

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: P860145

Luminaire Tested: **SPHB-36SE-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: P860145
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-36SE-W-L835-CD
Description: 36000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens and, 3500K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

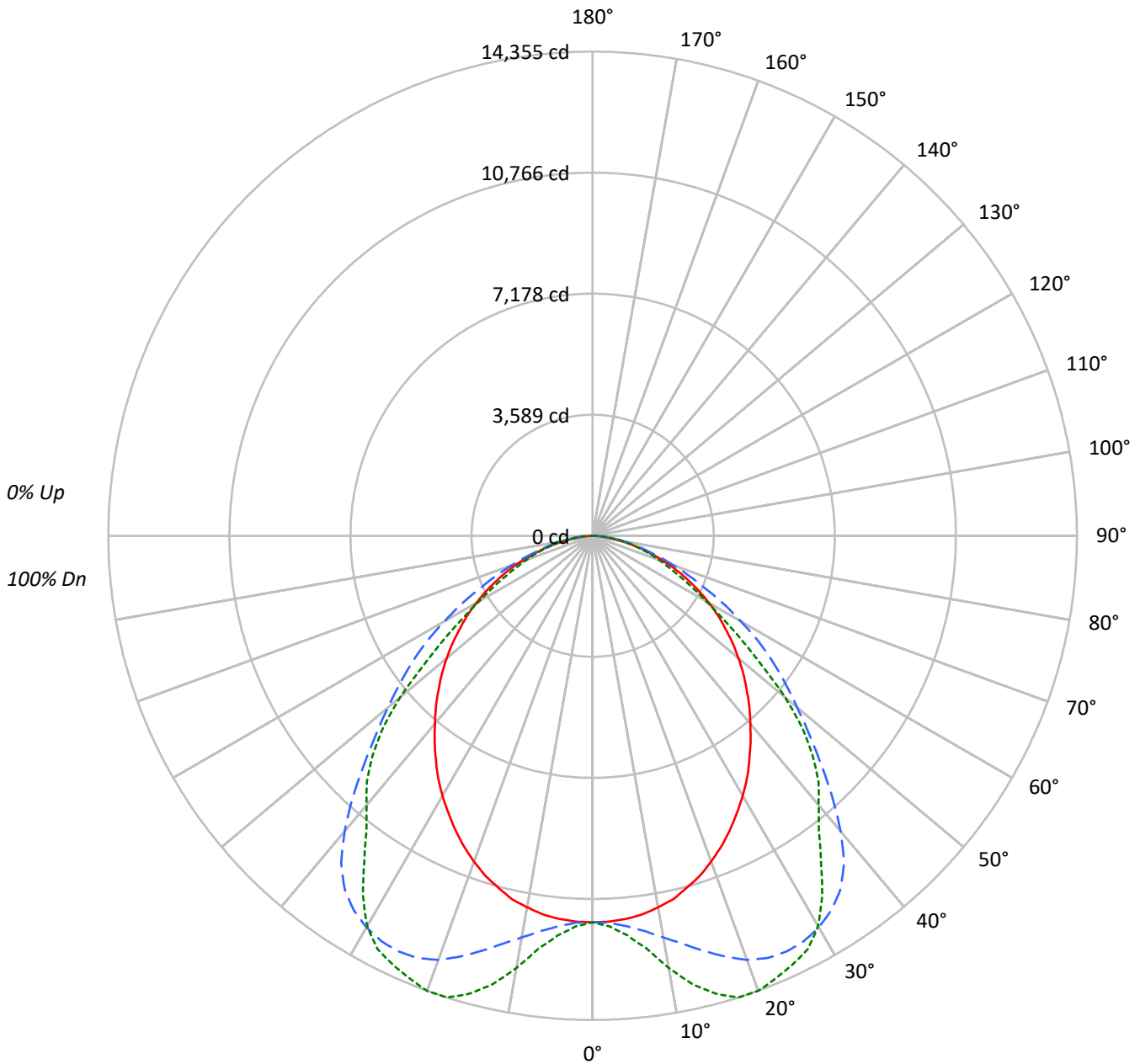
Lumens per Lamp: N/A
Luminaire Lumens: 36056.0 lumens
Efficiency: N/A
Efficacy: 149.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

Input Watts (W): 240.8
Input Voltage (V): NR
Input Current (Ain): 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°	60463	60463	60463
5°	60398	61537	62996
10°	59920	64785	69696
15°	58984	69609	76770
20°	57707	75144	80605
25°	56042	79198	81661
30°	54218	81676	81440
35°	52183	82497	75992
40°	50080	78771	71777
45°	48186	71401	68865
50°	46308	64923	61049
55°	44190	59984	49679
60°	42005	53478	40914
65°	39112	45953	35476
70°	35583	39233	32086
75°	30557	32926	29418
80°	23883	28244	27283
85°	16152	23968	22491



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1125.1	3.1
10°-20°	3567.5	9.9
20°-30°	5838.5	16.2
30°-40°	7122.5	19.8
40°-50°	7054.1	19.6
50°-60°	5641.0	15.6
60°-70°	3519.0	9.8
70°-80°	1724.1	4.8
80°-90°	452.2	1.3
90°-100°	11.9	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°	10531.1	29.2
0°-40°	17653.6	49.0
0°-60°	30348.7	84.2
0°-90°	36044.1	100.0
90°-120°	11.9	0.0
90°-150°	11.9	0.0
90°-180°	12.0	0.0
0°-180°	36056.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11459	11459	11459	11459	11459	
5°	11403	11453	11618	11821	11894	###
15°	10798	11426	12743	13757	14054	3044
25°	9626	11256	13604	13998	14027	4430
35°	8101	10825	12807	12123	11798	5067
45°	6458	10032	9569	9247	9229	4988
55°	4804	7702	6521	5891	5400	4304
65°	3133	4322	3681	3052	2842	3106
75°	1499	1836	1615	1479	1443	1591
85°	267	379	396	376	372	330
90°	1	39	70	89	92	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°	11459.1	11459.1	11459.1	11459.1	11459.1
2.5°	11447.7	11443.4	11485.0	11561.0	11595.4
5°	11403.2	11453.4	11618.3	11820.6	11893.7
7.5°	11322.9	11457.7	11822.0	12193.5	12351.3
10°	11183.7	11460.6	12091.7	12747.2	13008.2
12.5°	11040.3	11450.5	12391.5	13319.5	13604.9
15°	10797.9	11426.1	12742.9	13757.0	14053.9
17.5°	10572.7	11397.5	13081.4	14128.5	14353.7
20°	10277.2	11355.9	13382.6	14241.8	14355.1
22.5°	9967.4	11322.9	13549.0	14165.8	14200.2
25°	9626.0	11255.5	13603.5	13998.0	14026.6
27.5°	9261.7	11195.2	13551.9	13790.0	13814.4
30°	8898.8	11086.2	13405.6	13465.8	13366.8
32.5°	8518.7	10977.2	13168.9	12897.8	12666.9
35°	8101.3	10825.1	12807.4	12123.2	11797.6
37.5°	7689.6	10678.8	12243.7	11256.9	11011.6
40°	7270.8	10498.1	11436.2	10447.9	10420.7
42.5°	6874.9	10303.0	10522.5	9818.2	9910.0
45°	6457.5	10031.9	9568.6	9247.3	9228.7
47.5°	6061.6	9657.6	8700.9	8616.2	8425.5
50°	5641.4	9141.2	7909.1	7828.8	7437.2
52.5°	5229.7	8482.8	7201.9	6900.7	6329.8
55°	4803.7	7702.5	6520.6	5890.9	5400.4
57.5°	4407.8	6844.8	5827.8	5011.7	4571.3
60°	3980.4	5975.6	5067.6	4240.0	3877.1
62.5°	3561.5	5119.2	4379.1	3583.0	3342.1
65°	3132.7	4321.7	3680.6	3052.3	2841.5
67.5°	2722.4	3631.8	3076.7	2573.2	2432.7
70°	2306.5	2946.2	2543.1	2161.6	2079.8
72.5°	1877.6	2353.8	2056.9	1824.5	1762.8
75°	1498.9	1836.0	1615.1	1478.8	1443.0
77.5°	1115.9	1365.5	1262.2	1181.9	1171.9
80°	786.0	985.4	929.5	913.7	897.9
82.5°	502.0	644.0	661.2	651.2	639.7
85°	266.8	378.7	395.9	375.8	371.5
87.5°	107.6	165.0	177.9	196.5	202.2
90°	1.4	38.7	70.3	88.9	91.8
92.5°	1.4	8.6	10.0	10.0	8.6
95°	1.4	5.7	5.7	4.3	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)