

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: P685764

Luminaire Tested: **8CZL-10-UNV-N-LVR-L940-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685764  
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-L940-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH NARROW LENS @90 CRI and 4000K  
Light Source: (784) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

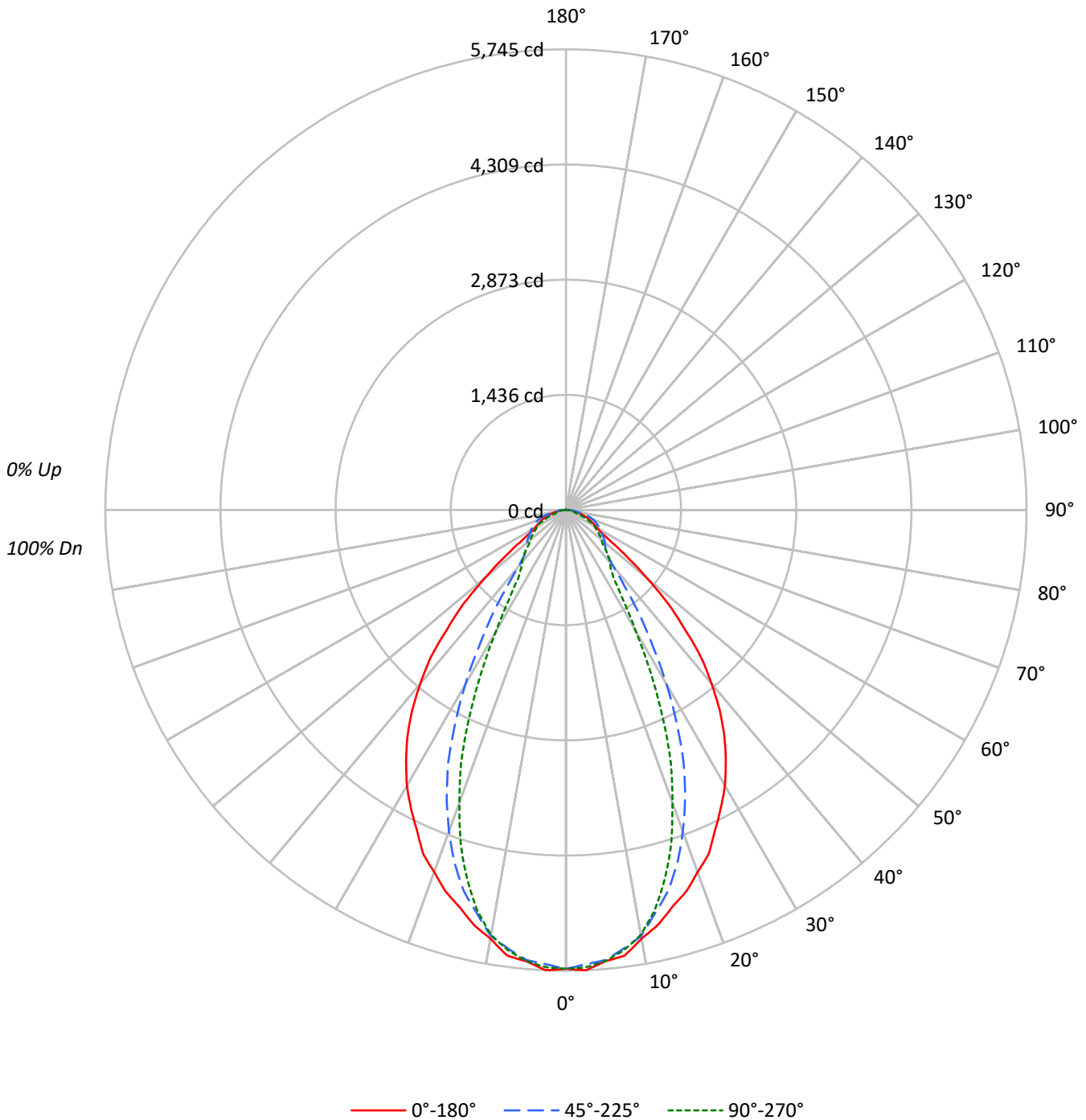
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6773.2 lumens  
Efficiency: N/A  
Efficacy: 107.5 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°	9237	9237	9237
5°	9155	9129	9152
10°	8897	8842	8820
15°	8567	8225	7964
20°	8251	7327	6670
25°	7841	6187	5086
30°	7396	4680	3249
35°	6789	3173	2042
40°	5954	1933	1791
45°	4770	1610	1605
50°	3298	1591	1449
55°	1943	1577	1364
60°	1448	1639	1348
65°	1370	1650	1185
70°	1318	1759	895
75°	1243	1766	765
80°	1154	1464	866
85°	1024	1778	1069



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	531.4	7.8
10°-20°	1376.0	20.3
20°-30°	1607.4	23.7
30°-40°	1192.6	17.6
40°-50°	790.6	11.7
50°-60°	524.3	7.7
60°-70°	391.2	5.8
70°-80°	230.9	3.4
80°-90°	97.2	1.4
90°-100°	21.0	0.3
100°-110°	2.8	0.0
110°-120°	1.5	0.0
120°-130°	1.3	0.0
130°-140°	1.3	0.0
140°-150°	1.3	0.0
150°-160°	1.2	0.0
160°-170°	0.9	0.0
170°-180°	0.3	0.0
0°-30°	3514.8	51.9
0°-40°	4707.4	69.5
0°-60°	6022.3	88.9
0°-90°	6741.6	99.5
90°-120°	25.3	0.4
90°-150°	29.2	0.4
90°-180°	32.0	0.5
0°-180°	6773.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5721	5721	5721	5721	5721	
5°	5648	5644	5632	5653	5647	534
15°	5125	5064	4920	4836	4764	1446
25°	4401	4085	3473	2979	2855	2027
35°	3444	2552	1610	1088	1036	2138
45°	2089	1232	705	732	703	1608
55°	690	606	560	541	485	679
65°	359	401	432	422	310	358
75°	199	223	283	206	123	210
85°	55	67	96	128	58	60
90°	1	20	48	82	17	4
95°	0	3	19	41	9	0
105°	0	1	2	3	3	1
115°	0	1	2	2	2	0
125°	1	1	2	2	2	1
135°	1	2	2	2	2	1
145°	2	2	2	2	2	1
155°	2	2	2	3	3	1
165°	2	3	3	3	3	1
175°	2	3	3	4	4	0
180°	3	3	3	3	3	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5720.7	5720.7	5720.7	5720.7	5720.7
2.5°	5745.4	5714.4	5669.8	5710.0	5706.6
5°	5648.4	5643.6	5632.4	5652.8	5647.0
7.5°	5604.8	5578.6	5516.6	5564.6	5537.4
10°	5426.5	5395.9	5393.0	5383.3	5379.9
12.5°	5300.0	5263.1	5145.3	5139.0	5112.9
15°	5125.0	5063.9	4920.4	4835.6	4764.4
17.5°	4989.3	4856.5	4617.0	4459.0	4367.4
20°	4802.2	4655.8	4264.2	3988.4	3881.8
22.5°	4648.1	4388.8	3885.2	3495.0	3421.8
25°	4401.4	4084.9	3472.7	2978.8	2854.8
27.5°	4187.1	3750.4	2986.1	2444.2	2292.0
30°	3967.1	3375.8	2510.1	1919.8	1742.9
32.5°	3710.7	2998.2	2020.1	1440.5	1312.5
35°	3444.1	2551.8	1609.6	1088.1	1035.8
37.5°	3150.4	2150.5	1209.8	908.8	917.5
40°	2824.7	1800.6	917.0	833.2	849.6
42.5°	2500.0	1505.9	762.9	783.7	788.6
45°	2089.0	1232.5	705.2	731.9	702.8
47.5°	1729.8	1007.2	664.5	661.6	620.4
50°	1313.0	821.0	633.5	598.6	576.8
52.5°	972.3	692.6	603.9	565.6	543.3
55°	690.2	606.3	560.3	540.9	484.7
57.5°	518.6	545.3	526.8	483.2	444.0
60°	448.3	491.5	507.5	455.6	417.3
62.5°	404.7	445.4	476.0	439.1	381.9
65°	358.7	400.8	431.8	422.2	310.2
67.5°	318.4	365.4	403.7	362.1	253.5
70°	279.2	322.8	372.7	307.3	189.5
72.5°	237.0	270.0	330.1	238.9	138.1
75°	199.2	223.0	283.1	205.5	122.6
77.5°	159.5	179.3	193.9	187.1	108.1
80°	124.1	143.9	157.5	170.1	93.1
82.5°	90.2	103.2	125.0	150.7	77.5
85°	55.3	67.4	96.0	127.5	57.7
87.5°	23.7	41.2	70.3	105.7	37.8
90°	1.0	20.4	48.0	82.4	17.0
92.5°	0.5	8.7	31.0	60.6	11.1
95°	0.5	3.4	18.9	41.2	8.7
97.5°	0.5	1.5	9.7	26.7	6.3
100°	0.5	1.0	5.3	15.5	4.4
102.5°	0.5	1.0	2.4	7.8	3.4
105°	0.5	1.0	1.9	3.4	2.9
107.5°	0.5	1.0	1.5	2.4	2.4
110°	0.5	1.0	1.5	2.4	2.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.5	1.0	1.5	2.4	2.4
115°	0.5	1.0	1.5	1.9	1.9
117.5°	0.5	1.0	1.5	1.9	1.9
120°	0.5	1.0	1.5	1.9	1.9
122.5°	0.5	1.0	1.5	1.9	1.9
125°	1.0	1.0	1.5	1.9	1.9
127.5°	1.0	1.5	1.5	1.9	1.9
130°	1.0	1.5	1.5	1.9	1.9
132.5°	1.0	1.5	1.5	1.9	1.9
135°	1.0	1.5	1.5	1.9	1.9
137.5°	1.0	1.5	1.9	1.9	1.9
140°	1.5	1.9	1.9	1.9	1.9
142.5°	1.5	1.9	1.9	2.4	1.9
145°	1.5	1.9	1.9	2.4	2.4
147.5°	1.5	1.9	2.4	2.4	2.4
150°	1.5	1.9	2.4	2.9	2.9
152.5°	1.9	1.9	2.4	2.9	2.9
155°	1.9	2.4	2.4	2.9	2.9
157.5°	1.9	2.4	2.4	2.9	3.4
160°	1.9	2.4	2.9	3.4	3.4
162.5°	1.9	2.4	2.9	3.4	3.4
165°	2.4	2.9	2.9	3.4	3.4
167.5°	2.4	2.9	3.4	3.4	3.9
170°	2.4	2.9	3.4	3.9	3.9
172.5°	2.4	2.9	3.4	3.9	3.9
175°	2.4	2.9	3.4	3.9	4.4
177.5°	2.4	2.9	3.4	3.9	4.4
180°	3.4	3.4	3.4	3.4	3.4

(END OF REPORT)