

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: P860141

Luminaire Tested: **SPHB-36SE-N-L950-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: P860141
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-36SE-N-L950-CD
Description: 36000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens
and, 5000K 90CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

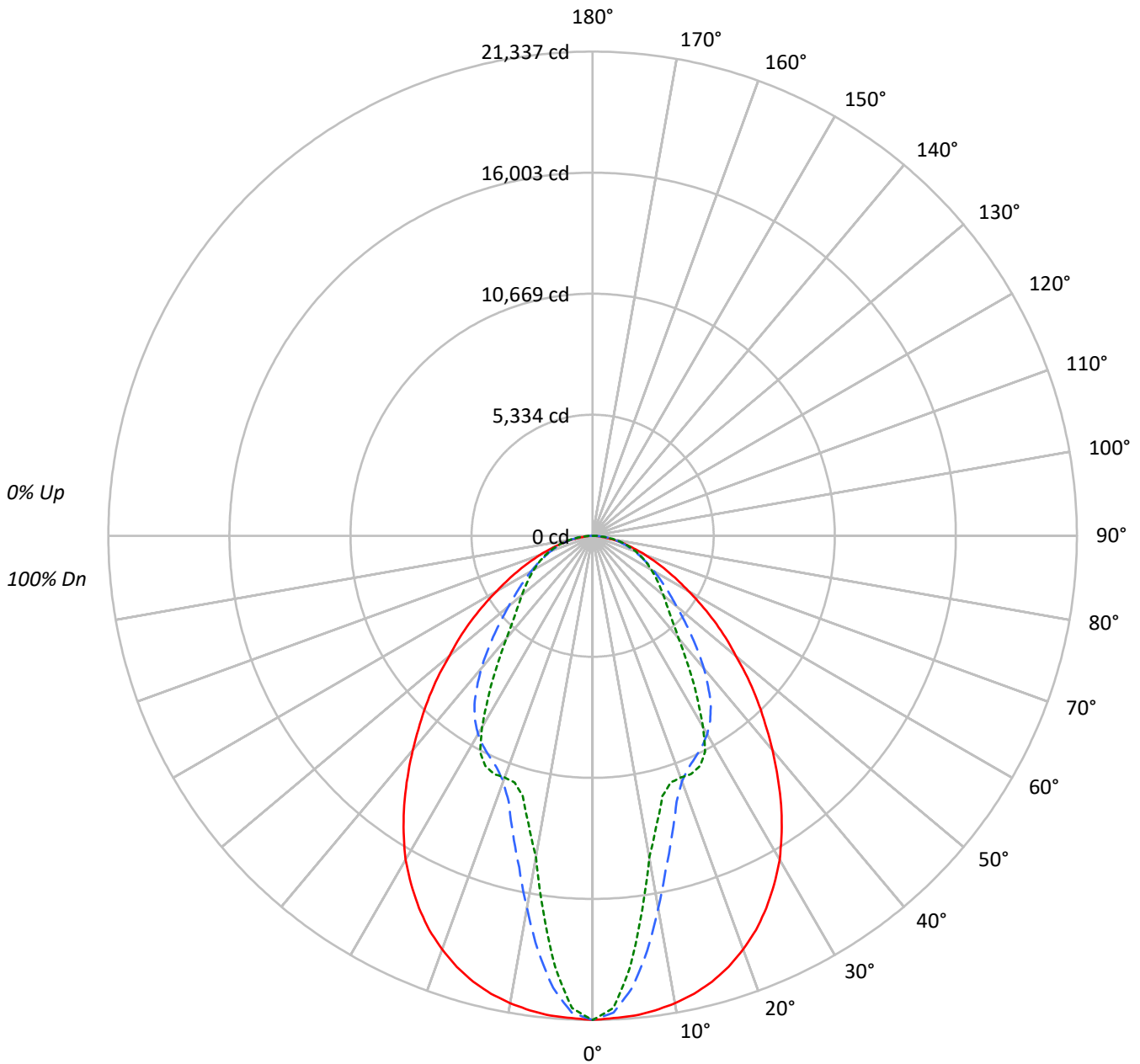
Lumens per Lamp: N/A
Luminaire Lumens: 31271.0 lumens
Efficiency: N/A
Efficacy: 129.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

Input Watts (W): 240.8
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	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°	112582	112582	112582
5°	112451	105929	100916
10°	112067	89289	76975
15°	111135	74119	64866
20°	108896	64609	63676
25°	105396	62513	65169
30°	100414	61511	59308
35°	93234	58452	49145
40°	84899	52474	40581
45°	76635	45532	35626
50°	67630	39591	33361
55°	60013	35708	32112
60°	51430	33021	31457
65°	44517	31034	31299
70°	38096	29853	31260
75°	31978	28990	30981
80°	24400	28013	30340
85°	15977	24852	23369



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1819.1	5.8
10°-20°	4177.0	13.4
20°-30°	5645.0	18.1
30°-40°	5941.0	19.0
40°-50°	5041.2	16.1
50°-60°	3905.1	12.5
60°-70°	2719.8	8.7
70°-80°	1557.4	5.0
80°-90°	453.2	1.4
90°-100°	12.1	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°	11641.1	37.2
0°-40°	17582.2	56.2
0°-60°	26528.5	84.8
0°-90°	31258.9	100.0
90°-120°	12.1	0.0
90°-150°	12.1	0.0
90°-180°	12.0	0.0
0°-180°	31271.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	21337	21337	21337	21337	21337	
5°	21231	20842	19999	19232	19053	###
15°	20345	17268	13569	12213	11875	5725
25°	18103	12788	10738	11049	11194	8310
35°	14474	9835	9074	8196	7630	9022
45°	10270	7385	6102	5014	4774	7910
55°	6524	4975	3882	3528	3491	5833
65°	3566	2919	2486	2486	2507	3562
75°	1569	1394	1422	1512	1520	1673
85°	264	342	410	386	386	335
90°	2	31	60	77	80	14
95°	2	5	10	10	8	1
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°	21336.7	21336.7	21336.7	21336.7	21336.7
2.5°	21274.8	21204.8	21033.8	20923.0	20836.7
5°	21230.9	20841.6	19999.4	19232.2	19053.0
7.5°	21098.9	20243.8	18443.8	17025.1	16666.7
10°	20916.5	19385.3	16665.1	14888.0	14366.8
12.5°	20673.8	18468.3	14961.3	13286.8	13031.1
15°	20344.8	17267.8	13568.6	12213.4	11874.6
17.5°	19918.0	16026.6	12283.4	11499.9	11405.4
20°	19393.5	14888.0	11506.4	11239.3	11340.3
22.5°	18803.8	13782.0	11055.2	11167.6	11356.6
25°	18103.4	12788.4	10737.6	11048.7	11193.7
27.5°	17316.7	11890.8	10446.0	10731.1	10731.1
30°	16481.0	11143.2	10095.8	10069.8	9734.2
32.5°	15505.3	10507.9	9638.1	9121.7	8623.3
35°	14474.3	9835.2	9074.5	8196.5	7629.7
37.5°	13392.7	9209.7	8361.1	7202.9	6675.2
40°	12325.8	8592.4	7618.3	6310.3	5891.7
42.5°	11263.7	7963.6	6844.6	5587.1	5256.4
45°	10270.1	7385.4	6101.8	5013.7	4774.3
47.5°	9260.2	6771.3	5416.0	4552.7	4386.6
50°	8238.9	6149.0	4823.1	4186.2	4064.1
52.5°	7378.8	5569.2	4319.8	3839.3	3766.0
55°	6523.7	4974.6	3881.6	3528.2	3490.7
57.5°	5675.0	4420.8	3480.9	3243.1	3235.0
60°	4873.6	3902.8	3129.1	2998.8	2980.9
62.5°	4191.1	3388.1	2795.2	2733.3	2741.4
65°	3565.6	2919.0	2485.7	2485.7	2506.9
67.5°	2985.7	2487.3	2202.3	2239.7	2269.0
70°	2469.4	2096.4	1935.1	2000.3	2026.3
72.5°	1980.7	1733.1	1679.4	1751.0	1772.2
75°	1568.6	1394.3	1422.0	1511.6	1519.7
77.5°	1163.0	1097.9	1169.5	1267.3	1285.2
80°	803.0	809.6	921.9	990.4	998.5
82.5°	518.0	565.2	690.6	726.5	713.5
85°	263.9	342.1	410.5	386.0	386.0
87.5°	101.0	148.2	174.3	205.2	216.6
90°	1.6	30.9	60.3	76.6	79.8
92.5°	1.6	8.1	13.0	14.7	13.0
95°	1.6	4.9	9.8	9.8	8.1
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)