

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: P685665

Luminaire Tested: **8CZL-14-UNV-LVR-L835-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685665
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-14-UNV-LVR-L835-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL @80 CRI and 3500K
Light Source: (784) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

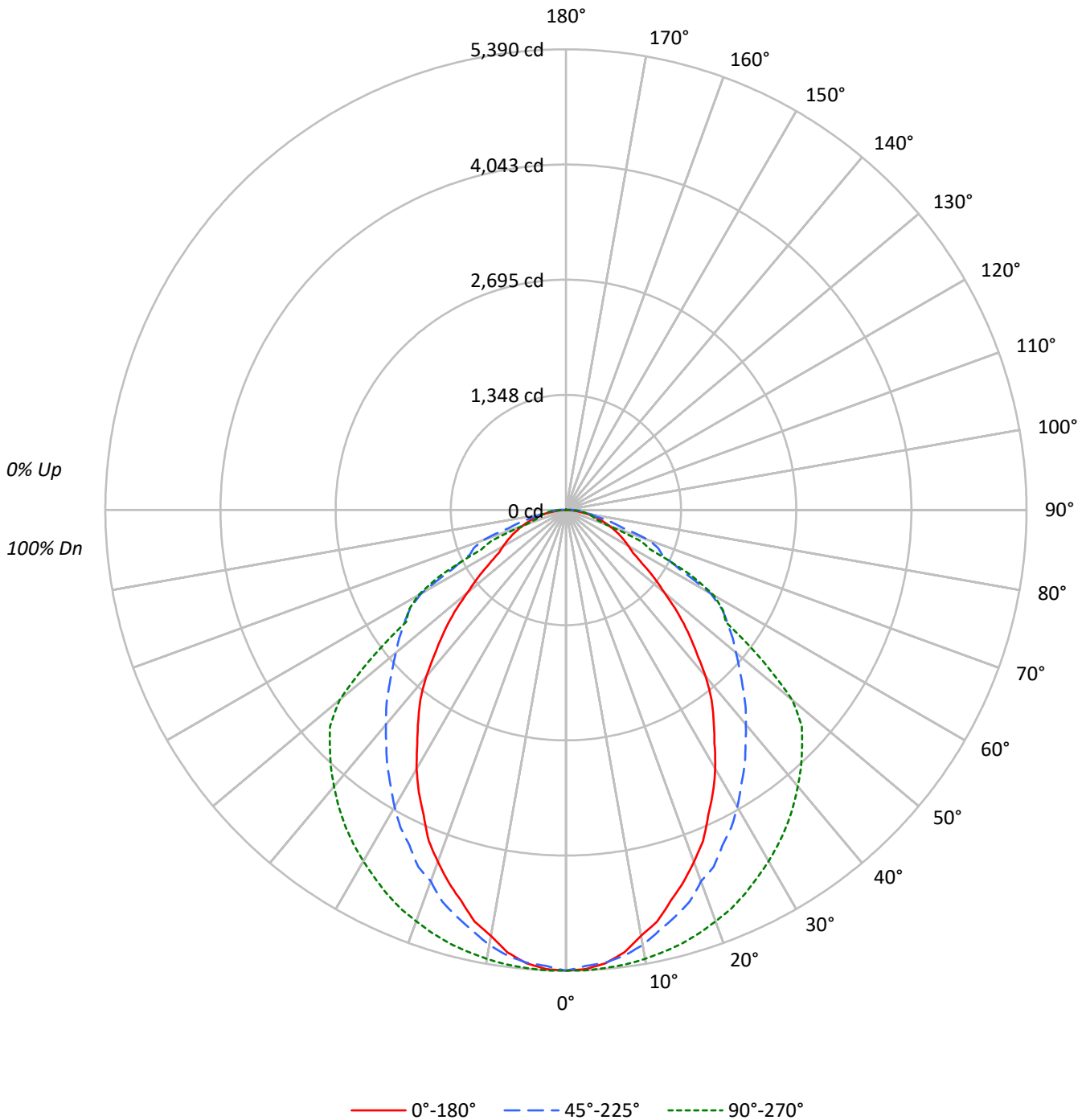
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12205.1 lumens
Efficiency: N/A
Efficacy: 137.1 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.31 / 1.26
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 (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

TEST NUMBER: P685665
CATALOG NUMBER: 8CZL-14-UNV-LVR-L835-CD-U

Luminous Intensity Polar Plot





TEST NUMBER: P685665

CATALOG NUMBER: 8CZL-14-UNV-LVR-L835-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	88	85
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37
8	63	50	42	36	61	49	42	36	48	41	36	47	40	36	46	40	35	34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	29	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8702	8702	8702
5°	8626	8614	8717
10°	8291	8474	8742
15°	7914	8236	8778
20°	7526	7944	8798
25°	7019	7715	8827
30°	6517	7478	8842
35°	5941	7185	8882
40°	5359	6905	8898
45°	4610	6683	8921
50°	3768	6526	8687
55°	3068	6500	6425
60°	2735	6319	6446
65°	2645	4742	4157
70°	2541	4860	2363
75°	2449	3425	2109
80°	2233	2786	2513
85°	2001	3474	3133



TEST NUMBER: P685665
 CATALOG NUMBER: 8CZL-14-UNV-LVR-L835-CD-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	504.8	4.1
10°-20°	1399.4	11.5
20°-30°	2024.6	16.6
30°-40°	2310.8	18.9
40°-50°	2270.6	18.6
50°-60°	1811.1	14.8
60°-70°	1140.8	9.3
70°-80°	505.4	4.1
80°-90°	193.8	1.6
90°-100°	38.4	0.3
100°-110°	2.5	0.0
110°-120°	0.3	0.0
120°-130°	0.4	0.0
130°-140°	0.6	0.0
140°-150°	0.5	0.0
150°-160°	0.4	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	3928.8	32.2
0°-40°	6239.7	51.1
0°-60°	10321.4	84.6
0°-90°	12161.3	99.6
90°-120°	41.3	0.3
90°-150°	42.7	0.4
90°-180°	44.0	0.4
0°-180°	12205.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5389	5389	5389	5389	5389	
5°	5322	5334	5315	5359	5378	500
15°	4735	4782	4927	5158	5251	1333
25°	3940	4067	4331	4727	4955	1816
35°	3014	3196	3645	4182	4506	1884
45°	2019	2313	2927	3582	3907	1551
55°	1090	1476	2309	2490	2282	1002
65°	692	942	1241	1322	1088	686
75°	392	454	549	416	338	411
85°	108	131	188	242	169	114
90°	1	45	99	144	28	6
95°	1	7	41	70	9	1
105°	1	1	1	2	0	1
115°	1	1	0	0	0	1
125°	1	2	0	0	0	1
135°	1	2	1	0	0	1
145°	2	2	1	0	0	1
155°	2	2	1	0	0	1
165°	2	2	2	1	0	1
175°	2	2	2	1	1	0
180°	2	2	2	2	2	



TEST NUMBER: P685665

CATALOG NUMBER: 8CZL-14-UNV-LVR-L835-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5389.4	5389.4	5389.4	5389.4	5389.4
2.5°	5375.1	5371.8	5339.1	5385.2	5390.2
5°	5322.4	5334.1	5314.9	5359.2	5378.5
7.5°	5221.1	5233.7	5256.3	5337.5	5360.9
10°	5057.1	5088.9	5168.4	5282.2	5332.4
12.5°	4931.5	4970.9	5042.0	5235.4	5293.1
15°	4734.8	4781.7	4927.3	5158.4	5251.3
17.5°	4567.4	4652.8	4807.7	5061.3	5191.0
20°	4380.0	4448.6	4623.5	4965.8	5120.7
22.5°	4192.5	4279.5	4518.1	4838.6	5049.5
25°	3939.7	4066.9	4330.6	4727.3	4955.0
27.5°	3725.4	3886.1	4189.1	4595.9	4849.5
30°	3495.3	3620.0	4010.8	4462.0	4742.4
32.5°	3235.8	3431.6	3818.3	4308.8	4630.2
35°	3014.0	3196.5	3645.1	4182.4	4506.3
37.5°	2799.7	2971.3	3453.4	4039.3	4369.1
40°	2542.8	2768.8	3276.0	3876.1	4221.8
42.5°	2258.2	2535.2	3111.1	3722.1	4071.9
45°	2018.8	2312.6	2926.9	3582.3	3907.1
47.5°	1770.2	2079.9	2754.5	3412.4	3743.8
50°	1499.9	1876.5	2598.0	3255.0	3458.4
52.5°	1302.4	1664.8	2457.4	2970.5	2915.2
55°	1089.8	1475.6	2309.2	2490.0	2282.5
57.5°	928.2	1304.9	2170.3	1955.2	2178.7
60°	847.0	1168.4	1956.9	1861.5	1996.2
62.5°	770.9	1048.7	1496.5	1746.0	1642.2
65°	692.2	942.4	1241.3	1322.4	1088.1
67.5°	616.0	850.4	1170.1	987.6	947.5
70°	538.2	779.2	1029.5	842.0	500.5
72.5°	464.5	697.2	703.9	466.2	371.6
75°	392.5	453.6	549.1	416.0	338.1
77.5°	313.9	389.2	367.4	372.5	306.3
80°	240.2	267.8	299.6	333.1	270.3
82.5°	169.9	199.2	242.7	291.3	221.8
85°	108.0	131.4	187.5	241.9	169.1
87.5°	42.7	82.9	139.8	195.0	99.6
90°	0.8	45.2	98.8	144.0	27.6
92.5°	0.8	20.9	66.1	105.5	14.2
95°	0.8	6.7	41.0	70.3	9.2
97.5°	0.8	2.5	21.8	43.5	5.0
100°	0.8	0.8	9.2	23.4	2.5
102.5°	0.8	0.8	3.3	9.2	0.8
105°	0.8	0.8	0.8	2.5	0.0
107.5°	0.8	0.8	0.0	0.0	0.0
110°	0.8	0.8	0.0	0.0	0.0



TEST NUMBER: P685665
CATALOG NUMBER: 8CZL-14-UNV-LVR-L835-CD-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.8	0.8	0.0	0.0	0.0
115°	0.8	0.8	0.0	0.0	0.0
117.5°	0.8	0.8	0.0	0.0	0.0
120°	0.8	0.8	0.0	0.0	0.0
122.5°	0.8	0.8	0.0	0.0	0.0
125°	0.8	1.7	0.0	0.0	0.0
127.5°	0.8	0.8	0.0	0.0	0.0
130°	0.8	1.7	0.8	0.0	0.0
132.5°	0.8	1.7	0.8	0.0	0.0
135°	0.8	1.7	0.8	0.0	0.0
137.5°	0.8	1.7	0.8	0.0	0.0
140°	1.7	1.7	0.8	0.0	0.0
142.5°	1.7	1.7	0.8	0.0	0.0
145°	1.7	1.7	0.8	0.0	0.0
147.5°	1.7	1.7	0.8	0.0	0.0
150°	1.7	1.7	0.8	0.0	0.0
152.5°	1.7	1.7	0.8	0.0	0.0
155°	1.7	1.7	0.8	0.0	0.0
157.5°	1.7	2.5	0.8	0.0	0.0
160°	2.5	2.5	0.8	0.0	0.0
162.5°	2.5	2.5	1.7	0.8	0.0
165°	2.5	2.5	1.7	0.8	0.0
167.5°	2.5	2.5	1.7	0.8	0.0
170°	2.5	2.5	1.7	0.8	0.8
172.5°	2.5	2.5	1.7	0.8	0.8
175°	2.5	2.5	1.7	0.8	0.8
177.5°	2.5	2.5	1.7	0.8	0.8
180°	1.7	1.7	1.7	1.7	1.7

(END OF REPORT)