

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: P685816

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

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685816
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-18-UNV-M-LVR-L935-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH MEDIUM LENS @90 CRI and 3500K
Light Source: (1176) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

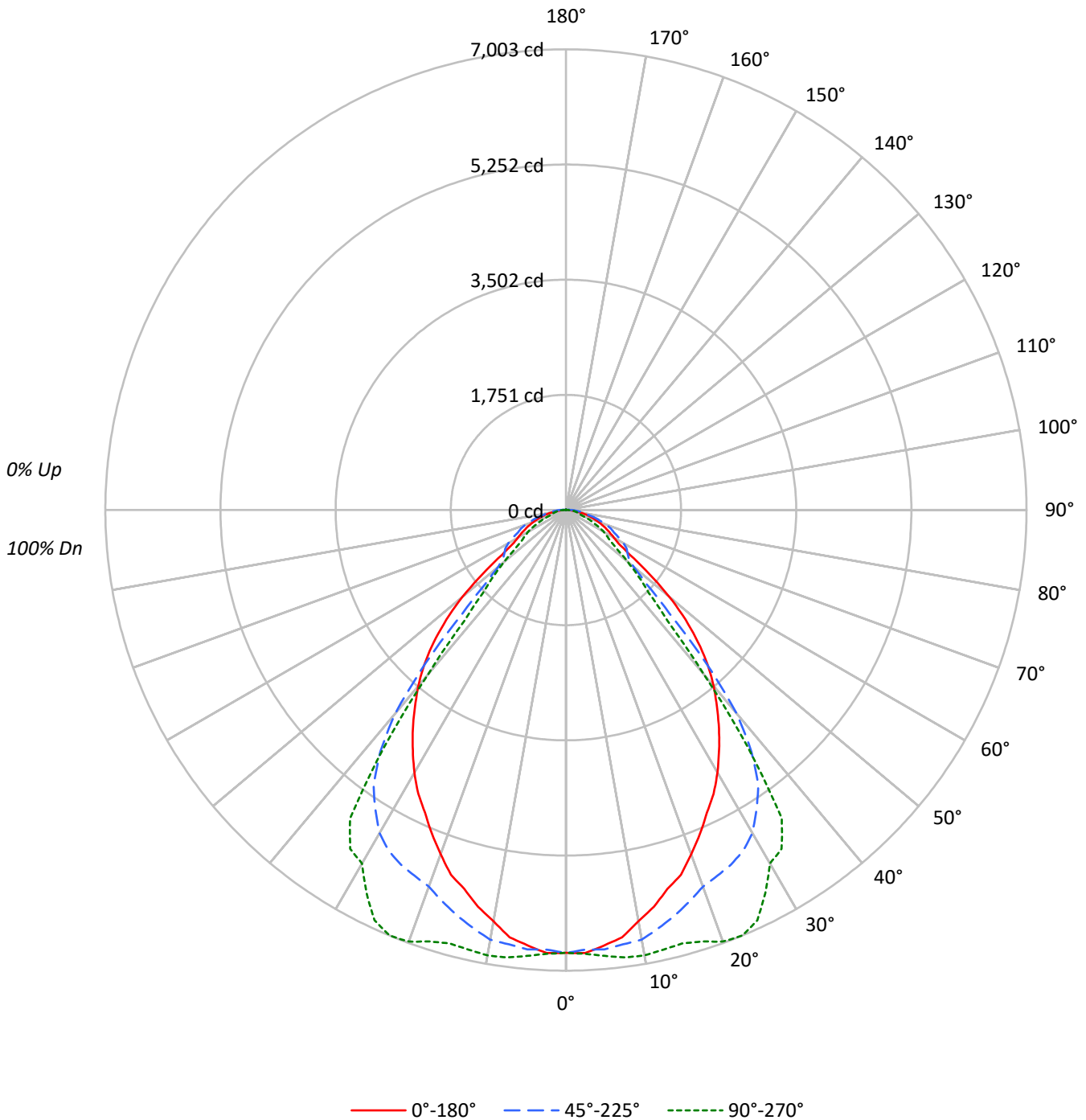
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12453.6 lumens
Efficiency: N/A
Efficacy: 114.3 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.34 / 1.2
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 (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	100	100	100	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88	88	88	88
2	103	96	90	86	100	94	89	84	91	86	83	87	84	81	84	81	79	77	77	77	77
3	95	87	80	74	93	85	79	74	82	77	72	79	75	71	77	73	70	68	68	68	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	70	66	62	60	60	60	60
5	83	72	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54	54	54	54
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	49	49	49	49
7	72	60	53	47	70	59	52	47	58	51	47	57	51	46	55	50	46	44	44	44	44
8	68	56	48	43	66	55	48	43	54	47	42	52	47	42	51	46	42	40	40	40	40
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	42	39	37	37	37	37
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	35	34	34	34	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10870	10870	10870
5°	10769	10866	11028
10°	10404	10872	11269
15°	9966	10669	11401
20°	9564	10466	11994
25°	9036	10591	12261
30°	8589	10568	11565
35°	7997	10049	11276
40°	7362	8518	6872
45°	6486	5077	4073
50°	5149	3371	3074
55°	3333	3207	2333
60°	2721	3260	2143
65°	2593	3072	1751
70°	2461	3083	1384
75°	2338	2886	1287
80°	2163	2726	1445
85°	1936	3335	1773



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	638.8	5.1
10°-20°	1812.1	14.6
20°-30°	2732.5	21.9
30°-40°	3019.4	24.2
40°-50°	1893.1	15.2
50°-60°	1019.2	8.2
60°-70°	692.2	5.6
70°-80°	413.4	3.3
80°-90°	179.7	1.4
90°-100°	39.4	0.3
100°-110°	4.5	0.0
110°-120°	1.7	0.0
120°-130°	1.5	0.0
130°-140°	1.8	0.0
140°-150°	1.6	0.0
150°-160°	1.3	0.0
160°-170°	1.0	0.0
170°-180°	0.4	0.0
0°-30°	5183.5	41.6
0°-40°	8202.8	65.9
0°-60°	11115.2	89.3
0°-90°	12400.5	99.6
90°-120°	45.6	0.4
90°-150°	50.5	0.4
90°-180°	53.0	0.4
0°-180°	12453.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6732	6732	6732	6732	6732	
5°	6644	6656	6704	6783	6804	626
15°	5962	6171	6383	6692	6821	1683
25°	5072	5380	5945	6579	6882	2342
35°	4057	4534	5098	5485	5721	2532
45°	2841	3093	2224	1813	1784	2167
55°	1184	1239	1139	986	829	1150
65°	679	746	804	653	458	671
75°	375	417	463	380	206	395
85°	104	128	180	237	96	113
90°	3	40	91	152	28	7
95°	1	6	36	78	14	1
105°	1	2	3	6	3	1
115°	1	2	2	2	2	1
125°	1	2	2	2	2	1
135°	2	2	3	3	3	1
145°	2	3	3	3	4	1
155°	3	3	3	3	3	1
165°	3	4	4	4	4	1
175°	4	4	4	4	4	0
180°	4	4	4	4	4	

TEST NUMBER: P685816

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6732.2	6732.2	6732.2	6732.2	6732.2
2.5°	6741.0	6722.6	6688.3	6749.8	6750.6
5°	6644.4	6655.8	6704.1	6783.1	6804.2
7.5°	6550.5	6594.4	6659.4	6849.8	6859.5
10°	6346.0	6437.3	6631.3	6814.7	6873.5
12.5°	6175.7	6310.8	6511.0	6752.4	6843.7
15°	5962.3	6171.3	6382.8	6691.8	6820.9
17.5°	5813.1	5980.8	6239.7	6663.7	6875.3
20°	5566.4	5802.6	6091.4	6683.1	6980.6
22.5°	5326.8	5613.8	6016.8	6690.1	7002.6
25°	5072.2	5380.3	5944.8	6578.6	6882.3
27.5°	4861.5	5119.6	5837.7	6346.0	6565.4
30°	4606.9	4910.7	5668.3	5990.4	6202.9
32.5°	4333.1	4718.4	5393.5	5718.3	6104.6
35°	4057.4	4534.1	5098.5	5484.8	5720.9
37.5°	3769.5	4382.2	4635.0	4697.4	4535.8
40°	3493.0	4170.7	4041.6	3438.5	3260.3
42.5°	3191.0	3715.9	3152.4	2365.8	2285.9
45°	2840.7	3092.7	2223.6	1812.8	1783.8
47.5°	2467.6	2394.8	1658.3	1515.2	1498.5
50°	2049.8	1914.6	1342.2	1337.0	1223.7
52.5°	1597.7	1520.4	1203.5	1159.6	979.7
55°	1184.2	1238.6	1139.4	985.8	828.7
57.5°	948.1	1074.5	1094.7	861.2	740.9
60°	842.7	940.2	1009.5	791.8	663.7
62.5°	755.8	833.1	904.2	734.8	572.4
65°	678.6	746.2	804.1	653.1	458.2
67.5°	596.9	667.2	738.3	560.9	389.8
70°	521.4	596.1	653.1	497.7	293.2
72.5°	443.3	520.6	546.0	416.1	234.4
75°	374.8	417.0	462.6	380.1	206.3
77.5°	302.9	338.8	357.3	348.5	181.7
80°	232.6	261.6	293.2	316.9	155.4
82.5°	170.3	191.4	234.4	279.2	124.7
85°	104.5	128.2	180.0	237.0	95.7
87.5°	46.5	76.4	132.6	195.8	61.4
90°	2.6	39.5	91.3	151.9	28.1
92.5°	0.9	17.6	59.7	112.4	19.3
95°	0.9	6.1	36.0	78.1	14.0
97.5°	0.9	2.6	20.2	50.0	8.8
100°	0.9	1.8	9.7	29.0	6.1
102.5°	0.9	1.8	4.4	14.0	4.4
105°	0.9	1.8	2.6	6.1	2.6
107.5°	0.9	1.8	1.8	2.6	1.8
110°	0.9	1.8	1.8	1.8	1.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	1.8	1.8	1.8	1.8
115°	0.9	1.8	1.8	1.8	1.8
117.5°	0.9	1.8	1.8	1.8	1.8
120°	0.9	1.8	1.8	1.8	1.8
122.5°	0.9	1.8	1.8	1.8	1.8
125°	0.9	1.8	1.8	1.8	1.8
127.5°	0.9	1.8	1.8	1.8	1.8
130°	0.9	1.8	1.8	1.8	1.8
132.5°	1.8	1.8	2.6	2.6	2.6
135°	1.8	1.8	2.6	2.6	2.6
137.5°	1.8	2.6	2.6	2.6	2.6
140°	1.8	2.6	2.6	2.6	2.6
142.5°	1.8	2.6	2.6	2.6	2.6
145°	1.8	2.6	2.6	2.6	3.5
147.5°	1.8	2.6	2.6	2.6	3.5
150°	1.8	2.6	2.6	2.6	2.6
152.5°	2.6	2.6	2.6	2.6	2.6
155°	2.6	2.6	2.6	2.6	2.6
157.5°	2.6	2.6	2.6	3.5	3.5
160°	2.6	3.5	3.5	3.5	3.5
162.5°	2.6	3.5	3.5	3.5	3.5
165°	2.6	3.5	3.5	3.5	3.5
167.5°	2.6	3.5	3.5	3.5	4.4
170°	3.5	3.5	3.5	4.4	4.4
172.5°	3.5	3.5	3.5	4.4	4.4
175°	3.5	3.5	3.5	4.4	4.4
177.5°	3.5	4.4	3.5	4.4	5.3
180°	4.4	4.4	4.4	4.4	4.4

(END OF REPORT)