

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: P685948

Luminaire Tested: **8CZL-32-UNV-LVRF-L940-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685948  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-32-UNV-LVRF-L940-CD-U  
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH FROSTED LAY-IN @90 CRI and 4000K  
Light Source: (1176) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

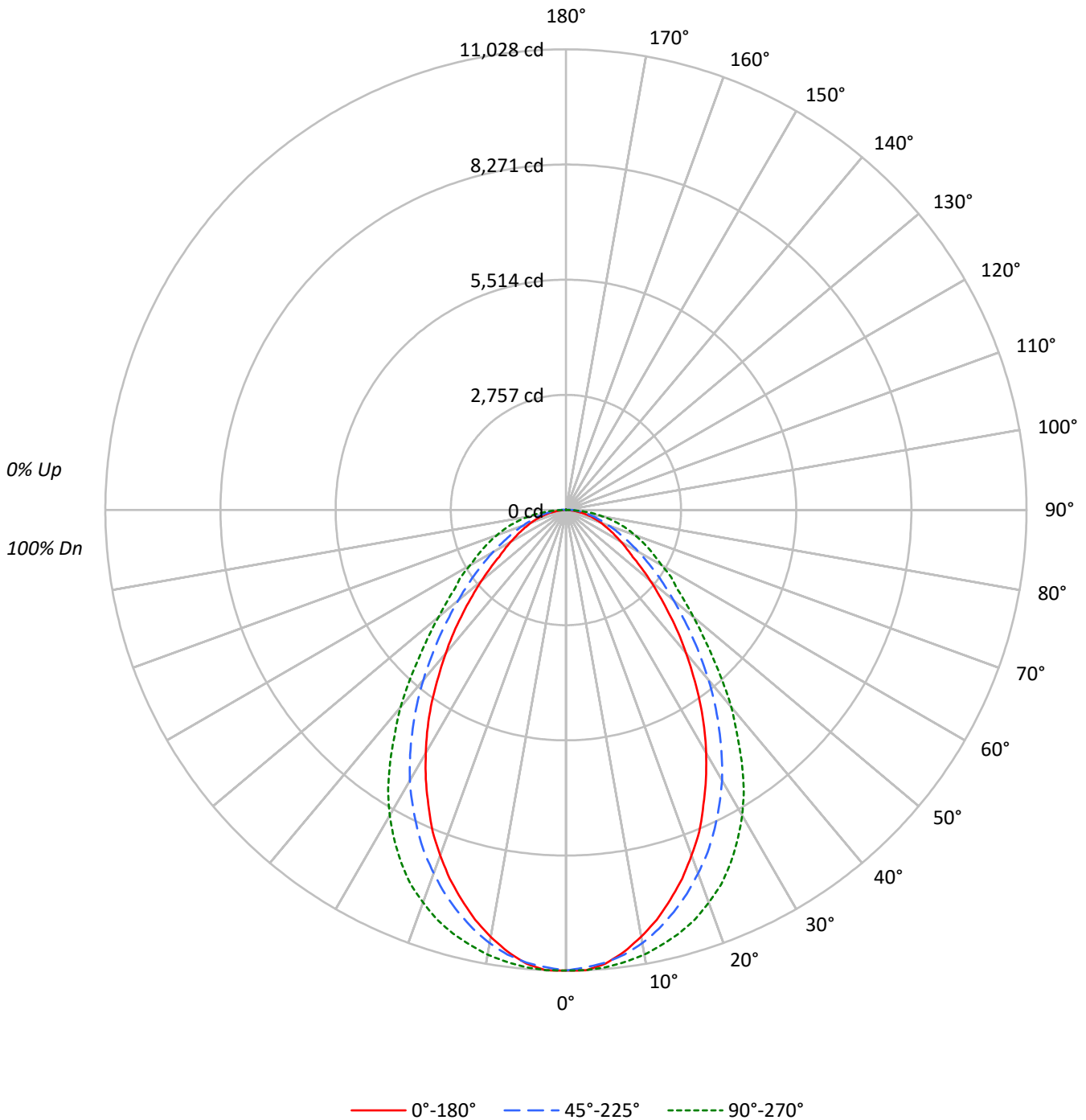
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20334.6 lumens  
Efficiency: N/A  
Efficacy: 98.7 lumens/watt  
Spacing Criteria (0/90/45): 0.97 / 1.15 / 1.12  
Luminous Opening: Rectangular (W 0.83' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 206  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86	86	86
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	74	74	74
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	65	65	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	57
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	51	51	51
6	75	63	55	49	73	62	54	48	60	53	48	58	52	48	57	51	47	45	45	45
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41	41	41
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37	37	37
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34	34	34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31	31	31

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	17798	17798	17798
5°	17668	17627	17805
10°	17008	17260	17717
15°	16138	16657	17531
20°	15113	15897	17182
25°	13878	14998	16613
30°	12509	13938	15731
35°	11017	12606	14449
40°	9430	11193	12993
45°	7944	9756	11316
50°	6634	8456	10004
55°	5490	7430	9071
60°	4947	6513	8554
65°	4497	5732	8365
70°	4188	5146	8301
75°	3884	4803	8470
80°	3520	4758	8484
85°	3023	5576	8394



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1031.4	5.1
10°-20°	2818.8	13.9
20°-30°	3894.7	19.2
30°-40°	4006.5	19.7
40°-50°	3284.6	16.2
50°-60°	2356.9	11.6
60°-70°	1585.3	7.8
70°-80°	925.3	4.6
80°-90°	356.5	1.8
90°-100°	61.8	0.3
100°-110°	5.2	0.0
110°-120°	1.0	0.0
120°-130°	0.9	0.0
130°-140°	1.3	0.0
140°-150°	1.6	0.0
150°-160°	1.4	0.0
160°-170°	1.1	0.0
170°-180°	0.4	0.0
0°-30°	7744.9	38.1
0°-40°	11751.4	57.8
0°-60°	17392.9	85.5
0°-90°	20260.0	99.6
90°-120°	68.0	0.3
90°-150°	71.8	0.4
90°-180°	75.0	0.4
0°-180°	20334.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	11023	11023	11023	11023	11023	
5°	10901	10909	10876	10977	10985	1023
15°	9654	9753	9965	10352	10488	2708
25°	7790	7972	8419	9005	9325	3575
35°	5589	5848	6396	6994	7330	3483
45°	3479	3750	4273	4693	4956	2700
55°	1950	2183	2639	3001	3222	1795
65°	1177	1247	1500	1926	2190	1173
75°	623	645	770	1069	1358	661
85°	163	203	301	450	453	177
90°	2	68	154	234	49	10
95°	2	11	65	112	21	0
105°	0	2	3	6	3	0
115°	2	2	2	0	0	1
125°	2	2	2	0	0	1
135°	2	3	2	2	0	1
145°	3	3	3	2	2	2
155°	3	5	3	2	2	1
165°	5	5	5	3	2	1
175°	5	6	5	3	3	0
180°	5	5	5	5	5	

TEST NUMBER: P685948

CATALOG NUMBER: 8CZL-32-UNV-LVRF-L940-CD-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	11023.3	11023.3	11023.3	11023.3	11023.3
2.5°	11028.1	11018.5	10956.8	11028.1	11024.9
5°	10901.3	10909.2	10876.0	10977.4	10985.3
7.5°	10665.3	10696.9	10733.4	10882.3	10909.2
10°	10373.7	10421.3	10527.4	10749.2	10806.3
12.5°	10045.8	10098.1	10270.8	10576.5	10655.7
15°	9654.5	9752.7	9965.0	10351.6	10487.8
17.5°	9250.5	9370.9	9633.9	10091.8	10275.5
20°	8795.8	8916.2	9252.1	9762.2	9999.9
22.5°	8339.6	8456.8	8867.1	9410.5	9706.8
25°	7789.8	7972.0	8418.8	9004.9	9325.0
27.5°	7263.8	7457.1	7954.6	8583.5	8902.0
30°	6709.4	6935.9	7476.1	8076.6	8437.8
32.5°	6159.6	6389.3	6940.7	7566.4	7924.5
35°	5589.3	5847.5	6395.7	6994.5	7330.4
37.5°	5011.0	5293.0	5857.0	6446.4	6717.3
40°	4474.0	4751.2	5310.4	5838.0	6164.4
42.5°	3978.1	4250.6	4768.6	5247.1	5540.2
45°	3479.0	3749.9	4272.8	4692.6	4955.6
47.5°	3032.3	3309.5	3795.9	4220.5	4440.7
50°	2641.0	2892.9	3366.6	3751.5	3982.8
52.5°	2282.9	2512.6	2981.6	3355.5	3578.8
55°	1950.2	2183.1	2639.4	3000.6	3222.4
57.5°	1726.8	1893.2	2303.5	2704.3	2989.5
60°	1532.0	1635.0	2016.8	2492.0	2648.9
62.5°	1333.9	1427.4	1741.1	2159.3	2403.3
65°	1177.1	1246.8	1500.3	1926.5	2189.5
67.5°	1021.8	1074.1	1291.2	1701.5	1967.7
70°	887.2	920.5	1090.0	1479.7	1758.5
72.5°	758.9	776.3	928.4	1276.9	1554.2
75°	622.6	644.8	770.0	1069.4	1357.7
77.5°	492.7	524.4	635.3	891.9	1132.7
80°	378.6	404.0	511.7	733.5	912.5
82.5°	263.0	297.8	399.2	579.8	698.7
85°	163.2	202.8	301.0	449.9	453.1
87.5°	68.1	126.7	220.2	332.7	231.3
90°	1.6	68.1	153.7	234.5	49.1
92.5°	0.0	31.7	104.6	167.9	28.5
95°	1.6	11.1	65.0	112.5	20.6
97.5°	0.0	3.2	34.9	71.3	12.7
100°	0.0	1.6	14.3	39.6	7.9
102.5°	0.0	1.6	6.3	17.4	4.8
105°	0.0	1.6	3.2	6.3	3.2
107.5°	0.0	1.6	1.6	1.6	1.6
110°	1.6	1.6	1.6	1.6	0.0



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 CATALOG NUMBER: 8CZL-32-UNV-LVRF-L940-CD-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	1.6	1.6	0.0	0.0
115°	1.6	1.6	1.6	0.0	0.0
117.5°	1.6	1.6	1.6	0.0	0.0
120°	1.6	1.6	1.6	0.0	0.0
122.5°	1.6	1.6	1.6	0.0	0.0
125°	1.6	1.6	1.6	0.0	0.0
127.5°	1.6	1.6	1.6	0.0	0.0
130°	1.6	1.6	1.6	0.0	0.0
132.5°	1.6	3.2	1.6	1.6	0.0
135°	1.6	3.2	1.6	1.6	0.0
137.5°	1.6	3.2	1.6	1.6	0.0
140°	1.6	3.2	1.6	1.6	1.6
142.5°	3.2	3.2	3.2	1.6	1.6
145°	3.2	3.2	3.2	1.6	1.6
147.5°	3.2	3.2	3.2	1.6	1.6
150°	3.2	3.2	3.2	1.6	1.6
152.5°	3.2	4.8	3.2	1.6	1.6
155°	3.2	4.8	3.2	1.6	1.6
157.5°	3.2	4.8	3.2	1.6	1.6
160°	3.2	4.8	3.2	1.6	1.6
162.5°	4.8	4.8	3.2	3.2	1.6
165°	4.8	4.8	4.8	3.2	1.6
167.5°	4.8	4.8	4.8	3.2	1.6
170°	4.8	4.8	4.8	3.2	3.2
172.5°	4.8	4.8	4.8	3.2	3.2
175°	4.8	6.3	4.8	3.2	3.2
177.5°	4.8	6.3	4.8	3.2	3.2
180°	4.8	4.8	4.8	4.8	4.8

(END OF REPORT)