

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: P685917

Luminaire Tested: **8CZL-24-UNV-LVRF-L840-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685917
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-24-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

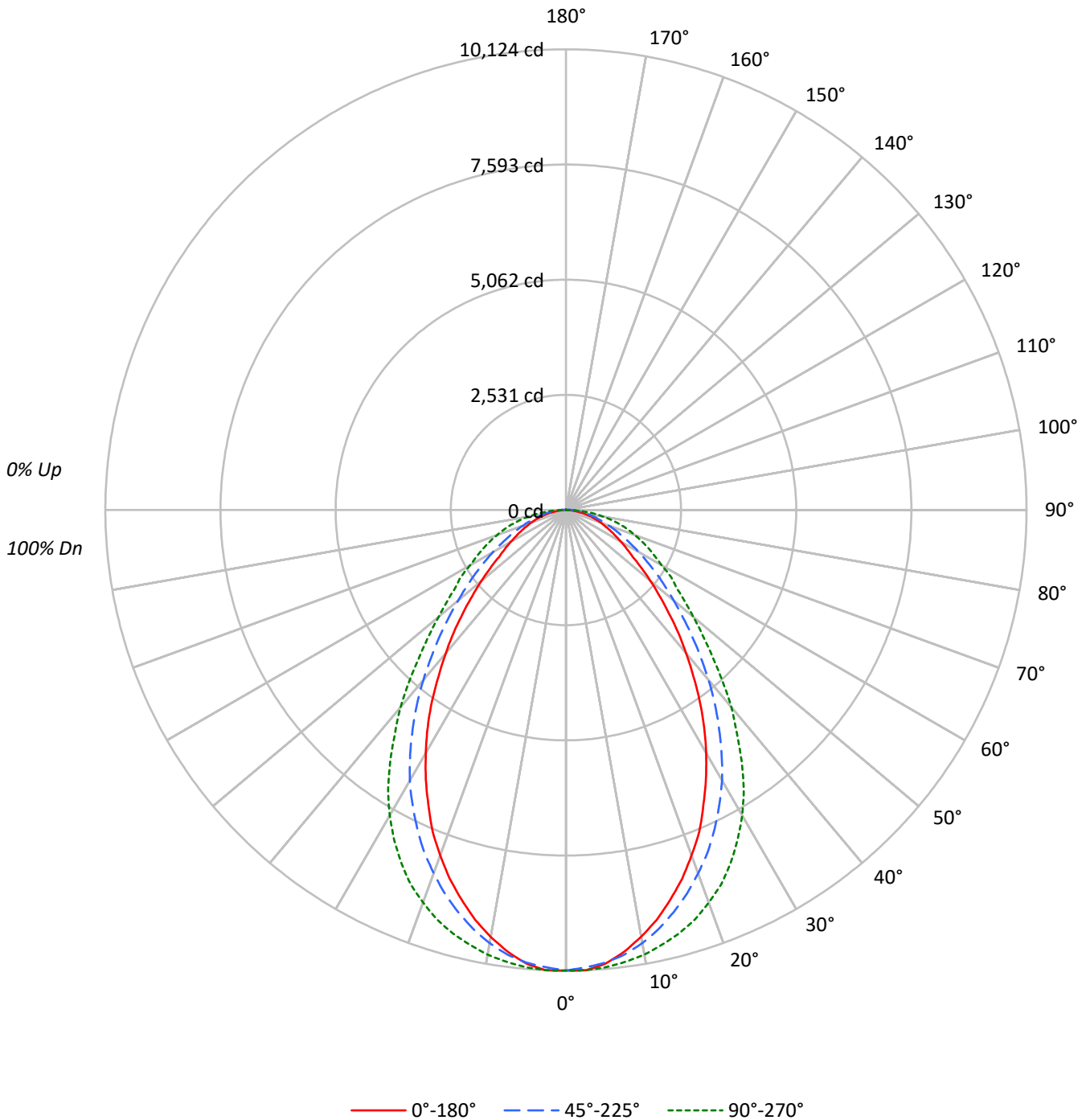
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18668.1 lumens
Efficiency: N/A
Efficacy: 121.2 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): 154
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	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°	16340	16340	16340
5°	16220	16183	16345
10°	15614	15845	16265
15°	14815	15292	16094
20°	13875	14594	15774
25°	12740	13769	15251
30°	11484	12796	14442
35°	10114	11573	13264
40°	8657	10275	11928
45°	7293	8957	10388
50°	6090	7763	9184
55°	5040	6821	8327
60°	4542	5979	7853
65°	4128	5262	7679
70°	3845	4724	7621
75°	3566	4409	7775
80°	3232	4368	7789
85°	2775	5119	7707



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	946.9	5.1
10°-20°	2587.7	13.9
20°-30°	3575.5	19.2
30°-40°	3678.1	19.7
40°-50°	3015.4	16.2
50°-60°	2163.8	11.6
60°-70°	1455.3	7.8
70°-80°	849.4	4.6
80°-90°	327.3	1.8
90°-100°	56.7	0.3
100°-110°	4.8	0.0
110°-120°	0.9	0.0
120°-130°	0.8	0.0
130°-140°	1.2	0.0
140°-150°	1.4	0.0
150°-160°	1.2	0.0
160°-170°	1.0	0.0
170°-180°	0.4	0.0
0°-30°	7110.2	38.1
0°-40°	10788.3	57.8
0°-60°	15967.5	85.5
0°-90°	18599.5	99.6
90°-120°	62.5	0.3
90°-150°	66.0	0.4
90°-180°	69.0	0.4
0°-180°	18668.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10120	10120	10120	10120	10120	
5°	10008	10015	9985	10078	10085	939
15°	8863	8953	9148	9503	9628	2486
25°	7151	7319	7729	8267	8561	3282
35°	5131	5368	5872	6421	6730	3197
45°	3194	3443	3923	4308	4549	2479
55°	1790	2004	2423	2755	2958	1648
65°	1081	1145	1377	1769	2010	1077
75°	572	592	707	982	1246	607
85°	150	186	276	413	416	162
90°	2	62	141	215	45	9
95°	2	10	60	103	19	0
105°	0	2	3	6	3	0
115°	2	2	2	0	0	1
125°	2	2	2	0	0	1
135°	2	3	2	2	0	1
145°	3	3	3	2	2	2
155°	3	4	3	2	2	1
165°	4	4	4	3	2	1
175°	4	6	4	3	3	0
180°	4	4	4	4	4	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10119.9	10119.9	10119.9	10119.9	10119.9
2.5°	10124.2	10115.5	10058.8	10124.2	10121.3
5°	10007.9	10015.2	9984.6	10077.7	10085.0
7.5°	9791.2	9820.3	9853.7	9990.4	10015.2
10°	9523.6	9567.2	9664.6	9868.3	9920.6
12.5°	9222.5	9270.5	9429.0	9709.7	9782.4
15°	8863.3	8953.4	9148.3	9503.2	9628.3
17.5°	8492.4	8602.9	8844.3	9264.7	9433.4
20°	8075.0	8185.5	8493.8	8962.2	9180.3
22.5°	7656.1	7763.7	8140.4	8639.3	8911.2
25°	7151.4	7318.7	7728.8	8266.9	8560.7
27.5°	6668.5	6846.0	7302.7	7880.1	8172.4
30°	6159.5	6367.5	6863.4	7414.6	7746.3
32.5°	5654.8	5865.7	6371.8	6946.3	7275.0
35°	5131.2	5368.3	5871.5	6421.3	6729.6
37.5°	4600.3	4859.2	5377.0	5918.0	6166.8
40°	4107.3	4361.8	4875.2	5359.5	5659.2
42.5°	3652.1	3902.2	4377.8	4817.0	5086.1
45°	3193.9	3442.6	3922.6	4308.0	4549.4
47.5°	2783.8	3038.3	3484.8	3874.6	4076.7
50°	2424.5	2655.8	3090.6	3444.1	3656.4
52.5°	2095.8	2306.7	2737.2	3080.5	3285.5
55°	1790.4	2004.2	2423.1	2754.7	2958.3
57.5°	1585.3	1738.0	2114.7	2482.7	2744.5
60°	1406.4	1501.0	1851.5	2287.8	2431.8
62.5°	1224.6	1310.4	1598.4	1982.4	2206.4
65°	1080.6	1144.6	1377.3	1768.6	2010.0
67.5°	938.1	986.1	1185.4	1562.1	1806.4
70°	814.5	845.0	1000.6	1358.4	1614.4
72.5°	696.7	712.7	852.3	1172.3	1426.8
75°	571.6	592.0	706.8	981.7	1246.4
77.5°	452.3	481.4	583.2	818.8	1039.9
80°	347.6	370.9	469.8	673.4	837.7
82.5°	241.4	273.4	366.5	532.3	641.4
85°	149.8	186.2	276.3	413.1	416.0
87.5°	62.5	116.4	202.2	305.4	212.3
90°	1.5	62.5	141.1	215.3	45.1
92.5°	0.0	29.1	96.0	154.2	26.2
95°	1.5	10.2	59.6	103.3	18.9
97.5°	0.0	2.9	32.0	65.4	11.6
100°	0.0	1.5	13.1	36.4	7.3
102.5°	0.0	1.5	5.8	16.0	4.4
105°	0.0	1.5	2.9	5.8	2.9
107.5°	0.0	1.5	1.5	1.5	1.5
110°	1.5	1.5	1.5	1.5	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	1.5	1.5	0.0	0.0
115°	1.5	1.5	1.5	0.0	0.0
117.5°	1.5	1.5	1.5	0.0	0.0
120°	1.5	1.5	1.5	0.0	0.0
122.5°	1.5	1.5	1.5	0.0	0.0
125°	1.5	1.5	1.5	0.0	0.0
127.5°	1.5	1.5	1.5	0.0	0.0
130°	1.5	1.5	1.5	0.0	0.0
132.5°	1.5	2.9	1.5	1.5	0.0
135°	1.5	2.9	1.5	1.5	0.0
137.5°	1.5	2.9	1.5	1.5	0.0
140°	1.5	2.9	1.5	1.5	1.5
142.5°	2.9	2.9	2.9	1.5	1.5
145°	2.9	2.9	2.9	1.5	1.5
147.5°	2.9	2.9	2.9	1.5	1.5
150°	2.9	2.9	2.9	1.5	1.5
152.5°	2.9	4.4	2.9	1.5	1.5
155°	2.9	4.4	2.9	1.5	1.5
157.5°	2.9	4.4	2.9	1.5	1.5
160°	2.9	4.4	2.9	1.5	1.5
162.5°	4.4	4.4	2.9	2.9	1.5
165°	4.4	4.4	4.4	2.9	1.5
167.5°	4.4	4.4	4.4	2.9	1.5
170°	4.4	4.4	4.4	2.9	2.9
172.5°	4.4	4.4	4.4	2.9	2.9
175°	4.4	5.8	4.4	2.9	2.9
177.5°	4.4	5.8	4.4	2.9	2.9
180°	4.4	4.4	4.4	4.4	4.4

(END OF REPORT)