

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: P685845

Luminaire Tested: **8CZL-14-UNV-W-LVR-L835-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685845
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-L835-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH WIDE LENS @80 CRI and 3500K
Light Source: (784) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

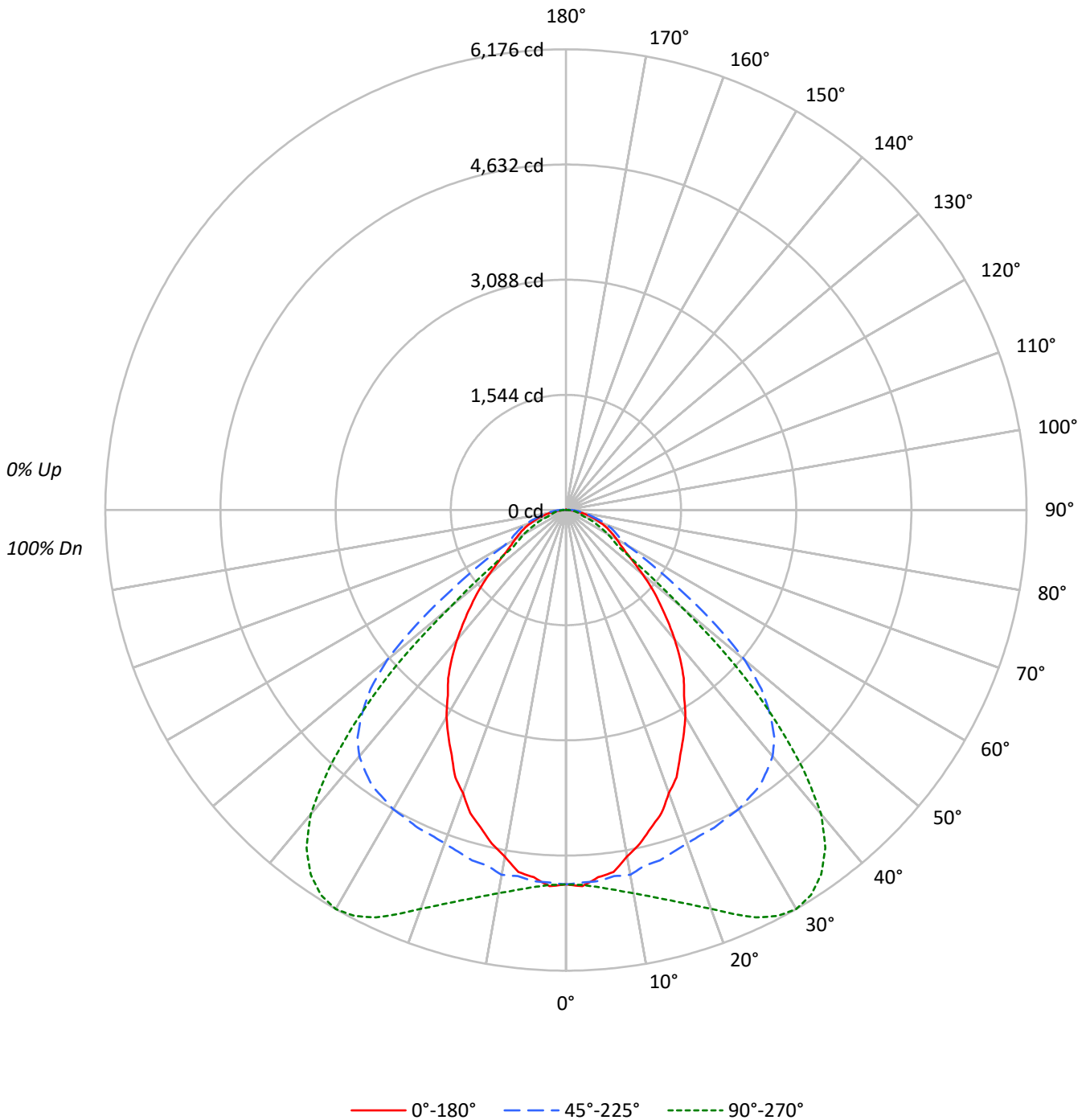
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11938.3 lumens
Efficiency: N/A
Efficacy: 134.1 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_{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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87
2	102	95	89	84	99	93	88	83	89	85	81	86	82	79	83	80	77	75
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	59	57
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	51
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	47	40	35	46	40	35	45	39	35	44	39	34	33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	35	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8102	8102	8102
5°	8009	8092	8225
10°	7733	8142	8552
15°	7369	8126	9055
20°	6936	8170	9774
25°	6458	8371	10735
30°	5970	8636	11515
35°	5425	8915	11756
40°	4783	9084	11217
45°	4077	8836	8992
50°	3379	7857	5103
55°	2752	5308	2441
60°	2541	3087	2108
65°	2450	2840	1714
70°	2312	2786	1225
75°	2151	2543	1190
80°	1961	2498	1307
85°	1504	2992	1441



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	477.1	4.0
10°-20°	1385.0	11.6
20°-30°	2197.9	18.4
30°-40°	2745.1	23.0
40°-50°	2521.3	21.1
50°-60°	1345.6	11.3
60°-70°	692.6	5.8
70°-80°	380.8	3.2
80°-90°	157.1	1.3
90°-100°	30.3	0.3
100°-110°	1.6	0.0
110°-120°	0.4	0.0
120°-130°	0.5	0.0
130°-140°	0.9	0.0
140°-150°	0.8	0.0
150°-160°	0.6	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	4060.0	34.0
0°-40°	6805.2	57.0
0°-60°	10672.1	89.4
0°-90°	11902.5	99.7
90°-120°	32.3	0.3
90°-150°	34.6	0.3
90°-180°	36.0	0.3
0°-180°	11938.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5018	5018	5018	5018	5018	
5°	4942	4954	4993	5070	5075	467
15°	4408	4552	4861	5257	5417	1240
25°	3625	3966	4699	5559	6026	1670
35°	2752	3260	4523	5510	5964	1709
45°	1785	2574	3870	4010	3938	1382
55°	978	1753	1886	1056	867	903
65°	641	840	743	606	449	633
75°	345	382	408	362	191	366
85°	81	106	162	213	78	93
90°	0	30	80	129	17	3
95°	0	3	30	59	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	2	2	1	1	0
175°	2	2	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°	5017.9	5017.9	5017.9	5017.9	5017.9
2.5°	5047.2	5036.3	5000.3	5032.9	5030.4
5°	4941.7	4954.3	4992.8	5069.8	5074.8
7.5°	4894.8	4929.2	4950.9	5117.5	5139.2
10°	4716.6	4770.1	4966.0	5139.2	5216.3
12.5°	4582.6	4690.6	4880.6	5174.4	5308.3
15°	4408.5	4552.5	4861.4	5257.3	5417.1
17.5°	4260.4	4407.7	4802.8	5320.0	5543.5
20°	4036.9	4303.9	4755.1	5385.3	5688.3
22.5°	3877.0	4147.4	4718.2	5443.1	5859.9
25°	3625.1	3965.8	4699.0	5559.4	6025.6
27.5°	3414.2	3812.6	4656.3	5633.9	6135.3
30°	3202.4	3625.1	4632.0	5647.3	6176.3
32.5°	2947.1	3472.8	4570.9	5616.3	6117.7
35°	2752.1	3260.2	4523.2	5510.0	5964.5
37.5°	2514.4	3092.8	4418.6	5317.5	5713.4
40°	2269.1	2937.9	4309.8	5017.0	5321.7
42.5°	2021.4	2763.8	4135.7	4616.1	4709.0
45°	1785.3	2573.8	3869.5	4010.1	3938.1
47.5°	1573.6	2369.6	3554.8	3250.1	3081.0
50°	1345.1	2162.0	3127.9	2474.2	2031.4
52.5°	1139.2	1988.7	2540.3	1675.7	1263.9
55°	977.6	1752.7	1885.8	1056.3	867.1
57.5°	863.0	1571.9	1361.0	835.3	742.4
60°	786.8	1345.9	955.9	766.7	652.9
62.5°	711.5	1064.7	817.8	698.9	549.1
65°	641.2	840.4	743.3	606.0	448.6
67.5°	568.3	682.2	671.3	549.9	374.1
70°	489.7	560.8	590.1	460.4	259.5
72.5°	419.3	470.4	502.2	393.4	220.1
75°	344.8	382.5	407.6	362.4	190.8
77.5°	273.7	308.0	332.3	328.1	167.4
80°	210.9	233.5	268.7	293.8	140.6
82.5°	144.0	160.7	211.8	253.6	109.6
85°	81.2	106.3	161.5	212.6	77.8
87.5°	23.4	62.8	117.2	170.8	45.2
90°	0.0	30.1	79.5	128.9	16.7
92.5°	0.0	11.7	51.9	90.4	11.7
95°	0.0	3.3	30.1	59.4	7.5
97.5°	0.0	0.8	14.2	35.2	3.3
100°	0.0	0.8	5.0	16.7	0.8
102.5°	0.0	0.8	1.7	5.9	0.0
105°	0.0	0.8	0.8	0.8	0.0
107.5°	0.0	0.8	0.8	0.0	0.0
110°	0.0	0.8	0.8	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.8	0.8	0.0	0.0
115°	0.0	0.8	0.8	0.0	0.0
117.5°	0.0	0.8	0.8	0.0	0.0
120°	0.0	0.8	0.8	0.0	0.0
122.5°	0.0	0.8	0.8	0.0	0.0
125°	0.0	0.8	0.8	0.0	0.0
127.5°	0.8	0.8	0.8	0.8	0.0
130°	0.8	1.7	1.7	0.8	0.0
132.5°	0.8	1.7	1.7	0.8	0.0
135°	0.8	1.7	1.7	0.8	0.8
137.5°	0.8	1.7	1.7	0.8	0.8
140°	0.8	1.7	1.7	0.8	0.8
142.5°	0.8	1.7	1.7	0.8	0.8
145°	0.8	1.7	1.7	0.8	0.8
147.5°	0.8	1.7	1.7	0.8	0.8
150°	0.8	1.7	1.7	0.8	0.8
152.5°	1.7	1.7	1.7	0.8	0.8
155°	1.7	1.7	1.7	0.8	0.8
157.5°	1.7	1.7	1.7	0.8	0.8
160°	1.7	1.7	1.7	0.8	0.8
162.5°	1.7	2.5	1.7	0.8	0.8
165°	1.7	2.5	1.7	0.8	0.8
167.5°	1.7	2.5	1.7	0.8	0.8
170°	1.7	2.5	1.7	0.8	0.8
172.5°	1.7	2.5	1.7	0.8	0.8
175°	2.5	2.5	1.7	0.8	0.8
177.5°	2.5	2.5	1.7	1.7	1.7
180°	1.7	1.7	1.7	1.7	1.7

(END OF REPORT)