

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: P685735

Luminaire Tested: **8CZL-14-UNV-N-LVR-L840-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685735
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-14-UNV-N-LVR-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH NARROW LENS @80 CRI and 4000K
Light Source: (784) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

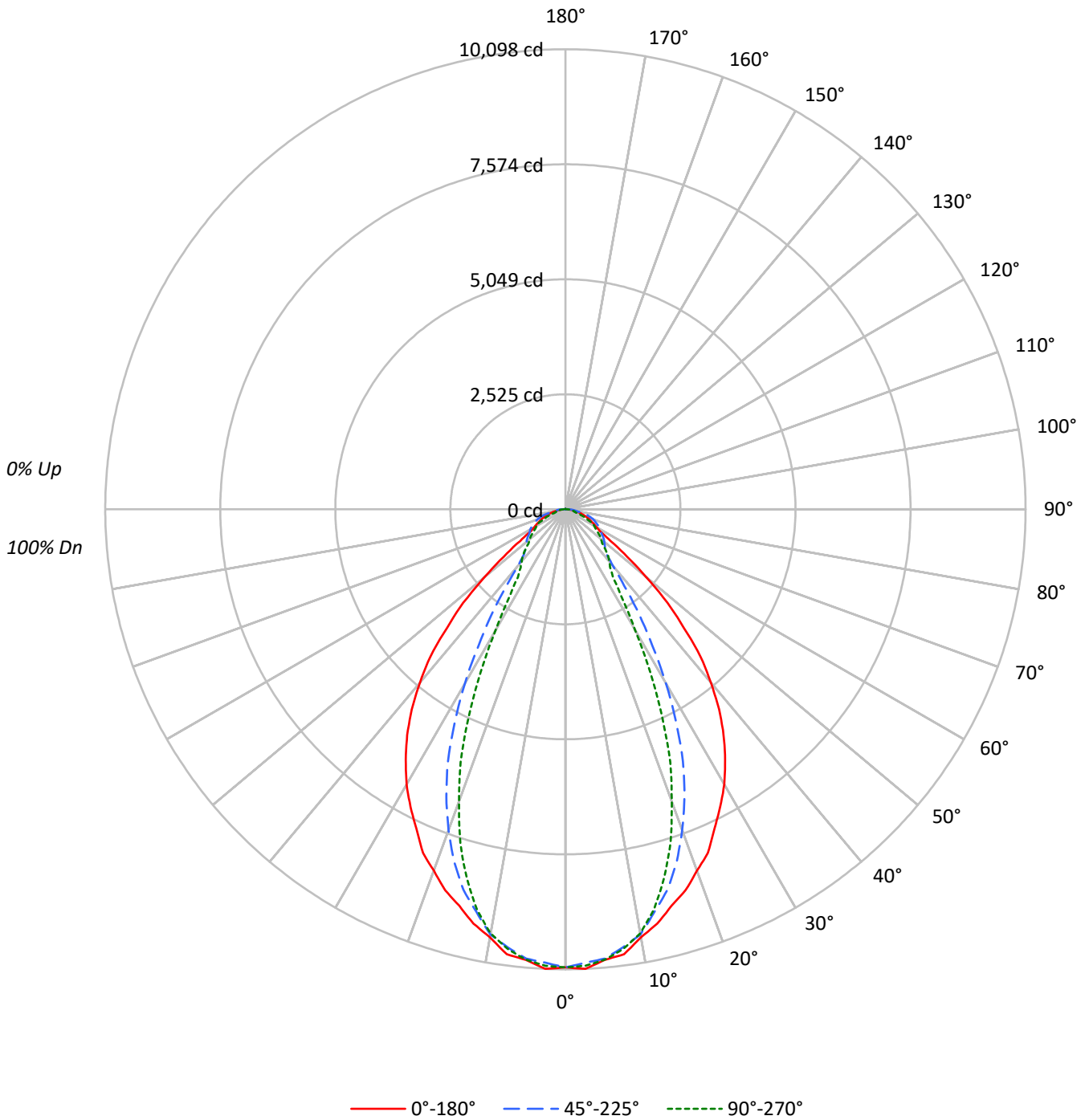
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11903.9 lumens
Efficiency: N/A
Efficacy: 133.8 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.8 / 0.85
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 (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				
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	90	90	88
2	103	97	92	87	101	95	90	86	92	88	84	88	85	82	86	83	80	80	80	80	78
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	72	72	72	70
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	65	65	65	63
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	59	59	59	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	55	55	55	53
7	75	64	57	51	73	63	56	51	62	55	51	60	55	51	59	54	50	50	50	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	47	47	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	43	43	43	43	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	41	41	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16233	16233	16233
5°	16090	16044	16085
10°	15636	15540	15502
15°	15056	14455	13997
20°	14502	12877	11722
25°	13781	10873	8938
30°	12999	8225	5711
35°	11931	5576	3588
40°	10463	3397	3147
45°	8383	2830	2820
50°	5796	2796	2546
55°	3415	2772	2398
60°	2544	2880	2368
65°	2408	2900	2083
70°	2316	3093	1572
75°	2184	3104	1344
80°	2028	2574	1521
85°	1799	3125	1878



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	934.0	7.8
10°-20°	2418.3	20.3
20°-30°	2825.1	23.7
30°-40°	2095.9	17.6
40°-50°	1389.4	11.7
50°-60°	921.5	7.7
60°-70°	687.5	5.8
70°-80°	405.8	3.4
80°-90°	170.9	1.4
90°-100°	36.9	0.3
100°-110°	5.0	0.0
110°-120°	2.6	0.0
120°-130°	2.3	0.0
130°-140°	2.2	0.0
140°-150°	2.3	0.0
150°-160°	2.1	0.0
160°-170°	1.5	0.0
170°-180°	0.6	0.0
0°-30°	6177.3	51.9
0°-40°	8273.2	69.5
0°-60°	10584.2	88.9
0°-90°	11848.4	99.5
90°-120°	44.5	0.4
90°-150°	51.4	0.4
90°-180°	56.0	0.5
0°-180°	11903.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10054	10054	10054	10054	10054	
5°	9927	9919	9899	9935	9925	939
15°	9007	8900	8648	8499	8373	2541
25°	7735	7179	6103	5235	5017	3563
35°	6053	4485	2829	1912	1820	3757
45°	3671	2166	1239	1286	1235	2826
55°	1213	1066	985	951	852	1194
65°	630	704	759	742	545	629
75°	350	392	498	361	216	370
85°	97	118	169	224	101	105
90°	2	36	84	145	30	6
95°	1	6	33	72	15	1
105°	1	2	3	6	5	1
115°	1	2	3	3	3	1
125°	2	2	3	3	3	1
135°	2	3	3	3	3	1
145°	3	3	3	4	4	2
155°	3	4	4	5	5	2
165°	4	5	5	6	6	1
175°	4	5	6	7	8	0
180°	6	6	6	6	6	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10054.1	10054.1	10054.1	10054.1	10054.1
2.5°	10097.5	10043.0	9964.6	10035.3	10029.4
5°	9927.2	9918.6	9899.0	9934.8	9924.6
7.5°	9850.5	9804.5	9695.5	9779.8	9732.1
10°	9537.0	9483.4	9478.2	9461.2	9455.2
12.5°	9314.7	9250.0	9043.0	9031.9	8985.9
15°	9007.2	8899.9	8647.7	8498.6	8373.4
17.5°	8768.7	8535.3	8114.5	7836.8	7675.8
20°	8439.9	8182.6	7494.3	7009.7	6822.3
22.5°	8169.0	7713.3	6828.2	6142.5	6013.9
25°	7735.4	7179.2	6103.3	5235.3	5017.2
27.5°	7358.9	6591.4	5248.1	4295.7	4028.3
30°	6972.2	5933.0	4411.6	3374.1	3063.2
32.5°	6521.6	5269.4	3550.4	2531.6	2306.7
35°	6053.1	4484.9	2828.9	1912.3	1820.3
37.5°	5536.9	3779.5	2126.2	1597.2	1612.5
40°	4964.4	3164.5	1611.7	1464.3	1493.2
42.5°	4393.7	2646.6	1340.8	1377.4	1385.9
45°	3671.4	2166.2	1239.4	1286.3	1235.1
47.5°	3040.2	1770.1	1167.9	1162.7	1090.3
50°	2307.6	1443.0	1113.3	1052.0	1013.7
52.5°	1708.8	1217.3	1061.4	994.1	954.9
55°	1213.0	1065.6	984.7	950.6	851.8
57.5°	911.5	958.3	925.9	849.3	780.3
60°	787.9	863.7	891.9	800.7	733.4
62.5°	711.3	782.8	836.5	771.8	671.2
65°	630.3	704.5	759.0	741.9	545.2
67.5°	559.6	642.3	709.6	636.3	445.5
70°	490.7	567.3	655.1	540.1	333.1
72.5°	416.5	474.5	580.1	419.9	242.8
75°	350.1	391.8	497.5	361.2	215.5
77.5°	280.3	315.2	340.7	328.8	190.0
80°	218.1	253.0	276.8	299.0	163.6
82.5°	158.4	181.4	219.8	264.9	136.3
85°	97.1	118.4	168.7	224.0	101.4
87.5°	41.7	72.4	123.5	185.7	66.4
90°	1.7	35.8	84.3	144.8	29.8
92.5°	0.9	15.3	54.5	106.5	19.6
95°	0.9	6.0	33.2	72.4	15.3
97.5°	0.9	2.6	17.0	46.9	11.1
100°	0.9	1.7	9.4	27.3	7.7
102.5°	0.9	1.7	4.3	13.6	6.0
105°	0.9	1.7	3.4	6.0	5.1
107.5°	0.9	1.7	2.6	4.3	4.3
110°	0.9	1.7	2.6	4.3	4.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	1.7	2.6	4.3	4.3
115°	0.9	1.7	2.6	3.4	3.4
117.5°	0.9	1.7	2.6	3.4	3.4
120°	0.9	1.7	2.6	3.4	3.4
122.5°	0.9	1.7	2.6	3.4	3.4
125°	1.7	1.7	2.6	3.4	3.4
127.5°	1.7	2.6	2.6	3.4	3.4
130°	1.7	2.6	2.6	3.4	3.4
132.5°	1.7	2.6	2.6	3.4	3.4
135°	1.7	2.6	2.6	3.4	3.4
137.5°	1.7	2.6	3.4	3.4	3.4
140°	2.6	3.4	3.4	3.4	3.4
142.5°	2.6	3.4	3.4	4.3	3.4
145°	2.6	3.4	3.4	4.3	4.3
147.5°	2.6	3.4	4.3	4.3	4.3
150°	2.6	3.4	4.3	5.1	5.1
152.5°	3.4	3.4	4.3	5.1	5.1
155°	3.4	4.3	4.3	5.1	5.1
157.5°	3.4	4.3	4.3	5.1	6.0
160°	3.4	4.3	5.1	6.0	6.0
162.5°	3.4	4.3	5.1	6.0	6.0
165°	4.3	5.1	5.1	6.0	6.0
167.5°	4.3	5.1	6.0	6.0	6.8
170°	4.3	5.1	6.0	6.8	6.8
172.5°	4.3	5.1	6.0	6.8	6.8
175°	4.3	5.1	6.0	6.8	7.7
177.5°	4.3	5.1	6.0	6.8	7.7
180°	6.0	6.0	6.0	6.0	6.0

(END OF REPORT)