

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: P859884

Luminaire Tested: **SPHB-15HE-M-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: P859884
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SPHB-15HE-M-L835-CD
Description: 15000 Lumen High Efficacy Select Pro High Bay with Medium Lens and, 3500K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

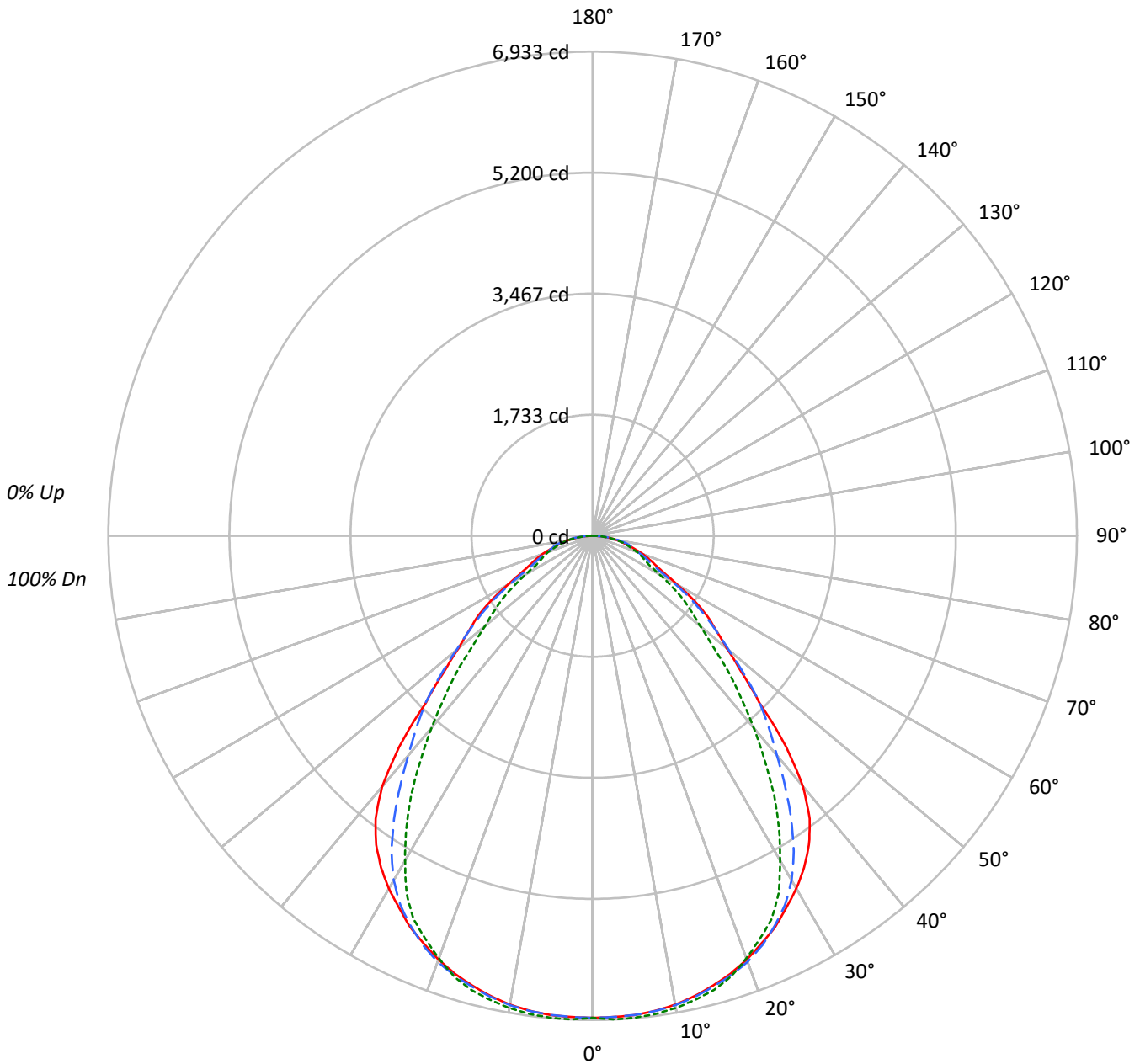
Lumens per Lamp: N/A
Luminaire Lumens: 14326.0 lumens
Efficiency: N/A
Efficacy: 162.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P859884

CATALOG NUMBER: SPHB-15HE-M-L835-CD

Luminous Intensity Polar Plot





TEST NUMBER: P859884

CATALOG NUMBER: SPHB-15HE-M-L835-CD

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	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87								
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75								
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66								
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58								
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51								
6	75	63	55	49	73	62	54	49	60	54	48	59	53	48	57	52	48	46								
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41								
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37								
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34								
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	53835	53835	53835
5°	53941	53927	54233
10°	53988	54046	54377
15°	53830	53970	54345
20°	53596	53867	53436
25°	53203	53054	52154
30°	52530	51292	48365
35°	51427	47188	43106
40°	47726	41766	36510
45°	37233	37334	30214
50°	30410	30841	24401
55°	27247	26218	21441
60°	21812	20648	17155
65°	18279	16734	15171
70°	17355	15943	15446
75°	15746	16928	14897
80°	15825	17298	15703
85°	13764	16127	13120



TEST NUMBER: P859884

CATALOG NUMBER: SPHB-15HE-M-L835-CD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	656.3	4.6
10°-20°	1887.4	13.2
20°-30°	2817.6	19.7
30°-40°	3074.4	21.5
40°-50°	2515.0	17.6
50°-60°	1653.6	11.5
60°-70°	948.7	6.6
70°-80°	574.9	4.0
80°-90°	193.0	1.3
90°-100°	5.0	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°	5361.2	37.4
0°-40°	8435.6	58.9
0°-60°	12604.3	88.0
0°-90°	14321.0	100.0
90°-120°	5.0	0.0
90°-150°	5.0	0.0
90°-180°	5.0	0.0
0°-180°	14326.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6902	6902	6902	6902	6902	
5°	6889	6878	6887	6916	6927	655
15°	6666	6665	6684	6726	6730	1882
25°	6182	6196	6165	6090	6060	2844
35°	5401	5279	4956	4618	4527	3347
45°	3375	3628	3384	2988	2739	2679
55°	2004	1949	1928	1657	1577	1765
65°	990	976	907	882	822	1012
75°	522	565	562	539	494	566
85°	154	175	180	158	147	167
90°	1	13	26	30	32	7
95°	1	2	3	3	2	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: P859884

CATALOG NUMBER: SPHB-15HE-M-L835-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6902.0	6902.0	6902.0	6902.0	6902.0
2.5°	6897.4	6887.4	6896.5	6924.8	6932.9
5°	6889.3	6878.3	6887.4	6915.7	6926.6
7.5°	6861.0	6854.7	6863.8	6892.0	6905.6
10°	6816.4	6809.1	6823.7	6848.3	6865.6
12.5°	6750.0	6747.2	6760.9	6796.4	6803.7
15°	6666.2	6665.3	6683.5	6726.3	6729.9
17.5°	6571.6	6570.6	6593.4	6621.6	6611.6
20°	6456.9	6463.2	6489.6	6463.2	6437.7
22.5°	6319.4	6339.4	6345.8	6263.0	6250.2
25°	6181.9	6196.5	6164.6	6090.0	6060.0
27.5°	6004.4	6021.7	5962.6	5856.0	5770.5
30°	5832.4	5816.0	5694.9	5489.2	5369.9
32.5°	5634.8	5576.6	5359.0	5075.0	4966.7
35°	5400.9	5278.9	4955.7	4618.0	4527.0
37.5°	5105.0	4882.0	4528.8	4176.5	4039.1
40°	4687.2	4429.6	4101.9	3737.7	3585.7
42.5°	4101.9	4006.3	3735.0	3325.4	3144.2
45°	3375.4	3627.6	3384.5	2987.6	2739.1
47.5°	2889.3	3239.8	2947.6	2660.8	2318.6
50°	2506.1	2747.3	2541.6	2283.1	2010.9
52.5°	2229.4	2302.2	2219.3	1935.3	1780.6
55°	2003.6	1949.0	1928.0	1656.8	1576.7
57.5°	1723.2	1693.2	1639.5	1444.7	1339.1
60°	1398.2	1462.0	1323.6	1268.1	1099.7
62.5°	1148.8	1211.6	1063.2	1059.6	919.4
65°	990.4	975.9	906.7	882.1	822.0
67.5°	876.6	831.1	807.4	775.6	754.6
70°	761.0	741.9	699.1	705.5	677.3
72.5°	634.5	659.1	616.3	628.1	577.1
75°	522.5	565.3	561.7	538.9	494.3
77.5°	430.6	476.1	484.3	463.3	426.9
80°	352.3	383.2	385.1	372.3	349.6
82.5°	258.5	276.7	290.4	268.5	254.0
85°	153.8	174.8	180.2	157.5	146.6
87.5°	50.1	70.1	78.3	81.0	81.9
90°	0.9	12.7	25.5	30.0	31.9
92.5°	0.9	3.6	5.5	8.2	9.1
95°	0.9	1.8	2.7	2.7	1.8
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



TEST NUMBER: P859884

CATALOG NUMBER: SPHB-15HE-M-L835-CD

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)