

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: P860132

Luminaire Tested: **SPHB-36SE-M-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: P860132
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SPHB-36SE-M-L950-CD
Description: 36000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens
and, 5000K 90CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

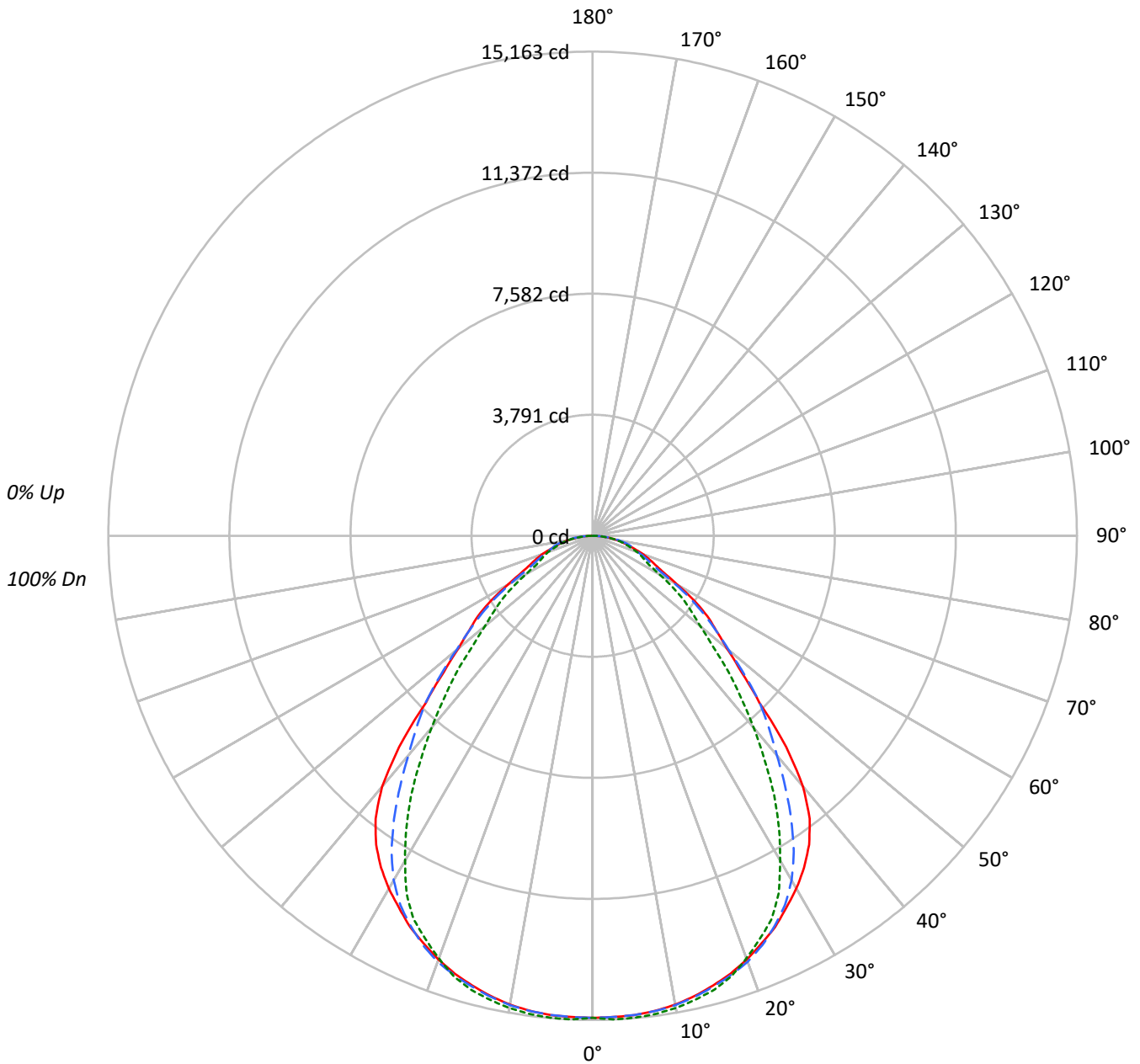
Lumens per Lamp: N/A
Luminaire Lumens: 31333.0 lumens
Efficiency: N/A
Efficacy: 130.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

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	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87																			
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75																			
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66																			
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58																			
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51																			
6	75	63	55	49	73	62	54	49	60	54	48	59	53	48	57	52	48	46																			
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41																			
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37																			
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34																			
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	79651	79651	79651
5°	79808	79787	80240
10°	79877	79962	80453
15°	79644	79851	80405
20°	79296	79698	79061
25°	78717	78496	77163
30°	77720	75888	71557
35°	76088	69817	63777
40°	70612	61794	54018
45°	55089	55237	44704
50°	44993	45630	36103
55°	40313	38792	31722
60°	32273	30549	25381
65°	27045	24758	22447
70°	25679	23590	22852
75°	23298	25043	22040
80°	23412	25591	23230
85°	20372	23865	19403



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1435.3	4.6
10°-20°	4128.0	13.2
20°-30°	6162.4	19.7
30°-40°	6724.2	21.5
40°-50°	5500.7	17.6
50°-60°	3616.7	11.5
60°-70°	2075.0	6.6
70°-80°	1257.4	4.0
80°-90°	422.2	1.3
90°-100°	11.0	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°	11725.7	37.4
0°-40°	18449.9	58.9
0°-60°	27567.4	88.0
0°-90°	31322.0	100.0
90°-120°	11.0	0.0
90°-150°	11.0	0.0
90°-180°	11.0	0.0
0°-180°	31333.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15096	15096	15096	15096	15096	
5°	15068	15044	15064	15126	15149	###
15°	14580	14578	14618	14711	14719	4115
25°	13521	13553	13483	13320	13254	6220
35°	11812	11546	10839	10100	9901	7321
45°	7383	7934	7402	6534	5991	5860
55°	4382	4263	4217	3624	3448	3859
65°	2166	2134	1983	1929	1798	2214
75°	1143	1236	1228	1179	1081	1237
85°	336	382	394	344	320	365
90°	2	28	56	66	70	16
95°	2	4	6	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°	15095.6	15095.6	15095.6	15095.6	15095.6
2.5°	15085.7	15063.8	15083.7	15145.4	15163.3
5°	15067.8	15043.9	15063.8	15125.5	15149.4
7.5°	15006.1	14992.1	15012.0	15073.7	15103.6
10°	14908.5	14892.6	14924.4	14978.2	15016.0
12.5°	14763.2	14757.2	14787.0	14864.7	14880.6
15°	14580.0	14578.0	14617.8	14711.4	14719.3
17.5°	14372.9	14370.9	14420.7	14482.4	14460.5
20°	14122.1	14136.0	14193.7	14136.0	14080.2
22.5°	13821.4	13865.2	13879.2	13698.0	13670.1
25°	13520.8	13552.6	13482.9	13319.7	13254.0
27.5°	13132.5	13170.4	13040.9	12808.0	12620.9
30°	12756.2	12720.4	12455.6	12005.6	11744.8
32.5°	12324.2	12196.8	11720.9	11099.7	10862.8
35°	11812.5	11545.7	10838.9	10100.3	9901.2
37.5°	11165.4	10677.7	9905.1	9134.6	8834.0
40°	10251.6	9688.1	8971.4	8175.0	7842.5
42.5°	8971.4	8762.3	8169.0	7273.1	6876.9
45°	7382.6	7934.1	7402.5	6534.4	5990.9
47.5°	6319.4	7085.9	6446.8	5819.6	5071.0
50°	5481.2	6008.8	5558.8	4993.4	4398.1
52.5°	4875.9	5035.2	4854.0	4232.8	3894.4
55°	4382.2	4262.7	4216.9	3623.6	3448.4
57.5°	3768.9	3703.2	3585.8	3159.7	2928.7
60°	3058.2	3197.5	2894.9	2773.4	2405.1
62.5°	2512.6	2650.0	2325.5	2317.5	2010.9
65°	2166.2	2134.3	1983.0	1929.3	1797.9
67.5°	1917.3	1817.8	1766.0	1696.3	1650.5
70°	1664.5	1622.7	1529.1	1543.0	1481.3
72.5°	1387.7	1441.5	1347.9	1373.8	1262.3
75°	1142.8	1236.4	1228.4	1178.7	1081.1
77.5°	941.7	1041.3	1059.2	1013.4	933.8
80°	770.5	838.2	842.2	814.3	764.5
82.5°	565.4	605.3	635.1	587.3	555.5
85°	336.5	382.3	394.2	344.4	320.5
87.5°	109.5	153.3	171.2	177.2	179.2
90°	2.0	27.9	55.7	65.7	69.7
92.5°	2.0	8.0	11.9	17.9	19.9
95°	2.0	4.0	6.0	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)