

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: P685796

Luminaire Tested: **8CZL-18-UNV-M-LVR-L840-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685796
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-18-UNV-M-LVR-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH MEDIUM LENS @80 CRI and 4000K
Light Source: (1176) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

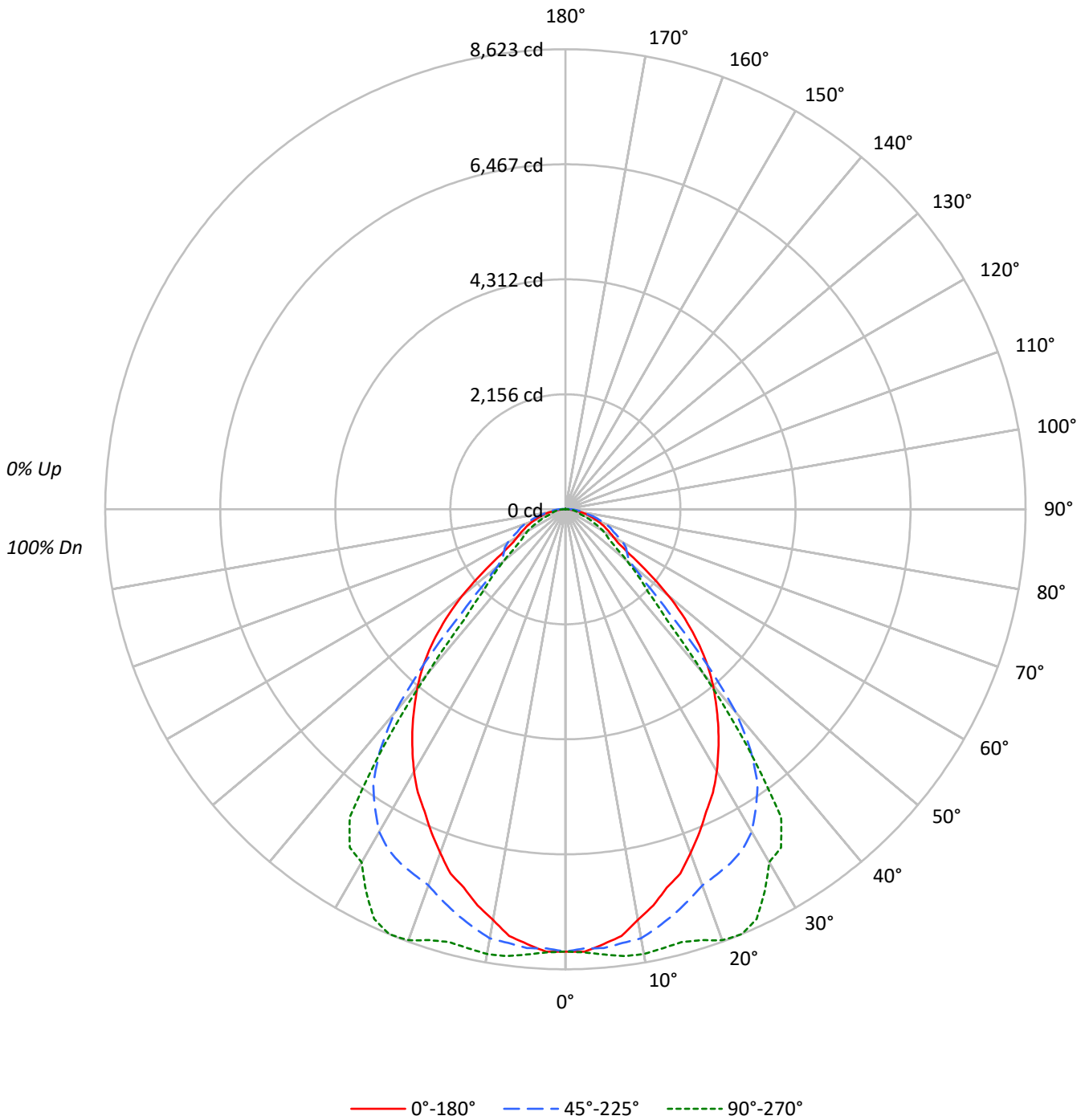
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15335.0 lumens
Efficiency: N/A
Efficacy: 140.7 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.34 / 1.2
Luminous Opening: Rectangular (W 0.83' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 109
Input Voltage (V): 120
Input Current (A_{in}): 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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	90	90	90	88
2	103	96	90	86	100	94	89	84	91	86	83	87	84	81	84	81	79	79	79	79	77
3	95	87	80	74	93	85	79	74	82	77	72	79	75	71	77	73	70	70	70	70	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	70	66	62	62	62	62	60
5	83	72	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	56	56	56	54
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	51	51	51	49
7	72	60	53	47	70	59	52	47	58	51	47	57	51	46	55	50	46	46	46	46	44
8	68	56	48	43	66	55	48	43	54	47	42	52	47	42	51	46	42	42	42	42	40
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	42	39	39	39	39	37
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	35	35	35	35	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13385	13385	13385
5°	13261	13380	13580
10°	12812	13388	13877
15°	12272	13138	14040
20°	11777	12888	14769
25°	11127	13041	15098
30°	10576	13013	14240
35°	9848	12375	13885
40°	9065	10489	8462
45°	7987	6252	5015
50°	6340	4152	3785
55°	4105	3950	2872
60°	3351	4014	2639
65°	3192	3783	2156
70°	3031	3796	1704
75°	2880	3554	1585
80°	2664	3357	1779
85°	2382	4105	2182



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	786.7	5.1
10°-20°	2231.4	14.6
20°-30°	3364.8	21.9
30°-40°	3718.0	24.2
40°-50°	2331.1	15.2
50°-60°	1255.1	8.2
60°-70°	852.4	5.6
70°-80°	509.1	3.3
80°-90°	221.2	1.4
90°-100°	48.5	0.3
100°-110°	5.6	0.0
110°-120°	2.0	0.0
120°-130°	1.9	0.0
130°-140°	2.2	0.0
140°-150°	2.0	0.0
150°-160°	1.6	0.0
160°-170°	1.2	0.0
170°-180°	0.5	0.0
0°-30°	6382.8	41.6
0°-40°	10100.8	65.9
0°-60°	13687.0	89.3
0°-90°	15269.7	99.6
90°-120°	56.1	0.4
90°-150°	62.1	0.4
90°-180°	65.0	0.4
0°-180°	15335.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8290	8290	8290	8290	8290	
5°	8182	8196	8255	8353	8378	771
15°	7342	7599	7860	8240	8399	2073
25°	6246	6625	7320	8101	8475	2883
35°	4996	5583	6278	6754	7045	3118
45°	3498	3808	2738	2232	2196	2668
55°	1458	1525	1403	1214	1020	1416
65°	836	919	990	804	564	827
75°	462	514	570	468	254	487
85°	129	158	222	292	118	139
90°	3	49	112	187	35	9
95°	1	8	44	96	17	1
105°	1	2	3	8	3	1
115°	1	2	2	2	2	1
125°	1	2	2	2	2	1
135°	2	2	3	3	3	2
145°	2	3	3	3	4	1
155°	3	3	3	3	3	1
165°	3	4	4	4	4	1
175°	4	4	4	5	5	0
180°	5	5	5	5	5	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8289.9	8289.9	8289.9	8289.9	8289.9
2.5°	8300.7	8278.0	8235.8	8311.5	8312.6
5°	8181.8	8195.8	8255.3	8352.6	8378.5
7.5°	8066.1	8120.2	8200.2	8434.7	8446.6
10°	7814.3	7926.7	8165.6	8391.5	8463.9
12.5°	7604.6	7771.0	8017.5	8314.7	8427.2
15°	7341.9	7599.1	7859.7	8240.2	8399.1
17.5°	7158.1	7364.6	7683.5	8205.6	8466.1
20°	6854.4	7145.1	7500.8	8229.3	8595.8
22.5°	6559.3	6912.7	7408.9	8238.0	8622.8
25°	6245.8	6625.2	7320.3	8100.7	8474.7
27.5°	5986.4	6304.2	7188.4	7814.3	8084.5
30°	5672.9	6046.9	6979.8	7376.5	7638.1
32.5°	5335.6	5810.2	6641.4	7041.4	7517.0
35°	4996.2	5583.2	6278.2	6753.8	7044.6
37.5°	4641.6	5396.2	5707.5	5784.2	5585.3
40°	4301.1	5135.6	4976.7	4234.1	4014.7
42.5°	3929.3	4575.7	3881.7	2913.2	2814.8
45°	3498.0	3808.2	2738.1	2232.2	2196.5
47.5°	3038.6	2948.9	2041.9	1865.7	1845.2
50°	2524.0	2357.6	1652.8	1646.3	1506.9
52.5°	1967.3	1872.2	1482.0	1427.9	1206.4
55°	1458.2	1525.2	1403.1	1213.9	1020.4
57.5°	1167.4	1323.1	1348.0	1060.4	912.3
60°	1037.7	1157.7	1243.1	975.0	817.2
62.5°	930.7	1025.8	1113.4	904.8	704.8
65°	835.6	918.8	990.2	804.2	564.3
67.5°	735.1	821.5	909.1	690.7	479.9
70°	642.1	734.0	804.2	612.9	361.0
72.5°	545.9	641.0	672.4	512.4	288.6
75°	461.6	513.5	569.7	468.1	254.0
77.5°	372.9	417.3	440.0	429.1	223.8
80°	286.5	322.1	361.0	390.2	191.3
82.5°	209.7	235.6	288.6	343.7	153.5
85°	128.6	157.8	221.6	291.9	117.8
87.5°	57.3	94.0	163.2	241.1	75.7
90°	3.2	48.6	112.4	187.0	34.6
92.5°	1.1	21.6	73.5	138.4	23.8
95°	1.1	7.6	44.3	96.2	17.3
97.5°	1.1	3.2	24.9	61.6	10.8
100°	1.1	2.2	11.9	35.7	7.6
102.5°	1.1	2.2	5.4	17.3	5.4
105°	1.1	2.2	3.2	7.6	3.2
107.5°	1.1	2.2	2.2	3.2	2.2
110°	1.1	2.2	2.2	2.2	2.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.1	2.2	2.2	2.2	2.2
115°	1.1	2.2	2.2	2.2	2.2
117.5°	1.1	2.2	2.2	2.2	2.2
120°	1.1	2.2	2.2	2.2	2.2
122.5°	1.1	2.2	2.2	2.2	2.2
125°	1.1	2.2	2.2	2.2	2.2
127.5°	1.1	2.2	2.2	2.2	2.2
130°	1.1	2.2	2.2	2.2	2.2
132.5°	2.2	2.2	3.2	3.2	3.2
135°	2.2	2.2	3.2	3.2	3.2
137.5°	2.2	3.2	3.2	3.2	3.2
140°	2.2	3.2	3.2	3.2	3.2
142.5°	2.2	3.2	3.2	3.2	3.2
145°	2.2	3.2	3.2	3.2	4.3
147.5°	2.2	3.2	3.2	3.2	4.3
150°	2.2	3.2	3.2	3.2	3.2
152.5°	3.2	3.2	3.2	3.2	3.2
155°	3.2	3.2	3.2	3.2	3.2
157.5°	3.2	3.2	3.2	4.3	4.3
160°	3.2	4.3	4.3	4.3	4.3
162.5°	3.2	4.3	4.3	4.3	4.3
165°	3.2	4.3	4.3	4.3	4.3
167.5°	3.2	4.3	4.3	4.3	5.4
170°	4.3	4.3	4.3	5.4	5.4
172.5°	4.3	4.3	4.3	5.4	5.4
175°	4.3	4.3	4.3	5.4	5.4
177.5°	4.3	5.4	4.3	5.4	6.5
180°	5.4	5.4	5.4	5.4	5.4

(END OF REPORT)