

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: P860118

Luminaire Tested: **SPHB-36HE-W-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: P860118
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-L835-CD
Description: 36000 Lumen High Efficacy Select Pro High Bay with Wide Lens and, 3500K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

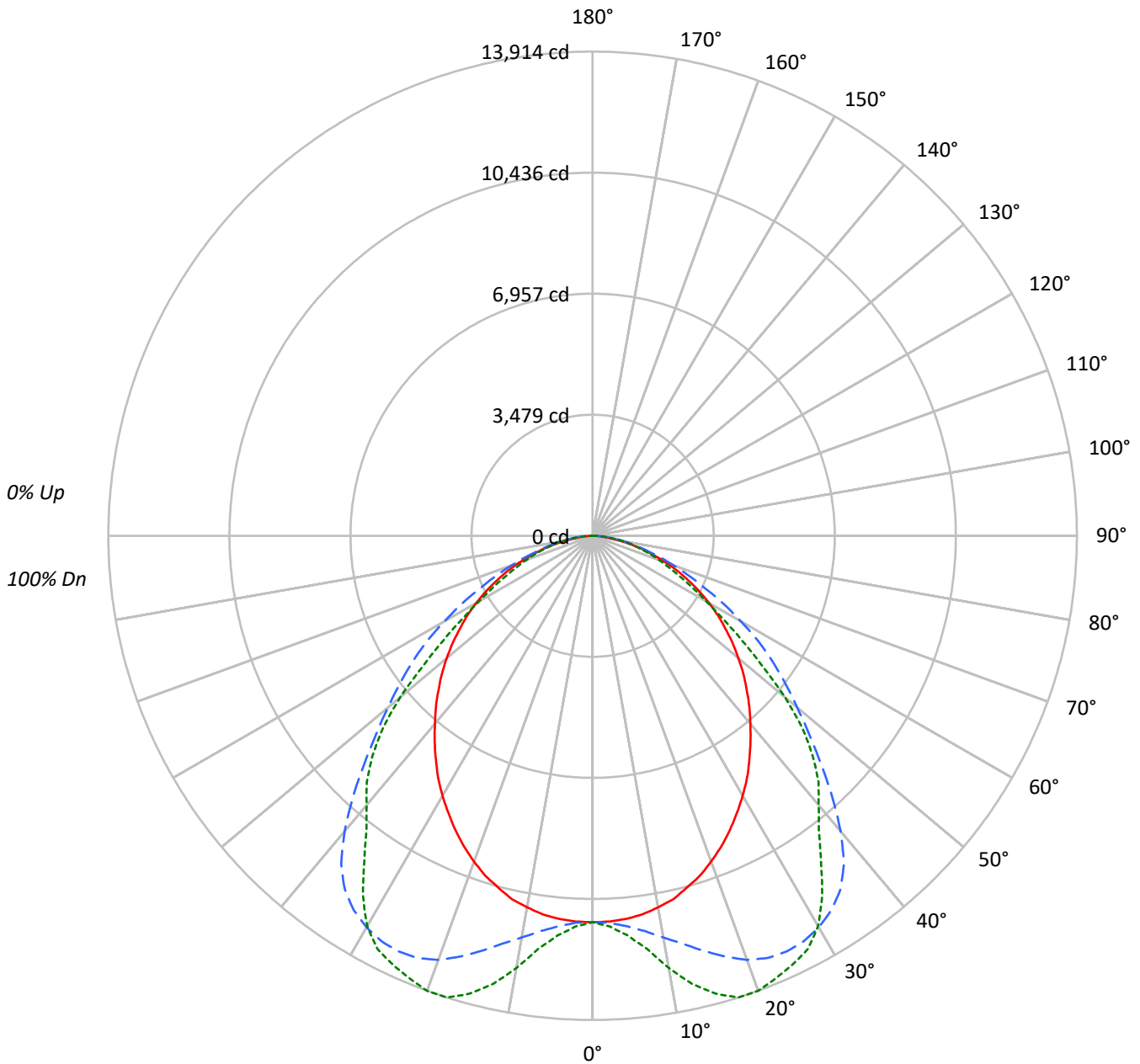
Lumens per Lamp: N/A
Luminaire Lumens: 34947.0 lumens
Efficiency: N/A
Efficacy: 161.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

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°	58604	58604	58604
5°	58540	59645	61058
10°	58078	62793	67552
15°	57170	67468	74409
20°	55932	72833	78126
25°	54318	76762	79150
30°	52550	79164	78935
35°	50578	79959	73655
40°	48540	76348	69568
45°	46704	69205	66746
50°	44883	62926	59171
55°	42830	58140	48151
60°	40712	51832	39656
65°	37908	44539	34385
70°	34488	38027	31100
75°	29618	31913	28513
80°	23151	27375	26445
85°	15656	23229	21801



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1090.5	3.1
10°-20°	3457.8	9.9
20°-30°	5658.9	16.2
30°-40°	6903.5	19.8
40°-50°	6837.1	19.6
50°-60°	5467.5	15.6
60°-70°	3410.8	9.8
70°-80°	1671.1	4.8
80°-90°	438.3	1.3
90°-100°	11.5	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°	10207.2	29.2
0°-40°	17110.6	49.0
0°-60°	29415.2	84.2
0°-90°	34935.4	100.0
90°-120°	11.5	0.0
90°-150°	11.5	0.0
90°-180°	12.0	0.0
0°-180°	34947.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11107	11107	11107	11107	11107	
5°	11052	11101	11261	11457	11528	###
15°	10466	11075	12351	13334	13622	2950
25°	9330	10909	13185	13567	13595	4293
35°	7852	10492	12414	11750	11435	4912
45°	6259	9723	9274	8963	8945	4834
55°	4656	7466	6320	5710	5234	4171
65°	3036	4189	3567	2958	2754	3011
75°	1453	1780	1565	1433	1399	1542
85°	259	367	384	364	360	320
90°	1	38	68	86	89	15
95°	1	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°	11106.7	11106.7	11106.7	11106.7	11106.7
2.5°	11095.6	11091.4	11131.7	11205.4	11238.8
5°	11052.5	11101.1	11261.0	11457.0	11527.9
7.5°	10974.6	11105.3	11458.4	11818.5	11971.4
10°	10839.8	11108.1	11719.8	12355.1	12608.1
12.5°	10700.7	11098.3	12010.3	12909.8	13186.5
15°	10465.8	11074.7	12350.9	13333.9	13621.6
17.5°	10247.5	11046.9	12679.0	13693.9	13912.2
20°	9961.1	11006.6	12971.0	13803.8	13913.6
22.5°	9660.8	10974.6	13132.3	13730.1	13763.4
25°	9329.9	10909.3	13185.1	13567.4	13595.2
27.5°	8976.8	10850.9	13135.0	13365.8	13389.5
30°	8625.1	10745.2	12993.2	13051.6	12955.7
32.5°	8256.7	10639.6	12763.9	12501.1	12277.3
35°	7852.1	10492.2	12413.5	11750.4	11434.8
37.5°	7453.1	10350.4	11867.1	10910.7	10672.9
40°	7047.2	10175.2	11084.4	10126.6	10100.1
42.5°	6663.5	9986.1	10198.8	9516.2	9605.2
45°	6258.9	9723.4	9274.3	8962.9	8944.8
47.5°	5875.2	9360.5	8433.2	8351.2	8166.3
50°	5467.8	8860.0	7665.8	7588.0	7208.4
52.5°	5068.8	8221.9	6980.4	6688.5	6135.2
55°	4655.9	7465.6	6320.1	5709.7	5234.3
57.5°	4272.2	6634.3	5648.6	4857.5	4430.7
60°	3857.9	5791.8	4911.7	4109.6	3757.8
62.5°	3452.0	4961.8	4244.4	3472.8	3239.3
65°	3036.3	4188.8	3567.4	2958.4	2754.1
67.5°	2638.7	3520.1	2982.1	2494.1	2357.9
70°	2235.5	2855.6	2464.9	2095.1	2015.9
72.5°	1819.8	2281.4	1993.6	1768.4	1708.6
75°	1452.8	1779.5	1565.4	1433.3	1398.6
77.5°	1081.6	1323.5	1223.4	1145.6	1135.8
80°	761.9	955.1	900.9	885.6	870.3
82.5°	486.6	624.2	640.9	631.2	620.0
85°	258.6	367.0	383.7	364.2	360.1
87.5°	104.3	159.9	172.4	190.5	196.0
90°	1.4	37.5	68.1	86.2	89.0
92.5°	1.4	8.3	9.7	9.7	8.3
95°	1.4	5.6	5.6	4.2	2.8
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



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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)