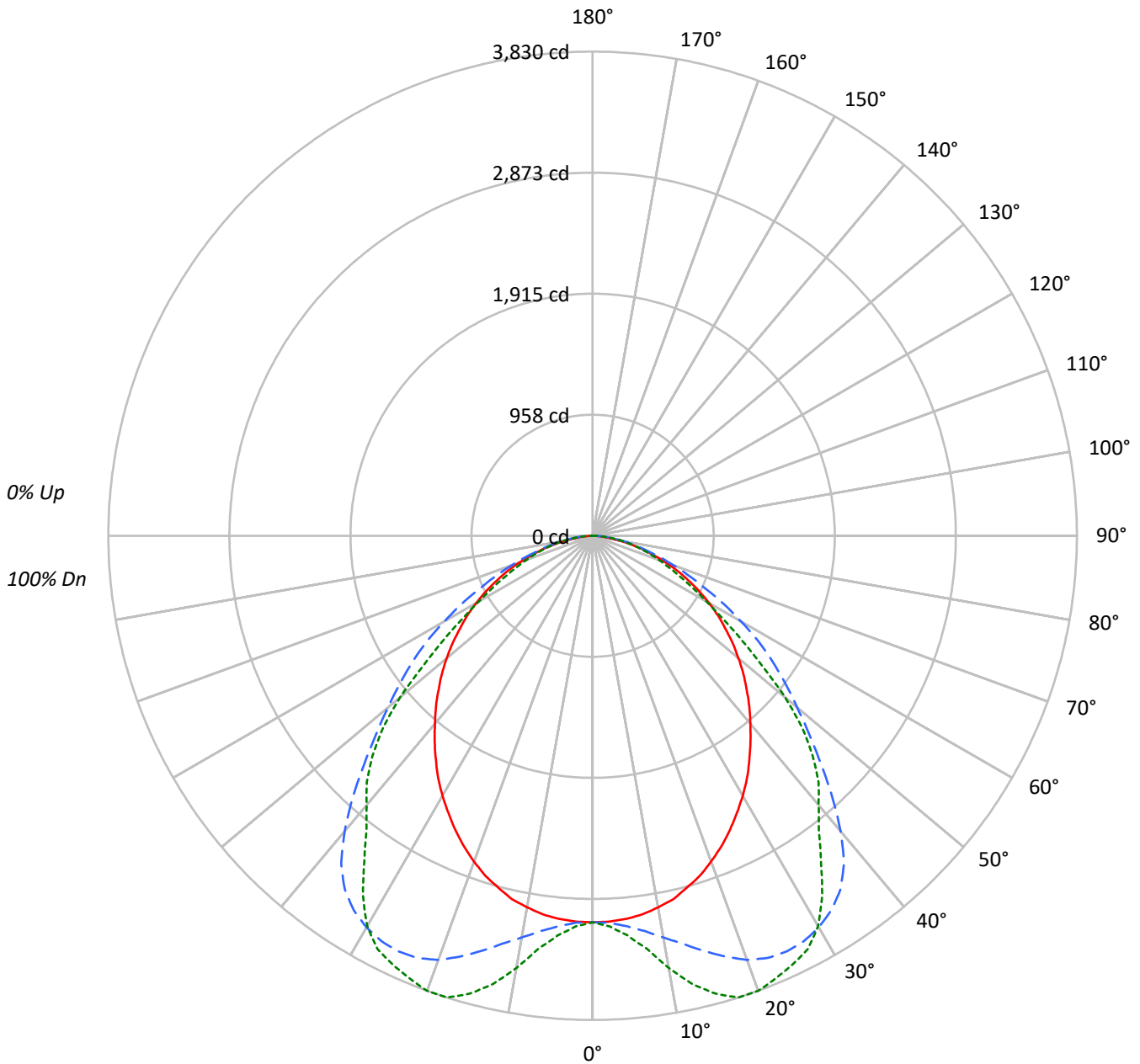
Lumens per Lamp: N/A
Luminaire Lumens: 9620.0 lumens
Efficiency: N/A
Efficacy: 175.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

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									
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	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85																			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72																			
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62																			
4	84	73	64	58	82	71	63	57	69	62	57	66	61	56	64	59	55	53																			
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	52	48	46																			
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40																			
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	38	36																			
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32																			
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	29																			
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23848	23848	23848
5°	23822	24271	24846
10°	23633	25552	27489
15°	23264	27455	30279
20°	22760	29638	31791
25°	22104	31236	32208
30°	21384	32214	32121
35°	20582	32538	29972
40°	19752	31069	28309
45°	19005	28162	27161
50°	18265	25606	24079
55°	17430	23658	19594
60°	16567	21093	16137
65°	15426	18124	13992
70°	14035	15474	12655
75°	12052	12986	11603
80°	9419	11140	10762
85°	6372	9451	8869



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.2	3.1
10°-20°	951.8	9.9
20°-30°	1557.8	16.2
30°-40°	1900.3	19.8
40°-50°	1882.1	19.6
50°-60°	1505.0	15.6
60°-70°	938.9	9.8
70°-80°	460.0	4.8
80°-90°	120.6	1.3
90°-100°	3.2	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°	2809.8	29.2
0°-40°	4710.1	49.0
0°-60°	8097.3	84.2
0°-90°	9616.8	100.0
90°-120°	3.2	0.0
90°-150°	3.2	0.0
90°-180°	3.0	0.0
0°-180°	9620.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3057	3057	3057	3057	3057	
5°	3042	3056	3100	3154	3173	289
15°	2881	3049	3400	3670	3750	812
25°	2568	3003	3630	3735	3742	1182
35°	2162	2888	3417	3235	3148	1352
45°	1723	2677	2553	2467	2462	1331
55°	1282	2055	1740	1572	1441	1148
65°	836	1153	982	814	758	829
75°	400	490	431	395	385	425
85°	71	101	106	100	99	88
90°	0	10	19	24	24	4
95°	0	2	2	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°	3057.4	3057.4	3057.4	3057.4	3057.4
2.5°	3054.3	3053.2	3064.3	3084.6	3093.7
5°	3042.5	3055.8	3099.9	3153.8	3173.3
7.5°	3021.0	3057.0	3154.2	3253.3	3295.4
10°	2983.9	3057.8	3226.1	3401.0	3470.7
12.5°	2945.6	3055.1	3306.1	3553.7	3629.9
15°	2881.0	3048.6	3399.9	3670.5	3749.7
17.5°	2820.9	3040.9	3490.2	3769.6	3829.7
20°	2742.0	3029.8	3570.6	3799.8	3830.0
22.5°	2659.4	3021.0	3615.0	3779.5	3788.7
25°	2568.3	3003.0	3629.5	3734.8	3742.4
27.5°	2471.1	2987.0	3615.7	3679.3	3685.8
30°	2374.3	2957.9	3576.7	3592.8	3566.4
32.5°	2272.8	2928.8	3513.6	3441.2	3379.6
35°	2161.5	2888.2	3417.1	3234.6	3147.7
37.5°	2051.6	2849.2	3266.7	3003.4	2938.0
40°	1939.9	2801.0	3051.3	2787.6	2780.3
42.5°	1834.3	2748.9	2807.5	2619.6	2644.1
45°	1722.9	2676.6	2553.0	2467.3	2462.3
47.5°	1617.3	2576.7	2321.4	2298.9	2248.0
50°	1505.2	2438.9	2110.2	2088.8	1984.3
52.5°	1395.3	2263.3	1921.5	1841.2	1688.8
55°	1281.7	2055.1	1739.7	1571.7	1440.9
57.5°	1176.0	1826.2	1554.9	1337.1	1219.7
60°	1062.0	1594.3	1352.1	1131.3	1034.4
62.5°	950.2	1365.9	1168.4	956.0	891.7
65°	835.8	1153.1	982.0	814.4	758.1
67.5°	726.4	969.0	820.9	686.6	649.1
70°	615.4	786.1	678.5	576.7	554.9
72.5°	501.0	628.0	548.8	486.8	470.3
75°	399.9	489.9	430.9	394.6	385.0
77.5°	297.7	364.3	336.8	315.3	312.7
80°	209.7	262.9	248.0	243.8	239.6
82.5°	133.9	171.8	176.4	173.7	170.7
85°	71.2	101.0	105.6	100.3	99.1
87.5°	28.7	44.0	47.5	52.4	54.0
90°	0.4	10.3	18.8	23.7	24.5
92.5°	0.4	2.3	2.7	2.7	2.3
95°	0.4	1.5	1.5	1.1	0.8
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)