

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: P685855

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

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685855  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-14-UNV-W-LVR-L840-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH WIDE LENS @80 CRI and 4000K  
Light Source: (784) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

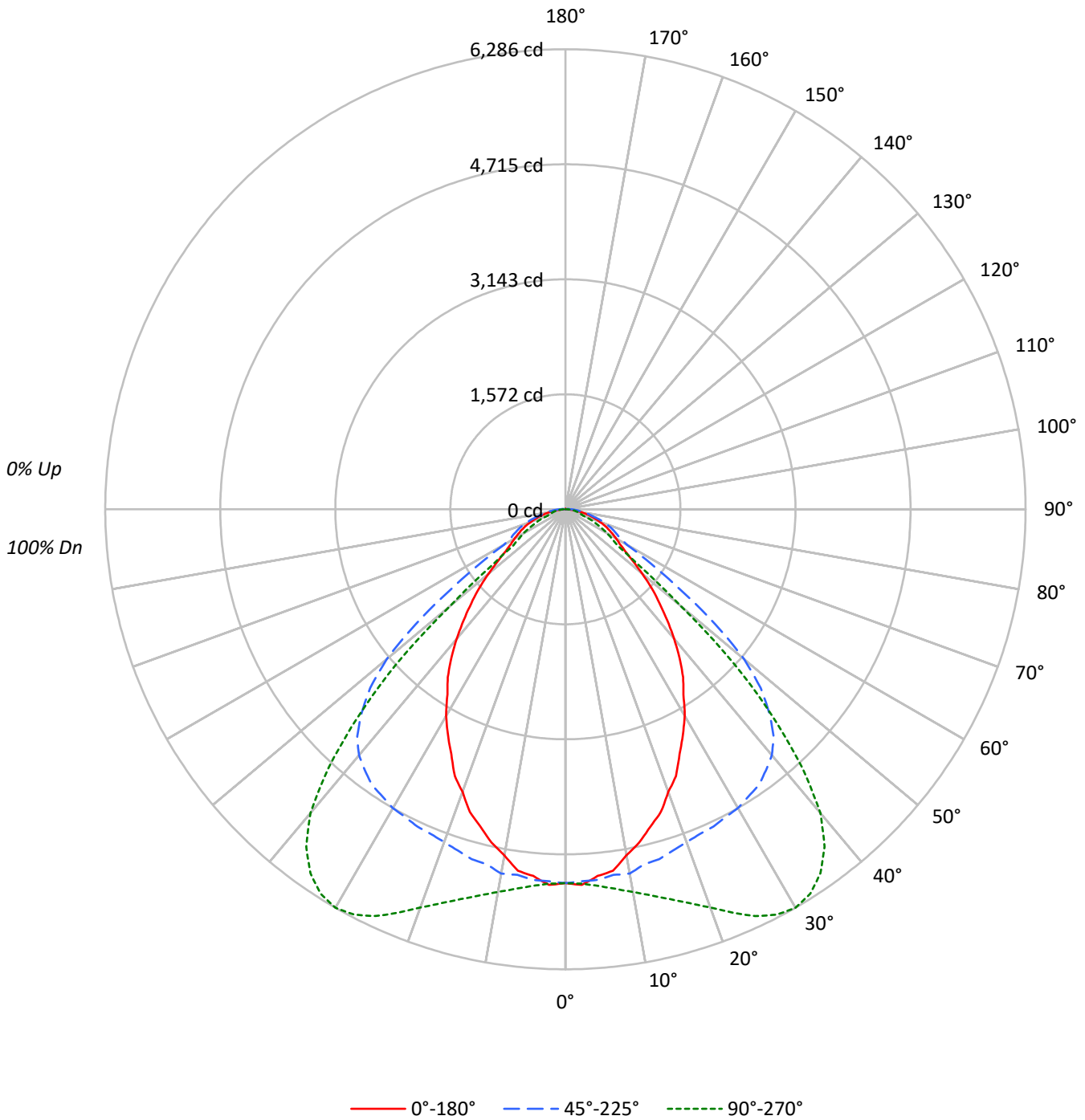
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12151.1 lumens  
Efficiency: N/A  
Efficacy: 136.5 lumens/watt  
Spacing Criteria (0/90/45): 1 / 1.64 / 1.46  
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 (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	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	89	89	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	77	77	77	75
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	68	68	68	66
4	87	76	68	62	85	75	68	62	72	66	61	70	65	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	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	47	47	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	38	38	38	36
9	61	48	40	35	59	47	40	35	46	40	35	45	39	35	44	39	34	34	34	34	33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	35	31	31	31	31	30

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

	0°	45°	90°
0°	8246	8246	8246
5°	8152	8236	8372
10°	7871	8287	8704
15°	7500	8271	9216
20°	7060	8316	9948
25°	6573	8520	10926
30°	6077	8790	11720
35°	5521	9074	11966
40°	4868	9245	11416
45°	4149	8993	9152
50°	3439	7997	5194
55°	2801	5403	2484
60°	2586	3142	2146
65°	2493	2890	1744
70°	2353	2835	1247
75°	2190	2588	1211
80°	1996	2543	1331
85°	1530	3046	1467



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	485.6	4.0
10°-20°	1409.7	11.6
20°-30°	2237.1	18.4
30°-40°	2794.0	23.0
40°-50°	2566.2	21.1
50°-60°	1369.6	11.3
60°-70°	704.9	5.8
70°-80°	387.6	3.2
80°-90°	159.9	1.3
90°-100°	30.9	0.3
100°-110°	1.7	0.0
110°-120°	0.4	0.0
120°-130°	0.6	0.0
130°-140°	1.0	0.0
140°-150°	0.8	0.0
150°-160°	0.6	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	4132.3	34.0
0°-40°	6926.4	57.0
0°-60°	10862.2	89.4
0°-90°	12114.5	99.7
90°-120°	33.0	0.3
90°-150°	35.4	0.3
90°-180°	37.0	0.3
0°-180°	12151.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5107	5107	5107	5107	5107	
5°	5030	5042	5082	5160	5165	475
15°	4487	4634	4948	5351	5514	1262
25°	3690	4036	4783	5658	6133	1700
35°	2801	3318	4604	5608	6071	1739
45°	1817	2620	3938	4082	4008	1407
55°	995	1784	1919	1075	883	919
65°	653	855	756	617	457	645
75°	351	389	415	369	194	373
85°	83	108	164	216	79	95
90°	0	31	81	131	17	3
95°	0	3	31	60	8	0
105°	0	1	1	1	0	0
115°	0	1	1	0	0	0
125°	0	1	1	0	0	0
135°	1	2	2	1	1	1
145°	1	2	2	1	1	1
155°	2	2	2	1	1	1
165°	2	3	2	1	1	0
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°	5107.3	5107.3	5107.3	5107.3	5107.3
2.5°	5137.1	5126.0	5089.4	5122.6	5120.0
5°	5029.7	5042.5	5081.7	5160.1	5165.2
7.5°	4982.0	5017.0	5039.1	5208.6	5230.8
10°	4800.6	4855.1	5054.4	5230.8	5309.2
12.5°	4664.3	4774.2	4967.5	5266.6	5402.9
15°	4487.1	4633.6	4947.9	5350.9	5513.6
17.5°	4336.3	4486.2	4888.3	5414.8	5642.3
20°	4108.8	4380.6	4839.8	5481.2	5789.6
22.5°	3946.1	4221.3	4802.3	5540.0	5964.3
25°	3689.7	4036.4	4782.7	5658.4	6133.0
27.5°	3475.0	3880.5	4739.2	5734.3	6244.6
30°	3259.4	3689.7	4714.5	5747.9	6286.3
32.5°	2999.6	3534.6	4652.3	5716.4	6226.7
35°	2801.1	3318.2	4603.8	5608.2	6070.8
37.5°	2559.2	3147.8	4497.3	5412.2	5815.2
40°	2309.6	2990.2	4386.5	5106.4	5416.5
42.5°	2057.4	2813.0	4209.3	4698.3	4792.9
45°	1817.1	2619.7	3938.4	4081.5	4008.3
47.5°	1601.6	2411.8	3618.1	3308.0	3135.9
50°	1369.0	2200.5	3183.6	2518.3	2067.6
52.5°	1159.5	2024.2	2585.6	1705.5	1286.4
55°	995.0	1783.9	1919.4	1075.1	882.6
57.5°	878.3	1599.9	1385.2	850.2	755.7
60°	800.8	1369.9	972.9	780.4	664.5
62.5°	724.1	1083.6	832.3	711.4	558.9
65°	652.6	855.3	756.5	616.8	456.6
67.5°	578.5	694.3	683.2	559.7	380.8
70°	498.4	570.8	600.6	468.6	264.1
72.5°	426.8	478.8	511.2	400.4	224.1
75°	351.0	389.3	414.9	368.9	194.2
77.5°	278.6	313.5	338.2	334.0	170.4
80°	214.7	237.7	273.5	299.0	143.1
82.5°	146.5	163.6	215.5	258.1	111.6
85°	82.6	108.2	164.4	216.4	79.2
87.5°	23.9	63.9	119.3	173.8	46.0
90°	0.0	30.7	80.9	131.2	17.0
92.5°	0.0	11.9	52.8	92.0	11.9
95°	0.0	3.4	30.7	60.5	7.7
97.5°	0.0	0.9	14.5	35.8	3.4
100°	0.0	0.9	5.1	17.0	0.9
102.5°	0.0	0.9	1.7	6.0	0.0
105°	0.0	0.9	0.9	0.9	0.0
107.5°	0.0	0.9	0.9	0.0	0.0
110°	0.0	0.9	0.9	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

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

(END OF REPORT)