

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: P860119

Luminaire Tested: **SPHB-36HE-W-L840-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: P860119
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-36HE-W-L840-CD
Description: 36000 Lumen High Efficacy Select Pro High Bay with Wide Lens and, 4000K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

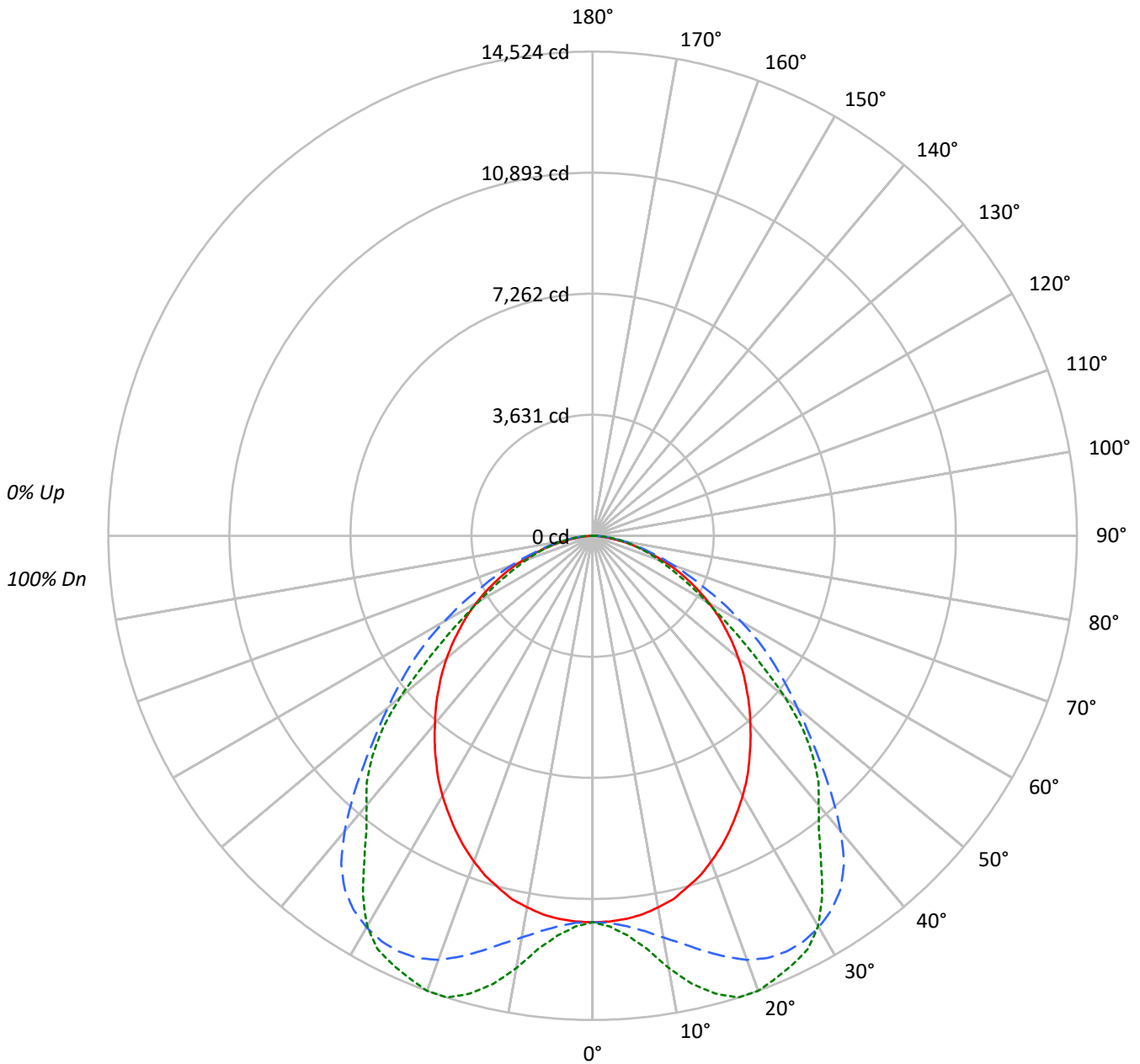
Lumens per Lamp: N/A
Luminaire Lumens: 36479.0 lumens
Efficiency: N/A
Efficacy: 168.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

Input Watts (W): 216
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	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°	61173	61173	61173
5°	61107	62260	63735
10°	60623	65545	70514
15°	59676	70426	77671
20°	58384	76026	81550
25°	56699	80127	82620
30°	54854	82634	82396
35°	52795	83465	76884
40°	50668	79696	72618
45°	48751	72239	69673
50°	46851	65685	61765
55°	44708	60688	50262
60°	42497	54106	41395
65°	39570	46492	35892
70°	35999	39694	32462
75°	30916	33312	29762
80°	24166	28575	27602
85°	16340	24246	22757



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1138.3	3.1
10°-20°	3609.4	9.9
20°-30°	5907.0	16.2
30°-40°	7206.1	19.8
40°-50°	7136.9	19.6
50°-60°	5707.1	15.6
60°-70°	3560.3	9.8
70°-80°	1744.4	4.8
80°-90°	457.5	1.3
90°-100°	12.1	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°	10654.7	29.2
0°-40°	17860.7	49.0
0°-60°	30704.7	84.2
0°-90°	36466.9	100.0
90°-120°	12.1	0.0
90°-150°	12.1	0.0
90°-180°	12.0	0.0
0°-180°	36479.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11594	11594	11594	11594	11594	
5°	11537	11588	11755	11959	12033	###
15°	10925	11560	12892	13918	14219	3080
25°	9739	11388	13763	14162	14191	4482
35°	8196	10952	12958	12266	11936	5127
45°	6533	10150	9681	9356	9337	5046
55°	4860	7793	6597	5960	5464	4354
65°	3169	4372	3724	3088	2875	3143
75°	1516	1858	1634	1496	1460	1610
85°	270	383	400	380	376	334
90°	2	39	71	90	93	16
95°	2	6	6	4	3	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°	11593.6	11593.6	11593.6	11593.6	11593.6
2.5°	11582.0	11577.6	11619.7	11696.6	11731.4
5°	11537.0	11587.8	11754.7	11959.3	12033.3
7.5°	11455.7	11592.1	11960.7	12336.6	12496.2
10°	11314.9	11595.0	12233.5	12896.7	13160.9
12.5°	11169.8	11584.9	12536.8	13475.8	13764.6
15°	10924.6	11560.2	12892.4	13918.4	14218.8
17.5°	10696.7	11531.2	13234.9	14294.2	14522.1
20°	10397.8	11489.1	13539.6	14408.9	14523.5
22.5°	10084.3	11455.7	13708.0	14332.0	14366.8
25°	9738.9	11387.5	13763.1	14162.2	14191.2
27.5°	9370.3	11326.6	13710.9	13951.8	13976.4
30°	9003.2	11216.3	13562.8	13623.8	13523.7
32.5°	8618.6	11106.0	13323.4	13049.1	12815.5
35°	8196.3	10952.1	12957.7	12265.5	11936.1
37.5°	7779.8	10804.1	12387.4	11389.0	11140.8
40°	7356.1	10621.3	11570.4	10570.5	10542.9
42.5°	6955.6	10423.9	10645.9	9933.4	10026.3
45°	6533.3	10149.6	9680.9	9355.8	9337.0
47.5°	6132.7	9770.9	8802.9	8717.3	8524.3
50°	5707.5	9248.4	8001.9	7920.6	7524.4
52.5°	5291.0	8582.3	7286.4	6981.7	6404.1
55°	4860.0	7792.9	6597.1	5960.0	5463.7
57.5°	4459.5	6925.1	5896.2	5070.5	4624.9
60°	4027.1	6045.7	5127.1	4289.7	3922.6
62.5°	3603.3	5179.3	4430.5	3625.1	3381.3
65°	3169.4	4372.4	3723.8	3088.1	2874.8
67.5°	2754.4	3674.4	3112.8	2603.4	2461.2
70°	2333.5	2980.7	2573.0	2186.9	2104.2
72.5°	1899.6	2381.4	2081.0	1845.9	1783.5
75°	1516.5	1857.5	1634.0	1496.2	1459.9
77.5°	1129.0	1381.5	1277.0	1195.8	1185.6
80°	795.3	997.0	940.4	924.4	908.4
82.5°	507.9	651.6	669.0	658.8	647.2
85°	269.9	383.1	400.5	380.2	375.9
87.5°	108.8	166.9	179.9	198.8	204.6
90°	1.5	39.2	71.1	90.0	92.9
92.5°	1.5	8.7	10.2	10.2	8.7
95°	1.5	5.8	5.8	4.4	2.9
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)