

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: P685805

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

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685805
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-14-UNV-M-LVR-L850-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH MEDIUM LENS @80 CRI and 5000K
Light Source: (784) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

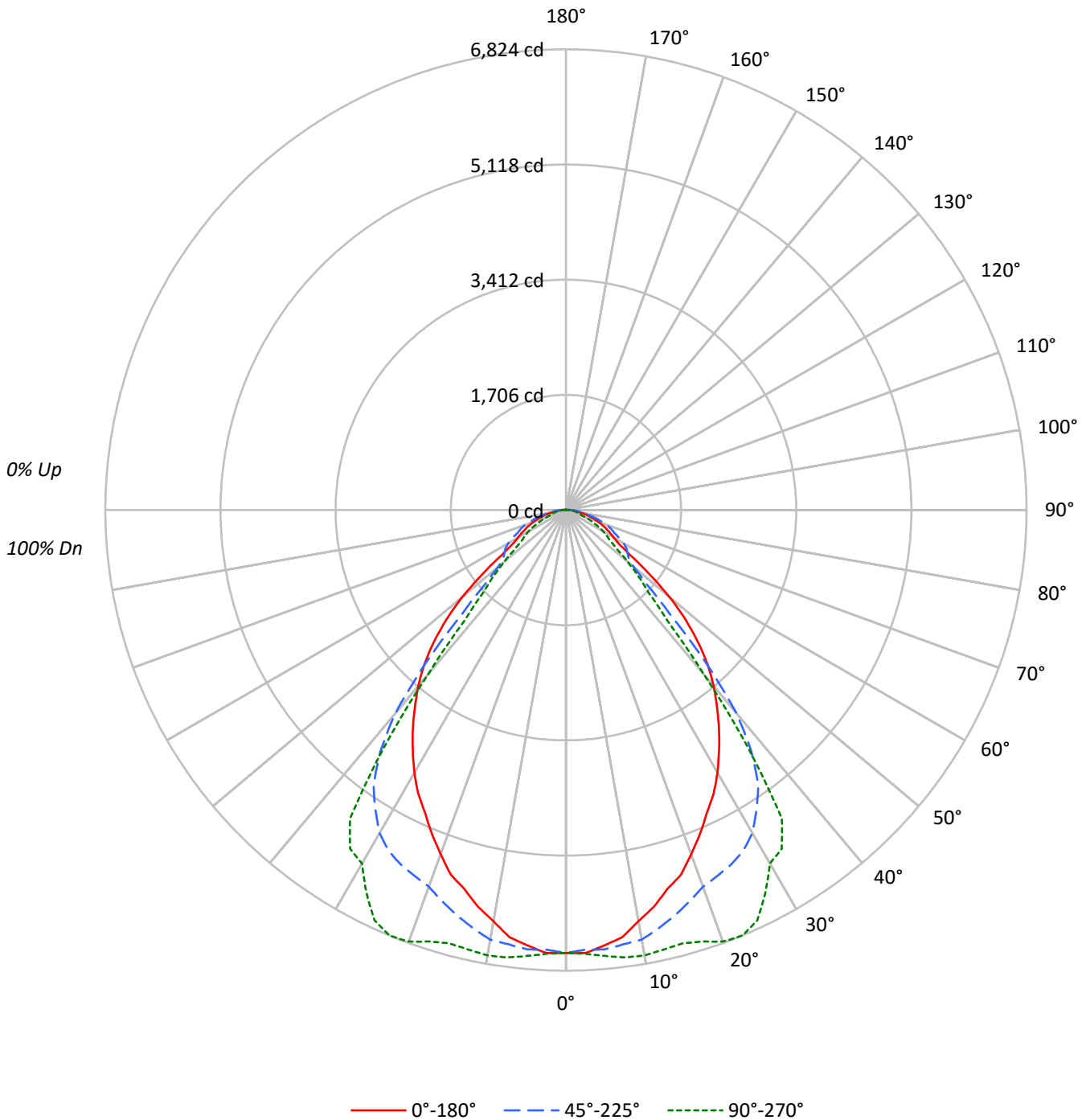
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12135.9 lumens
Efficiency: N/A
Efficacy: 136.4 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): 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

TEST NUMBER: P685805
CATALOG NUMBER: 8CZL-14-UNV-M-LVR-L850-CD-U

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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°	10593	10593	10593
5°	10494	10589	10747
10°	10139	10595	10982
15°	9712	10397	11111
20°	9320	10199	11688
25°	8806	10320	11948
30°	8370	10298	11270
35°	7793	9793	10989
40°	7174	8301	6697
45°	6321	4948	3969
50°	5017	3286	2995
55°	3248	3126	2273
60°	2652	3177	2088
65°	2526	2994	1706
70°	2399	3005	1349
75°	2279	2812	1254
80°	2108	2656	1408
85°	1886	3249	1727



TEST NUMBER: P685805
 CATALOG NUMBER: 8CZL-14-UNV-M-LVR-L850-CD-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	622.6	5.1
10°-20°	1765.9	14.6
20°-30°	2662.8	21.9
30°-40°	2942.3	24.2
40°-50°	1844.8	15.2
50°-60°	993.2	8.2
60°-70°	674.5	5.6
70°-80°	402.9	3.3
80°-90°	175.1	1.4
90°-100°	38.4	0.3
100°-110°	4.4	0.0
110°-120°	1.6	0.0
120°-130°	1.4	0.0
130°-140°	1.7	0.0
140°-150°	1.6	0.0
150°-160°	1.3	0.0
160°-170°	1.0	0.0
170°-180°	0.4	0.0
0°-30°	5051.3	41.6
0°-40°	7993.6	65.9
0°-60°	10831.7	89.3
0°-90°	12084.2	99.6
90°-120°	44.4	0.4
90°-150°	49.1	0.4
90°-180°	52.0	0.4
0°-180°	12135.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6560	6560	6560	6560	6560	
5°	6475	6486	6533	6610	6631	610
15°	5810	6014	6220	6521	6647	1640
25°	4943	5243	5793	6411	6707	2282
35°	3954	4418	4968	5345	5575	2467
45°	2768	3014	2167	1766	1738	2112
55°	1154	1207	1110	961	808	1121
65°	661	727	784	636	446	654
75°	365	406	451	370	201	385
85°	102	125	175	231	93	110
90°	3	38	89	148	27	7
95°	1	6	35	76	14	1
105°	1	2	3	6	3	1
115°	1	2	2	2	2	1
125°	1	2	2	2	2	1
135°	2	2	3	3	3	1
145°	2	3	3	3	3	1
155°	3	3	3	3	3	1
165°	3	3	3	3	3	1
175°	3	3	3	4	4	0
180°	4	4	4	4	4	



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CATALOG NUMBER: 8CZL-14-UNV-M-LVR-L850-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6560.5	6560.5	6560.5	6560.5	6560.5
2.5°	6569.0	6551.1	6517.7	6577.6	6578.5
5°	6474.9	6486.1	6533.1	6610.1	6630.6
7.5°	6383.4	6426.2	6489.5	6675.1	6684.5
10°	6184.1	6273.1	6462.1	6640.9	6698.2
12.5°	6018.1	6149.9	6344.9	6580.2	6669.1
15°	5810.3	6013.9	6220.0	6521.1	6646.9
17.5°	5664.8	5828.2	6080.6	6493.8	6699.9
20°	5424.4	5654.6	5936.0	6512.6	6802.6
22.5°	5190.9	5470.6	5863.3	6519.4	6824.0
25°	4942.8	5243.1	5793.1	6410.8	6706.8
27.5°	4737.5	4989.0	5688.8	6184.1	6398.0
30°	4489.4	4785.4	5523.7	5837.6	6044.7
32.5°	4222.5	4598.1	5255.9	5572.4	5948.8
35°	3953.9	4418.4	4968.5	5344.9	5575.0
37.5°	3673.3	4270.4	4516.8	4577.5	4420.1
40°	3403.9	4064.3	3938.5	3350.8	3177.2
42.5°	3109.6	3621.1	3071.9	2305.5	2227.6
45°	2768.3	3013.8	2166.9	1766.5	1738.3
47.5°	2404.7	2333.7	1616.0	1476.5	1460.3
50°	1997.5	1865.7	1308.0	1302.9	1192.5
52.5°	1556.9	1481.6	1172.8	1130.1	954.7
55°	1154.0	1207.0	1110.4	960.7	807.6
57.5°	923.9	1047.1	1066.8	839.2	722.0
60°	821.2	916.2	983.8	771.6	646.7
62.5°	736.5	811.8	881.1	716.0	557.8
65°	661.3	727.1	783.6	636.5	446.5
67.5°	581.7	650.1	719.4	546.6	379.8
70°	508.1	580.9	636.5	485.0	285.7
72.5°	432.0	507.3	532.1	405.5	228.4
75°	365.3	406.3	450.8	370.4	201.0
77.5°	295.1	330.2	348.2	339.6	177.1
80°	226.7	254.9	285.7	308.8	151.4
82.5°	166.0	186.5	228.4	272.0	121.5
85°	101.8	124.9	175.4	231.0	93.2
87.5°	45.3	74.4	129.2	190.8	59.9
90°	2.6	38.5	89.0	148.0	27.4
92.5°	0.9	17.1	58.2	109.5	18.8
95°	0.9	6.0	35.1	76.1	13.7
97.5°	0.9	2.6	19.7	48.8	8.6
100°	0.9	1.7	9.4	28.2	6.0
102.5°	0.9	1.7	4.3	13.7	4.3
105°	0.9	1.7	2.6	6.0	2.6
107.5°	0.9	1.7	1.7	2.6	1.7
110°	0.9	1.7	1.7	1.7	1.7



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 CATALOG NUMBER: 8CZL-14-UNV-M-LVR-L850-CD-U

CANDELA DISTRIBUTION (continued):

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

(END OF REPORT)