

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: P685675

Luminaire Tested: **8CZL-14-UNV-LVR-L840-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685675  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-14-UNV-LVR-L840-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL @80 CRI and 4000K  
Light Source: (784) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

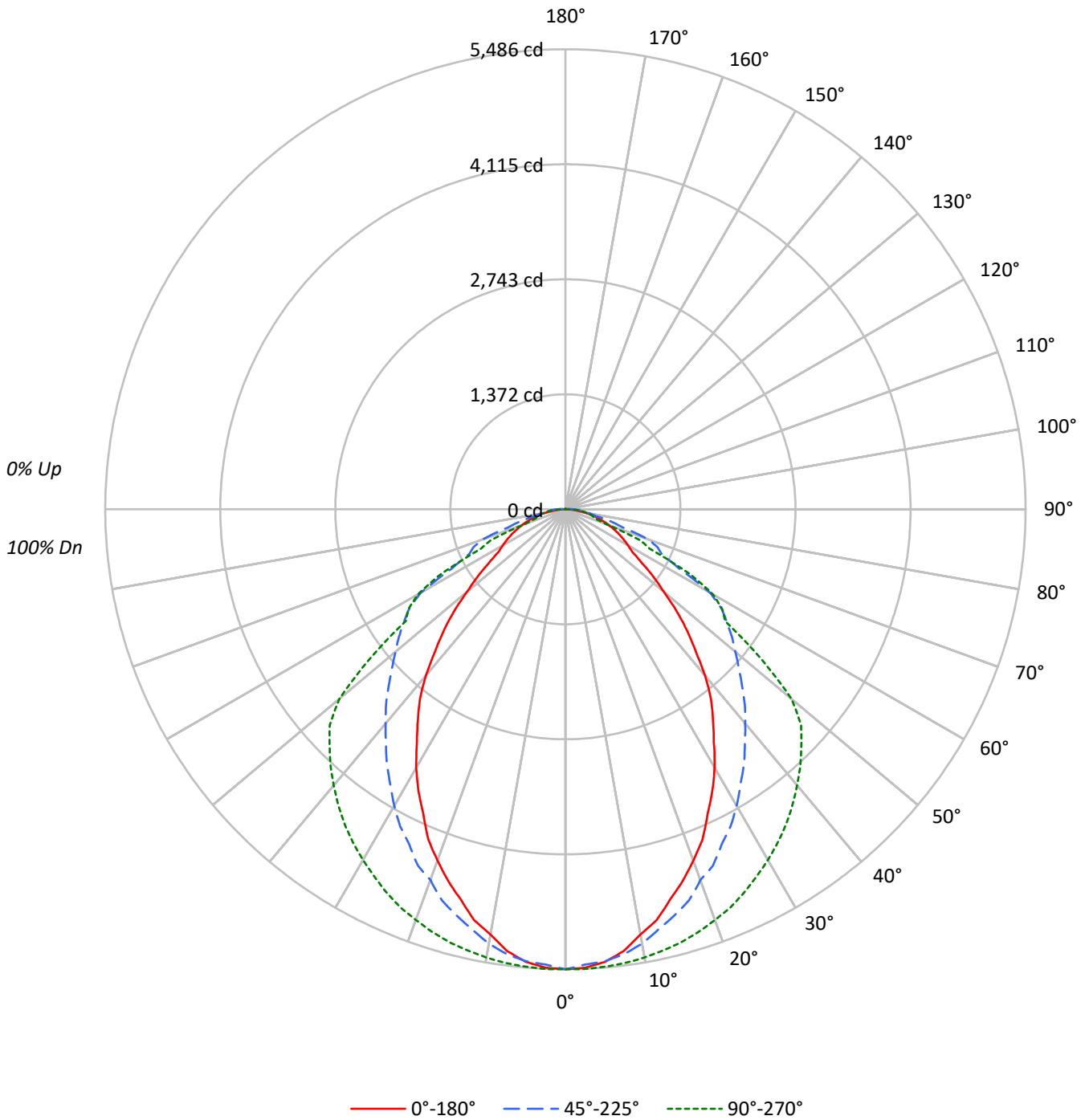
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12422.6 lumens  
Efficiency: N/A  
Efficacy: 139.6 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.31 / 1.26  
Luminous Opening: Rectangular (W 0.83' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 89  
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				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	100	100	100	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	88	85	85	85	85
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73	73	73	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63	63	63	63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	54	54	54	54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	49	47	47	47	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42	42	42	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37	37	37	37
8	63	50	42	36	61	49	42	36	48	41	36	47	40	36	46	40	35	34	34	34	34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30	30	30	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29	28	28	28	28

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

	0°	45°	90°
0°	8857	8857	8857
5°	8780	8768	8873
10°	8439	8625	8898
15°	8056	8383	8934
20°	7660	8086	8955
25°	7144	7852	8984
30°	6633	7611	8999
35°	6047	7313	9040
40°	5455	7028	9057
45°	4692	6802	9080
50°	3835	6642	8842
55°	3122	6616	6539
60°	2784	6432	6561
65°	2692	4827	4231
70°	2586	4946	2405
75°	2492	3486	2147
80°	2273	2836	2559
85°	2036	3535	3188



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	513.8	4.1
10°-20°	1424.4	11.5
20°-30°	2060.7	16.6
30°-40°	2352.0	18.9
40°-50°	2311.0	18.6
50°-60°	1843.4	14.8
60°-70°	1161.1	9.3
70°-80°	514.4	4.1
80°-90°	197.3	1.6
90°-100°	39.1	0.3
100°-110°	2.6	0.0
110°-120°	0.3	0.0
120°-130°	0.4	0.0
130°-140°	0.6	0.0
140°-150°	0.5	0.0
150°-160°	0.4	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	3998.8	32.2
0°-40°	6350.8	51.1
0°-60°	10505.2	84.6
0°-90°	12378.0	99.6
90°-120°	42.1	0.3
90°-150°	43.6	0.4
90°-180°	45.0	0.4
0°-180°	12422.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5485	5485	5485	5485	5485	
5°	5417	5429	5410	5455	5474	509
15°	4819	4867	5015	5250	5345	1357
25°	4010	4139	4408	4812	5043	1848
35°	3068	3253	3710	4257	4587	1918
45°	2055	2354	2979	3646	3977	1579
55°	1109	1502	2350	2534	2323	1020
65°	704	959	1263	1346	1108	698
75°	400	462	559	423	344	419
85°	110	134	191	246	172	116
90°	1	46	100	146	28	6
95°	1	7	42	72	9	1
105°	1	1	1	3	0	1
115°	1	1	0	0	0	1
125°	1	2	0	0	0	1
135°	1	2	1	0	0	1
145°	2	2	1	0	0	1
155°	2	2	1	0	0	1
165°	3	3	2	1	0	1
175°	3	3	2	1	1	0
180°	2	2	2	2	2	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5485.4	5485.4	5485.4	5485.4	5485.4
2.5°	5470.9	5467.5	5434.2	5481.1	5486.2
5°	5417.2	5429.1	5409.5	5454.7	5474.3
7.5°	5314.1	5326.9	5349.9	5432.5	5456.4
10°	5147.2	5179.5	5260.5	5376.3	5427.4
12.5°	5019.4	5059.4	5131.8	5328.6	5387.4
15°	4819.2	4866.9	5015.1	5250.2	5344.8
17.5°	4648.8	4735.7	4893.3	5151.4	5283.5
20°	4458.0	4527.8	4705.9	5054.3	5211.9
22.5°	4267.1	4355.7	4598.5	4924.8	5139.5
25°	4009.9	4139.4	4407.7	4811.5	5043.2
27.5°	3791.8	3955.3	4263.7	4677.8	4935.9
30°	3557.5	3684.4	4082.3	4541.5	4826.8
32.5°	3293.4	3492.8	3886.3	4385.6	4712.7
35°	3067.7	3253.4	3710.0	4256.9	4586.6
37.5°	2849.6	3024.2	3514.9	4111.2	4446.9
40°	2588.1	2818.1	3334.3	3945.1	4297.0
42.5°	2298.4	2580.4	3166.5	3788.4	4144.5
45°	2054.8	2353.8	2979.1	3646.1	3976.6
47.5°	1801.8	2117.0	2803.6	3473.2	3810.5
50°	1526.6	1909.9	2644.3	3313.0	3520.0
52.5°	1325.5	1694.4	2501.2	3023.4	2967.2
55°	1109.2	1501.9	2350.4	2534.4	2323.1
57.5°	944.8	1328.1	2209.0	1990.0	2217.5
60°	862.1	1189.2	1991.7	1894.6	2031.8
62.5°	784.6	1067.4	1523.2	1777.1	1671.4
65°	704.5	959.2	1263.4	1346.0	1107.5
67.5°	627.0	865.5	1190.9	1005.2	964.3
70°	547.8	793.1	1047.8	857.0	509.4
72.5°	472.8	709.6	716.4	474.5	378.2
75°	399.5	461.7	558.8	423.4	344.2
77.5°	319.5	396.1	374.0	379.1	311.8
80°	244.5	272.6	305.0	339.1	275.2
82.5°	172.9	202.8	247.0	296.5	225.8
85°	109.9	133.7	190.8	246.2	172.1
87.5°	43.4	84.3	142.3	198.5	101.4
90°	0.9	46.0	100.5	146.5	28.1
92.5°	0.9	21.3	67.3	107.3	14.5
95°	0.9	6.8	41.7	71.6	9.4
97.5°	0.9	2.6	22.1	44.3	5.1
100°	0.9	0.9	9.4	23.9	2.6
102.5°	0.9	0.9	3.4	9.4	0.9
105°	0.9	0.9	0.9	2.6	0.0
107.5°	0.9	0.9	0.0	0.0	0.0
110°	0.9	0.9	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	0.9	0.0	0.0	0.0
115°	0.9	0.9	0.0	0.0	0.0
117.5°	0.9	0.9	0.0	0.0	0.0
120°	0.9	0.9	0.0	0.0	0.0
122.5°	0.9	0.9	0.0	0.0	0.0
125°	0.9	1.7	0.0	0.0	0.0
127.5°	0.9	0.9	0.0	0.0	0.0
130°	0.9	1.7	0.9	0.0	0.0
132.5°	0.9	1.7	0.9	0.0	0.0
135°	0.9	1.7	0.9	0.0	0.0
137.5°	0.9	1.7	0.9	0.0	0.0
140°	1.7	1.7	0.9	0.0	0.0
142.5°	1.7	1.7	0.9	0.0	0.0
145°	1.7	1.7	0.9	0.0	0.0
147.5°	1.7	1.7	0.9	0.0	0.0
150°	1.7	1.7	0.9	0.0	0.0
152.5°	1.7	1.7	0.9	0.0	0.0
155°	1.7	1.7	0.9	0.0	0.0
157.5°	1.7	2.6	0.9	0.0	0.0
160°	2.6	2.6	0.9	0.0	0.0
162.5°	2.6	2.6	1.7	0.9	0.0
165°	2.6	2.6	1.7	0.9	0.0
167.5°	2.6	2.6	1.7	0.9	0.0
170°	2.6	2.6	1.7	0.9	0.9
172.5°	2.6	2.6	1.7	0.9	0.9
175°	2.6	2.6	1.7	0.9	0.9
177.5°	2.6	2.6	1.7	0.9	0.9
180°	1.7	1.7	1.7	1.7	1.7

(END OF REPORT)