

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: P860131

Luminaire Tested: **SPHB-36SE-M-L940-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: P860131
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-L940-CD
Description: 36000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens
and, 4000K 90CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

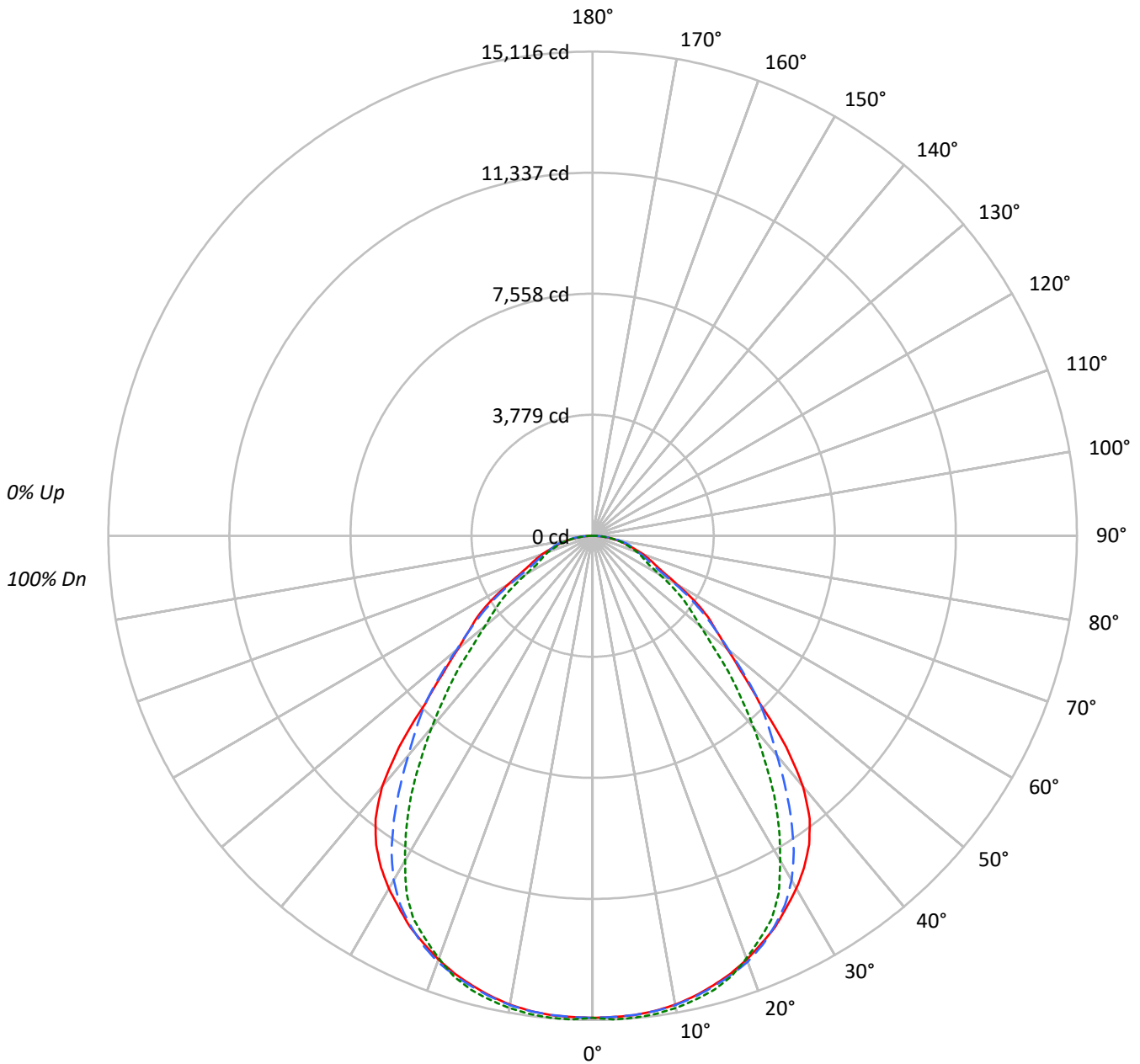
Lumens per Lamp: N/A
Luminaire Lumens: 31236.0 lumens
Efficiency: N/A
Efficacy: 129.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

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					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	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°	79404	79404	79404
5°	79561	79540	79992
10°	79630	79715	80204
15°	79397	79604	80157
20°	79050	79452	78817
25°	78473	78253	76925
30°	77479	75653	71336
35°	75852	69601	63579
40°	70393	61603	53851
45°	54918	55067	44565
50°	44854	45489	35991
55°	40188	38672	31624
60°	32172	30454	25303
65°	26962	24682	22377
70°	25598	23516	22781
75°	23226	24965	21973
80°	23339	25512	23160
85°	20305	23792	19349



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1430.9	4.6
10°-20°	4115.2	13.2
20°-30°	6143.3	19.7
30°-40°	6703.4	21.5
40°-50°	5483.7	17.6
50°-60°	3605.5	11.5
60°-70°	2068.6	6.6
70°-80°	1253.5	4.0
80°-90°	420.9	1.3
90°-100°	10.9	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°	11689.4	37.4
0°-40°	18392.9	58.9
0°-60°	27482.1	88.0
0°-90°	31225.1	100.0
90°-120°	10.9	0.0
90°-150°	10.9	0.0
90°-180°	11.0	0.0
0°-180°	31236.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15049	15049	15049	15049	15049	
5°	15021	14997	15017	15079	15102	###
15°	14535	14533	14573	14666	14674	4103
25°	13479	13511	13441	13278	13213	6201
35°	11776	11510	10805	10069	9870	7299
45°	7360	7910	7380	6514	5972	5842
55°	4369	4250	4204	3612	3438	3848
65°	2160	2128	1977	1923	1792	2208
75°	1139	1233	1225	1175	1078	1233
85°	335	381	393	343	320	364
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°	15048.9	15048.9	15048.9	15048.9	15048.9
2.5°	15039.0	15017.2	15037.0	15098.5	15116.4
5°	15021.1	14997.3	15017.2	15078.7	15102.5
7.5°	14959.6	14945.7	14965.6	15027.1	15056.9
10°	14862.3	14846.5	14878.2	14931.8	14969.5
12.5°	14717.4	14711.5	14741.3	14818.7	14834.6
15°	14534.8	14532.9	14572.6	14665.8	14673.8
17.5°	14328.4	14326.4	14376.1	14437.6	14415.8
20°	14078.3	14092.2	14149.8	14092.2	14036.7
22.5°	13778.6	13822.3	13836.2	13655.6	13627.8
25°	13478.9	13510.7	13441.2	13278.5	13213.0
27.5°	13091.9	13129.6	13000.6	12768.4	12581.8
30°	12716.7	12681.0	12417.0	11968.5	11708.5
32.5°	12286.0	12159.0	11684.6	11065.4	10829.2
35°	11775.9	11510.0	10805.4	10069.0	9870.5
37.5°	11130.9	10644.6	9874.5	9106.4	8806.7
40°	10219.8	9658.1	8943.6	8149.7	7818.2
42.5°	8943.6	8735.2	8143.7	7250.6	6855.6
45°	7359.7	7909.5	7379.6	6514.2	5972.3
47.5°	6299.8	7064.0	6426.9	5801.6	5055.3
50°	5464.2	5990.2	5541.6	4977.9	4384.5
52.5°	4860.8	5019.6	4839.0	4219.7	3882.3
55°	4368.6	4249.5	4203.9	3612.4	3437.7
57.5°	3757.3	3691.8	3574.7	3149.9	2919.7
60°	3048.7	3187.6	2885.9	2764.9	2397.7
62.5°	2504.8	2641.8	2318.3	2310.3	2004.7
65°	2159.5	2127.7	1976.9	1923.3	1792.3
67.5°	1911.4	1812.1	1760.5	1691.1	1645.4
70°	1659.3	1617.6	1524.3	1538.2	1476.7
72.5°	1383.4	1437.0	1343.7	1369.5	1258.4
75°	1139.3	1232.6	1224.6	1175.0	1077.8
77.5°	938.8	1038.1	1055.9	1010.3	930.9
80°	768.1	835.6	839.6	811.8	762.2
82.5°	563.7	603.4	633.2	585.5	553.8
85°	335.4	381.1	393.0	343.4	319.6
87.5°	109.2	152.8	170.7	176.6	178.6
90°	2.0	27.8	55.6	65.5	69.5
92.5°	2.0	7.9	11.9	17.9	19.8
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)