

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: P685807

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

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685807
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-L850-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH MEDIUM LENS @80 CRI and 5000K
Light Source: (1176) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

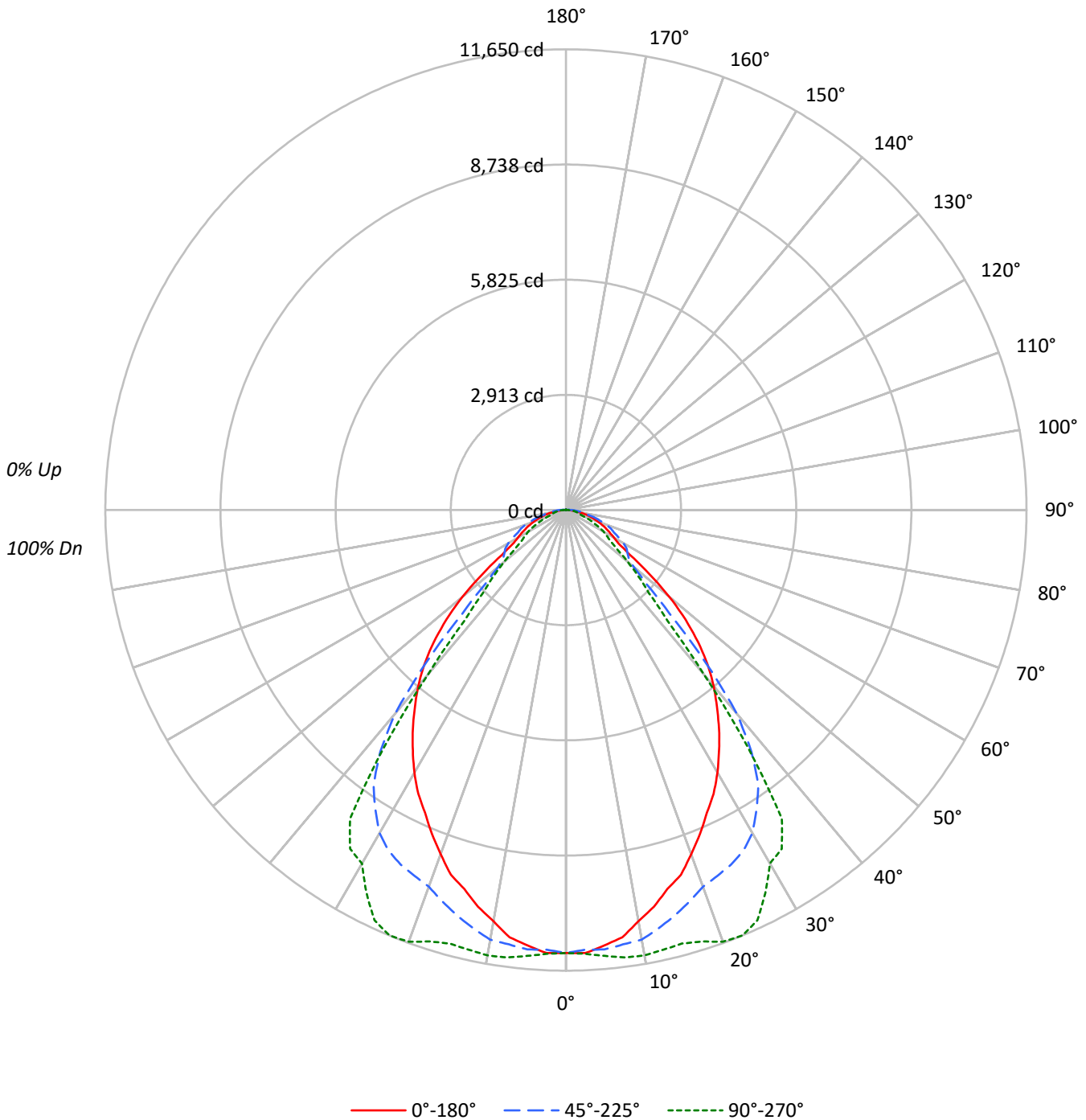
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20719.4 lumens
Efficiency: N/A
Efficacy: 134.5 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

TEST NUMBER: P685807
CATALOG NUMBER: 8CZL-24-UNV-M-LVR-L850-CD-U

Luminous Intensity Polar Plot





TEST NUMBER: P685807

CATALOG NUMBER: 8CZL-24-UNV-M-LVR-L850-CD-U

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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88	88	88
2	103	96	90	86	100	94	89	84	91	86	83	87	84	81	84	81	79	77	77	77
3	95	87	80	74	93	85	79	74	82	77	72	79	75	71	77	73	70	68	68	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	70	66	62	60	60	60
5	83	72	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54	54	54
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	49	49	49
7	72	60	53	47	70	59	52	47	58	51	47	57	51	46	55	50	46	44	44	44
8	68	56	48	43	66	55	48	43	54	47	42	52	47	42	51	46	42	40	40	40
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	42	39	37	37	37
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	35	34	34	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18084	18084	18084
5°	17917	18078	18348
10°	17310	18088	18749
15°	16581	17751	18969
20°	15913	17413	19955
25°	15034	17620	20399
30°	14290	17582	19240
35°	13306	16720	18761
40°	12249	14173	11433
45°	10792	8447	6777
50°	8566	5609	5114
55°	5546	5336	3881
60°	4528	5424	3565
65°	4313	5111	2913
70°	4095	5130	2303
75°	3890	4802	2141
80°	3598	4536	2404
85°	3220	5547	2949



TEST NUMBER: P685807
 CATALOG NUMBER: 8CZL-24-UNV-M-LVR-L850-CD-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1062.9	5.1
10°-20°	3014.8	14.6
20°-30°	4546.2	21.9
30°-40°	5023.4	24.2
40°-50°	3149.7	15.2
50°-60°	1695.8	8.2
60°-70°	1151.7	5.6
70°-80°	687.8	3.3
80°-90°	298.9	1.4
90°-100°	65.5	0.3
100°-110°	7.5	0.0
110°-120°	2.7	0.0
120°-130°	2.4	0.0
130°-140°	3.0	0.0
140°-150°	2.7	0.0
150°-160°	2.1	0.0
160°-170°	1.6	0.0
170°-180°	0.6	0.0
0°-30°	8623.9	41.6
0°-40°	13647.4	65.9
0°-60°	18492.8	89.3
0°-90°	20631.2	99.6
90°-120°	75.7	0.4
90°-150°	83.8	0.4
90°-180°	88.0	0.4
0°-180°	20719.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11201	11201	11201	11201	11201	
5°	11055	11074	11154	11285	11320	1042
15°	9920	10267	10619	11134	11348	2801
25°	8439	8952	9891	10945	11450	3896
35°	6750	7544	8483	9125	9518	4213
45°	4726	5145	3700	3016	2968	3605
55°	1970	2061	1896	1640	1379	1914
65°	1129	1241	1338	1087	762	1117
75°	624	694	770	632	343	657
85°	174	213	299	394	159	187
90°	4	66	152	253	47	12
95°	2	10	60	130	23	1
105°	2	3	4	10	4	2
115°	2	3	3	3	3	1
125°	2	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	



TEST NUMBER: P685807

CATALOG NUMBER: 8CZL-24-UNV-M-LVR-L850-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	11200.6	11200.6	11200.6	11200.6	11200.6
2.5°	11215.2	11184.6	11127.6	11229.8	11231.3
5°	11054.6	11073.6	11153.9	11285.3	11320.4
7.5°	10898.3	10971.3	11079.4	11396.3	11412.4
10°	10558.0	10709.9	11032.7	11337.9	11435.8
12.5°	10274.7	10499.6	10832.6	11234.2	11386.1
15°	9919.8	10267.4	10619.4	11133.5	11348.1
17.5°	9671.5	9950.4	10381.3	11086.7	11438.7
20°	9261.1	9654.0	10134.5	11118.8	11614.0
22.5°	8862.4	9340.0	10010.3	11130.5	11650.5
25°	8438.8	8951.5	9890.6	10945.0	11450.4
27.5°	8088.3	8517.7	9712.4	10558.0	10923.1
30°	7664.7	8170.1	9430.5	9966.5	10320.0
32.5°	7209.1	7850.2	8973.4	9513.8	10156.4
35°	6750.5	7543.5	8482.6	9125.3	9518.1
37.5°	6271.4	7290.9	7711.5	7815.2	7546.4
40°	5811.4	6938.9	6724.2	5720.8	5424.3
42.5°	5308.9	6182.3	5244.7	3936.1	3803.2
45°	4726.2	5145.4	3699.5	3015.9	2967.8
47.5°	4105.5	3984.3	2758.9	2520.8	2493.1
50°	3410.3	3185.4	2233.1	2224.4	2035.9
52.5°	2658.1	2529.6	2002.4	1929.3	1629.9
55°	1970.2	2060.8	1895.7	1640.2	1378.7
57.5°	1577.3	1787.7	1821.3	1432.8	1232.7
60°	1402.1	1564.2	1679.6	1317.4	1104.1
62.5°	1257.5	1386.0	1504.3	1222.4	952.3
65°	1129.0	1241.4	1337.8	1086.6	762.4
67.5°	993.1	1110.0	1228.3	933.3	648.5
70°	867.5	991.7	1086.6	828.1	487.8
72.5°	737.6	866.1	908.4	692.3	390.0
75°	623.6	693.7	769.7	632.4	343.2
77.5°	503.9	563.8	594.4	579.8	302.3
80°	387.0	435.2	487.8	527.2	258.5
82.5°	283.3	318.4	390.0	464.4	207.4
85°	173.8	213.2	299.4	394.3	159.2
87.5°	77.4	127.1	220.5	325.7	102.2
90°	4.4	65.7	151.9	252.7	46.7
92.5°	1.5	29.2	99.3	186.9	32.1
95°	1.5	10.2	59.9	130.0	23.4
97.5°	1.5	4.4	33.6	83.2	14.6
100°	1.5	2.9	16.1	48.2	10.2
102.5°	1.5	2.9	7.3	23.4	7.3
105°	1.5	2.9	4.4	10.2	4.4
107.5°	1.5	2.9	2.9	4.4	2.9
110°	1.5	2.9	2.9	2.9	2.9



TEST NUMBER: P685807
CATALOG NUMBER: 8CZL-24-UNV-M-LVR-L850-CD-U

CANDELA DISTRIBUTION (continued):

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

(END OF REPORT)