

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: P685907

Luminaire Tested: **8CZL-24-UNV-LVRF-L835-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685907
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-L835-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH FROSTED LAY-IN @80 CRI and 3500K
Light Source: (1176) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

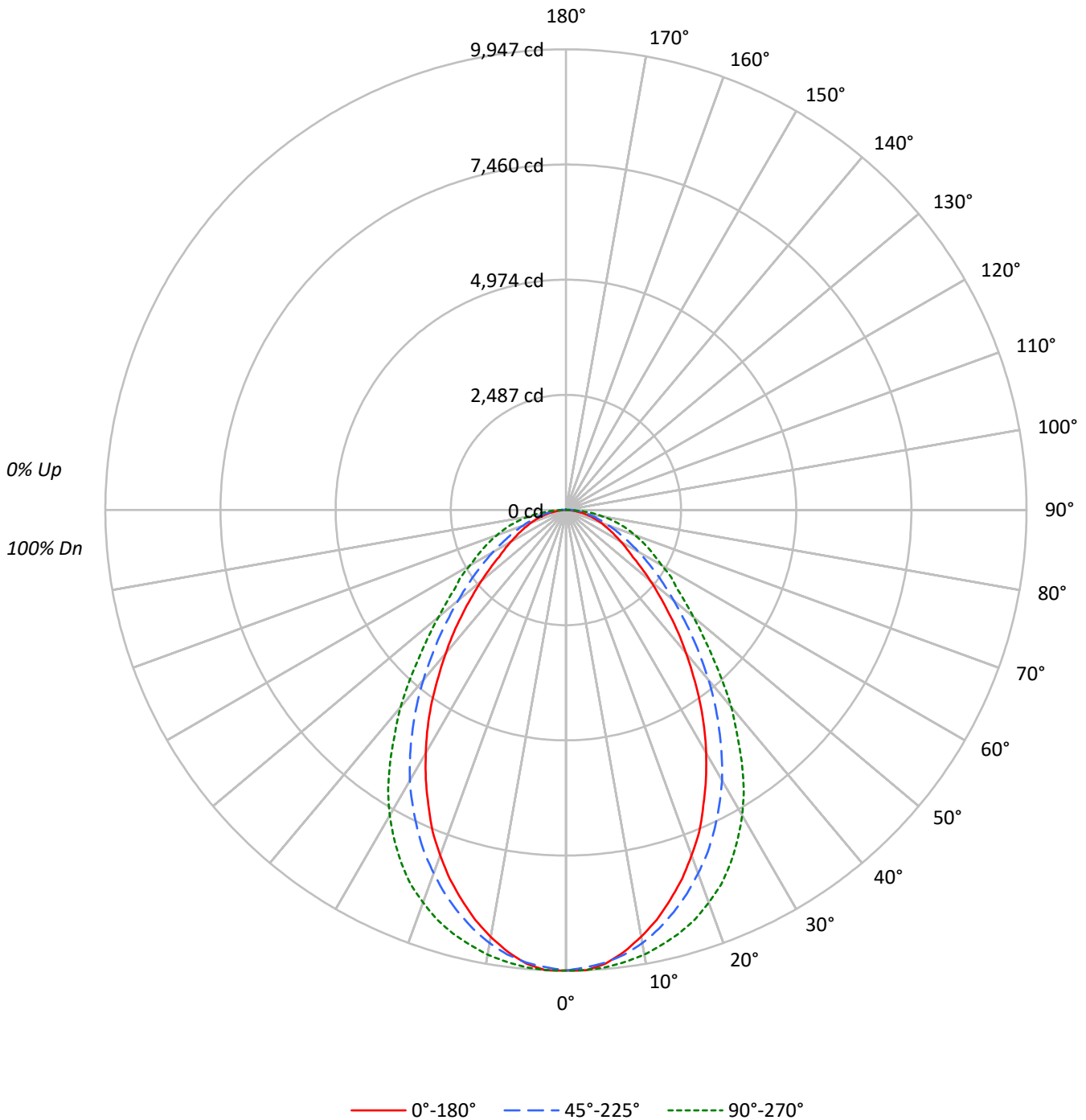
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18341.3 lumens
Efficiency: N/A
Efficacy: 119.1 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°	16054	16054	16054
5°	15936	15900	16059
10°	15341	15568	15980
15°	14556	15024	15813
20°	13632	14339	15498
25°	12517	13528	14984
30°	11283	12572	14189
35°	9937	11371	13032
40°	8505	10096	11719
45°	7165	8800	10206
50°	5984	7628	9024
55°	4952	6702	8182
60°	4462	5874	7715
65°	4056	5170	7545
70°	3778	4641	7488
75°	3503	4333	7639
80°	3175	4292	7653
85°	2727	5030	7571



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	930.3	5.1
10°-20°	2542.5	13.9
20°-30°	3512.9	19.2
30°-40°	3613.8	19.7
40°-50°	2962.6	16.2
50°-60°	2125.9	11.6
60°-70°	1429.9	7.8
70°-80°	834.6	4.6
80°-90°	321.6	1.8
90°-100°	55.7	0.3
100°-110°	4.7	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°	6985.7	38.1
0°-40°	10599.5	57.8
0°-60°	15688.0	85.5
0°-90°	18274.0	99.6
90°-120°	61.3	0.3
90°-150°	64.7	0.4
90°-180°	67.0	0.4
0°-180°	18341.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9943	9943	9943	9943	9943	
5°	9833	9840	9810	9901	9908	923
15°	8708	8797	8988	9337	9460	2443
25°	7026	7191	7594	8122	8411	3225
35°	5041	5274	5769	6309	6612	3141
45°	3138	3382	3854	4233	4470	2435
55°	1759	1969	2381	2706	2906	1619
65°	1062	1125	1353	1738	1975	1058
75°	562	582	694	965	1225	596
85°	147	183	272	406	409	159
90°	1	61	139	212	44	9
95°	1	10	59	102	19	0
105°	0	1	3	6	3	0
115°	1	1	1	0	0	1
125°	1	1	1	0	0	1
135°	1	3	1	1	0	1
145°	3	3	3	1	1	2
155°	3	4	3	1	1	1
165°	4	4	4	3	1	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°	9942.8	9942.8	9942.8	9942.8	9942.8
2.5°	9947.1	9938.5	9882.8	9947.1	9944.2
5°	9832.7	9839.9	9809.9	9901.3	9908.5
7.5°	9619.8	9648.4	9681.3	9815.6	9839.9
10°	9356.9	9399.8	9495.5	9695.6	9747.0
12.5°	9061.1	9108.3	9264.0	9539.8	9611.3
15°	8708.1	8796.7	8988.2	9336.9	9459.8
17.5°	8343.8	8452.4	8689.6	9102.5	9268.3
20°	7933.6	8042.2	8345.2	8805.3	9019.7
22.5°	7522.1	7627.8	7997.9	8488.1	8755.3
25°	7026.2	7190.6	7593.5	8122.3	8410.9
27.5°	6551.8	6726.2	7174.9	7742.2	8029.4
30°	6051.7	6256.0	6743.3	7284.9	7610.7
32.5°	5555.8	5763.0	6260.3	6824.8	7147.7
35°	5041.4	5274.3	5768.8	6308.9	6611.8
37.5°	4519.8	4774.2	5282.9	5814.5	6058.8
40°	4035.4	4285.5	4789.9	5265.8	5560.1
42.5°	3588.1	3833.9	4301.2	4732.8	4997.1
45°	3138.0	3382.4	3853.9	4232.6	4469.8
47.5°	2735.0	2985.1	3423.8	3806.8	4005.4
50°	2382.1	2609.3	3036.6	3383.8	3592.4
52.5°	2059.1	2266.3	2689.3	3026.6	3228.0
55°	1759.1	1969.1	2380.7	2706.5	2906.5
57.5°	1557.6	1707.6	2077.7	2439.3	2696.5
60°	1381.8	1474.7	1819.1	2247.8	2389.2
62.5°	1203.2	1287.5	1570.4	1947.7	2167.7
65°	1061.7	1124.6	1353.2	1737.6	1974.8
67.5°	921.7	968.8	1164.6	1534.7	1774.8
70°	800.2	830.2	983.1	1334.7	1586.2
72.5°	684.5	700.2	837.4	1151.8	1401.8
75°	561.6	581.6	694.5	964.6	1224.6
77.5°	444.4	473.0	573.0	804.5	1021.7
80°	341.5	364.4	461.6	661.6	823.1
82.5°	237.2	268.6	360.1	523.0	630.2
85°	147.2	182.9	271.5	405.8	408.7
87.5°	61.4	114.3	198.6	300.1	208.6
90°	1.4	61.4	138.6	211.5	44.3
92.5°	0.0	28.6	94.3	151.5	25.7
95°	1.4	10.0	58.6	101.5	18.6
97.5°	0.0	2.9	31.4	64.3	11.4
100°	0.0	1.4	12.9	35.7	7.1
102.5°	0.0	1.4	5.7	15.7	4.3
105°	0.0	1.4	2.9	5.7	2.9
107.5°	0.0	1.4	1.4	1.4	1.4
110°	1.4	1.4	1.4	1.4	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	1.4	1.4	0.0	0.0
115°	1.4	1.4	1.4	0.0	0.0
117.5°	1.4	1.4	1.4	0.0	0.0
120°	1.4	1.4	1.4	0.0	0.0
122.5°	1.4	1.4	1.4	0.0	0.0
125°	1.4	1.4	1.4	0.0	0.0
127.5°	1.4	1.4	1.4	0.0	0.0
130°	1.4	1.4	1.4	0.0	0.0
132.5°	1.4	2.9	1.4	1.4	0.0
135°	1.4	2.9	1.4	1.4	0.0
137.5°	1.4	2.9	1.4	1.4	0.0
140°	1.4	2.9	1.4	1.4	1.4
142.5°	2.9	2.9	2.9	1.4	1.4
145°	2.9	2.9	2.9	1.4	1.4
147.5°	2.9	2.9	2.9	1.4	1.4
150°	2.9	2.9	2.9	1.4	1.4
152.5°	2.9	4.3	2.9	1.4	1.4
155°	2.9	4.3	2.9	1.4	1.4
157.5°	2.9	4.3	2.9	1.4	1.4
160°	2.9	4.3	2.9	1.4	1.4
162.5°	4.3	4.3	2.9	2.9	1.4
165°	4.3	4.3	4.3	2.9	1.4
167.5°	4.3	4.3	4.3	2.9	1.4
170°	4.3	4.3	4.3	2.9	2.9
172.5°	4.3	4.3	4.3	2.9	2.9
175°	4.3	5.7	4.3	2.9	2.9
177.5°	4.3	5.7	4.3	2.9	2.9
180°	4.3	4.3	4.3	4.3	4.3

(END OF REPORT)