

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: P685924

Luminaire Tested: **8CZL-10-UNV-LVRF-L850-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685924
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-10-UNV-LVRF-L850-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH FROSTED LAY-IN @80 CRI and 5000K
Light Source: (784) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

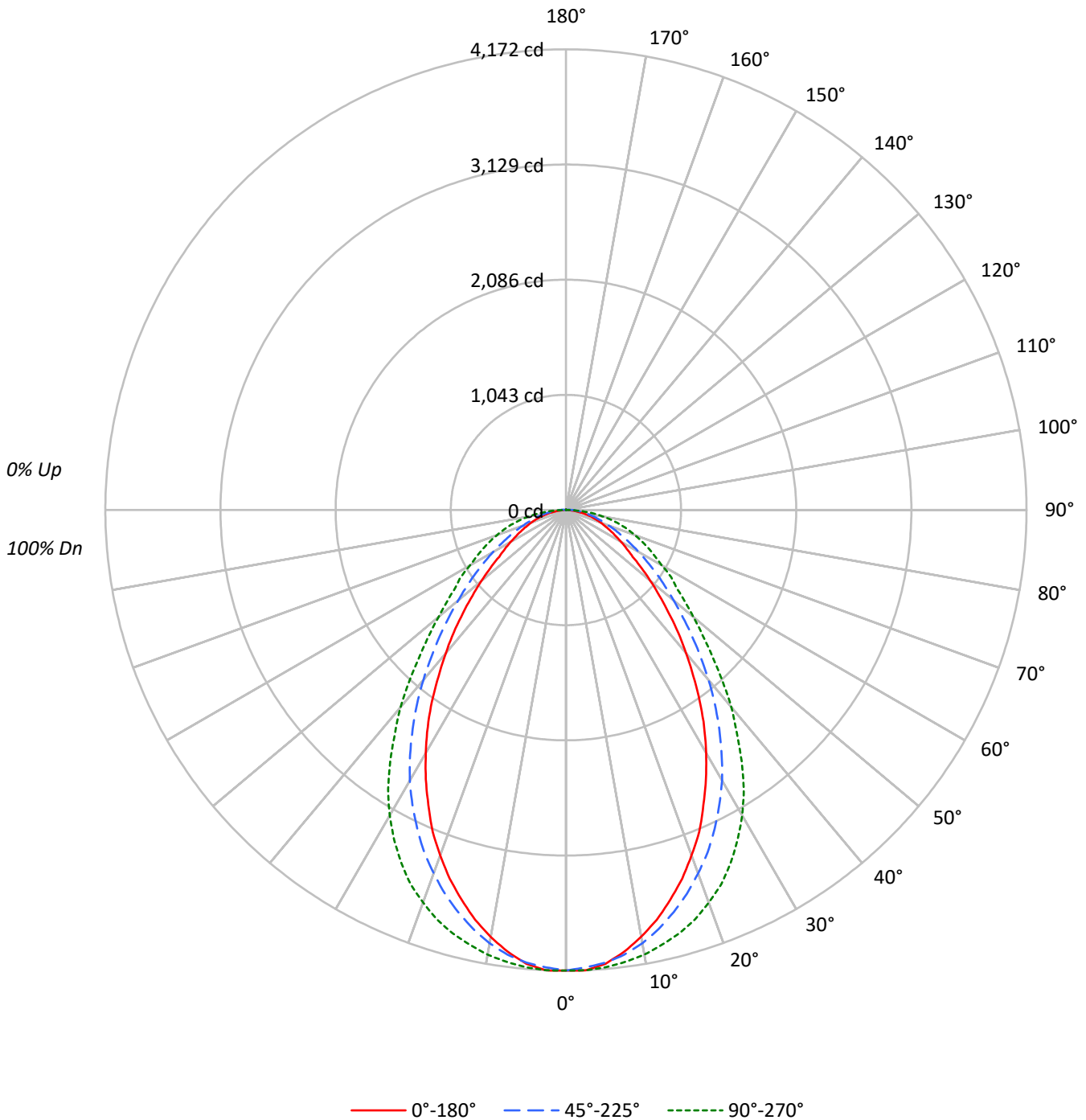
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7693.2 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Spacing Criteria (0/90/45): 0.97 / 1.15 / 1.12
Luminous Opening: Rectangular (W 0.83' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 63
Input Voltage (V): 120
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	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	74				
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57				
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	51				
6	75	63	55	49	73	62	54	48	60	53	48	58	52	48	57	51	47	45				
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41				
8	65	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	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6734	6734	6734
5°	6685	6669	6736
10°	6435	6530	6703
15°	6106	6302	6633
20°	5718	6014	6501
25°	5250	5674	6285
30°	4733	5273	5952
35°	4168	4769	5466
40°	3567	4235	4916
45°	3005	3691	4281
50°	2510	3199	3785
55°	2077	2811	3432
60°	1872	2464	3236
65°	1701	2168	3164
70°	1584	1947	3141
75°	1470	1817	3205
80°	1332	1800	3210
85°	1143	2110	3175



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	390.2	5.1
10°-20°	1066.4	13.9
20°-30°	1473.5	19.2
30°-40°	1515.8	19.7
40°-50°	1242.6	16.2
50°-60°	891.7	11.6
60°-70°	599.7	7.8
70°-80°	350.0	4.6
80°-90°	134.9	1.8
90°-100°	23.4	0.3
100°-110°	2.0	0.0
110°-120°	0.4	0.0
120°-130°	0.3	0.0
130°-140°	0.5	0.0
140°-150°	0.6	0.0
150°-160°	0.5	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	2930.1	38.1
0°-40°	4445.9	57.8
0°-60°	6580.3	85.5
0°-90°	7664.9	99.6
90°-120°	25.7	0.3
90°-150°	27.2	0.4
90°-180°	28.0	0.4
0°-180°	7693.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4170	4170	4170	4170	4170	
5°	4124	4127	4115	4153	4156	387
15°	3653	3690	3770	3916	3968	1025
25°	2947	3016	3185	3407	3528	1353
35°	2115	2212	2420	2646	2773	1318
45°	1316	1419	1616	1775	1875	1021
55°	738	826	999	1135	1219	679
65°	445	472	568	729	828	444
75°	236	244	291	405	514	250
85°	62	77	114	170	171	67
90°	1	26	58	89	19	4
95°	1	4	25	43	8	0
105°	0	1	1	2	1	0
115°	1	1	1	0	0	0
125°	1	1	1	0	0	1
135°	1	1	1	1	0	0
145°	1	1	1	1	1	1
155°	1	2	1	1	1	1
165°	2	2	2	1	1	0
175°	2	2	2	1	1	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4170.4	4170.4	4170.4	4170.4	4170.4
2.5°	4172.2	4168.7	4145.3	4172.2	4171.0
5°	4124.3	4127.3	4114.7	4153.1	4156.1
7.5°	4035.0	4047.0	4060.8	4117.1	4127.3
10°	3924.7	3942.7	3982.8	4066.8	4088.3
12.5°	3800.6	3820.4	3885.7	4001.4	4031.4
15°	3652.6	3689.8	3770.1	3916.3	3967.9
17.5°	3499.7	3545.3	3644.8	3818.0	3887.5
20°	3327.7	3373.3	3500.3	3693.3	3783.3
22.5°	3155.1	3199.5	3354.7	3560.3	3672.4
25°	2947.1	3016.1	3185.1	3406.8	3527.9
27.5°	2748.1	2821.3	3009.5	3247.4	3367.9
30°	2538.4	2624.1	2828.4	3055.6	3192.3
32.5°	2330.4	2417.3	2625.9	2862.6	2998.1
35°	2114.6	2212.3	2419.7	2646.2	2773.3
37.5°	1895.8	2002.5	2215.9	2438.9	2541.3
40°	1692.6	1797.5	2009.1	2208.7	2332.2
42.5°	1505.0	1608.1	1804.1	1985.1	2096.0
45°	1316.2	1418.7	1616.5	1775.3	1874.8
47.5°	1147.2	1252.1	1436.1	1596.7	1680.0
50°	999.2	1094.5	1273.7	1419.3	1506.8
52.5°	863.7	950.6	1128.0	1269.5	1354.0
55°	737.8	825.9	998.6	1135.2	1219.1
57.5°	653.3	716.3	871.5	1023.1	1131.0
60°	579.6	618.6	763.0	942.8	1002.2
62.5°	504.7	540.0	658.7	816.9	909.3
65°	445.3	471.7	567.6	728.8	828.3
67.5°	386.6	406.4	488.5	643.7	744.4
70°	335.6	348.2	412.4	559.8	665.3
72.5°	287.1	293.7	351.2	483.1	588.0
75°	235.6	243.9	291.3	404.6	513.7
77.5°	186.4	198.4	240.3	337.4	428.6
80°	143.3	152.8	193.6	277.5	345.2
82.5°	99.5	112.7	151.0	219.4	264.3
85°	61.7	76.7	113.9	170.2	171.4
87.5°	25.8	47.9	83.3	125.9	87.5
90°	0.6	25.8	58.1	88.7	18.6
92.5°	0.0	12.0	39.6	63.5	10.8
95°	0.6	4.2	24.6	42.6	7.8
97.5°	0.0	1.2	13.2	27.0	4.8
100°	0.0	0.6	5.4	15.0	3.0
102.5°	0.0	0.6	2.4	6.6	1.8
105°	0.0	0.6	1.2	2.4	1.2
107.5°	0.0	0.6	0.6	0.6	0.6
110°	0.6	0.6	0.6	0.6	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.6	0.6	0.0	0.0
115°	0.6	0.6	0.6	0.0	0.0
117.5°	0.6	0.6	0.6	0.0	0.0
120°	0.6	0.6	0.6	0.0	0.0
122.5°	0.6	0.6	0.6	0.0	0.0
125°	0.6	0.6	0.6	0.0	0.0
127.5°	0.6	0.6	0.6	0.0	0.0
130°	0.6	0.6	0.6	0.0	0.0
132.5°	0.6	1.2	0.6	0.6	0.0
135°	0.6	1.2	0.6	0.6	0.0
137.5°	0.6	1.2	0.6	0.6	0.0
140°	0.6	1.2	0.6	0.6	0.6
142.5°	1.2	1.2	1.2	0.6	0.6
145°	1.2	1.2	1.2	0.6	0.6
147.5°	1.2	1.2	1.2	0.6	0.6
150°	1.2	1.2	1.2	0.6	0.6
152.5°	1.2	1.8	1.2	0.6	0.6
155°	1.2	1.8	1.2	0.6	0.6
157.5°	1.2	1.8	1.2	0.6	0.6
160°	1.2	1.8	1.2	0.6	0.6
162.5°	1.8	1.8	1.2	1.2	0.6
165°	1.8	1.8	1.8	1.2	0.6
167.5°	1.8	1.8	1.8	1.2	0.6
170°	1.8	1.8	1.8	1.2	1.2
172.5°	1.8	1.8	1.8	1.2	1.2
175°	1.8	2.4	1.8	1.2	1.2
177.5°	1.8	2.4	1.8	1.2	1.2
180°	1.8	1.8	1.8	1.8	1.8

(END OF REPORT)