

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: P685696

Luminaire Tested: **8CZL-18-UNV-LVR-L935-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685696
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-18-UNV-LVR-L935-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL @90 CRI and 3500K
Light Source: (1176) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

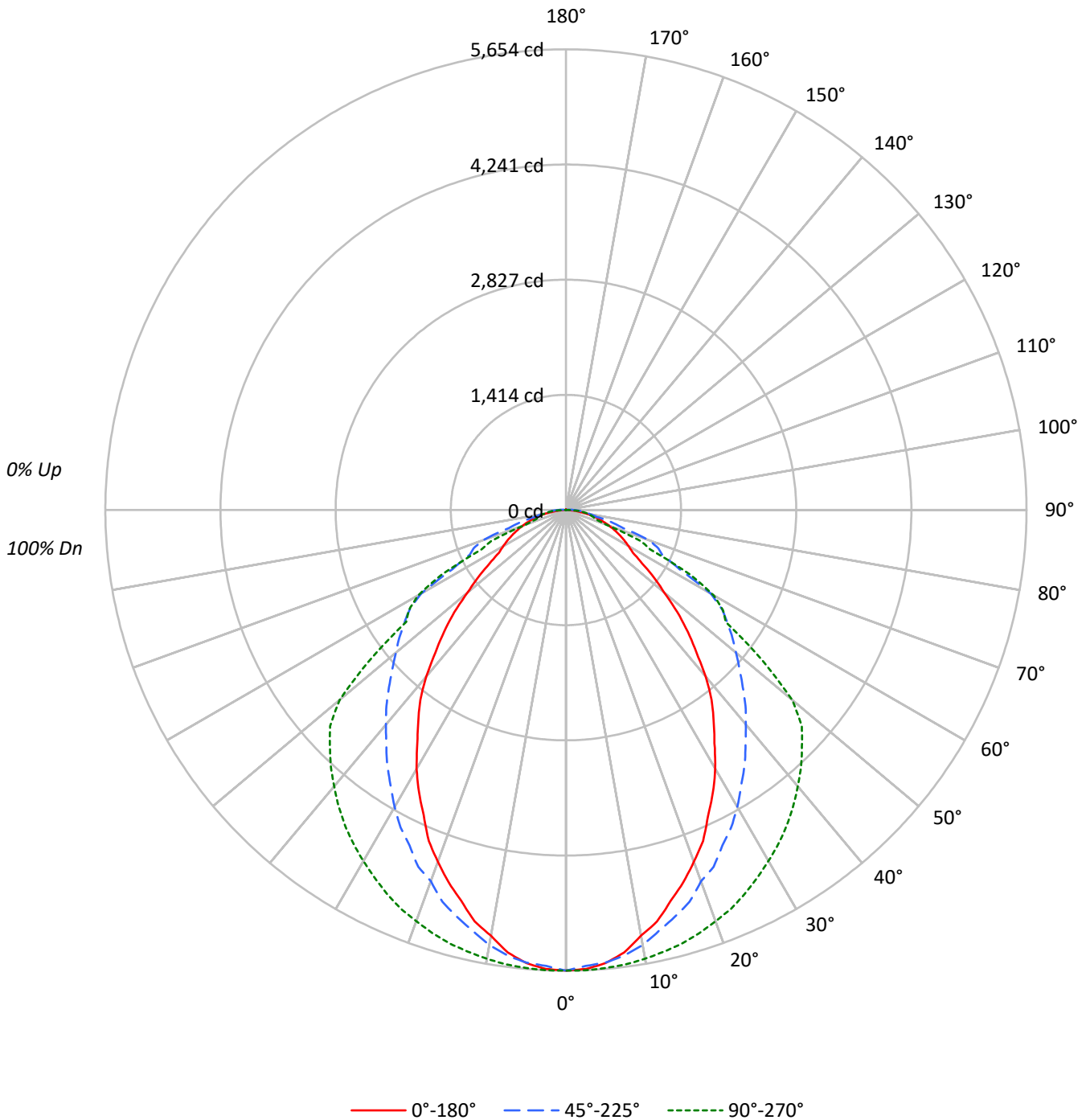
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12801.3 lumens
Efficiency: N/A
Efficacy: 117.4 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): 109
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: P685696
CATALOG NUMBER: 8CZL-18-UNV-LVR-L935-CD-U

Luminous Intensity Polar Plot





TEST NUMBER: P685696
 CATALOG NUMBER: 8CZL-18-UNV-LVR-L935-CD-U

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9127	9127	9127
5°	9048	9035	9143
10°	8696	8887	9170
15°	8301	8639	9206
20°	7893	8332	9228
25°	7361	8092	9258
30°	6835	7843	9273
35°	6231	7536	9316
40°	5621	7242	9333
45°	4835	7010	9357
50°	3951	6845	9111
55°	3217	6818	6739
60°	2869	6628	6761
65°	2774	4974	4360
70°	2665	5097	2478
75°	2568	3593	2213
80°	2342	2922	2637
85°	2097	3642	3285



TEST NUMBER: P685696
 CATALOG NUMBER: 8CZL-18-UNV-LVR-L935-CD-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	529.5	4.1
10°-20°	1467.8	11.5
20°-30°	2123.5	16.6
30°-40°	2423.7	18.9
40°-50°	2381.5	18.6
50°-60°	1899.6	14.8
60°-70°	1196.5	9.3
70°-80°	530.1	4.1
80°-90°	203.3	1.6
90°-100°	40.3	0.3
100°-110°	2.7	0.0
110°-120°	0.3	0.0
120°-130°	0.4	0.0
130°-140°	0.6	0.0
140°-150°	0.6	0.0
150°-160°	0.5	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	4120.7	32.2
0°-40°	6544.4	51.1
0°-60°	10825.5	84.6
0°-90°	12755.3	99.6
90°-120°	43.3	0.3
90°-150°	44.9	0.4
90°-180°	46.0	0.4
0°-180°	12801.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5653	5653	5653	5653	5653	
5°	5582	5595	5574	5621	5641	524
15°	4966	5015	5168	5410	5508	1398
25°	4132	4266	4542	4958	5197	1904
35°	3161	3353	3823	4387	4726	1976
45°	2117	2426	3070	3757	4098	1627
55°	1143	1548	2422	2612	2394	1051
65°	726	988	1302	1387	1141	719
75°	412	476	576	436	355	432
85°	113	138	197	254	177	120
90°	1	47	104	151	29	7
95°	1	7	43	74	10	1
105°	1	1	1	3	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°	3	3	2	1	0	1
175°	3	3	2	1	1	0
180°	2	2	2	2	2	

TEST NUMBER: P685696

CATALOG NUMBER: 8CZL-18-UNV-LVR-L935-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5652.6	5652.6	5652.6	5652.6	5652.6
2.5°	5637.6	5634.1	5599.9	5648.2	5653.5
5°	5582.3	5594.6	5574.4	5621.0	5641.2
7.5°	5476.1	5489.3	5513.0	5598.1	5622.7
10°	5304.1	5337.4	5420.8	5540.2	5592.9
12.5°	5172.4	5213.6	5288.3	5491.0	5551.6
15°	4966.1	5015.2	5168.0	5410.3	5507.7
17.5°	4790.5	4880.1	5042.5	5308.5	5444.5
20°	4593.9	4665.9	4849.3	5208.4	5370.8
22.5°	4397.2	4488.5	4738.7	5074.9	5296.2
25°	4132.1	4265.5	4542.1	4958.2	5197.0
27.5°	3907.4	4075.9	4393.7	4820.4	5086.4
30°	3666.0	3796.8	4206.7	4679.9	4974.0
32.5°	3393.8	3599.2	4004.8	4519.2	4856.3
35°	3161.2	3352.6	3823.1	4386.7	4726.4
37.5°	2936.5	3116.4	3622.1	4236.6	4582.5
40°	2667.0	2904.0	3436.0	4065.4	4428.0
42.5°	2368.5	2659.1	3263.0	3903.9	4270.8
45°	2117.4	2425.5	3069.9	3757.3	4097.9
47.5°	1856.7	2181.5	2889.1	3579.1	3926.7
50°	1573.1	1968.2	2724.9	3414.0	3627.3
52.5°	1366.0	1746.1	2577.4	3115.5	3057.6
55°	1143.0	1547.7	2422.0	2611.6	2393.9
57.5°	973.6	1368.6	2276.3	2050.7	2285.1
60°	888.4	1225.5	2052.4	1952.4	2093.7
62.5°	808.5	1100.0	1569.6	1831.2	1722.4
65°	726.0	988.5	1301.9	1387.0	1141.2
67.5°	646.1	891.9	1227.3	1035.9	993.7
70°	564.5	817.3	1079.8	883.1	525.0
72.5°	487.2	731.3	738.3	489.0	389.8
75°	411.7	475.8	575.9	436.3	354.7
77.5°	329.2	408.2	385.4	390.6	321.3
80°	251.9	280.9	314.3	349.4	283.6
82.5°	178.2	208.9	254.6	305.5	232.6
85°	113.2	137.8	196.6	253.7	177.3
87.5°	44.8	86.9	146.6	204.5	104.5
90°	0.9	47.4	103.6	151.0	29.0
92.5°	0.9	21.9	69.4	110.6	14.9
95°	0.9	7.0	43.0	73.7	9.7
97.5°	0.9	2.6	22.8	45.6	5.3
100°	0.9	0.9	9.7	24.6	2.6
102.5°	0.9	0.9	3.5	9.7	0.9
105°	0.9	0.9	0.9	2.6	0.0
107.5°	0.9	0.9	0.0	0.0	0.0
110°	0.9	0.9	0.0	0.0	0.0



TEST NUMBER: P685696
 CATALOG NUMBER: 8CZL-18-UNV-LVR-L935-CD-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	0.9	0.0	0.0	0.0
115°	0.9	0.9	0.0	0.0	0.0
117.5°	0.9	0.9	0.0	0.0	0.0
120°	0.9	0.9	0.0	0.0	0.0
122.5°	0.9	0.9	0.0	0.0	0.0
125°	0.9	1.8	0.0	0.0	0.0
127.5°	0.9	0.9	0.0	0.0	0.0
130°	0.9	1.8	0.9	0.0	0.0
132.5°	0.9	1.8	0.9	0.0	0.0
135°	0.9	1.8	0.9	0.0	0.0
137.5°	0.9	1.8	0.9	0.0	0.0
140°	1.8	1.8	0.9	0.0	0.0
142.5°	1.8	1.8	0.9	0.0	0.0
145°	1.8	1.8	0.9	0.0	0.0
147.5°	1.8	1.8	0.9	0.0	0.0
150°	1.8	1.8	0.9	0.0	0.0
152.5°	1.8	1.8	0.9	0.0	0.0
155°	1.8	1.8	0.9	0.0	0.0
157.5°	1.8	2.6	0.9	0.0	0.0
160°	2.6	2.6	0.9	0.0	0.0
162.5°	2.6	2.6	1.8	0.9	0.0
165°	2.6	2.6	1.8	0.9	0.0
167.5°	2.6	2.6	1.8	0.9	0.0
170°	2.6	2.6	1.8	0.9	0.9
172.5°	2.6	2.6	1.8	0.9	0.9
175°	2.6	2.6	1.8	0.9	0.9
177.5°	2.6	2.6	1.8	0.9	0.9
180°	1.8	1.8	1.8	1.8	1.8

(END OF REPORT)