

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: P859875

Luminaire Tested: **SPHB-12SE-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: P859875
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-12SE-W-L835-CD
Description: 12000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens
and, 3500K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

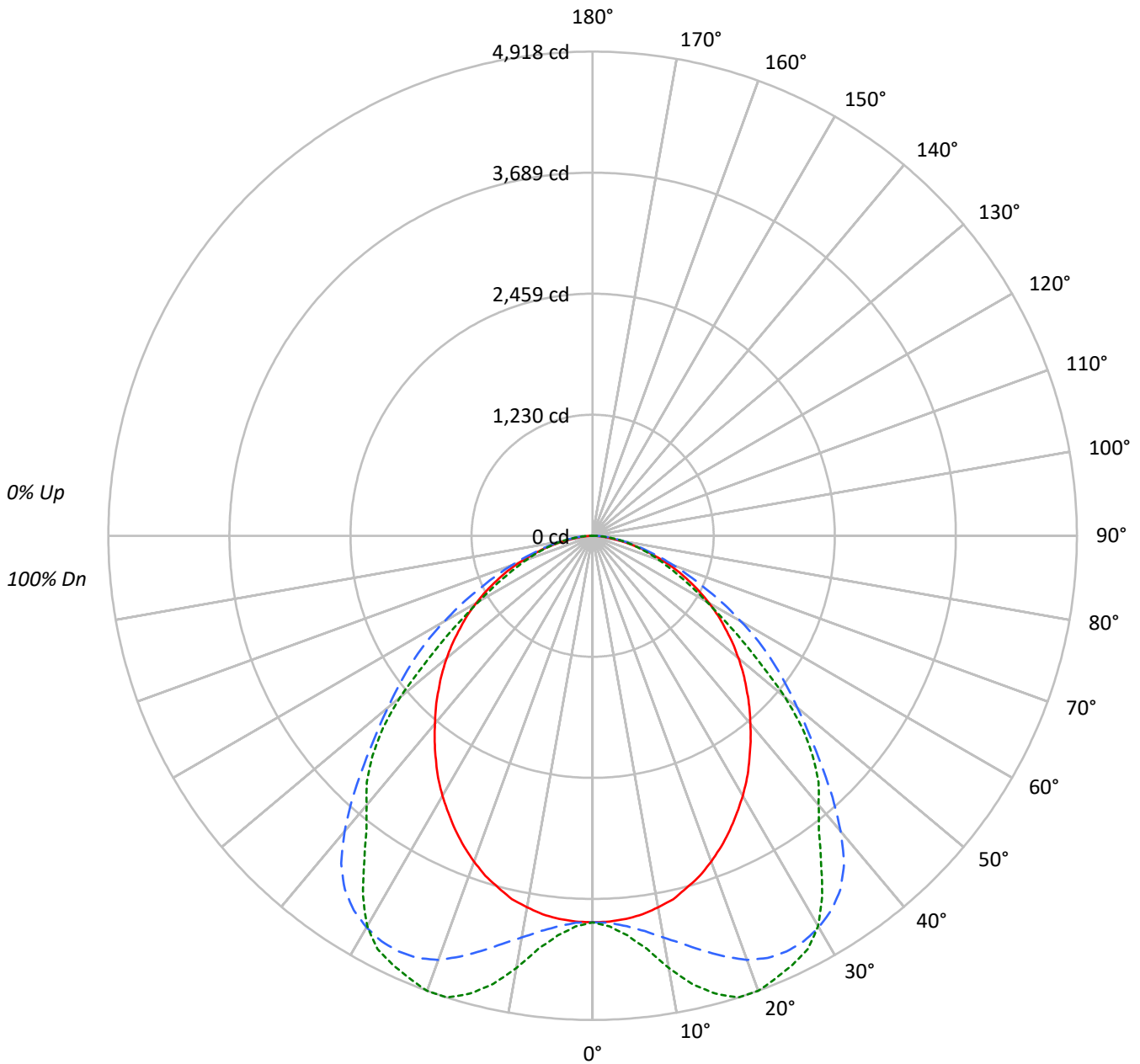
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12353.0 lumens
Efficiency: N/A
Efficacy: 161.9 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): 76.3
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	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°	30623	30623	30623
5°	30589	31166	31905
10°	30347	32811	35298
15°	29873	35254	38881
20°	29226	38058	40823
25°	28383	40110	41358
30°	27459	41365	41247
35°	26428	41781	38487
40°	25364	39894	36352
45°	24404	36162	34877
50°	23454	32881	30919
55°	22381	30380	25160
60°	21274	27085	20721
65°	19809	23273	17967
70°	18021	19870	16251
75°	15475	16675	14900
80°	12096	14302	13817
85°	8180	12135	11393



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	385.5	3.1
10°-20°	1222.3	9.9
20°-30°	2000.3	16.2
30°-40°	2440.2	19.8
40°-50°	2416.8	19.6
50°-60°	1932.6	15.6
60°-70°	1205.7	9.8
70°-80°	590.7	4.8
80°-90°	154.9	1.3
90°-100°	4.1	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°	3608.0	29.2
0°-40°	6048.2	49.0
0°-60°	10397.6	84.2
0°-90°	12348.9	100.0
90°-120°	4.1	0.0
90°-150°	4.1	0.0
90°-180°	4.0	0.0
0°-180°	12353.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3926	3926	3926	3926	3926	
5°	3907	3924	3980	4050	4075	371
15°	3699	3915	4366	4713	4815	1043
25°	3298	3856	4661	4796	4806	1518
35°	2776	3709	4388	4154	4042	1736
45°	2212	3437	3278	3168	3162	1709
55°	1646	2639	2234	2018	1850	1475
65°	1073	1481	1261	1046	974	1064
75°	514	629	553	507	494	545
85°	91	130	136	129	127	113
90°	0	13	24	30	32	5
95°	0	2	2	2	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



TEST NUMBER: P859875

CATALOG NUMBER: SPHB-12SE-W-L835-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3926.0	3926.0	3926.0	3926.0	3926.0
2.5°	3922.0	3920.6	3934.8	3960.9	3972.7
5°	3906.8	3924.0	3980.5	4049.8	4074.9
7.5°	3879.3	3925.5	4050.3	4177.6	4231.6
10°	3831.6	3926.5	4142.7	4367.3	4456.7
12.5°	3782.5	3923.0	4245.4	4563.3	4661.1
15°	3699.4	3914.7	4365.8	4713.2	4814.9
17.5°	3622.3	3904.8	4481.8	4840.5	4917.7
20°	3521.0	3890.6	4585.0	4879.3	4918.1
22.5°	3414.9	3879.3	4642.0	4853.3	4865.1
25°	3297.9	3856.2	4660.6	4795.8	4805.6
27.5°	3173.1	3835.5	4643.0	4724.5	4732.9
30°	3048.8	3798.2	4592.8	4613.5	4579.6
32.5°	2918.6	3760.8	4511.7	4418.9	4339.7
35°	2775.5	3708.8	4387.9	4153.5	4041.9
37.5°	2634.5	3658.6	4194.8	3856.7	3772.6
40°	2491.0	3596.7	3918.1	3579.5	3570.2
42.5°	2355.4	3529.9	3605.1	3363.8	3395.2
45°	2212.4	3437.0	3278.3	3168.2	3161.8
47.5°	2076.7	3308.7	2981.0	2952.0	2886.6
50°	1932.8	3131.8	2709.7	2682.2	2548.0
52.5°	1791.7	2906.3	2467.4	2364.2	2168.6
55°	1645.8	2638.9	2234.0	2018.3	1850.2
57.5°	1510.1	2345.1	1996.6	1717.0	1566.2
60°	1363.7	2047.3	1736.2	1452.6	1328.3
62.5°	1220.2	1753.9	1500.3	1227.6	1145.0
65°	1073.3	1480.7	1261.0	1045.7	973.5
67.5°	932.7	1244.3	1054.1	881.6	833.5
70°	790.2	1009.4	871.3	740.6	712.6
72.5°	643.3	806.4	704.7	625.1	604.0
75°	513.5	629.0	553.3	506.7	494.4
77.5°	382.3	467.8	432.5	404.9	401.5
80°	269.3	337.6	318.4	313.0	307.6
82.5°	172.0	220.6	226.5	223.1	219.2
85°	91.4	129.7	135.6	128.8	127.3
87.5°	36.9	56.5	60.9	67.3	69.3
90°	0.5	13.3	24.1	30.5	31.5
92.5°	0.5	2.9	3.4	3.4	2.9
95°	0.5	2.0	2.0	1.5	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)