

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: P685747

Luminaire Tested: **8CZL-24-UNV-N-LVR-L850-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685747
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-24-UNV-N-LVR-L850-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH NARROW LENS @80 CRI and 5000K
Light Source: (1176) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

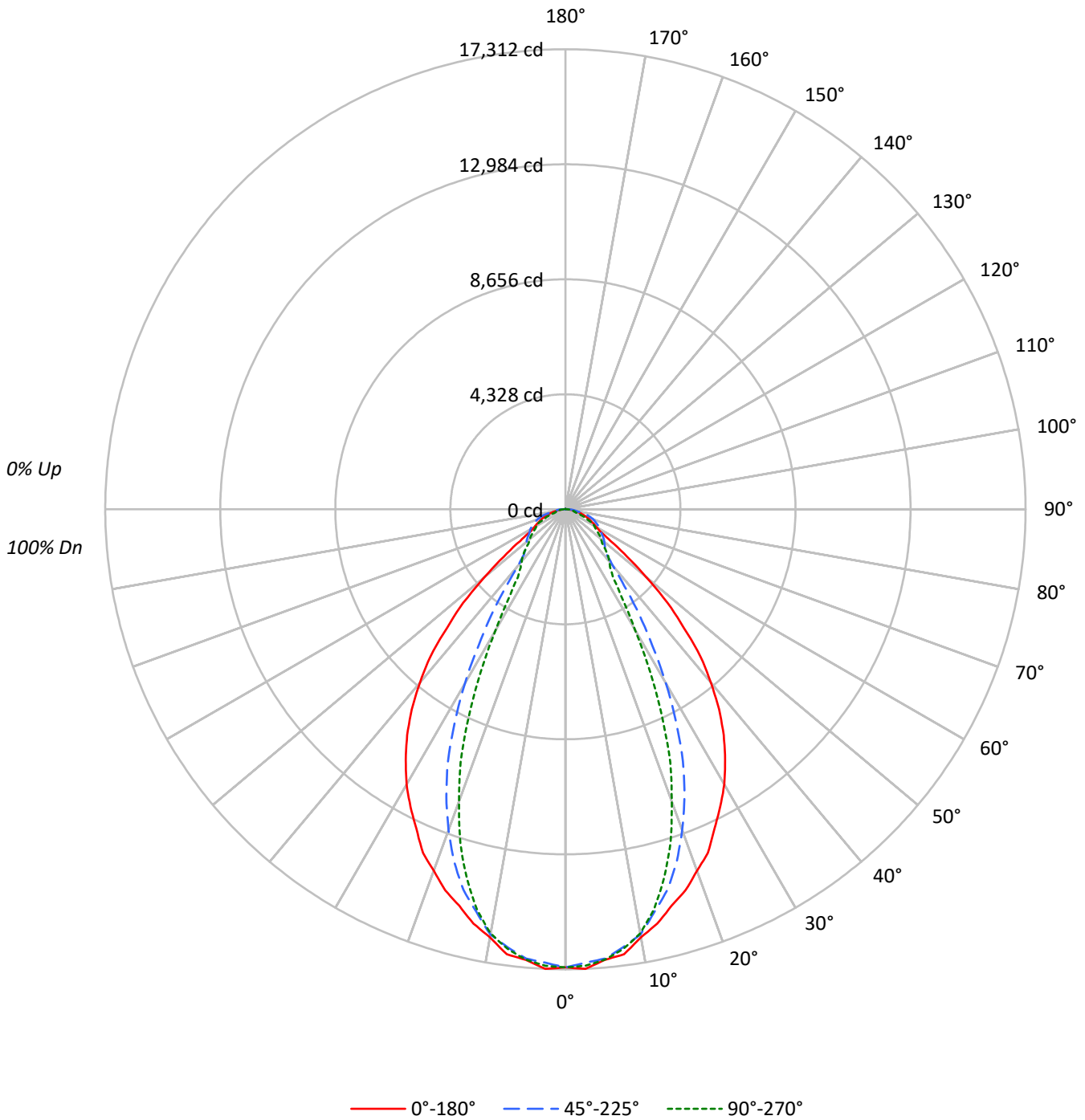
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20408.5 lumens
Efficiency: N/A
Efficacy: 132.5 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.8 / 0.85
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	90	90	88
2	103	97	92	87	101	95	90	86	92	88	84	88	85	82	86	83	80	80	80	80	78
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	72	72	72	70
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	65	65	65	63
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	59	59	59	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	55	55	55	53
7	75	64	57	51	73	63	56	51	62	55	51	60	55	51	59	54	50	50	50	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	47	47	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	43	43	43	43	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	41	41	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27831	27831	27831
5°	27585	27507	27578
10°	26807	26642	26577
15°	25813	24783	23997
20°	24862	22077	20097
25°	23626	18642	15324
30°	22286	14101	9791
35°	20455	9560	6151
40°	17939	5824	5396
45°	14373	4852	4835
50°	9938	4795	4365
55°	5854	4752	4111
60°	4362	4938	4060
65°	4129	4971	3571
70°	3971	5302	2696
75°	3744	5321	2305
80°	3477	4413	2607
85°	3084	5358	3220



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1601.2	7.8
10°-20°	4146.0	20.3
20°-30°	4843.5	23.7
30°-40°	3593.4	17.6
40°-50°	2382.1	11.7
50°-60°	1579.9	7.7
60°-70°	1178.7	5.8
70°-80°	695.7	3.4
80°-90°	293.0	1.4
90°-100°	63.3	0.3
100°-110°	8.5	0.0
110°-120°	4.4	0.0
120°-130°	4.0	0.0
130°-140°	3.8	0.0
140°-150°	3.9	0.0
150°-160°	3.5	0.0
160°-170°	2.6	0.0
170°-180°	1.0	0.0
0°-30°	10590.7	51.9
0°-40°	14184.1	69.5
0°-60°	18146.1	88.9
0°-90°	20313.5	99.5
90°-120°	76.2	0.4
90°-150°	87.9	0.4
90°-180°	95.0	0.5
0°-180°	20408.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	17237	17237	17237	17237	17237	
5°	17020	17005	16972	17033	17015	1610
15°	15442	15258	14826	14571	14356	4356
25°	13262	12308	10464	8976	8602	6109
35°	10378	7689	4850	3279	3121	6442
45°	6294	3714	2125	2205	2118	4845
55°	2080	1827	1688	1630	1460	2046
65°	1081	1208	1301	1272	935	1078
75°	600	672	853	619	370	634
85°	166	203	289	384	174	180
90°	3	61	145	248	51	11
95°	2	10	57	124	26	1
105°	2	3	6	10	9	2
115°	2	3	4	6	6	1
125°	3	3	4	6	6	2
135°	3	4	4	6	6	2
145°	4	6	6	7	7	3
155°	6	7	7	9	9	3
165°	7	9	9	10	10	2
175°	7	9	10	12	13	1
180°	10	10	10	10	10	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	17237.3	17237.3	17237.3	17237.3	17237.3
2.5°	17311.8	17218.3	17083.9	17205.2	17194.9
5°	17019.7	17005.1	16971.5	17032.8	17015.3
7.5°	16888.2	16809.4	16622.4	16767.0	16685.2
10°	16350.8	16258.8	16250.0	16220.8	16210.6
12.5°	15969.6	15858.6	15503.8	15484.8	15405.9
15°	15442.4	15258.4	14826.1	14570.6	14355.9
17.5°	15033.5	14633.4	13911.9	13435.8	13159.8
20°	14469.8	14028.7	12848.7	12017.8	11696.5
22.5°	14005.4	13224.1	11706.7	10531.1	10310.5
25°	13262.0	12308.4	10463.9	8975.7	8601.8
27.5°	12616.5	11300.7	8997.6	7364.9	6906.3
30°	11953.5	10171.8	7563.5	5784.7	5251.7
32.5°	11180.9	9034.1	6087.0	4340.4	3954.8
35°	10377.7	7689.1	4850.0	3278.6	3120.9
37.5°	9492.7	6479.9	3645.2	2738.3	2764.6
40°	8511.3	5425.4	2763.1	2510.5	2560.1
42.5°	7532.8	4537.5	2298.7	2361.5	2376.1
45°	6294.4	3713.8	2124.9	2205.2	2117.6
47.5°	5212.2	3034.7	2002.2	1993.5	1869.3
50°	3956.3	2473.9	1908.8	1803.6	1737.9
52.5°	2929.6	2086.9	1819.7	1704.3	1637.1
55°	2079.6	1827.0	1688.2	1629.8	1460.4
57.5°	1562.6	1643.0	1587.5	1456.0	1337.7
60°	1350.9	1480.9	1529.1	1372.8	1257.4
62.5°	1219.4	1342.1	1434.1	1323.1	1150.8
65°	1080.7	1207.8	1301.2	1272.0	934.7
67.5°	959.5	1101.2	1216.5	1090.9	763.8
70°	841.2	972.6	1123.1	925.9	571.0
72.5°	714.1	813.5	994.5	720.0	416.2
75°	600.2	671.8	852.9	619.2	369.5
77.5°	480.5	540.4	584.2	563.7	325.7
80°	373.9	433.7	474.6	512.6	280.4
82.5°	271.6	311.1	376.8	454.2	233.7
85°	166.5	203.0	289.2	384.1	173.8
87.5°	71.6	124.1	211.8	318.4	113.9
90°	2.9	61.3	144.6	248.3	51.1
92.5°	1.5	26.3	93.5	182.6	33.6
95°	1.5	10.2	57.0	124.1	26.3
97.5°	1.5	4.4	29.2	80.3	19.0
100°	1.5	2.9	16.1	46.7	13.1
102.5°	1.5	2.9	7.3	23.4	10.2
105°	1.5	2.9	5.8	10.2	8.8
107.5°	1.5	2.9	4.4	7.3	7.3
110°	1.5	2.9	4.4	7.3	7.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.5	2.9	4.4	7.3	7.3
115°	1.5	2.9	4.4	5.8	5.8
117.5°	1.5	2.9	4.4	5.8	5.8
120°	1.5	2.9	4.4	5.8	5.8
122.5°	1.5	2.9	4.4	5.8	5.8
125°	2.9	2.9	4.4	5.8	5.8
127.5°	2.9	4.4	4.4	5.8	5.8
130°	2.9	4.4	4.4	5.8	5.8
132.5°	2.9	4.4	4.4	5.8	5.8
135°	2.9	4.4	4.4	5.8	5.8
137.5°	2.9	4.4	5.8	5.8	5.8
140°	4.4	5.8	5.8	5.8	5.8
142.5°	4.4	5.8	5.8	7.3	5.8
145°	4.4	5.8	5.8	7.3	7.3
147.5°	4.4	5.8	7.3	7.3	7.3
150°	4.4	5.8	7.3	8.8	8.8
152.5°	5.8	5.8	7.3	8.8	8.8
155°	5.8	7.3	7.3	8.8	8.8
157.5°	5.8	7.3	7.3	8.8	10.2
160°	5.8	7.3	8.8	10.2	10.2
162.5°	5.8	7.3	8.8	10.2	10.2
165°	7.3	8.8	8.8	10.2	10.2
167.5°	7.3	8.8	10.2	10.2	11.7
170°	7.3	8.8	10.2	11.7	11.7
172.5°	7.3	8.8	10.2	11.7	11.7
175°	7.3	8.8	10.2	11.7	13.1
177.5°	7.3	8.8	10.2	11.7	13.1
180°	10.2	10.2	10.2	10.2	10.2

(END OF REPORT)