

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: P860172

Luminaire Tested: **SPHB-48HE-W-L835-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: P860172
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-48HE-W-L835-CD
Description: 48000 Lumen High Efficacy Select Pro High Bay with Wide Lens and, 3500K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

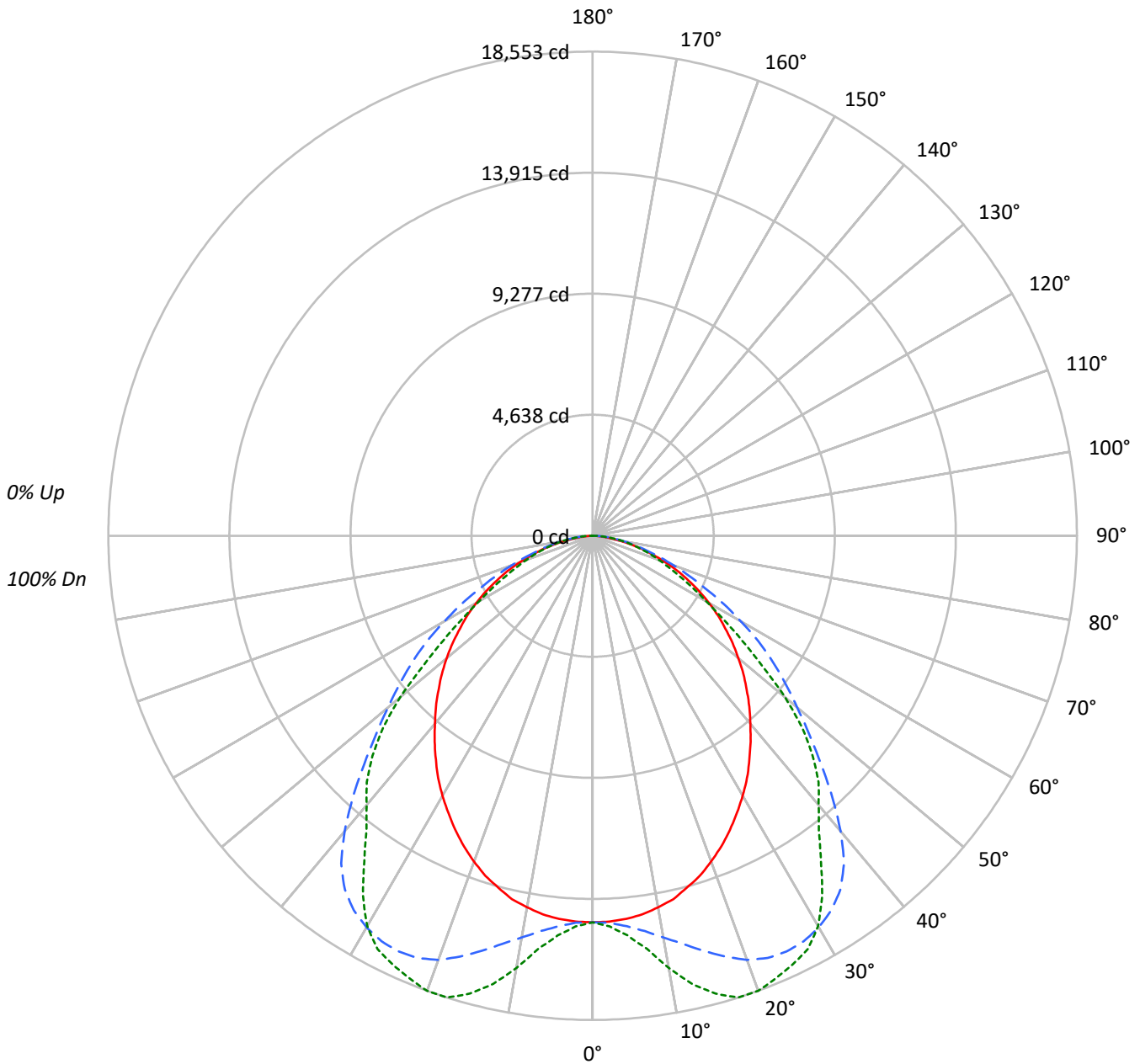
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 46600.0 lumens
Efficiency: N/A
Efficacy: 161.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 3.38' x H: 0')
CIE Type: Direct

Input Watts (W): 288.6
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	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°	47164	47164	47164
5°	47113	48002	49140
10°	46741	50536	54366
15°	46011	54298	59884
20°	45014	58616	62876
25°	43715	61778	63700
30°	42292	63711	63527
35°	40705	64352	59278
40°	39065	61445	55989
45°	37587	55696	53718
50°	36123	50643	47622
55°	34470	46791	38752
60°	32766	41715	31915
65°	30509	35845	27673
70°	27756	30604	25028
75°	23836	25684	22946
80°	18631	22031	21283
85°	12599	18697	17542



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1454.1	3.1
10°-20°	4610.8	9.9
20°-30°	7545.9	16.2
30°-40°	9205.4	19.8
40°-50°	9117.0	19.6
50°-60°	7290.6	15.6
60°-70°	4548.1	9.8
70°-80°	2228.4	4.8
80°-90°	584.4	1.3
90°-100°	15.4	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°	13610.8	29.2
0°-40°	22816.1	49.0
0°-60°	39223.7	84.2
0°-90°	46584.6	100.0
90°-120°	15.4	0.0
90°-150°	15.4	0.0
90°-180°	15.0	0.0
0°-180°	46600.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	14810	14810	14810	14810	14810	
5°	14738	14803	15016	15277	15372	###
15°	13956	14768	16469	17780	18164	3934
25°	12441	14547	17582	18091	18128	5725
35°	10470	13991	16553	15668	15248	6549
45°	8346	12966	12367	11952	11928	6446
55°	6208	9955	8428	7614	6980	5562
65°	4049	5586	4757	3945	3672	4015
75°	1937	2373	2087	1911	1865	2057
85°	345	489	512	486	480	427
90°	2	50	91	115	119	20
95°	2	7	7	6	4	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°	14810.2	14810.2	14810.2	14810.2	14810.2
2.5°	14795.3	14789.8	14843.5	14941.8	14986.3
5°	14737.9	14802.8	15015.9	15277.3	15371.9
7.5°	14634.1	14808.3	15279.2	15759.3	15963.3
10°	14454.2	14812.0	15627.7	16474.9	16812.3
12.5°	14268.9	14799.1	16015.2	17214.6	17583.5
15°	13955.6	14767.5	16469.3	17780.0	18163.7
17.5°	13664.5	14730.5	16906.8	18260.1	18551.2
20°	13282.6	14676.7	17296.1	18406.6	18553.0
22.5°	12882.2	14634.1	17511.2	18308.3	18352.8
25°	12441.0	14546.9	17581.6	18091.4	18128.5
27.5°	11970.1	14469.1	17514.9	17822.6	17854.1
30°	11501.1	14328.2	17325.8	17403.7	17275.8
32.5°	11009.8	14187.3	17019.9	16669.6	16371.1
35°	10470.4	13990.8	16552.8	15668.5	15247.7
37.5°	9938.3	13801.7	15824.2	14548.8	14231.8
40°	9397.0	13568.1	14780.5	13503.2	13468.0
42.5°	8885.4	13316.0	13599.6	12689.4	12808.0
45°	8345.9	12965.6	12366.8	11951.6	11927.5
47.5°	7834.2	12481.8	11245.3	11135.9	10889.3
50°	7291.1	11814.4	10222.0	10118.2	9612.1
52.5°	6759.0	10963.5	9308.0	8918.7	8180.9
55°	6208.4	9955.0	8427.5	7613.6	6979.6
57.5°	5696.8	8846.4	7532.1	6477.2	5908.1
60°	5144.4	7723.0	6549.5	5479.9	5010.9
62.5°	4603.0	6616.3	5659.7	4630.8	4319.4
65°	4048.7	5585.6	4756.9	3944.9	3672.4
67.5°	3518.6	4693.9	3976.4	3325.8	3144.1
70°	2980.9	3807.7	3286.8	2793.7	2688.0
72.5°	2426.7	3042.1	2658.4	2358.1	2278.3
75°	1937.2	2372.9	2087.4	1911.3	1864.9
77.5°	1442.3	1764.8	1631.4	1527.5	1514.6
80°	1015.9	1273.6	1201.3	1180.9	1160.5
82.5°	648.8	832.4	854.6	841.6	826.8
85°	344.8	489.4	511.7	485.7	480.1
87.5°	139.0	213.2	229.9	254.0	261.4
90°	1.9	50.1	90.8	114.9	118.6
92.5°	1.9	11.1	13.0	13.0	11.1
95°	1.9	7.4	7.4	5.6	3.7
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)