

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: P685664

Luminaire Tested: **8CZL-10-UNV-LVR-L835-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685664
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-10-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

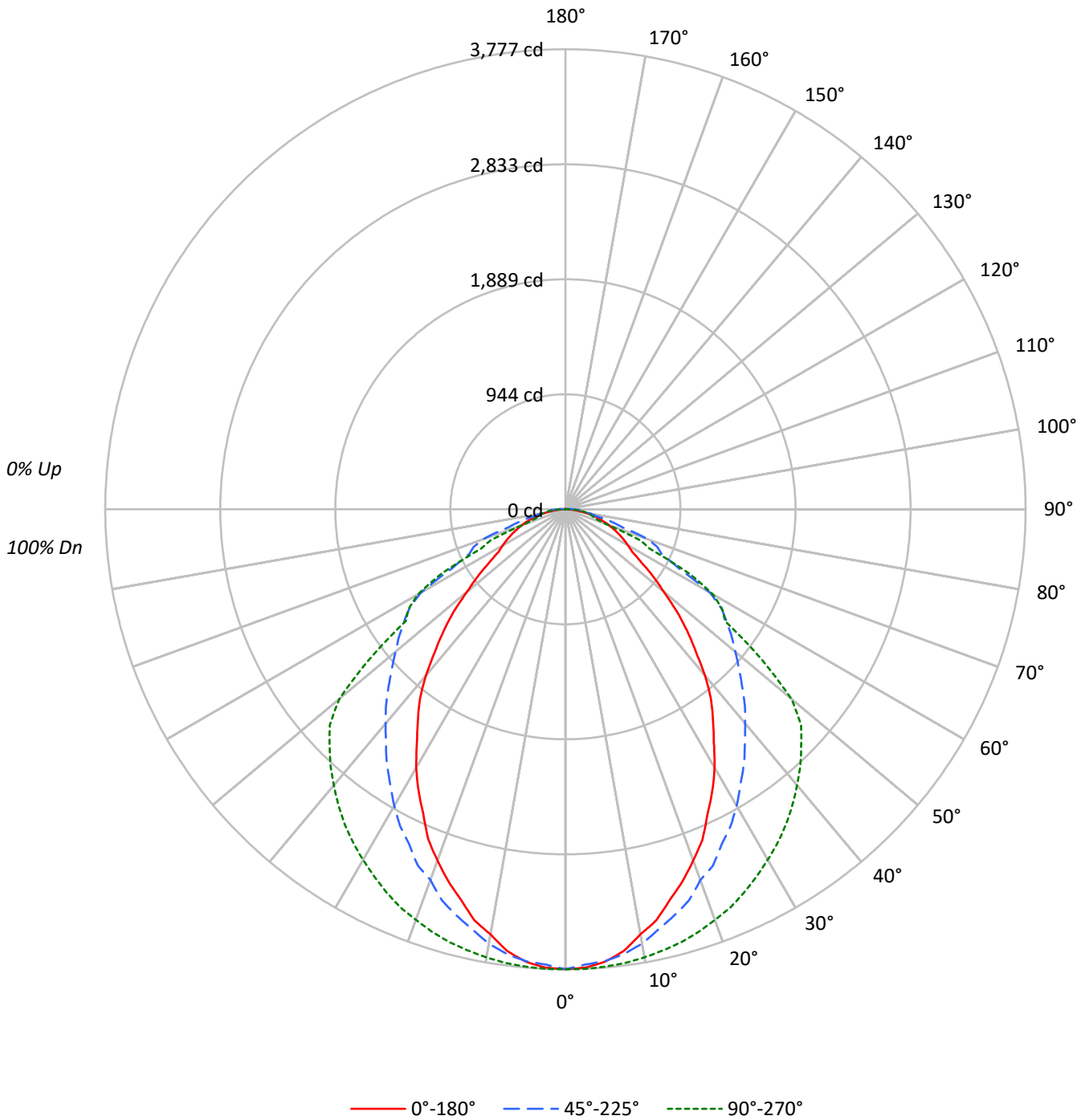
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8551.5 lumens
Efficiency: N/A
Efficacy: 135.7 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): 63
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

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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	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°	6097	6097	6097
5°	6044	6035	6108
10°	5809	5937	6125
15°	5545	5771	6150
20°	5273	5566	6164
25°	4917	5405	6185
30°	4566	5239	6195
35°	4162	5034	6223
40°	3755	4838	6234
45°	3230	4683	6251
50°	2640	4572	6086
55°	2149	4554	4502
60°	1917	4428	4516
65°	1853	3323	2913
70°	1780	3405	1656
75°	1716	2400	1478
80°	1565	1952	1761
85°	1401	2434	2195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	353.7	4.1
10°-20°	980.5	11.5
20°-30°	1418.5	16.6
30°-40°	1619.0	18.9
40°-50°	1590.9	18.6
50°-60°	1268.9	14.8
60°-70°	799.3	9.3
70°-80°	354.1	4.1
80°-90°	135.8	1.6
90°-100°	26.9	0.3
100°-110°	1.8	0.0
110°-120°	0.2	0.0
120°-130°	0.3	0.0
130°-140°	0.4	0.0
140°-150°	0.4	0.0
150°-160°	0.3	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	2752.7	32.2
0°-40°	4371.7	51.1
0°-60°	7231.5	84.6
0°-90°	8520.7	99.6
90°-120°	29.0	0.3
90°-150°	30.0	0.4
90°-180°	31.0	0.4
0°-180°	8551.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3776	3776	3776	3776	3776	
5°	3729	3737	3724	3755	3768	350
15°	3317	3350	3452	3614	3679	934
25°	2760	2849	3034	3312	3472	1272
35°	2112	2240	2554	2930	3157	1320
45°	1414	1620	2051	2510	2737	1087
55°	764	1034	1618	1745	1599	702
65°	485	660	870	927	762	481
75°	275	318	385	292	237	288
85°	76	92	131	170	118	80
90°	1	32	69	101	19	4
95°	1	5	29	49	6	0
105°	1	1	1	2	0	1
115°	1	1	0	0	0	1
125°	1	1	0	0	0	1
135°	1	1	1	0	0	1
145°	1	1	1	0	0	1
155°	1	1	1	0	0	1
165°	2	2	1	1	0	1
175°	2	2	1	1	1	0
180°	1	1	1	1	1	



TEST NUMBER: P685664

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3776.0	3776.0	3776.0	3776.0	3776.0
2.5°	3766.0	3763.7	3740.8	3773.1	3776.6
5°	3729.1	3737.3	3723.8	3754.9	3768.4
7.5°	3658.1	3666.9	3682.7	3739.6	3756.1
10°	3543.2	3565.5	3621.2	3700.9	3736.1
12.5°	3455.2	3482.8	3532.6	3668.1	3708.6
15°	3317.4	3350.2	3452.3	3614.1	3679.2
17.5°	3200.1	3259.9	3368.4	3546.1	3637.0
20°	3068.8	3116.8	3239.4	3479.3	3587.7
22.5°	2937.4	2998.4	3165.5	3390.1	3537.9
25°	2760.3	2849.4	3034.2	3312.1	3471.6
27.5°	2610.2	2722.8	2935.1	3220.1	3397.7
30°	2448.9	2536.3	2810.1	3126.2	3322.7
32.5°	2267.1	2404.3	2675.3	3018.9	3244.1
35°	2111.7	2239.6	2553.9	2930.4	3157.3
37.5°	1961.6	2081.8	2419.6	2830.1	3061.1
40°	1781.6	1939.9	2295.3	2715.7	2957.9
42.5°	1582.2	1776.3	2179.7	2607.8	2853.0
45°	1414.5	1620.3	2050.7	2509.9	2737.4
47.5°	1240.3	1457.3	1929.9	2390.9	2623.1
50°	1050.9	1314.8	1820.3	2280.6	2423.1
52.5°	912.5	1166.4	1721.7	2081.2	2042.5
55°	763.5	1033.9	1617.9	1744.6	1599.2
57.5°	650.3	914.2	1520.6	1369.9	1526.5
60°	593.5	818.6	1371.1	1304.2	1398.6
62.5°	540.1	734.8	1048.5	1223.3	1150.6
65°	485.0	660.3	869.7	926.6	762.4
67.5°	431.6	595.8	819.8	692.0	663.8
70°	377.1	546.0	721.3	589.9	350.7
72.5°	325.5	488.5	493.2	326.6	260.4
75°	275.0	317.8	384.7	291.5	236.9
77.5°	219.9	272.7	257.4	261.0	214.6
80°	168.3	187.7	209.9	233.4	189.4
82.5°	119.0	139.6	170.1	204.1	155.4
85°	75.6	92.1	131.4	169.5	118.5
87.5°	29.9	58.1	97.9	136.6	69.8
90°	0.6	31.7	69.2	100.9	19.4
92.5°	0.6	14.7	46.3	73.9	10.0
95°	0.6	4.7	28.7	49.3	6.5
97.5°	0.6	1.8	15.2	30.5	3.5
100°	0.6	0.6	6.5	16.4	1.8
102.5°	0.6	0.6	2.3	6.5	0.6
105°	0.6	0.6	0.6	1.8	0.0
107.5°	0.6	0.6	0.0	0.0	0.0
110°	0.6	0.6	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.6	0.6	0.0	0.0	0.0
115°	0.6	0.6	0.0	0.0	0.0
117.5°	0.6	0.6	0.0	0.0	0.0
120°	0.6	0.6	0.0	0.0	0.0
122.5°	0.6	0.6	0.0	0.0	0.0
125°	0.6	1.2	0.0	0.0	0.0
127.5°	0.6	0.6	0.0	0.0	0.0
130°	0.6	1.2	0.6	0.0	0.0
132.5°	0.6	1.2	0.6	0.0	0.0
135°	0.6	1.2	0.6	0.0	0.0
137.5°	0.6	1.2	0.6	0.0	0.0
140°	1.2	1.2	0.6	0.0	0.0
142.5°	1.2	1.2	0.6	0.0	0.0
145°	1.2	1.2	0.6	0.0	0.0
147.5°	1.2	1.2	0.6	0.0	0.0
150°	1.2	1.2	0.6	0.0	0.0
152.5°	1.2	1.2	0.6	0.0	0.0
155°	1.2	1.2	0.6	0.0	0.0
157.5°	1.2	1.8	0.6	0.0	0.0
160°	1.8	1.8	0.6	0.0	0.0
162.5°	1.8	1.8	1.2	0.6	0.0
165°	1.8	1.8	1.2	0.6	0.0
167.5°	1.8	1.8	1.2	0.6	0.0
170°	1.8	1.8	1.2	0.6	0.6
172.5°	1.8	1.8	1.2	0.6	0.6
175°	1.8	1.8	1.2	0.6	0.6
177.5°	1.8	1.8	1.2	0.6	0.6
180°	1.2	1.2	1.2	1.2	1.2

(END OF REPORT)