

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: P685676

Luminaire Tested: **8CZL-18-UNV-LVR-L840-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685676
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-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL @80 CRI and 4000K
Light Source: (1176) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

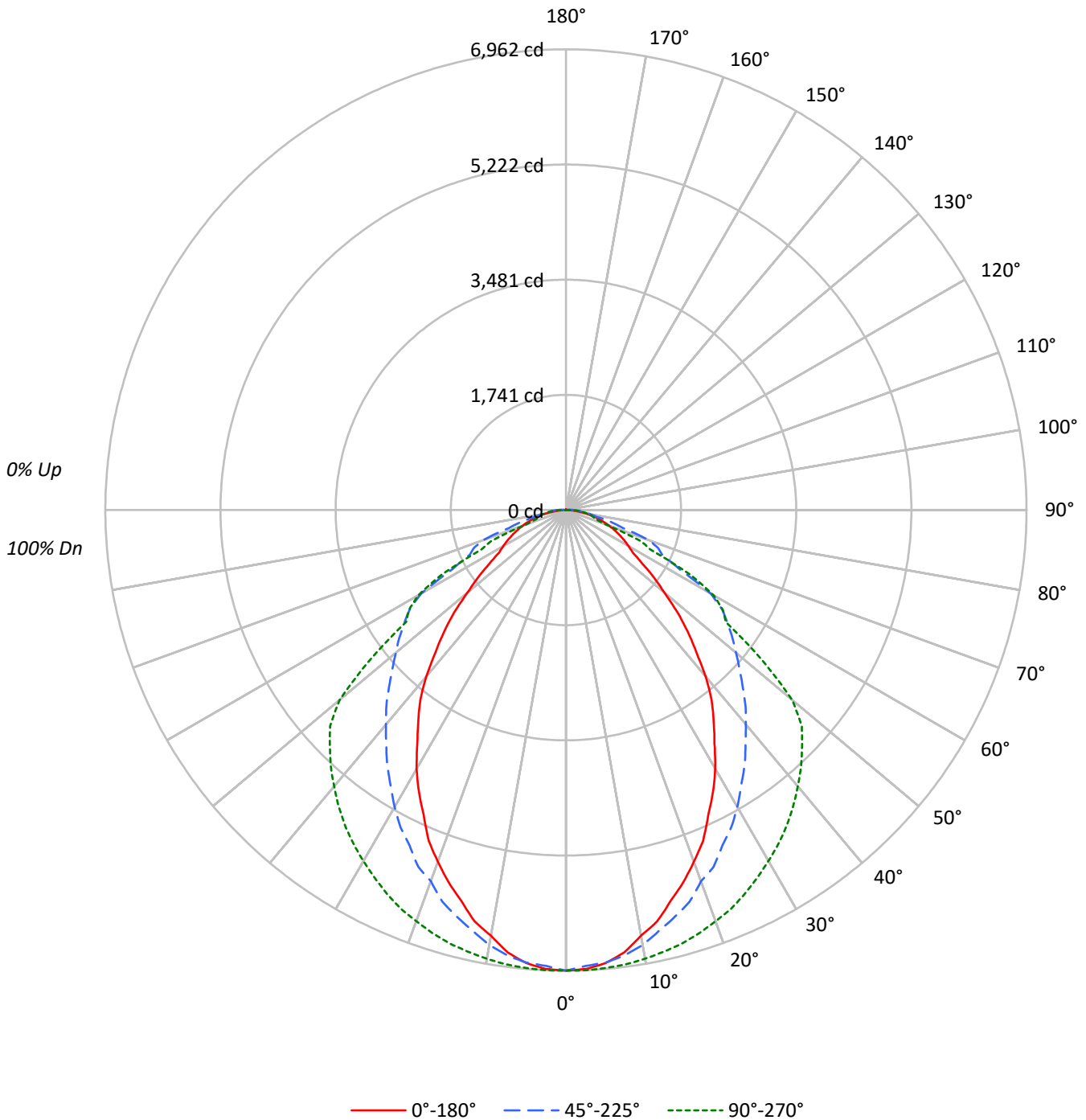
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15763.2 lumens
Efficiency: N/A
Efficacy: 144.6 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

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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°	11238	11238	11238
5°	11141	11125	11258
10°	10708	10944	11291
15°	10222	10637	11337
20°	9720	10260	11363
25°	9065	9964	11401
30°	8416	9658	11419
35°	7673	9279	11472
40°	6922	8918	11492
45°	5953	8632	11522
50°	4866	8428	11219
55°	3962	8395	8298
60°	3533	8161	8325
65°	3415	6125	5369
70°	3281	6277	3051
75°	3163	4424	2724
80°	2884	3598	3247
85°	2582	4485	4046



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	652.0	4.1
10°-20°	1807.4	11.5
20°-30°	2614.8	16.6
30°-40°	2984.5	18.9
40°-50°	2932.5	18.6
50°-60°	2339.1	14.8
60°-70°	1473.4	9.3
70°-80°	652.7	4.1
80°-90°	250.3	1.6
90°-100°	49.6	0.3
100°-110°	3.3	0.0
110°-120°	0.4	0.0
120°-130°	0.5	0.0
130°-140°	0.8	0.0
140°-150°	0.7	0.0
150°-160°	0.6	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	5074.2	32.2
0°-40°	8058.6	51.1
0°-60°	13330.2	84.6
0°-90°	15706.6	99.6
90°-120°	53.4	0.3
90°-150°	55.3	0.4
90°-180°	57.0	0.4
0°-180°	15763.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6960	6960	6960	6960	6960	
5°	6874	6889	6864	6922	6946	645
15°	6115	6176	6364	6662	6782	1722
25°	5088	5252	5593	6105	6399	2345
35°	3893	4128	4708	5402	5820	2433
45°	2607	2987	3780	4627	5046	2004
55°	1407	1906	2982	3216	2948	1294
65°	894	1217	1603	1708	1405	886
75°	507	586	709	537	437	531
85°	139	170	242	312	218	147
90°	1	58	128	186	36	8
95°	1	9	53	91	12	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6960.4	6960.4	6960.4	6960.4	6960.4
2.5°	6942.1	6937.7	6895.6	6955.0	6961.5
5°	6874.0	6889.1	6864.2	6921.5	6946.4
7.5°	6743.2	6759.4	6788.6	6893.4	6923.7
10°	6531.3	6572.4	6675.1	6822.1	6886.9
12.5°	6369.1	6419.9	6511.8	6761.5	6836.1
15°	6115.1	6175.6	6363.7	6662.1	6782.1
17.5°	5898.9	6009.2	6209.2	6536.7	6704.2
20°	5656.8	5745.4	5971.3	6413.5	6613.4
22.5°	5414.6	5527.1	5835.1	6249.2	6521.6
25°	5088.2	5252.5	5593.0	6105.4	6399.4
27.5°	4811.4	5019.0	5410.3	5935.7	6263.2
30°	4514.2	4675.2	5180.1	5762.7	6124.8
32.5°	4179.1	4432.0	4931.4	5564.9	5980.0
35°	3892.6	4128.3	4707.7	5401.7	5820.0
37.5°	3615.9	3837.5	4460.1	5216.8	5642.7
40°	3284.0	3575.9	4231.0	5006.0	5452.5
42.5°	2916.5	3274.3	4018.0	4807.1	5259.0
45°	2607.3	2986.8	3780.2	4626.6	5046.0
47.5°	2286.3	2686.2	3557.5	4407.2	4835.2
50°	1937.1	2423.6	3355.4	4203.9	4466.6
52.5°	1682.0	2150.1	3173.8	3836.4	3765.1
55°	1407.4	1905.8	2982.4	3215.9	2947.8
57.5°	1198.8	1685.3	2803.0	2525.2	2813.8
60°	1094.0	1509.1	2527.3	2404.1	2578.1
62.5°	995.6	1354.5	1932.8	2254.9	2120.9
65°	894.0	1217.2	1603.1	1708.0	1405.3
67.5°	795.6	1098.3	1511.2	1275.6	1223.7
70°	695.1	1006.4	1329.6	1087.5	646.4
72.5°	599.9	900.5	909.1	602.1	480.0
75°	507.0	585.9	709.1	537.2	436.7
77.5°	405.4	502.7	474.6	481.0	395.6
80°	310.2	345.9	387.0	430.2	349.2
82.5°	219.4	257.3	313.5	376.2	286.5
85°	139.4	169.7	242.1	312.4	218.4
87.5°	55.1	107.0	180.5	251.9	128.6
90°	1.1	58.4	127.6	185.9	35.7
92.5°	1.1	27.0	85.4	136.2	18.4
95°	1.1	8.6	53.0	90.8	11.9
97.5°	1.1	3.2	28.1	56.2	6.5
100°	1.1	1.1	11.9	30.3	3.2
102.5°	1.1	1.1	4.3	11.9	1.1
105°	1.1	1.1	1.1	3.2	0.0
107.5°	1.1	1.1	0.0	0.0	0.0
110°	1.1	1.1	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.1	1.1	0.0	0.0	0.0
115°	1.1	1.1	0.0	0.0	0.0
117.5°	1.1	1.1	0.0	0.0	0.0
120°	1.1	1.1	0.0	0.0	0.0
122.5°	1.1	1.1	0.0	0.0	0.0
125°	1.1	2.2	0.0	0.0	0.0
127.5°	1.1	1.1	0.0	0.0	0.0
130°	1.1	2.2	1.1	0.0	0.0
132.5°	1.1	2.2	1.1	0.0	0.0
135°	1.1	2.2	1.1	0.0	0.0
137.5°	1.1	2.2	1.1	0.0	0.0
140°	2.2	2.2	1.1	0.0	0.0
142.5°	2.2	2.2	1.1	0.0	0.0
145°	2.2	2.2	1.1	0.0	0.0
147.5°	2.2	2.2	1.1	0.0	0.0
150°	2.2	2.2	1.1	0.0	0.0
152.5°	2.2	2.2	1.1	0.0	0.0
155°	2.2	2.2	1.1	0.0	0.0
157.5°	2.2	3.2	1.1	0.0	0.0
160°	3.2	3.2	1.1	0.0	0.0
162.5°	3.2	3.2	2.2	1.1	0.0
165°	3.2	3.2	2.2	1.1	0.0
167.5°	3.2	3.2	2.2	1.1	0.0
170°	3.2	3.2	2.2	1.1	1.1
172.5°	3.2	3.2	2.2	1.1	1.1
175°	3.2	3.2	2.2	1.1	1.1
177.5°	3.2	3.2	2.2	1.1	1.1
180°	2.2	2.2	2.2	2.2	2.2

(END OF REPORT)