

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: P685734

Luminaire Tested: **8CZL-10-UNV-N-LVR-L840-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685734  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-10-UNV-N-LVR-L840-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH NARROW LENS @80 CRI and 4000K  
Light Source: (784) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

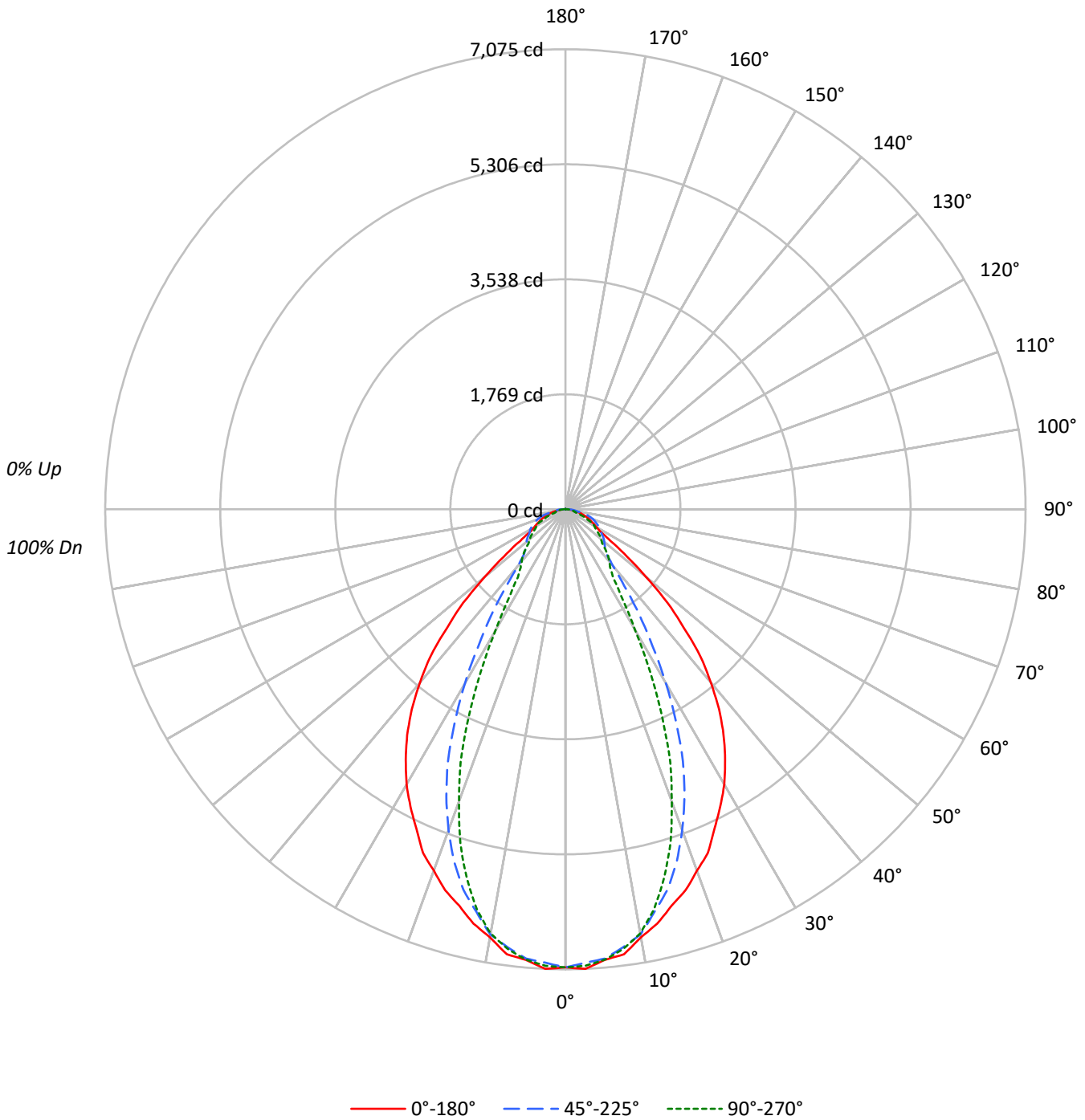
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8340.3 lumens  
Efficiency: N/A  
Efficacy: 132.4 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 0.8 / 0.85  
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<sub>in</sub>): 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	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	93	92	90	88
2	103	97	92	87	101	95	90	86	92	88	84	88	85	82	86	83	80	86	83	80	78
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	79	75	72	70
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	73	69	65	63
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	68	63	59	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	63	58	55	53
7	75	64	57	51	73	63	56	51	62	55	51	60	55	51	59	54	50	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	55	50	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	43	52	47	43	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	49	44	41	39

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	11374	11374	11374
5°	11273	11241	11270
10°	10955	10888	10861
15°	10549	10128	9806
20°	10160	9022	8213
25°	9655	7618	6263
30°	9107	5763	4001
35°	8359	3907	2514
40°	7331	2380	2205
45°	5874	1983	1976
50°	4061	1959	1784
55°	2392	1942	1680
60°	1783	2018	1659
65°	1687	2032	1459
70°	1623	2167	1102
75°	1530	2174	942
80°	1421	1804	1066
85°	1260	2190	1315



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	654.4	7.8
10°-20°	1694.3	20.3
20°-30°	1979.4	23.7
30°-40°	1468.5	17.6
40°-50°	973.5	11.7
50°-60°	645.6	7.7
60°-70°	481.7	5.8
70°-80°	284.3	3.4
80°-90°	119.7	1.4
90°-100°	25.9	0.3
100°-110°	3.5	0.0
110°-120°	1.8	0.0
120°-130°	1.6	0.0
130°-140°	1.6	0.0
140°-150°	1.6	0.0
150°-160°	1.5	0.0
160°-170°	1.1	0.0
170°-180°	0.4	0.0
0°-30°	4328.1	51.9
0°-40°	5796.5	69.5
0°-60°	7415.7	88.9
0°-90°	8301.4	99.5
90°-120°	31.2	0.4
90°-150°	36.0	0.4
90°-180°	39.0	0.5
0°-180°	8340.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7044	7044	7044	7044	7044	
5°	6955	6949	6936	6961	6954	658
15°	6311	6236	6059	5954	5867	1780
25°	5420	5030	4276	3668	3515	2496
35°	4241	3142	1982	1340	1275	2633
45°	2572	1518	868	901	865	1980
55°	850	747	690	666	597	836
65°	442	494	532	520	382	440
75°	245	274	348	253	151	259
85°	68	83	118	157	71	73
90°	1	25	59	102	21	4
95°	1	4	23	51	11	0
105°	1	1	2	4	4	1
115°	1	1	2	2	2	1
125°	1	1	2	2	2	1
135°	1	2	2	2	2	1
145°	2	2	2	3	3	1
155°	2	3	3	4	4	1
165°	3	4	4	4	4	1
175°	3	4	4	5	5	0
180°	4	4	4	4	4	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7044.3	7044.3	7044.3	7044.3	7044.3
2.5°	7074.7	7036.5	6981.6	7031.1	7027.0
5°	6955.3	6949.4	6935.6	6960.7	6953.6
7.5°	6901.6	6869.4	6793.0	6852.1	6818.7
10°	6682.0	6644.4	6640.8	6628.9	6624.7
12.5°	6526.2	6480.9	6335.8	6328.1	6295.9
15°	6310.8	6235.6	6058.9	5954.5	5866.7
17.5°	6143.7	5980.1	5685.3	5490.7	5377.9
20°	5913.3	5733.1	5250.8	4911.2	4779.9
22.5°	5723.5	5404.2	4784.1	4303.7	4213.6
25°	5419.7	5030.0	4276.2	3668.1	3515.3
27.5°	5155.9	4618.2	3677.0	3009.8	2822.4
30°	4885.0	4156.9	3090.9	2364.0	2146.2
32.5°	4569.3	3691.9	2487.5	1773.8	1616.2
35°	4241.0	3142.3	1982.0	1339.9	1275.4
37.5°	3879.3	2648.1	1489.7	1119.0	1129.8
40°	3478.3	2217.2	1129.2	1025.9	1046.2
42.5°	3078.4	1854.3	939.4	965.1	971.0
45°	2572.3	1517.7	868.4	901.2	865.4
47.5°	2130.1	1240.2	818.2	814.7	763.9
50°	1616.8	1011.0	780.0	737.1	710.2
52.5°	1197.2	852.9	743.6	696.5	669.0
55°	849.9	746.6	689.9	666.1	596.8
57.5°	638.6	671.4	648.7	595.0	546.7
60°	552.1	605.2	624.9	561.0	513.9
62.5°	498.3	548.5	586.1	540.7	470.3
65°	441.6	493.6	531.8	519.8	382.0
67.5°	392.1	450.0	497.2	445.8	312.1
70°	343.8	397.5	459.0	378.4	233.4
72.5°	291.8	332.4	406.4	294.2	170.1
75°	245.3	274.5	348.5	253.1	151.0
77.5°	196.4	220.8	238.7	230.4	133.1
80°	152.8	177.3	194.0	209.5	114.6
82.5°	111.0	127.1	154.0	185.6	95.5
85°	68.0	83.0	118.2	157.0	71.0
87.5°	29.2	50.7	86.5	130.1	46.6
90°	1.2	25.1	59.1	101.5	20.9
92.5°	0.6	10.7	38.2	74.6	13.7
95°	0.6	4.2	23.3	50.7	10.7
97.5°	0.6	1.8	11.9	32.8	7.8
100°	0.6	1.2	6.6	19.1	5.4
102.5°	0.6	1.2	3.0	9.5	4.2
105°	0.6	1.2	2.4	4.2	3.6
107.5°	0.6	1.2	1.8	3.0	3.0
110°	0.6	1.2	1.8	3.0	3.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.6	1.2	1.8	3.0	3.0
115°	0.6	1.2	1.8	2.4	2.4
117.5°	0.6	1.2	1.8	2.4	2.4
120°	0.6	1.2	1.8	2.4	2.4
122.5°	0.6	1.2	1.8	2.4	2.4
125°	1.2	1.2	1.8	2.4	2.4
127.5°	1.2	1.8	1.8	2.4	2.4
130°	1.2	1.8	1.8	2.4	2.4
132.5°	1.2	1.8	1.8	2.4	2.4
135°	1.2	1.8	1.8	2.4	2.4
137.5°	1.2	1.8	2.4	2.4	2.4
140°	1.8	2.4	2.4	2.4	2.4
142.5°	1.8	2.4	2.4	3.0	2.4
145°	1.8	2.4	2.4	3.0	3.0
147.5°	1.8	2.4	3.0	3.0	3.0
150°	1.8	2.4	3.0	3.6	3.6
152.5°	2.4	2.4	3.0	3.6	3.6
155°	2.4	3.0	3.0	3.6	3.6
157.5°	2.4	3.0	3.0	3.6	4.2
160°	2.4	3.0	3.6	4.2	4.2
162.5°	2.4	3.0	3.6	4.2	4.2
165°	3.0	3.6	3.6	4.2	4.2
167.5°	3.0	3.6	4.2	4.2	4.8
170°	3.0	3.6	4.2	4.8	4.8
172.5°	3.0	3.6	4.2	4.8	4.8
175°	3.0	3.6	4.2	4.8	5.4
177.5°	3.0	3.6	4.2	4.8	5.4
180°	4.2	4.2	4.2	4.2	4.2

(END OF REPORT)