

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: P685828

Luminaire Tested: **8CZL-32-UNV-M-LVR-L940-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685828  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-32-UNV-M-LVR-L940-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH MEDIUM LENS @90 CRI and 4000K  
Light Source: (1176) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

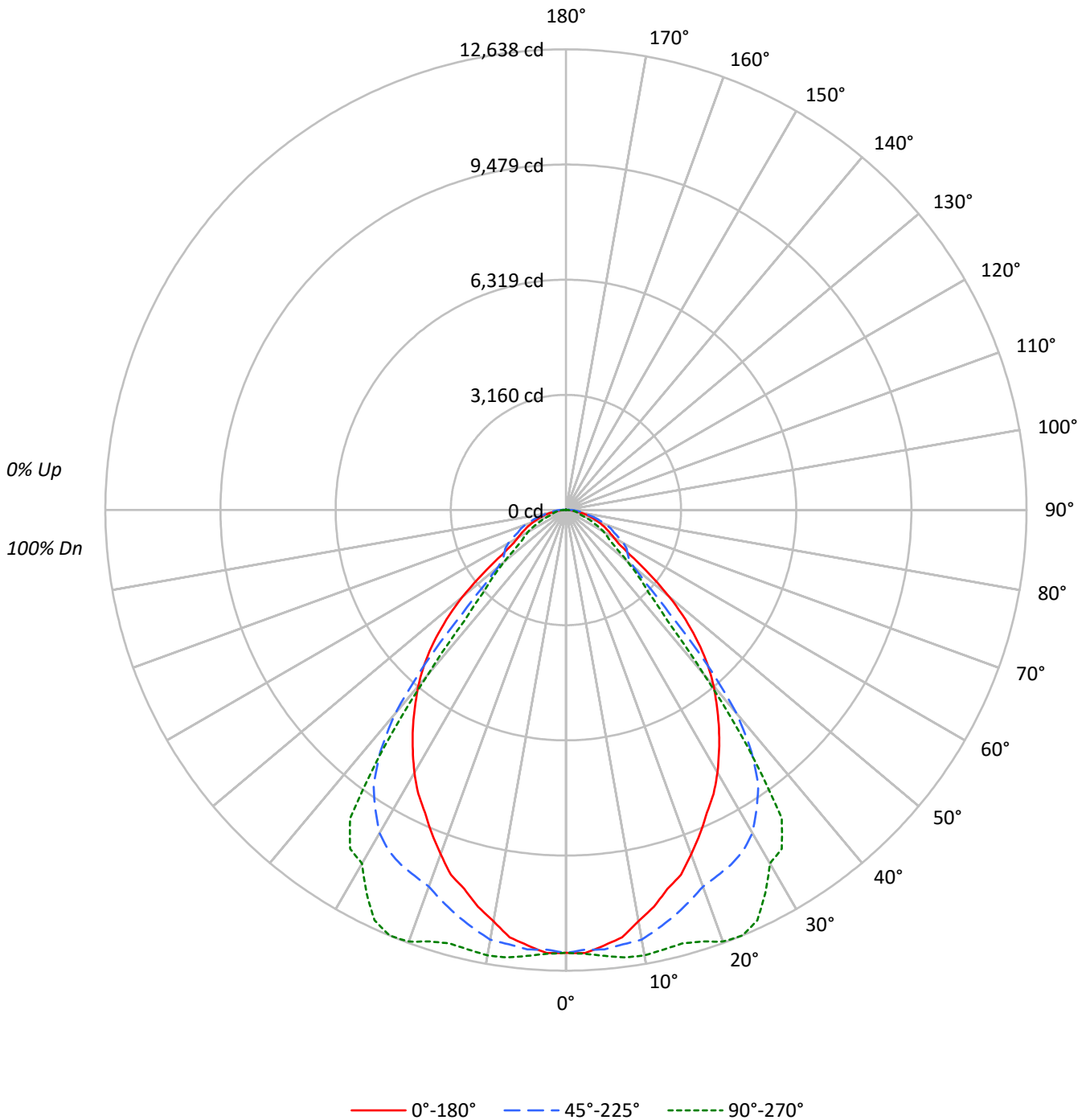
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22474.8 lumens  
Efficiency: N/A  
Efficacy: 109.1 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): 206  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88
2	103	96	90	86	100	94	89	84	91	86	83	87	84	81	84	81	79	77
3	95	87	80	74	93	85	79	74	82	77	72	79	75	71	77	73	70	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	70	66	62	60
5	83	72	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	49
7	72	60	53	47	70	59	52	47	58	51	47	57	51	46	55	50	46	44
8	68	56	48	43	66	55	48	43	54	47	42	52	47	42	51	46	42	40
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	42	39	37
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	35	34

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

	0°	45°	90°
0°	19617	19617	19617
5°	19435	19609	19902
10°	18776	19620	20337
15°	17986	19255	20576
20°	17260	18888	21646
25°	16307	19113	22127
30°	15501	19071	20870
35°	14433	18136	20350
40°	13286	15373	12402
45°	11706	9163	7351
50°	9292	6084	5547
55°	6016	5788	4210
60°	4911	5883	3868
65°	4679	5544	3160
70°	4442	5564	2498
75°	4220	5208	2323
80°	3903	4920	2607
85°	3492	6017	3199



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1152.9	5.1
10°-20°	3270.2	14.6
20°-30°	4931.4	21.9
30°-40°	5449.0	24.2
40°-50°	3416.5	15.2
50°-60°	1839.4	8.2
60°-70°	1249.2	5.6
70°-80°	746.1	3.3
80°-90°	324.2	1.4
90°-100°	71.0	0.3
100°-110°	8.2	0.0
110°-120°	3.0	0.0
120°-130°	2.7	0.0
130°-140°	3.2	0.0
140°-150°	2.9	0.0
150°-160°	2.3	0.0
160°-170°	1.8	0.0
170°-180°	0.7	0.0
0°-30°	9354.5	41.6
0°-40°	14803.5	65.9
0°-60°	20059.4	89.3
0°-90°	22379.0	99.6
90°-120°	82.2	0.4
90°-150°	91.1	0.4
90°-180°	96.0	0.4
0°-180°	22474.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	12150	12150	12150	12150	12150	
5°	11991	12012	12099	12241	12279	1130
15°	10760	11137	11519	12077	12310	3038
25°	9154	9710	10728	11872	12420	4226
35°	7322	8183	9201	9898	10324	4570
45°	5127	5581	4013	3271	3219	3911
55°	2137	2235	2056	1779	1496	2076
65°	1225	1347	1451	1179	827	1212
75°	676	752	835	686	372	713
85°	188	231	325	428	173	203
90°	5	71	165	274	51	13
95°	2	11	65	141	25	1
105°	2	3	5	11	5	2
115°	2	3	3	3	3	2
125°	2	3	3	3	3	1
135°	3	3	5	5	5	2
145°	3	5	5	5	6	2
155°	5	5	5	5	5	2
165°	5	6	6	6	6	1
175°	6	6	6	8	8	1
180°	8	8	8	8	8	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	12149.5	12149.5	12149.5	12149.5	12149.5
2.5°	12165.4	12132.1	12070.3	12181.2	12182.8
5°	11991.1	12011.7	12098.8	12241.4	12279.4
7.5°	11821.6	11900.8	12018.0	12361.8	12379.2
10°	11452.4	11617.2	11967.3	12298.4	12404.6
12.5°	11145.1	11389.1	11750.3	12186.0	12350.7
15°	10760.1	11137.2	11519.0	12076.6	12309.5
17.5°	10490.8	10793.4	11260.8	12025.9	12407.7
20°	10045.6	10471.8	10993.0	12060.8	12597.9
22.5°	9613.2	10131.2	10858.4	12073.5	12637.5
25°	9153.7	9709.8	10728.5	11872.3	12420.4
27.5°	8773.5	9239.3	10535.2	11452.4	11848.5
30°	8314.1	8862.2	10229.4	10810.8	11194.2
32.5°	7819.8	8515.3	9733.6	10319.7	11016.8
35°	7322.3	8182.6	9201.2	9898.3	10324.5
37.5°	6802.7	7908.5	8364.8	8477.3	8185.8
40°	6303.7	7526.7	7293.8	6205.5	5883.9
42.5°	5758.7	6706.1	5689.0	4269.5	4125.4
45°	5126.6	5581.3	4012.9	3271.4	3219.2
47.5°	4453.3	4321.8	2992.6	2734.4	2704.3
50°	3699.2	3455.2	2422.3	2412.8	2208.4
52.5°	2883.3	2743.9	2172.0	2092.8	1768.0
55°	2137.1	2235.4	2056.3	1779.1	1495.5
57.5°	1711.0	1939.1	1975.5	1554.1	1337.1
60°	1520.9	1696.7	1821.9	1429.0	1197.7
62.5°	1364.0	1503.4	1631.8	1326.0	1032.9
65°	1224.6	1346.6	1451.2	1178.7	827.0
67.5°	1077.3	1204.0	1332.3	1012.3	703.4
70°	941.0	1075.7	1178.7	898.3	529.1
72.5°	800.0	939.5	985.4	750.9	423.0
75°	676.5	752.5	834.9	686.0	372.3
77.5°	546.6	611.5	644.8	628.9	327.9
80°	419.8	472.1	529.1	571.9	280.4
82.5°	307.3	345.4	423.0	503.8	225.0
85°	188.5	231.3	324.8	427.7	172.7
87.5°	84.0	137.8	239.2	353.3	110.9
90°	4.8	71.3	164.8	274.1	50.7
92.5°	1.6	31.7	107.7	202.8	34.9
95°	1.6	11.1	65.0	141.0	25.3
97.5°	1.6	4.8	36.4	90.3	15.8
100°	1.6	3.2	17.4	52.3	11.1
102.5°	1.6	3.2	7.9	25.3	7.9
105°	1.6	3.2	4.8	11.1	4.8
107.5°	1.6	3.2	3.2	4.8	3.2
110°	1.6	3.2	3.2	3.2	3.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.6	3.2	3.2	3.2	3.2
115°	1.6	3.2	3.2	3.2	3.2
117.5°	1.6	3.2	3.2	3.2	3.2
120°	1.6	3.2	3.2	3.2	3.2
122.5°	1.6	3.2	3.2	3.2	3.2
125°	1.6	3.2	3.2	3.2	3.2
127.5°	1.6	3.2	3.2	3.2	3.2
130°	1.6	3.2	3.2	3.2	3.2
132.5°	3.2	3.2	4.8	4.8	4.8
135°	3.2	3.2	4.8	4.8	4.8
137.5°	3.2	4.8	4.8	4.8	4.8
140°	3.2	4.8	4.8	4.8	4.8
142.5°	3.2	4.8	4.8	4.8	4.8
145°	3.2	4.8	4.8	4.8	6.3
147.5°	3.2	4.8	4.8	4.8	6.3
150°	3.2	4.8	4.8	4.8	4.8
152.5°	4.8	4.8	4.8	4.8	4.8
155°	4.8	4.8	4.8	4.8	4.8
157.5°	4.8	4.8	4.8	6.3	6.3
160°	4.8	6.3	6.3	6.3	6.3
162.5°	4.8	6.3	6.3	6.3	6.3
165°	4.8	6.3	6.3	6.3	6.3
167.5°	4.8	6.3	6.3	6.3	7.9
170°	6.3	6.3	6.3	7.9	7.9
172.5°	6.3	6.3	6.3	7.9	7.9
175°	6.3	6.3	6.3	7.9	7.9
177.5°	6.3	7.9	6.3	7.9	9.5
180°	7.9	7.9	7.9	7.9	7.9

(END OF REPORT)