

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: P860251

Luminaire Tested: **SPHB-60SE-W-L740-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: P860251
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-60SE-W-L740-CD
Description: 60000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens and, 4000K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

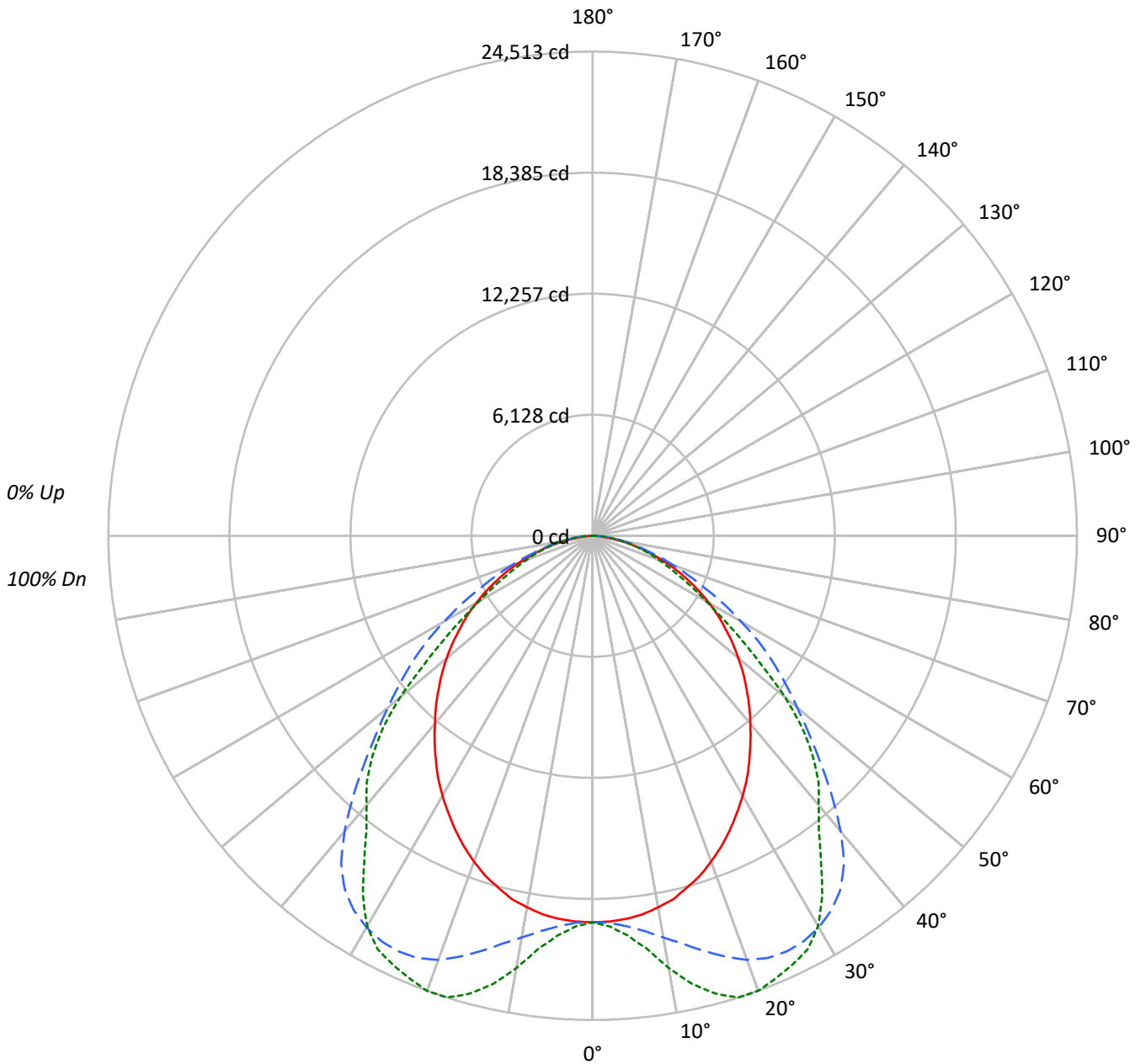
Lumens per Lamp: N/A
Luminaire Lumens: 61569.0 lumens
Efficiency: N/A
Efficacy: 163.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 3.38' x H: 0')
CIE Type: Direct

Input Watts (W): 376
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									
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°	62314	62314	62314
5°	62247	63422	64925
10°	61755	66769	71830
15°	60790	71740	79121
20°	59474	77445	83073
25°	57757	81623	84162
30°	55878	84177	83934
35°	53781	85023	78319
40°	51614	81183	73974
45°	49661	73588	70973
50°	47726	66911	62919
55°	45543	61821	51200
60°	43290	55115	42167
65°	40309	47359	36562
70°	36672	40434	33068
75°	31493	33934	30318
80°	24615	29108	28120
85°	16647	24700	23180



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1921.2	3.1
10°-20°	6091.9	9.9
20°-30°	9969.8	16.2
30°-40°	12162.4	19.8
40°-50°	12045.5	19.6
50°-60°	9632.5	15.6
60°-70°	6009.1	9.8
70°-80°	2944.1	4.8
80°-90°	772.2	1.3
90°-100°	20.3	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°	17982.8	29.2
0°-40°	30145.2	49.0
0°-60°	51823.2	84.2
0°-90°	61548.7	100.0
90°-120°	20.3	0.0
90°-150°	20.3	0.0
90°-180°	20.0	0.0
0°-180°	61569.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	19568	19568	19568	19568	19568	
5°	19472	19558	19839	20185	20310	###
15°	18438	19511	21760	23491	23998	5198
25°	16437	19220	23229	23903	23952	7564
35°	13834	18485	21870	20702	20146	8653
45°	11027	17130	16339	15791	15759	8517
55°	8203	13153	11135	10059	9222	7349
65°	5349	7380	6285	5212	4852	5304
75°	2560	3135	2758	2525	2464	2717
85°	456	647	676	642	634	564
90°	2	66	120	152	157	26
95°	2	10	10	7	5	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°	19567.5	19567.5	19567.5	19567.5	19567.5
2.5°	19548.0	19540.6	19611.6	19741.4	19800.2
5°	19472.0	19557.7	19839.4	20184.8	20309.7
7.5°	19334.9	19565.1	20187.2	20821.6	21091.0
10°	19097.3	19570.0	20647.7	21767.0	22212.8
12.5°	18852.3	19552.9	21159.6	22744.3	23231.7
15°	18438.4	19511.2	21759.7	23491.3	23998.3
17.5°	18053.9	19462.2	22337.7	24125.7	24510.3
20°	17549.3	19391.2	22852.1	24319.2	24512.7
22.5°	17020.3	19334.9	23136.2	24189.4	24248.2
25°	16437.3	19219.7	23229.3	23902.8	23951.8
27.5°	15815.2	19116.9	23141.1	23547.7	23589.3
30°	15195.5	18930.7	22891.3	22994.1	22825.1
32.5°	14546.5	18744.6	22487.1	22024.2	21629.9
35°	13833.7	18485.0	21869.9	20701.6	20145.6
37.5°	13130.8	18235.1	20907.3	19222.2	18803.4
40°	12415.6	17926.5	19528.4	17840.8	17794.2
42.5°	11739.5	17593.4	17968.1	16765.5	16922.3
45°	11026.8	17130.5	16339.4	15790.7	15758.9
47.5°	10350.8	16491.2	14857.5	14713.0	14387.3
50°	9633.1	15609.5	13505.5	13368.3	12699.7
52.5°	8930.2	14485.2	12298.0	11783.6	10808.8
55°	8202.7	13152.8	11134.6	10059.3	9221.7
57.5°	7526.7	11688.1	9951.6	8557.9	7806.0
60°	6796.8	10203.8	8653.4	7240.2	6620.5
62.5°	6081.6	8741.6	7477.7	6118.4	5706.9
65°	5349.3	7379.8	6284.9	5212.1	4852.1
67.5°	4648.8	6201.7	5253.8	4394.1	4154.0
70°	3938.5	5030.9	4342.6	3691.1	3551.5
72.5°	3206.1	4019.3	3512.3	3115.5	3010.2
75°	2559.5	3135.1	2757.9	2525.2	2464.0
77.5°	1905.6	2331.7	2155.4	2018.2	2001.1
80°	1342.2	1682.7	1587.2	1560.2	1533.3
82.5°	857.3	1099.7	1129.1	1112.0	1092.4
85°	455.6	646.6	676.0	641.7	634.4
87.5°	183.7	281.7	303.7	335.6	345.4
90°	2.4	66.1	120.0	151.9	156.8
92.5°	2.4	14.7	17.1	17.1	14.7
95°	2.4	9.8	9.8	7.3	4.9
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)