

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: P860100

Luminaire Tested: **SPHB-36HE-M-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: P860100
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-36HE-M-L835-CD
Description: 36000 Lumen High Efficacy Select Pro High Bay with Medium Lens and, 3500K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

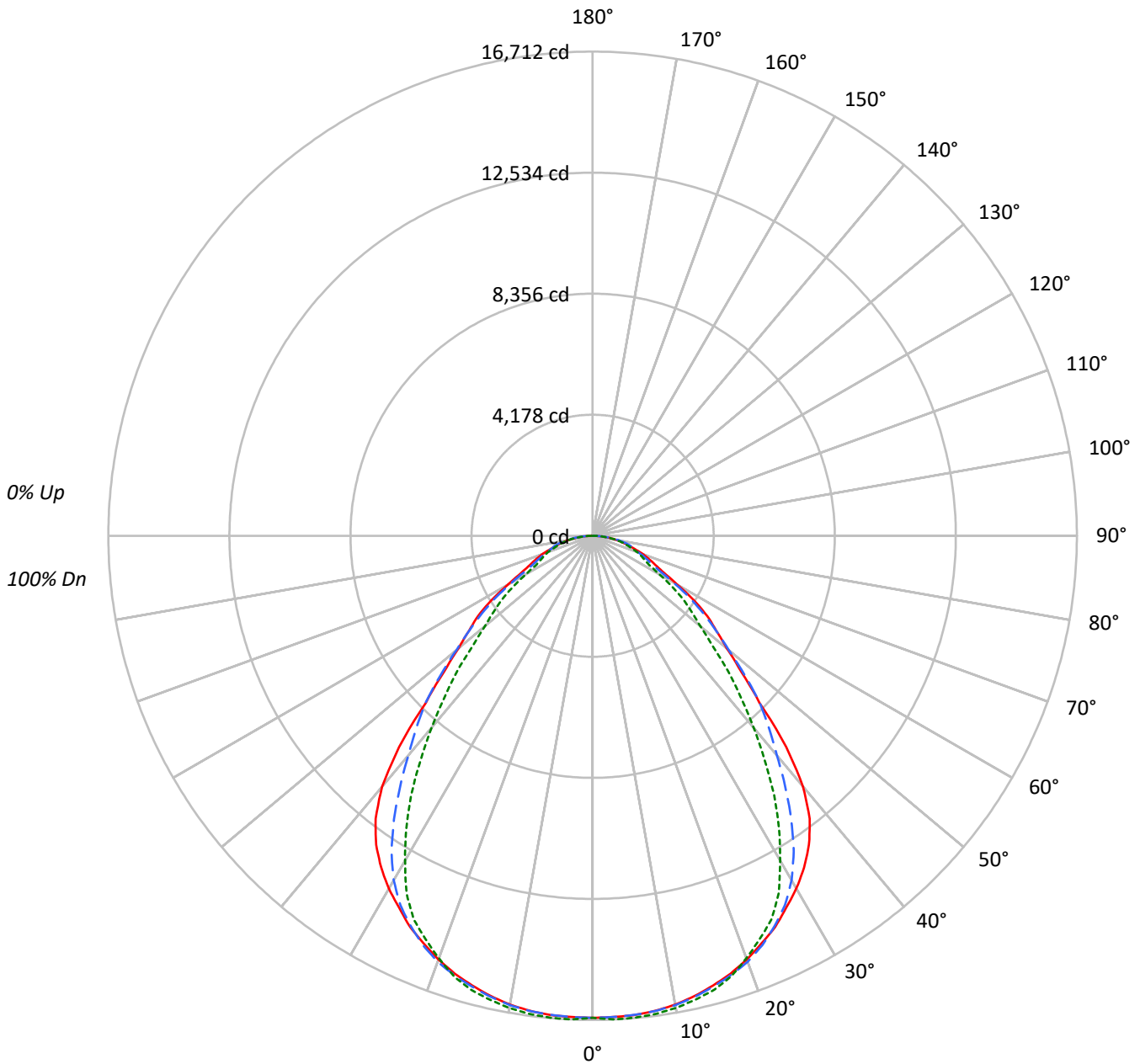
Lumens per Lamp: N/A
Luminaire Lumens: 34532.0 lumens
Efficiency: N/A
Efficacy: 159.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

Input Watts (W): 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									
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°	87783	87783	87783
5°	87956	87933	88432
10°	88032	88127	88667
15°	87776	88003	88614
20°	87392	87836	87133
25°	86753	86510	85042
30°	85655	83636	78863
35°	83856	76945	70288
40°	77821	68103	59533
45°	60713	60877	49268
50°	49587	50290	39788
55°	44428	42752	34961
60°	35567	33669	27972
65°	29807	27286	24738
70°	28300	25998	25185
75°	25677	27601	24291
80°	25804	28204	25603
85°	22448	26305	21389



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1581.9	4.6
10°-20°	4549.4	13.2
20°-30°	6791.6	19.7
30°-40°	7410.8	21.5
40°-50°	6062.3	17.6
50°-60°	3986.0	11.5
60°-70°	2286.9	6.6
70°-80°	1385.8	4.0
80°-90°	465.3	1.3
90°-100°	12.1	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°	12922.9	37.4
0°-40°	20333.6	58.9
0°-60°	30382.0	88.0
0°-90°	34519.9	100.0
90°-120°	12.1	0.0
90°-150°	12.1	0.0
90°-180°	12.0	0.0
0°-180°	34532.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16637	16637	16637	16637	16637	
5°	16606	16580	16602	16670	16696	###
15°	16069	16066	16110	16213	16222	4536
25°	14901	14936	14860	14680	14607	6855
35°	13018	12724	11946	11132	10912	8069
45°	8136	8744	8158	7202	6602	6458
55°	4830	4698	4647	3994	3800	4253
65°	2387	2352	2186	2126	1981	2441
75°	1260	1363	1354	1299	1192	1363
85°	371	421	434	380	353	402
90°	2	31	61	72	77	17
95°	2	4	7	7	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°	16636.9	16636.9	16636.9	16636.9	16636.9
2.5°	16625.9	16601.8	16623.7	16691.7	16711.5
5°	16606.1	16579.8	16601.8	16669.8	16696.1
7.5°	16538.1	16522.8	16544.7	16612.7	16645.6
10°	16430.6	16413.0	16448.2	16507.4	16549.1
12.5°	16270.4	16263.8	16296.8	16382.3	16399.9
15°	16068.6	16066.4	16110.2	16213.4	16222.1
17.5°	15840.3	15838.2	15893.0	15961.0	15936.9
20°	15563.9	15579.2	15642.9	15579.2	15517.8
22.5°	15232.5	15280.8	15296.2	15096.5	15065.8
25°	14901.2	14936.3	14859.5	14679.6	14607.2
27.5°	14473.3	14515.0	14372.4	14115.7	13909.4
30°	14058.6	14019.1	13727.3	13231.4	12943.9
32.5°	13582.5	13442.0	12917.6	12233.0	11971.9
35°	13018.5	12724.5	11945.5	11131.5	10912.0
37.5°	12305.4	11767.8	10916.4	10067.3	9735.9
40°	11298.2	10677.3	9887.3	9009.6	8643.2
42.5°	9887.3	9656.9	9003.0	8015.6	7579.0
45°	8136.3	8744.1	8158.3	7201.6	6602.5
47.5°	6964.6	7809.4	7105.0	6413.8	5588.8
50°	6040.8	6622.3	6126.4	5503.2	4847.1
52.5°	5373.7	5549.3	5349.6	4665.0	4292.0
55°	4829.6	4697.9	4647.4	3993.5	3800.5
57.5°	4153.7	4081.3	3951.9	3482.3	3227.8
60°	3370.4	3524.0	3190.5	3056.6	2650.7
62.5°	2769.2	2920.6	2562.9	2554.1	2216.2
65°	2387.4	2352.2	2185.5	2126.2	1981.4
67.5°	2113.1	2003.4	1946.3	1869.5	1819.0
70°	1834.4	1788.3	1685.2	1700.5	1632.5
72.5°	1529.4	1588.6	1485.5	1514.0	1391.2
75°	1259.5	1362.6	1353.9	1299.0	1191.5
77.5°	1037.9	1147.6	1167.3	1116.9	1029.1
80°	849.2	923.8	928.2	897.5	842.6
82.5°	623.2	667.1	700.0	647.3	612.2
85°	370.8	421.3	434.5	379.6	353.3
87.5°	120.7	169.0	188.7	195.3	197.5
90°	2.2	30.7	61.4	72.4	76.8
92.5°	2.2	8.8	13.2	19.7	21.9
95°	2.2	4.4	6.6	6.6	4.4
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)