

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: P859902

Luminaire Tested: **SPHB-15HE-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: P859902
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-15HE-W-L835-CD
Description: 15000 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

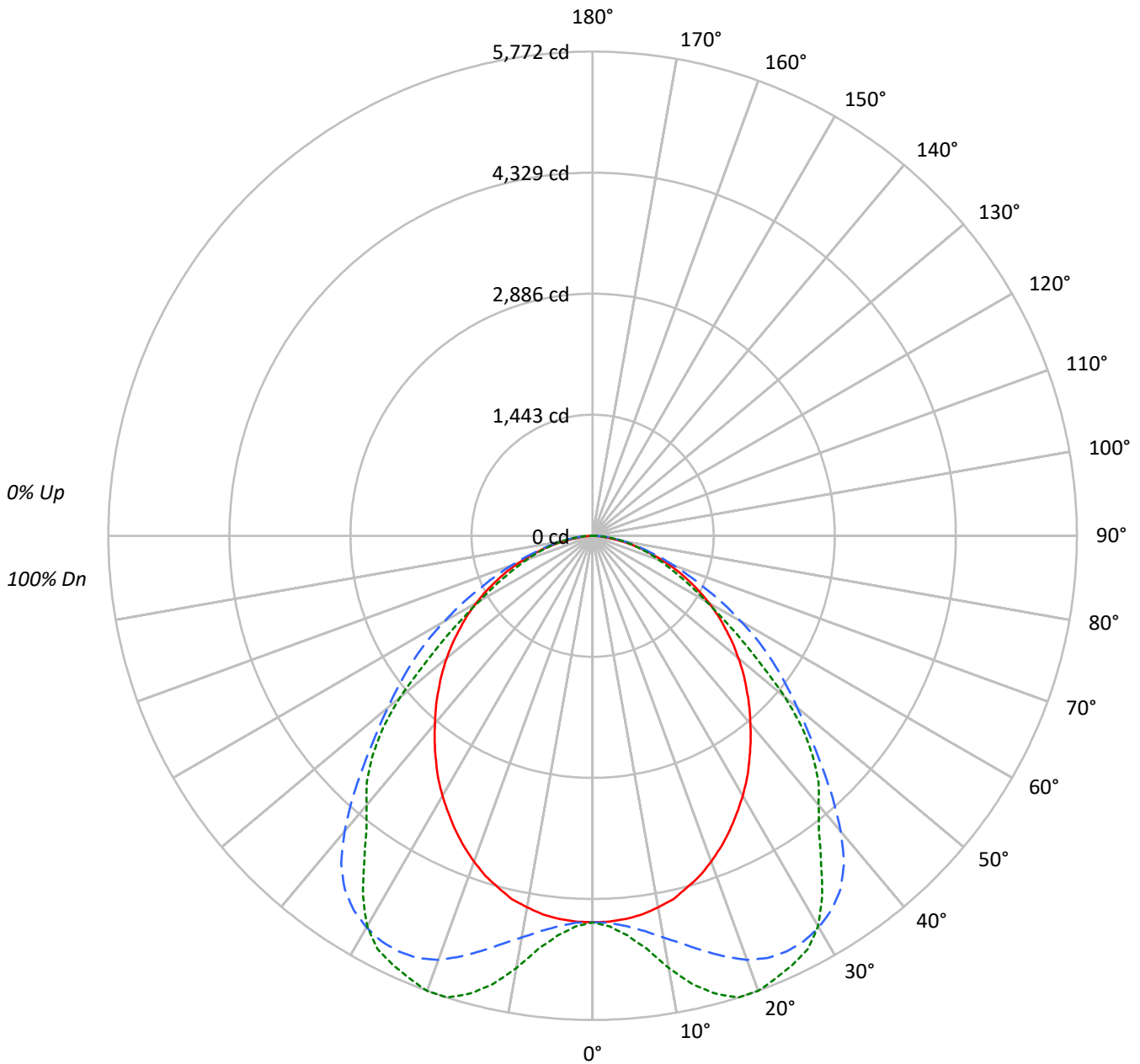
Lumens per Lamp: N/A
Luminaire Lumens: 14498.0 lumens
Efficiency: N/A
Efficacy: 164.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

Input Watts (W): 88.3
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			100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85			85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72			72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62			62
4	84	73	64	58	82	71	63	57	69	62	57	66	61	56	64	59	55	53			53
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	52	48	46			46
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40			40
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	38	36			36
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32			32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	29			29
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26			26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	35940	35940	35940
5°	35901	36578	37445
10°	35617	38508	41428
15°	35060	41376	45632
20°	34301	44666	47911
25°	33311	47075	48540
30°	32227	48548	48409
35°	31018	49036	45170
40°	29768	46822	42664
45°	28641	42441	40933
50°	27526	38590	36288
55°	26266	35655	29530
60°	24968	31788	24320
65°	23247	27313	21086
70°	21150	23321	19072
75°	18163	19571	17485
80°	14199	16786	16215
85°	9603	14247	13370



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	452.4	3.1
10°-20°	1434.5	9.9
20°-30°	2347.6	16.2
30°-40°	2863.9	19.8
40°-50°	2836.4	19.6
50°-60°	2268.2	15.6
60°-70°	1415.0	9.8
70°-80°	693.3	4.8
80°-90°	181.8	1.3
90°-100°	4.8	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°	4234.5	29.2
0°-40°	7098.5	49.0
0°-60°	12203.1	84.2
0°-90°	14493.2	100.0
90°-120°	4.8	0.0
90°-150°	4.8	0.0
90°-180°	5.0	0.0
0°-180°	14498.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4608	4608	4608	4608	4608	
5°	4585	4605	4672	4753	4782	435
15°	4342	4594	5124	5532	5651	1224
25°	3871	4526	5470	5628	5640	1781
35°	3258	4353	5150	4875	4744	2038
45°	2596	4034	3848	3718	3711	2006
55°	1932	3097	2622	2369	2172	1731
65°	1260	1738	1480	1227	1142	1249
75°	603	738	649	595	580	640
85°	107	152	159	151	149	133
90°	1	16	28	36	37	6
95°	1	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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4607.7	4607.7	4607.7	4607.7	4607.7
2.5°	4603.1	4601.3	4618.1	4648.6	4662.5
5°	4585.2	4605.4	4671.7	4753.0	4782.4
7.5°	4552.9	4607.1	4753.6	4903.0	4966.4
10°	4496.9	4608.3	4862.0	5125.6	5230.6
12.5°	4439.3	4604.2	4982.6	5355.7	5470.5
15°	4341.8	4594.4	5123.9	5531.6	5651.0
17.5°	4251.2	4582.9	5260.0	5681.0	5771.6
20°	4132.4	4566.2	5381.1	5726.6	5772.1
22.5°	4007.9	4552.9	5448.0	5696.0	5709.9
25°	3870.6	4525.8	5469.9	5628.5	5640.1
27.5°	3724.1	4501.6	5449.2	5544.9	5554.7
30°	3578.2	4457.7	5390.3	5414.6	5374.8
32.5°	3425.3	4413.9	5295.2	5186.2	5093.3
35°	3257.5	4352.8	5149.8	4874.7	4743.8
37.5°	3092.0	4293.9	4923.2	4526.4	4427.7
40°	2923.6	4221.3	4598.5	4201.1	4190.1
42.5°	2764.4	4142.8	4231.1	3947.9	3984.8
45°	2596.5	4033.8	3847.5	3718.3	3710.8
47.5°	2437.4	3883.3	3498.6	3464.6	3387.8
50°	2268.4	3675.6	3180.2	3147.9	2990.5
52.5°	2102.8	3410.9	2895.9	2774.8	2545.2
55°	1931.5	3097.2	2621.9	2368.7	2171.5
57.5°	1772.4	2752.3	2343.3	2015.2	1838.1
60°	1600.5	2402.8	2037.7	1704.9	1559.0
62.5°	1432.1	2058.4	1760.8	1440.7	1343.8
65°	1259.6	1737.8	1479.9	1227.3	1142.5
67.5°	1094.7	1460.3	1237.1	1034.7	978.2
70°	927.4	1184.7	1022.6	869.2	836.3
72.5°	755.0	946.5	827.1	733.6	708.8
75°	602.7	738.2	649.4	594.6	580.2
77.5°	448.7	549.1	507.5	475.2	471.2
80°	316.1	396.2	373.7	367.4	361.0
82.5°	201.9	259.0	265.9	261.8	257.2
85°	107.3	152.3	159.2	151.1	149.4
87.5°	43.3	66.3	71.5	79.0	81.3
90°	0.6	15.6	28.3	35.8	36.9
92.5°	0.6	3.5	4.0	4.0	3.5
95°	0.6	2.3	2.3	1.7	1.2
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)