

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: P685918

Luminaire Tested: **8CZL-32-UNV-LVRF-L840-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685918  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-32-UNV-LVRF-L840-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH FROSTED LAY-IN @80 CRI and 4000K  
Light Source: (1176) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

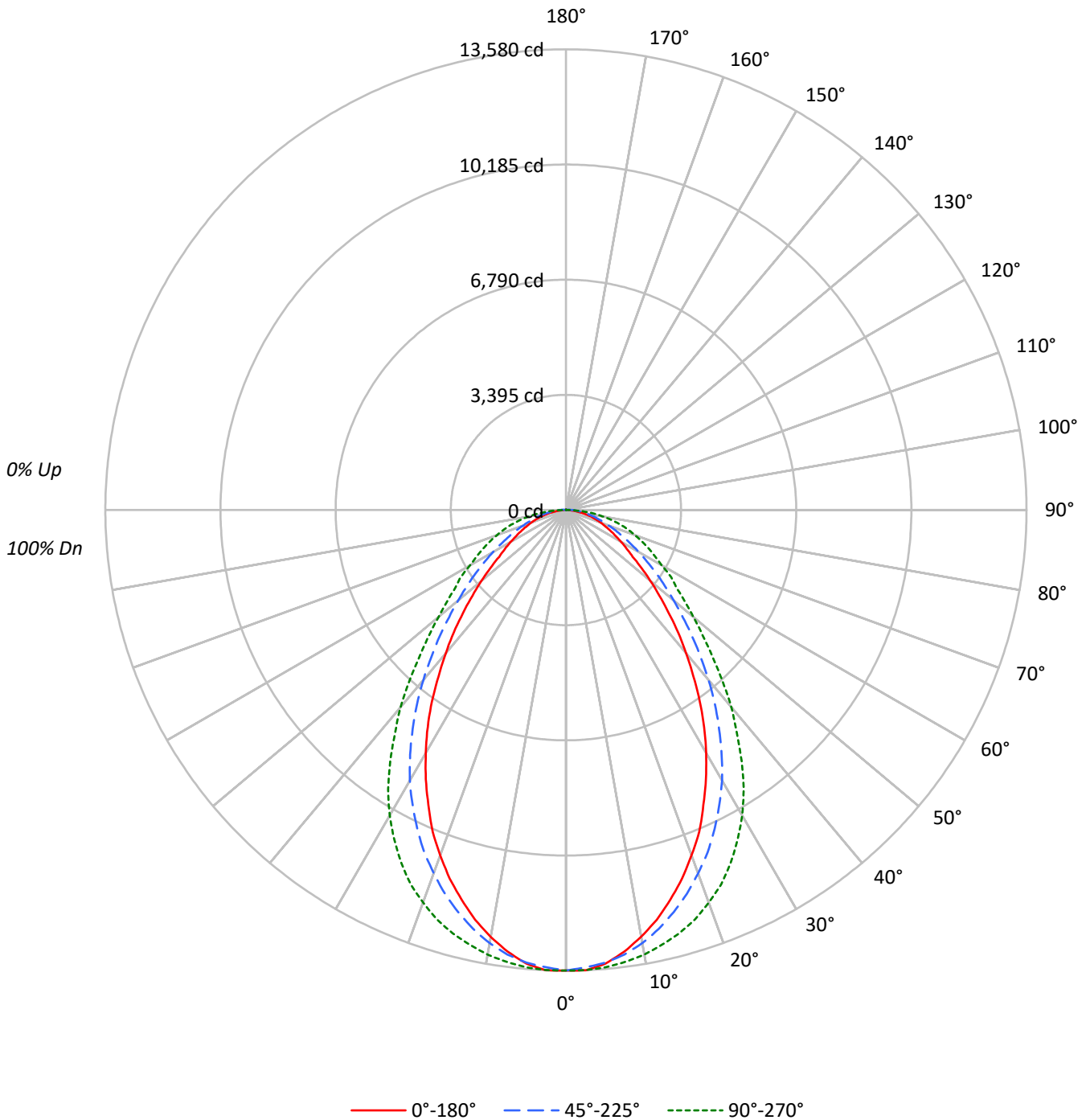
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25039.7 lumens  
Efficiency: N/A  
Efficacy: 121.6 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): 206  
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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	88	88	88	86
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	76	76	76	74
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	59	59	59	57
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	53	53	53	51
6	75	63	55	49	73	62	54	48	60	53	48	58	52	48	57	51	47	47	47	47	45
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	43	43	43	41
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	39	39	39	37
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	36	36	36	34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	33	33	33	31

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

	0°	45°	90°
0°	21916	21916	21916
5°	21756	21706	21924
10°	20943	21253	21816
15°	19872	20511	21587
20°	18610	19575	21157
25°	17089	18468	20456
30°	15403	17163	19371
35°	13566	15523	17792
40°	11612	13783	15999
45°	9782	12014	13934
50°	8169	10413	12319
55°	6760	9149	11170
60°	6092	8019	10533
65°	5538	7058	10300
70°	5157	6336	10222
75°	4783	5915	10430
80°	4335	5859	10448
85°	3722	6867	10335



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1270.1	5.1
10°-20°	3470.9	13.9
20°-30°	4795.9	19.2
30°-40°	4933.5	19.7
40°-50°	4044.6	16.2
50°-60°	2902.3	11.6
60°-70°	1952.1	7.8
70°-80°	1139.3	4.6
80°-90°	439.0	1.8
90°-100°	76.1	0.3
100°-110°	6.5	0.0
110°-120°	1.2	0.0
120°-130°	1.1	0.0
130°-140°	1.6	0.0
140°-150°	1.9	0.0
150°-160°	1.7	0.0
160°-170°	1.3	0.0
170°-180°	0.5	0.0
0°-30°	9536.9	38.1
0°-40°	14470.4	57.8
0°-60°	21417.2	85.5
0°-90°	24947.6	99.6
90°-120°	83.8	0.3
90°-150°	88.5	0.4
90°-180°	92.0	0.4
0°-180°	25039.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	13574	13574	13574	13574	13574	
5°	13424	13433	13392	13517	13527	1260
15°	11888	12009	12271	12747	12914	3335
25°	9592	9816	10367	11088	11482	4403
35°	6882	7200	7876	8613	9026	4288
45°	4284	4618	5261	5778	6102	3325
55°	2402	2688	3250	3695	3968	2211
65°	1450	1535	1847	2372	2696	1444
75°	767	794	948	1317	1672	814
85°	201	250	371	554	558	217
90°	2	84	189	289	60	12
95°	2	14	80	138	25	1
105°	0	2	4	8	4	0
115°	2	2	2	0	0	1
125°	2	2	2	0	0	2
135°	2	4	2	2	0	2
145°	4	4	4	2	2	2
155°	4	6	4	2	2	2
165°	6	6	6	4	2	2
175°	6	8	6	4	4	1
180°	6	6	6	6	6	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	13573.8	13573.8	13573.8	13573.8	13573.8
2.5°	13579.7	13568.0	13491.9	13579.7	13575.8
5°	13423.6	13433.4	13392.4	13517.2	13527.0
7.5°	13132.9	13171.9	13216.8	13400.2	13433.4
10°	12774.0	12832.5	12963.2	13236.3	13306.6
12.5°	12370.2	12434.5	12647.2	13023.7	13121.2
15°	11888.3	12009.3	12270.7	12746.7	12914.4
17.5°	11390.8	11539.1	11862.9	12426.7	12653.0
20°	10831.0	10979.2	11392.8	12021.0	12313.6
22.5°	10269.1	10413.5	10918.7	11587.9	11952.7
25°	9592.2	9816.5	10366.7	11088.5	11482.5
27.5°	8944.5	9182.5	9795.1	10569.6	10961.7
30°	8261.7	8540.7	9205.9	9945.3	10390.1
32.5°	7584.8	7867.7	8546.6	9317.1	9758.0
35°	6882.5	7200.5	7875.5	8612.9	9026.5
37.5°	6170.4	6517.7	7212.2	7937.9	8271.5
40°	5509.1	5850.5	6539.2	7188.8	7590.6
42.5°	4898.5	5234.1	5872.0	6461.1	6822.0
45°	4284.0	4617.6	5261.4	5778.3	6102.2
47.5°	3733.9	4075.3	4674.2	5197.0	5468.2
50°	3252.0	3562.2	4145.5	4619.5	4904.4
52.5°	2811.1	3094.0	3671.4	4131.8	4406.9
55°	2401.5	2688.2	3250.1	3694.9	3968.0
57.5°	2126.4	2331.2	2836.5	3330.1	3681.2
60°	1886.4	2013.2	2483.4	3068.6	3261.8
62.5°	1642.6	1757.7	2144.0	2659.0	2959.4
65°	1449.5	1535.3	1847.4	2372.2	2696.0
67.5°	1258.3	1322.7	1589.9	2095.2	2422.9
70°	1092.5	1133.4	1342.2	1822.1	2165.4
72.5°	934.4	955.9	1143.2	1572.4	1913.8
75°	766.7	794.0	948.1	1316.8	1671.9
77.5°	606.7	645.7	782.3	1098.3	1394.8
80°	466.2	497.5	630.1	903.2	1123.7
82.5°	323.8	366.8	491.6	714.0	860.3
85°	200.9	249.7	370.7	554.0	557.9
87.5°	83.9	156.1	271.2	409.7	284.8
90°	2.0	83.9	189.2	288.7	60.5
92.5°	0.0	39.0	128.8	206.8	35.1
95°	2.0	13.7	80.0	138.5	25.4
97.5°	0.0	3.9	42.9	87.8	15.6
100°	0.0	2.0	17.6	48.8	9.8
102.5°	0.0	2.0	7.8	21.5	5.9
105°	0.0	2.0	3.9	7.8	3.9
107.5°	0.0	2.0	2.0	2.0	2.0
110°	2.0	2.0	2.0	2.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	2.0	2.0	0.0	0.0
115°	2.0	2.0	2.0	0.0	0.0
117.5°	2.0	2.0	2.0	0.0	0.0
120°	2.0	2.0	2.0	0.0	0.0
122.5°	2.0	2.0	2.0	0.0	0.0
125°	2.0	2.0	2.0	0.0	0.0
127.5°	2.0	2.0	2.0	0.0	0.0
130°	2.0	2.0	2.0	0.0	0.0
132.5°	2.0	3.9	2.0	2.0	0.0
135°	2.0	3.9	2.0	2.0	0.0
137.5°	2.0	3.9	2.0	2.0	0.0
140°	2.0	3.9	2.0	2.0	2.0
142.5°	3.9	3.9	3.9	2.0	2.0
145°	3.9	3.9	3.9	2.0	2.0
147.5°	3.9	3.9	3.9	2.0	2.0
150°	3.9	3.9	3.9	2.0	2.0
152.5°	3.9	5.9	3.9	2.0	2.0
155°	3.9	5.9	3.9	2.0	2.0
157.5°	3.9	5.9	3.9	2.0	2.0
160°	3.9	5.9	3.9	2.0	2.0
162.5°	5.9	5.9	3.9	3.9	2.0
165°	5.9	5.9	5.9	3.9	2.0
167.5°	5.9	5.9	5.9	3.9	2.0
170°	5.9	5.9	5.9	3.9	3.9
172.5°	5.9	5.9	5.9	3.9	3.9
175°	5.9	7.8	5.9	3.9	3.9
177.5°	5.9	7.8	5.9	3.9	3.9
180°	5.9	5.9	5.9	5.9	5.9

(END OF REPORT)