

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: P860070

Luminaire Tested: **SPHB-30SE-M-L735-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: P860070
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-30SE-M-L735-CD
Description: 30000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens and, 3500K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

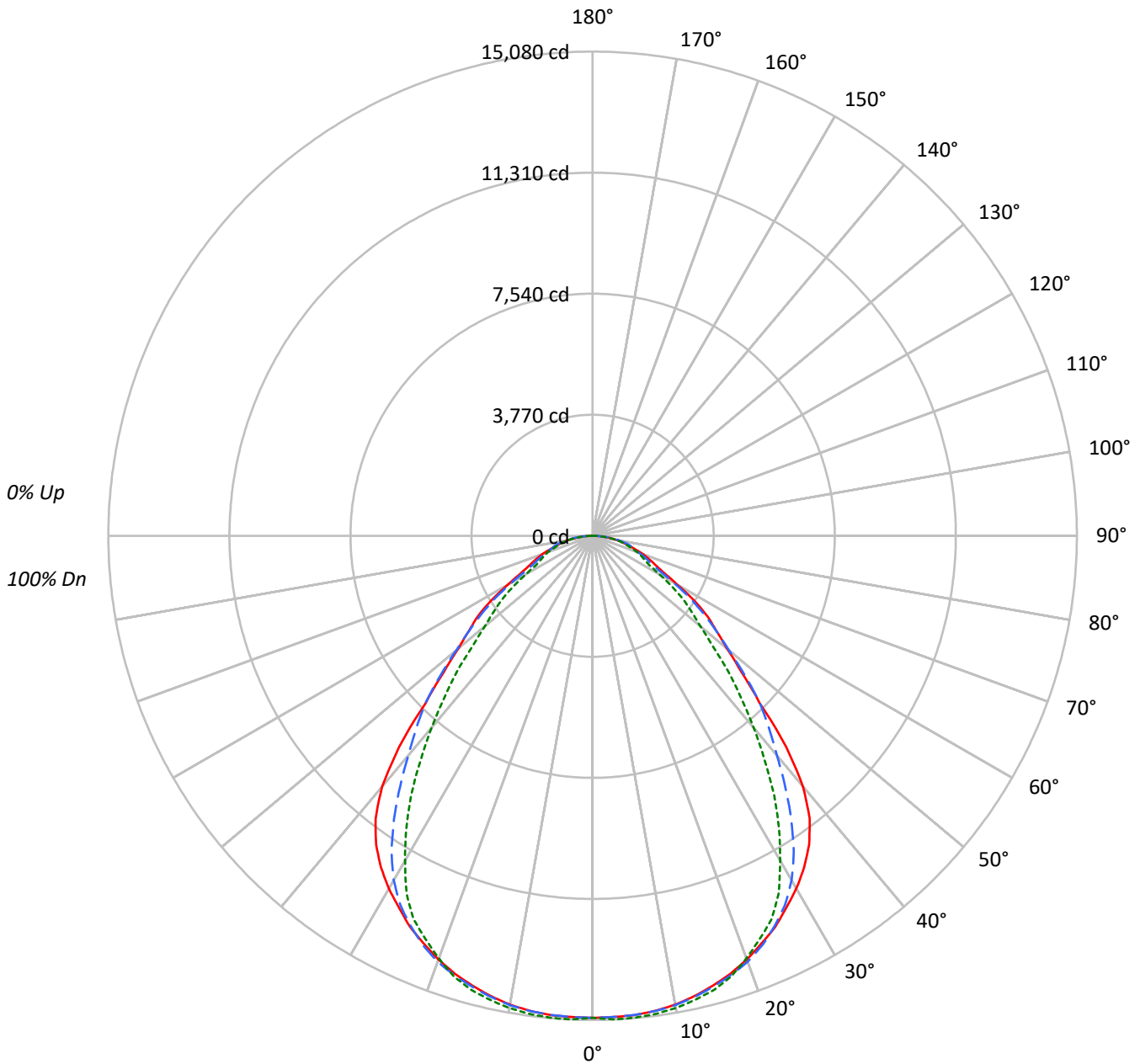
Lumens per Lamp: N/A
Luminaire Lumens: 31161.0 lumens
Efficiency: N/A
Efficacy: 159.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

Input Watts (W): 195
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	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°	79214	79214	79214
5°	79370	79349	79799
10°	79439	79524	80012
15°	79207	79413	79964
20°	78861	79261	78628
25°	78285	78065	76740
30°	77293	75471	71165
35°	75671	69434	63426
40°	70224	61454	53721
45°	54786	54934	44459
50°	44746	45380	35904
55°	40091	38579	31549
60°	32095	30382	25241
65°	26897	24622	22323
70°	25537	23460	22727
75°	23171	24906	21920
80°	23285	25451	23102
85°	20257	23738	19300



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1427.5	4.6
10°-20°	4105.3	13.2
20°-30°	6128.6	19.7
30°-40°	6687.3	21.5
40°-50°	5470.5	17.6
50°-60°	3596.9	11.5
60°-70°	2063.6	6.6
70°-80°	1250.5	4.0
80°-90°	419.9	1.3
90°-100°	10.9	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°	11661.4	37.4
0°-40°	18348.7	58.9
0°-60°	27416.1	88.0
0°-90°	31150.1	100.0
90°-120°	10.9	0.0
90°-150°	10.9	0.0
90°-180°	11.0	0.0
0°-180°	31161.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15013	15013	15013	15013	15013	
5°	14985	14961	14981	15042	15066	###
15°	14500	14498	14538	14631	14638	4093
25°	13447	13478	13409	13247	13181	6186
35°	11748	11482	10779	10045	9847	7281
45°	7342	7890	7362	6498	5958	5828
55°	4358	4239	4194	3604	3430	3838
65°	2154	2123	1972	1919	1788	2202
75°	1137	1230	1222	1172	1075	1230
85°	335	380	392	342	319	363
90°	2	28	55	65	69	16
95°	2	4	6	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°	15012.8	15012.8	15012.8	15012.8	15012.8
2.5°	15002.9	14981.1	15000.9	15062.3	15080.1
5°	14985.1	14961.3	14981.1	15042.5	15066.2
7.5°	14923.7	14909.8	14929.6	14991.0	15020.7
10°	14826.7	14810.8	14842.5	14896.0	14933.6
12.5°	14682.1	14676.2	14705.9	14783.1	14798.9
15°	14499.9	14498.0	14537.6	14630.6	14638.5
17.5°	14294.0	14292.0	14341.5	14402.9	14381.1
20°	14044.5	14058.4	14115.8	14058.4	14003.0
22.5°	13745.5	13789.1	13803.0	13622.8	13595.1
25°	13446.6	13478.2	13408.9	13246.6	13181.2
27.5°	13060.4	13098.1	12969.4	12737.7	12551.6
30°	12686.2	12650.6	12387.2	11939.7	11680.3
32.5°	12256.5	12129.8	11656.6	11038.8	10803.2
35°	11747.7	11482.3	10779.4	10044.8	9846.8
37.5°	11104.2	10619.0	9850.8	9084.5	8785.5
40°	10195.3	9634.9	8922.1	8130.1	7799.4
42.5°	8922.1	8714.2	8124.2	7233.1	6839.1
45°	7342.0	7890.5	7361.8	6498.5	5958.0
47.5°	6284.7	7047.0	6411.4	5787.7	5043.2
50°	5451.1	5975.8	5528.3	4966.0	4373.9
52.5°	4849.2	5007.6	4827.4	4209.6	3873.0
55°	4358.1	4239.3	4193.8	3603.7	3429.5
57.5°	3748.2	3682.9	3566.1	3142.3	2912.7
60°	3041.4	3180.0	2879.0	2758.2	2391.9
62.5°	2498.8	2635.5	2312.7	2304.8	1999.9
65°	2154.3	2122.6	1972.1	1918.7	1788.0
67.5°	1906.8	1807.8	1756.3	1687.0	1641.5
70°	1655.3	1613.7	1520.7	1534.5	1473.2
72.5°	1380.1	1433.6	1340.5	1366.2	1255.4
75°	1136.6	1229.6	1221.7	1172.2	1075.2
77.5°	936.6	1035.6	1053.4	1007.8	928.6
80°	766.3	833.6	837.6	809.8	760.3
82.5°	562.3	601.9	631.6	584.1	552.4
85°	334.6	380.2	392.1	342.5	318.8
87.5°	108.9	152.5	170.3	176.2	178.2
90°	2.0	27.7	55.4	65.3	69.3
92.5°	2.0	7.9	11.9	17.8	19.8
95°	2.0	4.0	5.9	5.9	4.0
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)