

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: P685745

Luminaire Tested: **8CZL-14-UNV-N-LVR-L850-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685745
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-14-UNV-N-LVR-L850-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH NARROW LENS @80 CRI and 5000K
Light Source: (784) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

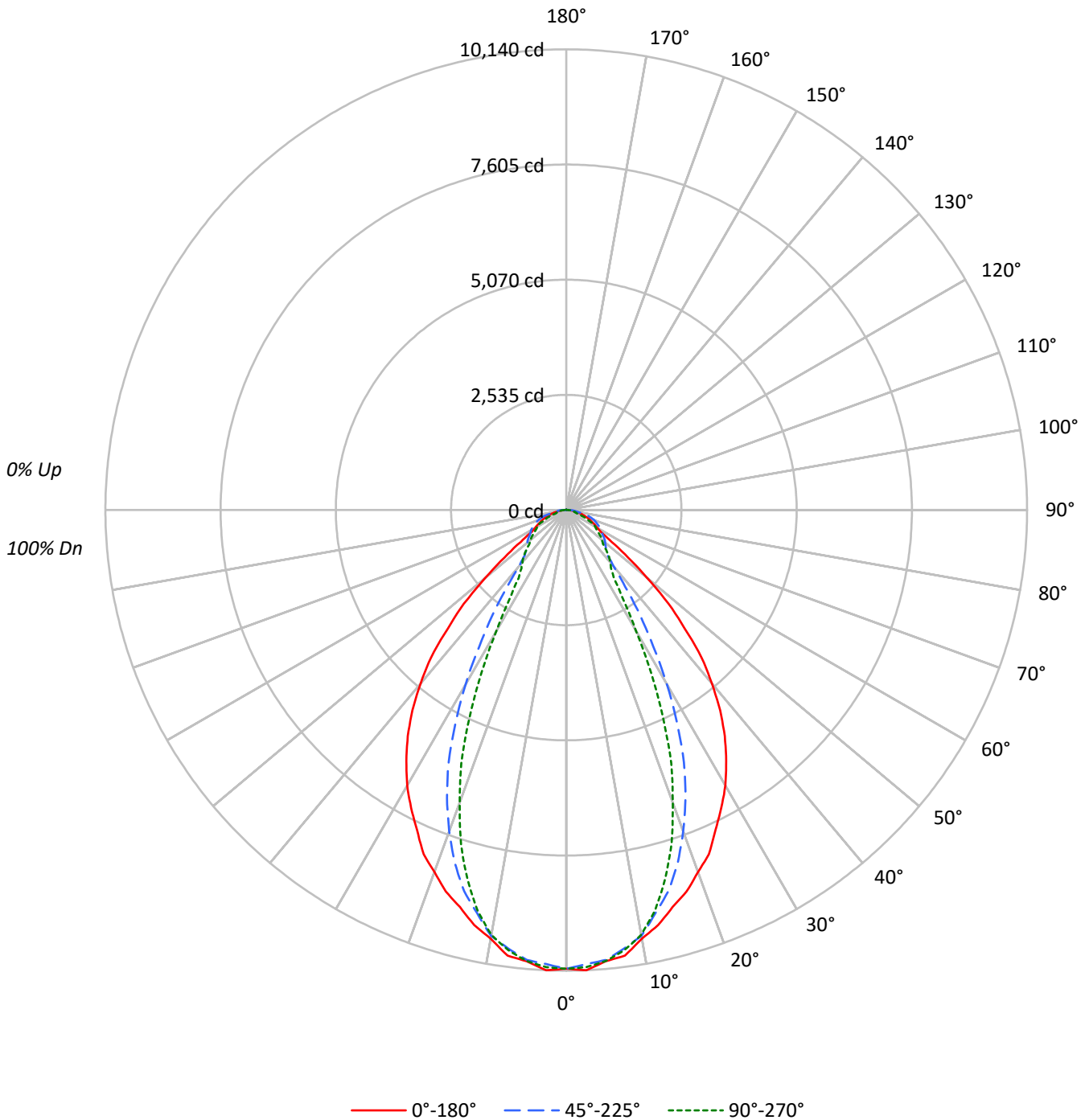
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11953.8 lumens
Efficiency: N/A
Efficacy: 134.3 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): 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	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°	16301	16301	16301
5°	16157	16111	16153
10°	15702	15605	15567
15°	15119	14516	14055
20°	14562	12931	11771
25°	13839	10919	8976
30°	13053	8259	5735
35°	11981	5599	3603
40°	10508	3411	3160
45°	8418	2842	2832
50°	5821	2808	2557
55°	3429	2783	2408
60°	2555	2892	2378
65°	2418	2912	2092
70°	2326	3105	1579
75°	2193	3117	1350
80°	2036	2585	1527
85°	1806	3138	1886



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	937.9	7.8
10°-20°	2428.4	20.3
20°-30°	2837.0	23.7
30°-40°	2104.7	17.6
40°-50°	1395.3	11.7
50°-60°	925.4	7.7
60°-70°	690.4	5.8
70°-80°	407.5	3.4
80°-90°	171.6	1.4
90°-100°	37.1	0.3
100°-110°	5.0	0.0
110°-120°	2.6	0.0
120°-130°	2.3	0.0
130°-140°	2.2	0.0
140°-150°	2.3	0.0
150°-160°	2.1	0.0
160°-170°	1.5	0.0
170°-180°	0.6	0.0
0°-30°	6203.3	51.9
0°-40°	8308.0	69.5
0°-60°	10628.6	88.9
0°-90°	11898.2	99.5
90°-120°	44.7	0.4
90°-150°	51.5	0.4
90°-180°	56.0	0.5
0°-180°	11953.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10096	10096	10096	10096	10096	
5°	9969	9960	9941	9976	9966	943
15°	9045	8937	8684	8534	8409	2552
25°	7768	7209	6129	5257	5038	3578
35°	6078	4504	2841	1920	1828	3773
45°	3687	2175	1245	1292	1240	2838
55°	1218	1070	989	955	855	1199
65°	633	707	762	745	548	631
75°	352	394	500	363	216	371
85°	98	119	169	225	102	105
90°	2	36	85	145	30	6
95°	1	6	33	73	15	1
105°	1	2	3	6	5	1
115°	1	2	3	3	3	1
125°	2	2	3	3	3	1
135°	2	3	3	3	3	1
145°	3	3	3	4	4	2
155°	3	4	4	5	5	2
165°	4	5	5	6	6	1
175°	4	5	6	7	8	0
180°	6	6	6	6	6	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10096.3	10096.3	10096.3	10096.3	10096.3
2.5°	10139.9	10085.2	10006.5	10077.5	10071.5
5°	9968.8	9960.3	9940.6	9976.5	9966.3
7.5°	9891.9	9845.7	9736.2	9820.9	9773.0
10°	9577.1	9523.2	9518.1	9500.9	9495.0
12.5°	9353.8	9288.8	9080.9	9069.8	9023.6
15°	9045.0	8937.2	8684.0	8534.3	8408.6
17.5°	8805.5	8571.1	8148.6	7869.7	7708.0
20°	8475.3	8217.0	7525.8	7039.1	6850.9
22.5°	8203.3	7745.7	6856.9	6168.3	6039.1
25°	7767.9	7209.3	6129.0	5257.3	5038.3
27.5°	7389.8	6619.1	5270.1	4313.8	4045.2
30°	7001.5	5957.9	4430.1	3388.2	3076.0
32.5°	6549.0	5291.5	3565.3	2542.3	2316.4
35°	6078.5	4503.7	2840.8	1920.4	1828.0
37.5°	5560.1	3795.4	2135.1	1603.9	1619.3
40°	4985.3	3177.8	1618.4	1470.4	1499.5
42.5°	4412.2	2657.7	1346.4	1383.2	1391.7
45°	3686.8	2175.3	1244.6	1291.7	1240.3
47.5°	3052.9	1777.5	1172.8	1167.6	1094.9
50°	2317.3	1449.1	1118.0	1056.4	1017.9
52.5°	1715.9	1222.4	1065.8	998.3	958.9
55°	1218.1	1070.1	988.8	954.6	855.4
57.5°	915.3	962.3	929.8	852.8	783.5
60°	791.2	867.4	895.6	804.1	736.5
62.5°	714.3	786.1	840.0	775.0	674.1
65°	633.0	707.4	762.2	745.1	547.5
67.5°	562.0	645.0	712.5	639.0	447.4
70°	492.7	569.7	657.8	542.3	334.5
72.5°	418.3	476.5	582.5	421.7	243.8
75°	351.6	393.5	499.6	362.7	216.4
77.5°	281.4	316.5	342.2	330.2	190.8
80°	219.0	254.1	278.0	300.2	164.2
82.5°	159.1	182.2	220.7	266.0	136.9
85°	97.5	118.9	169.4	225.0	101.8
87.5°	41.9	72.7	124.0	186.5	66.7
90°	1.7	35.9	84.7	145.4	29.9
92.5°	0.9	15.4	54.7	106.9	19.7
95°	0.9	6.0	33.4	72.7	15.4
97.5°	0.9	2.6	17.1	47.0	11.1
100°	0.9	1.7	9.4	27.4	7.7
102.5°	0.9	1.7	4.3	13.7	6.0
105°	0.9	1.7	3.4	6.0	5.1
107.5°	0.9	1.7	2.6	4.3	4.3
110°	0.9	1.7	2.6	4.3	4.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	1.7	2.6	4.3	4.3
115°	0.9	1.7	2.6	3.4	3.4
117.5°	0.9	1.7	2.6	3.4	3.4
120°	0.9	1.7	2.6	3.4	3.4
122.5°	0.9	1.7	2.6	3.4	3.4
125°	1.7	1.7	2.6	3.4	3.4
127.5°	1.7	2.6	2.6	3.4	3.4
130°	1.7	2.6	2.6	3.4	3.4
132.5°	1.7	2.6	2.6	3.4	3.4
135°	1.7	2.6	2.6	3.4	3.4
137.5°	1.7	2.6	3.4	3.4	3.4
140°	2.6	3.4	3.4	3.4	3.4
142.5°	2.6	3.4	3.4	4.3	3.4
145°	2.6	3.4	3.4	4.3	4.3
147.5°	2.6	3.4	4.3	4.3	4.3
150°	2.6	3.4	4.3	5.1	5.1
152.5°	3.4	3.4	4.3	5.1	5.1
155°	3.4	4.3	4.3	5.1	5.1
157.5°	3.4	4.3	4.3	5.1	6.0
160°	3.4	4.3	5.1	6.0	6.0
162.5°	3.4	4.3	5.1	6.0	6.0
165°	4.3	5.1	5.1	6.0	6.0
167.5°	4.3	5.1	6.0	6.0	6.8
170°	4.3	5.1	6.0	6.8	6.8
172.5°	4.3	5.1	6.0	6.8	6.8
175°	4.3	5.1	6.0	6.8	7.7
177.5°	4.3	5.1	6.0	6.8	7.7
180°	6.0	6.0	6.0	6.0	6.0

(END OF REPORT)