

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: P411989

Luminaire Tested: **LHB-36-UNV-L840-CD-U**

Issue Date: 09/28/2020

Test Information

Test Method: LM-79-08
Report Number: P411989
Test Lab: BAY AREA COMPLIANCE LABS
Issue Date: 09/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: LHB-36-UNV-L840-CD-U
Description: High Bay Luminaires for Commercial and Industrial Buildings
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (RKS180522018-10)
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37229.5 lumens
Efficiency: N/A
Efficacy: 140.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.23 / 1.32
Luminous Opening: Rectangular (W 0.99' x L: 3.76' x H: 0')
CIE Type: Direct

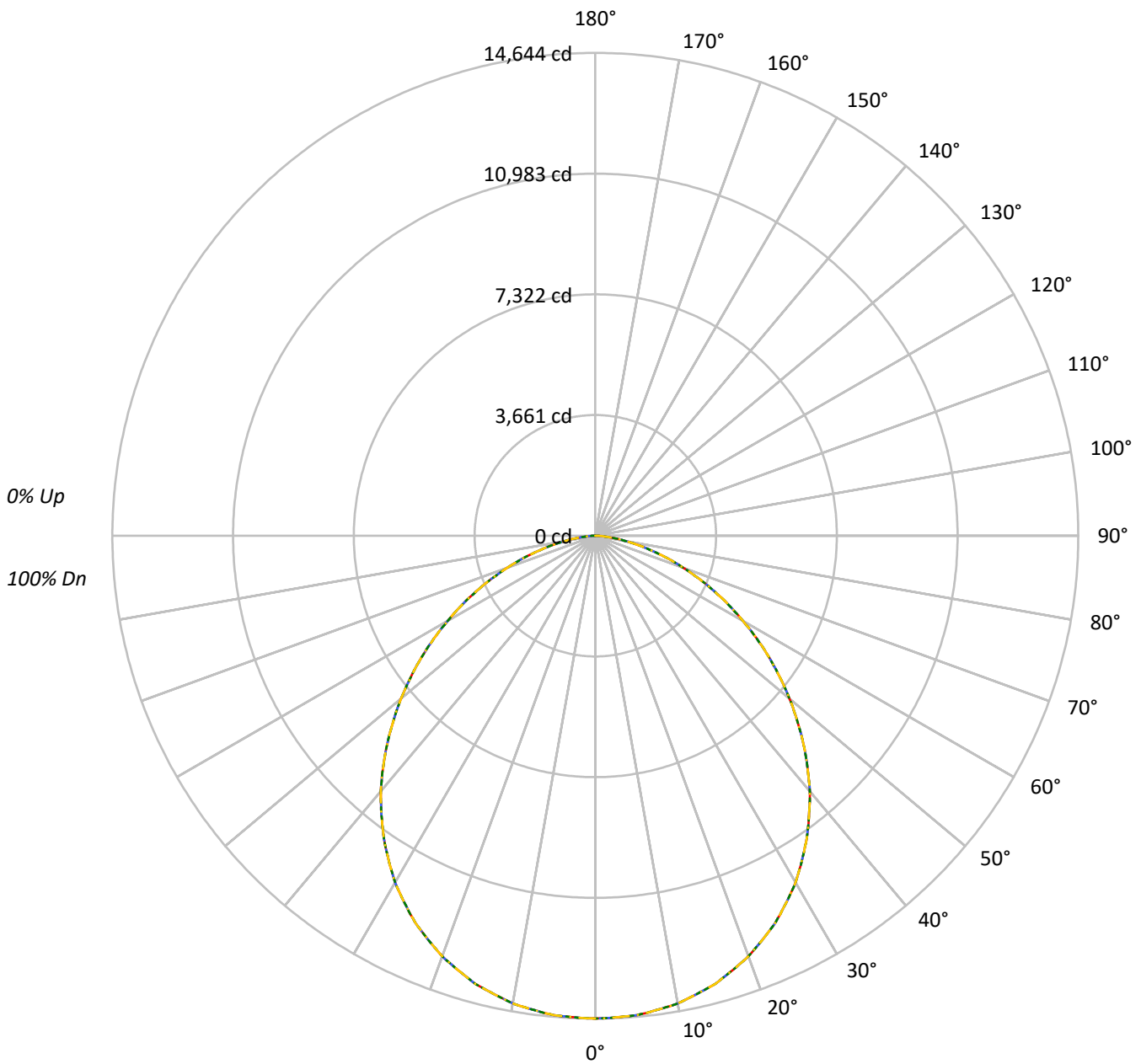
Input Watts (W): 265.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270° - - - 135°-315°



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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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	80	98	90	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61					61			
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53					53			
5	78	65	56	50	75	64	56	50	62	55	49	60	54	49	58	53	48	46					46			
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41					41			
7	67	53	45	39	65	53	45	39	51	44	38	50	43	38	48	42	38	36					36			
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	44	39	34	32					32			
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29					29			
10	54	41	34	29	53	41	34	28	40	33	28	39	33	28	38	32	28	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	42388	42388	42388	42388
5°	42408	42408	42408	42408
10°	42337	42337	42337	42337
15°	42153	42153	42153	42153
20°	41811	41811	41811	41811
25°	41315	41315	41315	41315
30°	40591	40591	40591	40591
35°	39517	39517	39517	39517
40°	38234	38234	38234	38234
45°	36535	36535	36535	36535
50°	34606	34606	34606	34606
55°	32444	32444	32444	32444
60°	29917	29917	29917	29917
65°	27221	27221	27221	27221
70°	23932	23932	23932	23932
75°	20195	20195	20195	20195
80°	15647	15647	15647	15647
85°	9465	9465	9465	9465



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1386.9	3.7
10°-20°	3966.8	10.7
20°-30°	5954.3	16.0
30°-40°	6989.1	18.8
40°-50°	6882.3	18.5
50°-60°	5749.3	15.4
60°-70°	3944.8	10.6
70°-80°	1945.4	5.2
80°-90°	410.5	1.1
90°-100°	0.0	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°	11308.0	30.4
0°-40°	18297.1	49.1
0°-60°	30928.7	83.1
0°-90°	37229.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	37229.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	14644	14644	14644	14644	14644	
5°	14595	14595	14595	14595	14595	###
15°	14066	14066	14066	14066	14066	3967
25°	12936	12936	12936	12936	12936	5954
35°	11183	11183	11183	11183	11183	6989
45°	8925	8925	8925	8925	8925	6882
55°	6429	6429	6429	6429	6429	5749
65°	3974	3974	3974	3974	3974	3945
75°	1806	1806	1806	1806	1806	1945
85°	285	285	285	285	285	391
90°	0	0	0	0	0	39
95°	0	0	0	0	0	0
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°	112.5°	135°	157.5°	180°	202.5°	225°
0°	14643.9	14643.9	14643.9	14643.9	14643.9	14643.9	14643.9	14643.9	14643.9	14643.9	14643.9
5°	14595.0	14595.0	14595.0	14595.0	14595.0	14595.0	14595.0	14595.0	14595.0	14595.0	14595.0
10°	14404.2	14404.2	14404.2	14404.2	14404.2	14404.2	14404.2	14404.2	14404.2	14404.2	14404.2
15°	14066.4	14066.4	14066.4	14066.4	14066.4	14066.4	14066.4	14066.4	14066.4	14066.4	14066.4
20°	13573.6	13573.6	13573.6	13573.6	13573.6	13573.6	13573.6	13573.6	13573.6	13573.6	13573.6
25°	12935.9	12935.9	12935.9	12935.9	12935.9	12935.9	12935.9	12935.9	12935.9	12935.9	12935.9
30°	12144.2	12144.2	12144.2	12144.2	12144.2	12144.2	12144.2	12144.2	12144.2	12144.2	12144.2
35°	11183.0	11183.0	11183.0	11183.0	11183.0	11183.0	11183.0	11183.0	11183.0	11183.0	11183.0
40°	10118.5	10118.5	10118.5	10118.5	10118.5	10118.5	10118.5	10118.5	10118.5	10118.5	10118.5
45°	8925.0	8925.0	8925.0	8925.0	8925.0	8925.0	8925.0	8925.0	8925.0	8925.0	8925.0
50°	7684.8	7684.8	7684.8	7684.8	7684.8	7684.8	7684.8	7684.8	7684.8	7684.8	7684.8
55°	6428.9	6428.9	6428.9	6428.9	6428.9	6428.9	6428.9	6428.9	6428.9	6428.9	6428.9
60°	5167.8	5167.8	5167.8	5167.8	5167.8	5167.8	5167.8	5167.8	5167.8	5167.8	5167.8
65°	3974.3	3974.3	3974.3	3974.3	3974.3	3974.3	3974.3	3974.3	3974.3	3974.3	3974.3
70°	2827.8	2827.8	2827.8	2827.8	2827.8	2827.8	2827.8	2827.8	2827.8	2827.8	2827.8
75°	1805.7	1805.7	1805.7	1805.7	1805.7	1805.7	1805.7	1805.7	1805.7	1805.7	1805.7
80°	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7	938.7
85°	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	14643.9	14643.9	14643.9	14643.9	14643.9	14643.9
5°	14595.0	14595.0	14595.0	14595.0	14595.0	14595.0
10°	14404.2	14404.2	14404.2	14404.2	14404.2	14404.2
15°	14066.4	14066.4	14066.4	14066.4	14066.4	14066.4
20°	13573.6	13573.6	13573.6	13573.6	13573.6	13573.6
25°	12935.9	12935.9	12935.9	12935.9	12935.9	12935.9
30°	12144.2	12144.2	12144.2	12144.2	12144.2	12144.2
35°	11183.0	11183.0	11183.0	11183.0	11183.0	11183.0
40°	10118.5	10118.5	10118.5	10118.5	10118.5	10118.5
45°	8925.0	8925.0	8925.0	8925.0	8925.0	8925.0
50°	7684.8	7684.8	7684.8	7684.8	7684.8	7684.8
55°	6428.9	6428.9	6428.9	6428.9	6428.9	6428.9
60°	5167.8	5167.8	5167.8	5167.8	5167.8	5167.8
65°	3974.3	3974.3	3974.3	3974.3	3974.3	3974.3
70°	2827.8	2827.8	2827.8	2827.8	2827.8	2827.8
75°	1805.7	1805.7	1805.7	1805.7	1805.7	1805.7
80°	938.7	938.7	938.7	938.7	938.7	938.7
85°	285.0	285.0	285.0	285.0	285.0	285.0
90°	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)