

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: P860258

Luminaire Tested: **SPHB-60SE-W-L950-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: P860258
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-L950-CD
Description: 60000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens and, 5000K 90CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

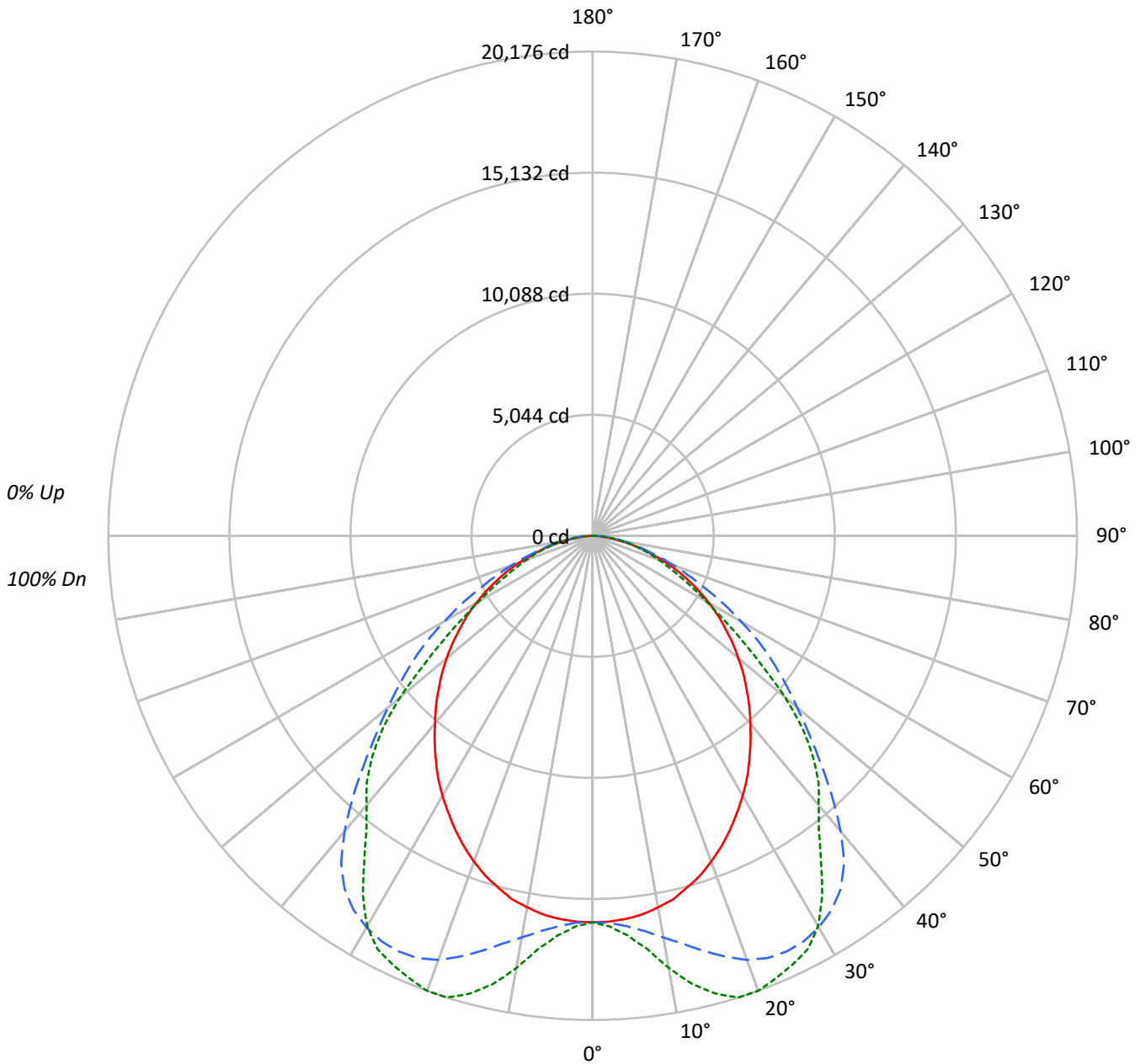
Lumens per Lamp: N/A
Luminaire Lumens: 50676.0 lumens
Efficiency: N/A
Efficacy: 134.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 3.38' x H: 0')
CIE Type: Direct

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				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°	51290	51290	51290
5°	51234	52201	53438
10°	50829	54956	59121
15°	50035	59048	65123
20°	48952	63743	68375
25°	47539	67182	69272
30°	45992	69284	69084
35°	44266	69980	64463
40°	42482	66820	60886
45°	40875	60568	58416
50°	39282	55073	51787
55°	37485	50883	42141
60°	35631	45364	34707
65°	33178	38981	30093
70°	30184	33281	27218
75°	25921	27931	24954
80°	20261	23957	23144
85°	13702	20330	19077



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1581.3	3.1
10°-20°	5014.1	9.9
20°-30°	8205.9	16.2
30°-40°	10010.6	19.8
40°-50°	9914.4	19.6
50°-60°	7928.3	15.6
60°-70°	4946.0	9.8
70°-80°	2423.3	4.8
80°-90°	635.6	1.3
90°-100°	16.7	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°	14801.3	29.2
0°-40°	24811.8	49.0
0°-60°	42654.5	84.2
0°-90°	50659.3	100.0
90°-120°	16.7	0.0
90°-150°	16.7	0.0
90°-180°	17.0	0.0
0°-180°	50676.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16106	16106	16106	16106	16106	
5°	16027	16098	16329	16614	16716	###
15°	15176	16059	17910	19335	19752	4278
25°	13529	15819	19120	19674	19714	6226
35°	11386	15214	18001	17039	16581	7122
45°	9076	14100	13448	12997	12971	7010
55°	6752	10826	9165	8280	7590	6049
65°	4403	6074	5173	4290	3994	4366
75°	2107	2580	2270	2078	2028	2236
85°	375	532	556	528	522	464
90°	2	54	99	125	129	22
95°	2	8	8	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°	16105.6	16105.6	16105.6	16105.6	16105.6
2.5°	16089.5	16083.4	16141.9	16248.7	16297.1
5°	16027.0	16097.5	16329.4	16613.6	16716.4
7.5°	15914.1	16103.6	16615.6	17137.8	17359.5
10°	15718.5	16107.6	16994.6	17915.9	18282.8
12.5°	15516.9	16093.5	17416.0	18720.3	19121.5
15°	15176.2	16059.2	17909.9	19335.2	19752.5
17.5°	14859.7	16018.9	18385.7	19857.3	20173.8
20°	14444.4	15960.4	18809.0	20016.6	20175.8
22.5°	14009.0	15914.1	19042.9	19909.7	19958.1
25°	13529.2	15819.3	19119.5	19673.9	19714.2
27.5°	13017.1	15734.6	19046.9	19381.5	19415.8
30°	12507.1	15581.4	18841.3	18925.9	18786.8
32.5°	11972.8	15428.2	18508.6	18127.6	17803.0
35°	11386.2	15214.5	18000.6	17039.0	16581.4
37.5°	10807.6	15008.9	17208.3	15821.3	15476.6
40°	10219.0	14754.9	16073.3	14684.3	14646.0
42.5°	9662.5	14480.7	14789.2	13799.3	13928.3
45°	9075.9	14099.7	13448.5	12997.0	12970.8
47.5°	8519.5	13573.5	12228.9	12109.9	11841.8
50°	7928.8	12847.8	11116.1	11003.2	10452.8
52.5°	7350.2	11922.4	10122.2	9698.8	8896.5
55°	6751.5	10825.8	9164.6	8279.6	7590.1
57.5°	6195.1	9620.2	8190.9	7043.8	6424.9
60°	5594.3	8398.5	7122.4	5959.2	5449.2
62.5°	5005.7	7195.0	6154.8	5035.9	4697.2
65°	4402.9	6074.1	5173.0	4290.0	3993.6
67.5°	3826.3	5104.4	4324.3	3616.7	3419.1
70°	3241.7	4140.8	3574.3	3038.1	2923.2
72.5°	2638.9	3308.2	2890.9	2564.3	2477.6
75°	2106.7	2580.4	2270.0	2078.5	2028.1
77.5°	1568.4	1919.2	1774.1	1661.2	1647.0
80°	1104.8	1385.0	1306.3	1284.2	1262.0
82.5°	705.6	905.2	929.4	915.3	899.1
85°	375.0	532.2	556.4	528.2	522.1
87.5°	151.2	231.8	250.0	276.2	284.3
90°	2.0	54.4	98.8	125.0	129.0
92.5°	2.0	12.1	14.1	14.1	12.1
95°	2.0	8.1	8.1	6.0	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)