

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: P860144

Luminaire Tested: **SPHB-36SE-W-L750-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: P860144
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-L750-CD
Description: 36000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens
and, 5000K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

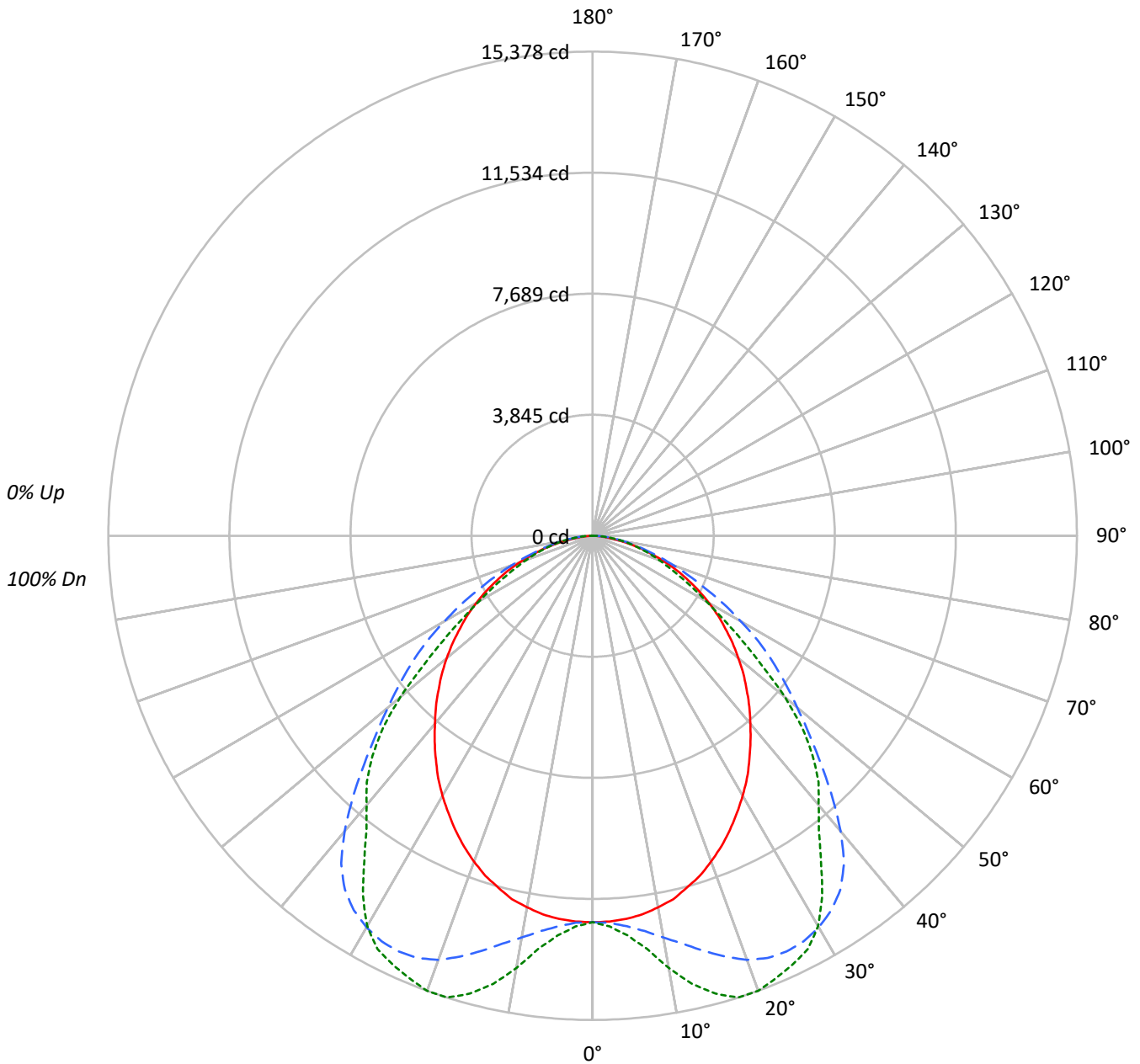
Lumens per Lamp: N/A
Luminaire Lumens: 38624.0 lumens
Efficiency: N/A
Efficacy: 160.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

Input Watts (W): 240.8
Input Voltage (V): NR
Input Current (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°	64770	64770	64770
5°	64700	65920	67483
10°	64188	69399	74660
15°	63185	74567	82238
20°	61817	80496	86346
25°	60033	84839	87478
30°	58079	87493	87241
35°	55900	88372	81405
40°	53647	84381	76888
45°	51618	76486	73769
50°	49606	69547	65398
55°	47337	64256	53217
60°	44996	57286	43828
65°	41897	49225	38003
70°	38116	42028	34372
75°	32735	35271	31511
80°	25585	30255	29228
85°	17302	25675	24095



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1205.2	3.1
10°-20°	3821.6	9.9
20°-30°	6254.3	16.2
30°-40°	7629.8	19.8
40°-50°	7556.5	19.6
50°-60°	6042.7	15.6
60°-70°	3769.7	9.8
70°-80°	1847.0	4.8
80°-90°	484.4	1.3
90°-100°	12.8	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°	11281.2	29.2
0°-40°	18911.0	49.0
0°-60°	32510.2	84.2
0°-90°	38611.2	100.0
90°-120°	12.8	0.0
90°-150°	12.8	0.0
90°-180°	13.0	0.0
0°-180°	38624.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12275	12275	12275	12275	12275	
5°	12215	12269	12446	12662	12741	###
15°	11567	12240	13650	14737	15055	3261
25°	10312	12057	14572	14995	15026	4745
35°	8678	11596	13720	12987	12638	5428
45°	6917	10746	10250	9906	9886	5343
55°	5146	8251	6985	6310	5785	4610
65°	3356	4630	3943	3270	3044	3327
75°	1606	1967	1730	1584	1546	1705
85°	286	406	424	403	398	354
90°	2	42	75	95	98	16
95°	2	6	6	5	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°	12275.3	12275.3	12275.3	12275.3	12275.3
2.5°	12263.0	12258.4	12302.9	12384.4	12421.3
5°	12215.4	12269.1	12445.8	12662.5	12740.8
7.5°	12129.3	12273.7	12664.0	13062.0	13231.0
10°	11980.3	12276.8	12952.9	13655.1	13934.7
12.5°	11826.6	12266.1	13274.0	14268.2	14573.9
15°	11566.9	12239.9	13650.5	14736.8	15054.9
17.5°	11325.7	12209.2	14013.1	15134.8	15376.0
20°	11009.2	12164.7	14335.8	15256.1	15377.5
22.5°	10677.3	12129.3	14514.0	15174.7	15211.6
25°	10311.6	12057.1	14572.4	14994.9	15025.7
27.5°	9921.3	11992.6	14517.1	14772.1	14798.3
30°	9532.6	11875.8	14360.3	14424.9	14318.9
32.5°	9125.4	11759.0	14106.8	13816.4	13569.0
35°	8678.3	11596.1	13719.6	12986.7	12637.9
37.5°	8237.3	11439.4	13115.8	12058.6	11795.9
40°	7788.6	11245.8	12250.7	11192.0	11162.8
42.5°	7364.6	11036.8	11271.9	10517.5	10615.8
45°	6917.4	10746.4	10250.1	9906.0	9886.0
47.5°	6493.3	10345.4	9320.5	9229.9	9025.5
50°	6043.1	9792.3	8472.4	8386.3	7966.9
52.5°	5602.2	9087.0	7714.9	7392.2	6780.7
55°	5145.8	8251.1	6985.0	6310.5	5785.0
57.5°	4721.7	7332.3	6242.9	5368.6	4896.9
60°	4263.9	6401.2	5428.5	4542.0	4153.2
62.5°	3815.2	5483.9	4691.0	3838.2	3580.1
65°	3355.8	4629.5	3942.7	3269.7	3043.9
67.5°	2916.3	3890.5	3295.8	2756.5	2605.9
70°	2470.7	3156.0	2724.3	2315.5	2228.0
72.5°	2011.3	2521.4	2203.4	1954.5	1888.4
75°	1605.7	1966.7	1730.1	1584.2	1545.7
77.5°	1195.4	1462.8	1352.1	1266.1	1255.3
80°	842.0	1055.6	995.7	978.8	961.9
82.5°	537.8	689.9	708.3	697.6	685.3
85°	285.8	405.6	424.1	402.6	398.0
87.5°	115.2	176.7	190.5	210.5	216.6
90°	1.5	41.5	75.3	95.3	98.3
92.5°	1.5	9.2	10.8	10.8	9.2
95°	1.5	6.1	6.1	4.6	3.1
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)