

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: P685787

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

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685787
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-24-UNV-M-LVR-L835-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH MEDIUM LENS @80 CRI and 3500K
Light Source: (1176) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

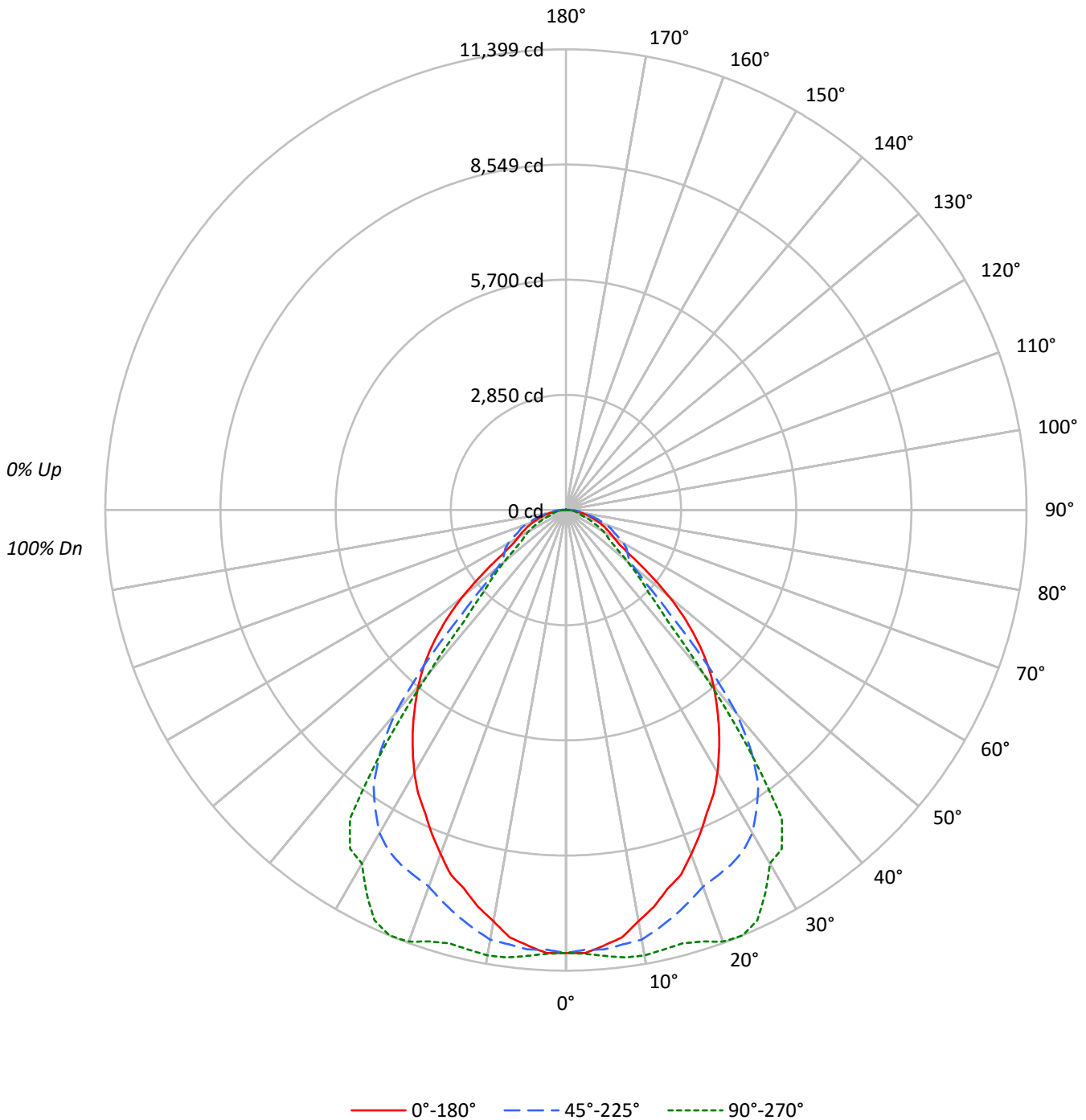
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20271.8 lumens
Efficiency: N/A
Efficacy: 131.6 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): 154
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	93	91	90	88
2	103	96	90	86	100	94	89	84	91	86	83	87	84	81	84	81	79	84	81	79	77
3	95	87	80	74	93	85	79	74	82	77	72	79	75	71	77	73	70	77	73	70	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	70	66	62	70	66	62	60
5	83	72	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	65	60	56	54
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	60	55	51	49
7	72	60	53	47	70	59	52	47	58	51	47	57	51	46	55	50	46	55	50	46	44
8	68	56	48	43	66	55	48	43	54	47	42	52	47	42	51	46	42	51	46	42	40
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	42	39	48	42	39	37
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	35	45	39	35	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17694	17694	17694
5°	17530	17687	17951
10°	16936	17697	18344
15°	16223	17367	18559
20°	15569	17037	19524
25°	14709	17239	19958
30°	13981	17202	18824
35°	13018	16358	18355
40°	11984	13866	11186
45°	10559	8265	6630
50°	8381	5488	5004
55°	5426	5221	3797
60°	4430	5307	3488
65°	4220	5001	2850
70°	4007	5019	2253
75°	3807	4698	2095
80°	3521	4438	2351
85°	3149	5426	2886



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1039.9	5.1
10°-20°	2949.7	14.6
20°-30°	4448.0	21.9
30°-40°	4914.9	24.2
40°-50°	3081.6	15.2
50°-60°	1659.1	8.2
60°-70°	1126.8	5.6
70°-80°	673.0	3.3
80°-90°	292.4	1.4
90°-100°	64.1	0.3
100°-110°	7.4	0.0
110°-120°	2.7	0.0
120°-130°	2.4	0.0
130°-140°	2.9	0.0
140°-150°	2.6	0.0
150°-160°	2.1	0.0
160°-170°	1.6	0.0
170°-180°	0.6	0.0
0°-30°	8437.6	41.6
0°-40°	13352.4	65.9
0°-60°	18093.2	89.3
0°-90°	20185.3	99.6
90°-120°	74.1	0.4
90°-150°	82.1	0.4
90°-180°	86.0	0.4
0°-180°	20271.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10959	10959	10959	10959	10959	
5°	10816	10834	10913	11042	11076	1019
15°	9705	10046	10390	10893	11103	2740
25°	8256	8758	9677	10708	11203	3812
35°	6605	7380	8299	8928	9312	4122
45°	4624	5034	3620	2951	2904	3527
55°	1928	2016	1855	1605	1349	1872
65°	1105	1215	1309	1063	746	1093
75°	610	679	753	619	336	643
85°	170	209	293	386	156	183
90°	4	64	149	247	46	12
95°	1	10	59	127	23	1
105°	1	3	4	10	4	1
115°	1	3	3	3	3	1
125°	1	3	3	3	3	1
135°	3	3	4	4	4	2
145°	3	4	4	4	6	2
155°	4	4	4	4	4	2
165°	4	6	6	6	6	1
175°	6	6	6	7	7	1
180°	7	7	7	7	7	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10958.6	10958.6	10958.6	10958.6	10958.6
2.5°	10972.9	10942.9	10887.2	10987.2	10988.6
5°	10815.7	10834.3	10912.9	11041.5	11075.8
7.5°	10662.8	10734.3	10840.0	11150.1	11165.8
10°	10329.9	10478.5	10794.3	11092.9	11188.7
12.5°	10052.6	10272.7	10598.5	10991.5	11140.1
15°	9705.4	10045.5	10389.9	10892.9	11102.9
17.5°	9462.5	9735.4	10157.0	10847.1	11191.5
20°	9061.0	9445.3	9915.5	10878.6	11363.0
22.5°	8670.9	9138.1	9794.0	10890.0	11398.7
25°	8256.5	8758.0	9676.8	10708.5	11203.0
27.5°	7913.5	8333.6	9502.5	10329.9	10687.1
30°	7499.1	7993.5	9226.7	9751.1	10096.9
32.5°	7053.3	7680.6	8779.5	9308.2	9936.9
35°	6604.6	7380.5	8299.3	8928.1	9312.5
37.5°	6135.9	7133.3	7544.8	7646.3	7383.4
40°	5685.8	6788.9	6578.9	5597.2	5307.1
42.5°	5194.2	6048.7	5131.4	3851.0	3721.0
45°	4624.1	5034.2	3619.5	2950.8	2903.6
47.5°	4016.8	3898.2	2699.3	2466.4	2439.2
50°	3336.6	3116.5	2184.9	2176.3	1992.0
52.5°	2600.7	2474.9	1959.1	1887.6	1594.7
55°	1927.7	2016.2	1854.8	1604.7	1348.9
57.5°	1543.3	1749.0	1781.9	1401.8	1206.0
60°	1371.8	1530.4	1643.3	1288.9	1080.3
62.5°	1230.3	1356.1	1471.8	1196.0	931.7
65°	1104.6	1214.6	1308.9	1063.1	745.9
67.5°	971.7	1086.0	1201.7	913.1	634.5
70°	848.8	970.3	1063.1	810.2	477.3
72.5°	721.6	847.4	888.8	677.3	381.5
75°	610.2	678.8	753.1	618.7	335.8
77.5°	493.0	551.6	581.6	567.3	295.8
80°	378.7	425.8	477.3	515.9	252.9
82.5°	277.2	311.5	381.5	454.4	202.9
85°	170.0	208.6	292.9	385.8	155.8
87.5°	75.7	124.3	215.8	318.7	100.0
90°	4.3	64.3	148.6	247.2	45.7
92.5°	1.4	28.6	97.2	182.9	31.4
95°	1.4	10.0	58.6	127.2	22.9
97.5°	1.4	4.3	32.9	81.5	14.3
100°	1.4	2.9	15.7	47.2	10.0
102.5°	1.4	2.9	7.1	22.9	7.1
105°	1.4	2.9	4.3	10.0	4.3
107.5°	1.4	2.9	2.9	4.3	2.9
110°	1.4	2.9	2.9	2.9	2.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.4	2.9	2.9	2.9	2.9
115°	1.4	2.9	2.9	2.9	2.9
117.5°	1.4	2.9	2.9	2.9	2.9
120°	1.4	2.9	2.9	2.9	2.9
122.5°	1.4	2.9	2.9	2.9	2.9
125°	1.4	2.9	2.9	2.9	2.9
127.5°	1.4	2.9	2.9	2.9	2.9
130°	1.4	2.9	2.9	2.9	2.9
132.5°	2.9	2.9	4.3	4.3	4.3
135°	2.9	2.9	4.3	4.3	4.3
137.5°	2.9	4.3	4.3	4.3	4.3
140°	2.9	4.3	4.3	4.3	4.3
142.5°	2.9	4.3	4.3	4.3	4.3
145°	2.9	4.3	4.3	4.3	5.7
147.5°	2.9	4.3	4.3	4.3	5.7
150°	2.9	4.3	4.3	4.3	4.3
152.5°	4.3	4.3	4.3	4.3	4.3
155°	4.3	4.3	4.3	4.3	4.3
157.5°	4.3	4.3	4.3	5.7	5.7
160°	4.3	5.7	5.7	5.7	5.7
162.5°	4.3	5.7	5.7	5.7	5.7
165°	4.3	5.7	5.7	5.7	5.7
167.5°	4.3	5.7	5.7	5.7	7.1
170°	5.7	5.7	5.7	7.1	7.1
172.5°	5.7	5.7	5.7	7.1	7.1
175°	5.7	5.7	5.7	7.1	7.1
177.5°	5.7	7.1	5.7	7.1	8.6
180°	7.1	7.1	7.1	7.1	7.1

(END OF REPORT)