

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: P685717

Luminaire Tested: **8CZL-24-UNV-LVR-L950-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685717
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-24-UNV-LVR-L950-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL @90 CRI and 5000K
Light Source: (1176) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

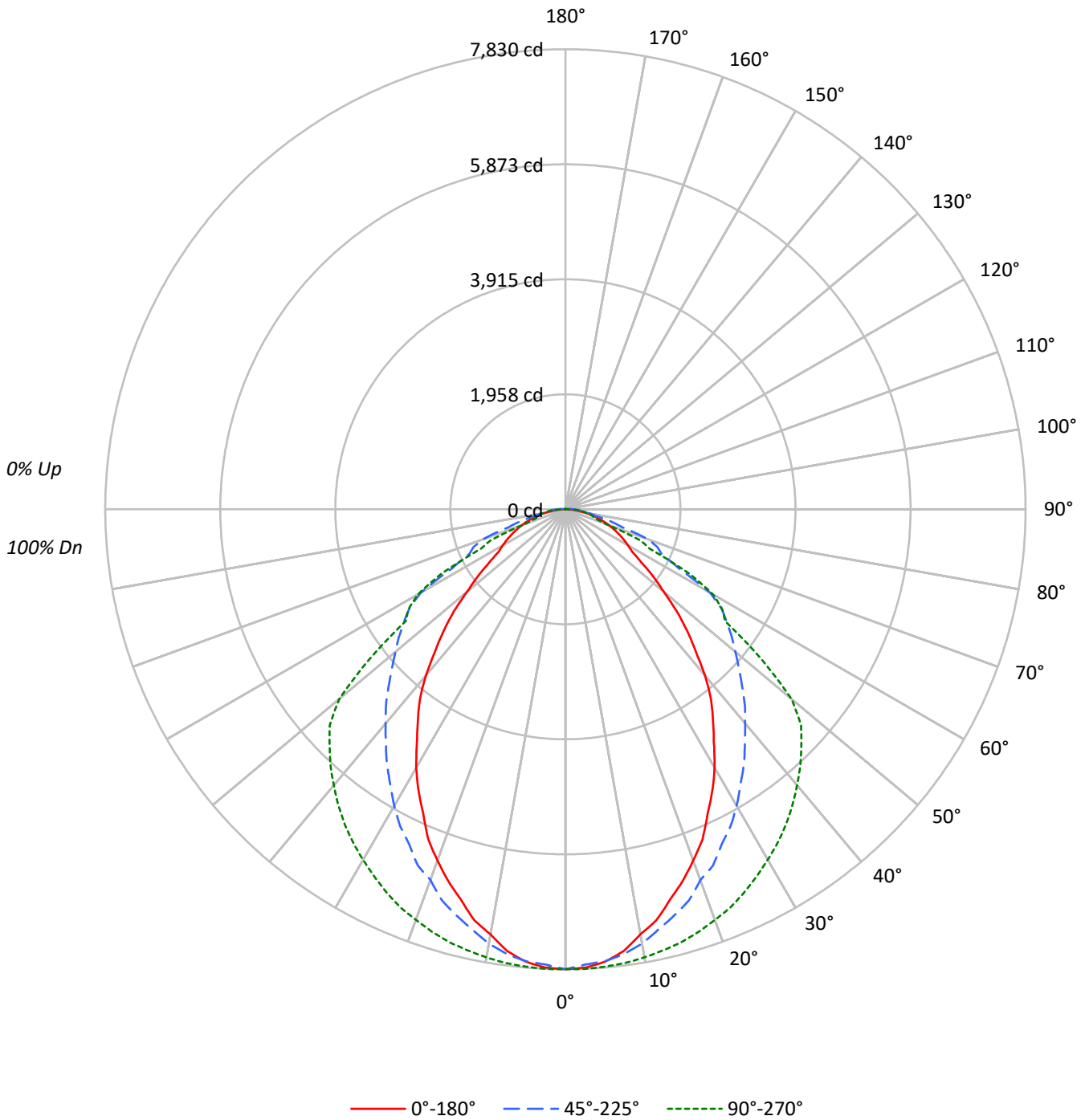
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17728.4 lumens
Efficiency: N/A
Efficacy: 115.1 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): 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				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	30	39	34	29	28	28	28	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12640	12640	12640
5°	12530	12512	12662
10°	12043	12308	12699
15°	11496	11964	12750
20°	10931	11539	12780
25°	10195	11206	12822
30°	9465	10862	12843
35°	8629	10436	12902
40°	7785	10030	12925
45°	6696	9708	12959
50°	5472	9479	12618
55°	4456	9442	9333
60°	3973	9179	9363
65°	3841	6888	6038
70°	3690	7059	3432
75°	3557	4975	3064
80°	3244	4047	3651
85°	2905	5044	4550



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	733.3	4.1
10°-20°	2032.7	11.5
20°-30°	2940.8	16.6
30°-40°	3356.5	18.9
40°-50°	3298.1	18.6
50°-60°	2630.7	14.8
60°-70°	1657.1	9.3
70°-80°	734.1	4.1
80°-90°	281.5	1.6
90°-100°	55.8	0.3
100°-110°	3.7	0.0
110°-120°	0.4	0.0
120°-130°	0.5	0.0
130°-140°	0.8	0.0
140°-150°	0.8	0.0
150°-160°	0.6	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	5706.8	32.2
0°-40°	9063.4	51.1
0°-60°	14992.2	84.6
0°-90°	17664.9	99.6
90°-120°	60.0	0.3
90°-150°	62.1	0.4
90°-180°	64.0	0.4
0°-180°	17728.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7828	7828	7828	7828	7828	
5°	7731	7748	7720	7784	7812	726
15°	6878	6946	7157	7493	7628	1936
25°	5723	5907	6290	6867	7197	2637
35°	4378	4643	5295	6075	6546	2737
45°	2932	3359	4252	5203	5675	2254
55°	1583	2143	3354	3617	3315	1455
65°	1005	1369	1803	1921	1580	996
75°	570	659	798	604	491	598
85°	157	191	272	351	246	166
90°	1	66	144	209	40	9
95°	1	10	60	102	13	1
105°	1	1	1	4	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	2
155°	2	2	1	0	0	1
165°	4	4	2	1	0	1
175°	4	4	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°	7828.3	7828.3	7828.3	7828.3	7828.3
2.5°	7807.6	7802.7	7755.3	7822.2	7829.5
5°	7731.0	7748.0	7720.1	7784.5	7812.5
7.5°	7583.9	7602.1	7635.0	7752.9	7786.9
10°	7345.6	7391.8	7507.3	7672.6	7745.6
12.5°	7163.2	7220.4	7323.7	7604.6	7688.4
15°	6877.5	6945.6	7157.2	7492.7	7627.7
17.5°	6634.4	6758.4	6983.3	7351.7	7540.1
20°	6362.1	6461.7	6715.8	7213.1	7438.0
22.5°	6089.7	6216.2	6562.7	7028.3	7334.7
25°	5722.6	5907.4	6290.3	6866.6	7197.3
27.5°	5411.3	5644.8	6084.9	6675.7	7044.1
30°	5077.0	5258.1	5825.9	6481.2	6888.5
32.5°	4700.1	4984.6	5546.3	6258.7	6725.6
35°	4377.9	4643.0	5294.6	6075.1	6545.6
37.5°	4066.7	4315.9	5016.2	5867.2	6346.3
40°	3693.5	4021.7	4758.5	5630.2	6132.3
42.5°	3280.1	3682.5	4519.0	5406.5	5914.7
45°	2932.4	3359.1	4251.5	5203.4	5675.2
47.5°	2571.3	3021.2	4001.1	4956.6	5438.1
50°	2178.6	2725.7	3773.7	4728.1	5023.5
52.5°	1891.7	2418.1	3569.5	4314.7	4234.5
55°	1582.9	2143.4	3354.3	3616.9	3315.4
57.5°	1348.3	1895.4	3152.5	2840.0	3164.6
60°	1230.3	1697.2	2842.4	2703.8	2899.6
62.5°	1119.7	1523.3	2173.8	2536.1	2385.3
65°	1005.4	1368.9	1803.0	1920.9	1580.5
67.5°	894.8	1235.2	1699.6	1434.6	1376.2
70°	781.7	1131.9	1495.4	1223.1	727.0
72.5°	674.7	1012.7	1022.5	677.2	539.8
75°	570.2	658.9	797.5	604.2	491.2
77.5°	455.9	565.3	533.7	541.0	445.0
80°	348.9	389.0	435.2	483.9	392.7
82.5°	246.8	289.4	352.6	423.1	322.2
85°	156.8	190.9	272.3	351.4	245.6
87.5°	62.0	120.4	203.0	283.3	144.7
90°	1.2	65.7	143.5	209.1	40.1
92.5°	1.2	30.4	96.0	153.2	20.7
95°	1.2	9.7	59.6	102.1	13.4
97.5°	1.2	3.6	31.6	63.2	7.3
100°	1.2	1.2	13.4	34.0	3.6
102.5°	1.2	1.2	4.9	13.4	1.2
105°	1.2	1.2	1.2	3.6	0.0
107.5°	1.2	1.2	0.0	0.0	0.0
110°	1.2	1.2	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.2	1.2	0.0	0.0	0.0
115°	1.2	1.2	0.0	0.0	0.0
117.5°	1.2	1.2	0.0	0.0	0.0
120°	1.2	1.2	0.0	0.0	0.0
122.5°	1.2	1.2	0.0	0.0	0.0
125°	1.2	2.4	0.0	0.0	0.0
127.5°	1.2	1.2	0.0	0.0	0.0
130°	1.2	2.4	1.2	0.0	0.0
132.5°	1.2	2.4	1.2	0.0	0.0
135°	1.2	2.4	1.2	0.0	0.0
137.5°	1.2	2.4	1.2	0.0	0.0
140°	2.4	2.4	1.2	0.0	0.0
142.5°	2.4	2.4	1.2	0.0	0.0
145°	2.4	2.4	1.2	0.0	0.0
147.5°	2.4	2.4	1.2	0.0	0.0
150°	2.4	2.4	1.2	0.0	0.0
152.5°	2.4	2.4	1.2	0.0	0.0
155°	2.4	2.4	1.2	0.0	0.0
157.5°	2.4	3.6	1.2	0.0	0.0
160°	3.6	3.6	1.2	0.0	0.0
162.5°	3.6	3.6	2.4	1.2	0.0
165°	3.6	3.6	2.4	1.2	0.0
167.5°	3.6	3.6	2.4	1.2	0.0
170°	3.6	3.6	2.4	1.2	1.2
172.5°	3.6	3.6	2.4	1.2	1.2
175°	3.6	3.6	2.4	1.2	1.2
177.5°	3.6	3.6	2.4	1.2	1.2
180°	2.4	2.4	2.4	2.4	2.4

(END OF REPORT)