

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: P685806

Luminaire Tested: **8CZL-18-UNV-M-LVR-L850-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685806
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-18-UNV-M-LVR-L850-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH MEDIUM LENS @80 CRI and 5000K
Light Source: (1176) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

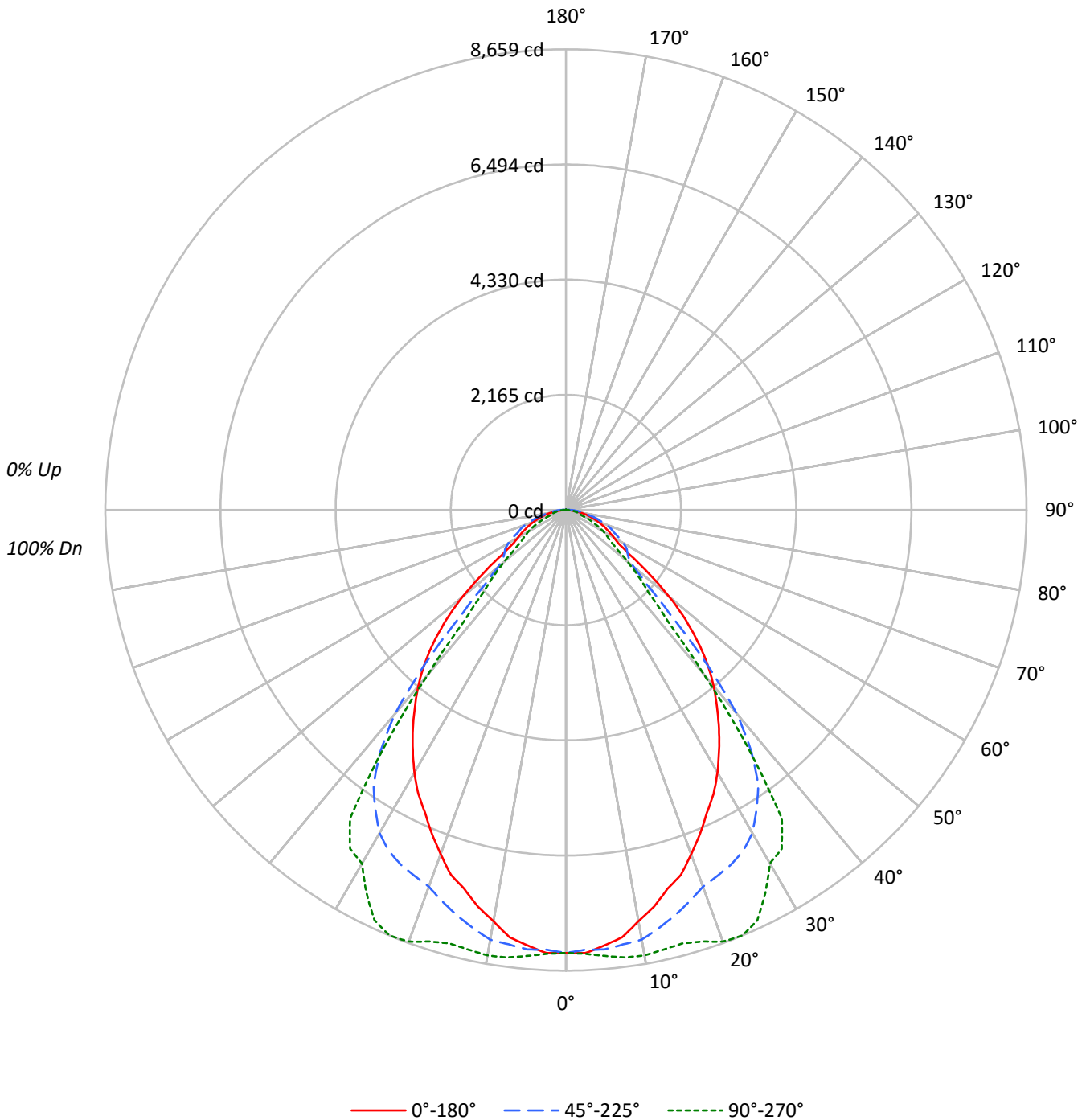
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15399.5 lumens
Efficiency: N/A
Efficacy: 141.3 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.34 / 1.2
Luminous Opening: Rectangular (W 0.83' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 109
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





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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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	90	90	88
2	103	96	90	86	100	94	89	84	91	86	83	87	84	81	84	81	79	79	79	77
3	95	87	80	74	93	85	79	74	82	77	72	79	75	71	77	73	70	70	70	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	70	66	62	62	62	60
5	83	72	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	56	56	54
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	51	51	49
7	72	60	53	47	70	59	52	47	58	51	47	57	51	46	55	50	46	46	46	44
8	68	56	48	43	66	55	48	43	54	47	42	52	47	42	51	46	42	42	42	40
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	42	39	39	39	37
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	35	35	35	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13441	13441	13441
5°	13316	13436	13637
10°	12865	13444	13935
15°	12324	13193	14098
20°	11827	12942	14831
25°	11174	13096	15161
30°	10621	13068	14300
35°	9889	12427	13944
40°	9104	10533	8497
45°	8021	6278	5036
50°	6367	4169	3801
55°	4122	3966	2884
60°	3365	4031	2650
65°	3206	3799	2165
70°	3044	3812	1712
75°	2891	3569	1591
80°	2675	3371	1786
85°	2393	4122	2192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	790.0	5.1
10°-20°	2240.7	14.6
20°-30°	3378.9	21.9
30°-40°	3733.6	24.2
40°-50°	2340.9	15.2
50°-60°	1260.3	8.2
60°-70°	856.0	5.6
70°-80°	511.2	3.3
80°-90°	222.1	1.4
90°-100°	48.7	0.3
100°-110°	5.6	0.0
110°-120°	2.0	0.0
120°-130°	1.9	0.0
130°-140°	2.2	0.0
140°-150°	2.0	0.0
150°-160°	1.6	0.0
160°-170°	1.2	0.0
170°-180°	0.5	0.0
0°-30°	6409.6	41.6
0°-40°	10143.2	65.9
0°-60°	13744.5	89.3
0°-90°	15333.8	99.6
90°-120°	56.3	0.4
90°-150°	62.4	0.4
90°-180°	66.0	0.4
0°-180°	15399.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8325	8325	8325	8325	8325	
5°	8216	8230	8290	8388	8414	774
15°	7373	7631	7893	8275	8434	2081
25°	6272	6653	7351	8135	8510	2896
35°	5017	5607	6305	6782	7074	3131
45°	3513	3824	2750	2242	2206	2679
55°	1464	1532	1409	1219	1025	1422
65°	839	923	994	808	567	830
75°	464	516	572	470	255	489
85°	129	158	222	293	118	139
90°	3	49	113	188	35	9
95°	1	8	44	97	17	1
105°	1	2	3	8	3	1
115°	1	2	2	2	2	1
125°	1	2	2	2	2	1
135°	2	2	3	3	3	2
145°	2	3	3	3	4	1
155°	3	3	3	3	3	1
165°	3	4	4	4	4	1
175°	4	4	4	5	5	0
180°	5	5	5	5	5	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8324.7	8324.7	8324.7	8324.7	8324.7
2.5°	8335.6	8312.8	8270.4	8346.4	8347.5
5°	8216.1	8230.3	8290.0	8387.7	8413.7
7.5°	8100.0	8154.3	8234.6	8470.2	8482.1
10°	7847.1	7960.0	8199.9	8426.7	8499.5
12.5°	7636.5	7803.7	8051.2	8349.7	8462.6
15°	7372.7	7631.1	7892.7	8274.8	8434.3
17.5°	7188.2	7395.5	7715.7	8240.0	8501.6
20°	6883.2	7175.2	7532.3	8263.9	8631.9
22.5°	6586.8	6941.8	7440.0	8272.6	8659.0
25°	6272.0	6653.0	7351.0	8134.7	8510.3
27.5°	6011.5	6330.6	7218.6	7847.1	8118.5
30°	5696.7	6072.3	7009.1	7407.5	7670.1
32.5°	5358.0	5834.6	6669.3	7070.9	7548.6
35°	5017.2	5606.6	6304.6	6782.2	7074.2
37.5°	4661.1	5418.8	5731.4	5808.5	5608.8
40°	4319.2	5157.2	4997.6	4251.9	4031.5
42.5°	3945.8	4594.9	3898.0	2925.4	2826.6
45°	3512.7	3824.2	2749.6	2241.6	2205.7
47.5°	3051.3	2961.2	2050.5	1873.6	1852.9
50°	2534.6	2367.5	1659.7	1653.2	1513.2
52.5°	1975.6	1880.1	1488.2	1433.9	1211.4
55°	1464.3	1531.6	1409.0	1219.0	1024.7
57.5°	1172.3	1328.7	1353.6	1064.9	916.2
60°	1042.1	1162.6	1248.3	979.1	820.6
62.5°	934.6	1030.1	1118.1	908.6	707.7
65°	839.1	922.7	994.3	807.6	566.6
67.5°	738.1	825.0	912.9	693.6	482.0
70°	644.8	737.1	807.6	615.5	362.6
72.5°	548.2	643.7	675.2	514.5	289.8
75°	463.5	515.6	572.1	470.0	255.1
77.5°	374.5	419.0	441.8	430.9	224.7
80°	287.7	323.5	362.6	391.9	192.1
82.5°	210.6	236.6	289.8	345.2	154.1
85°	129.2	158.5	222.5	293.1	118.3
87.5°	57.5	94.4	163.9	242.1	76.0
90°	3.3	48.8	112.9	187.8	34.7
92.5°	1.1	21.7	73.8	138.9	23.9
95°	1.1	7.6	44.5	96.6	17.4
97.5°	1.1	3.3	25.0	61.9	10.9
100°	1.1	2.2	11.9	35.8	7.6
102.5°	1.1	2.2	5.4	17.4	5.4
105°	1.1	2.2	3.3	7.6	3.3
107.5°	1.1	2.2	2.2	3.3	2.2
110°	1.1	2.2	2.2	2.2	2.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.1	2.2	2.2	2.2	2.2
115°	1.1	2.2	2.2	2.2	2.2
117.5°	1.1	2.2	2.2	2.2	2.2
120°	1.1	2.2	2.2	2.2	2.2
122.5°	1.1	2.2	2.2	2.2	2.2
125°	1.1	2.2	2.2	2.2	2.2
127.5°	1.1	2.2	2.2	2.2	2.2
130°	1.1	2.2	2.2	2.2	2.2
132.5°	2.2	2.2	3.3	3.3	3.3
135°	2.2	2.2	3.3	3.3	3.3
137.5°	2.2	3.3	3.3	3.3	3.3
140°	2.2	3.3	3.3	3.3	3.3
142.5°	2.2	3.3	3.3	3.3	3.3
145°	2.2	3.3	3.3	3.3	4.3
147.5°	2.2	3.3	3.3	3.3	4.3
150°	2.2	3.3	3.3	3.3	3.3
152.5°	3.3	3.3	3.3	3.3	3.3
155°	3.3	3.3	3.3	3.3	3.3
157.5°	3.3	3.3	3.3	4.3	4.3
160°	3.3	4.3	4.3	4.3	4.3
162.5°	3.3	4.3	4.3	4.3	4.3
165°	3.3	4.3	4.3	4.3	4.3
167.5°	3.3	4.3	4.3	4.3	5.4
170°	4.3	4.3	4.3	5.4	5.4
172.5°	4.3	4.3	4.3	5.4	5.4
175°	4.3	4.3	4.3	5.4	5.4
177.5°	4.3	5.4	4.3	5.4	6.5
180°	5.4	5.4	5.4	5.4	5.4

(END OF REPORT)