

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: P685726

Luminaire Tested: **8CZL-18-UNV-N-LVR-L835-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685726
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-18-UNV-N-LVR-L835-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH NARROW LENS @80 CRI and 3500K
Light Source: (1176) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

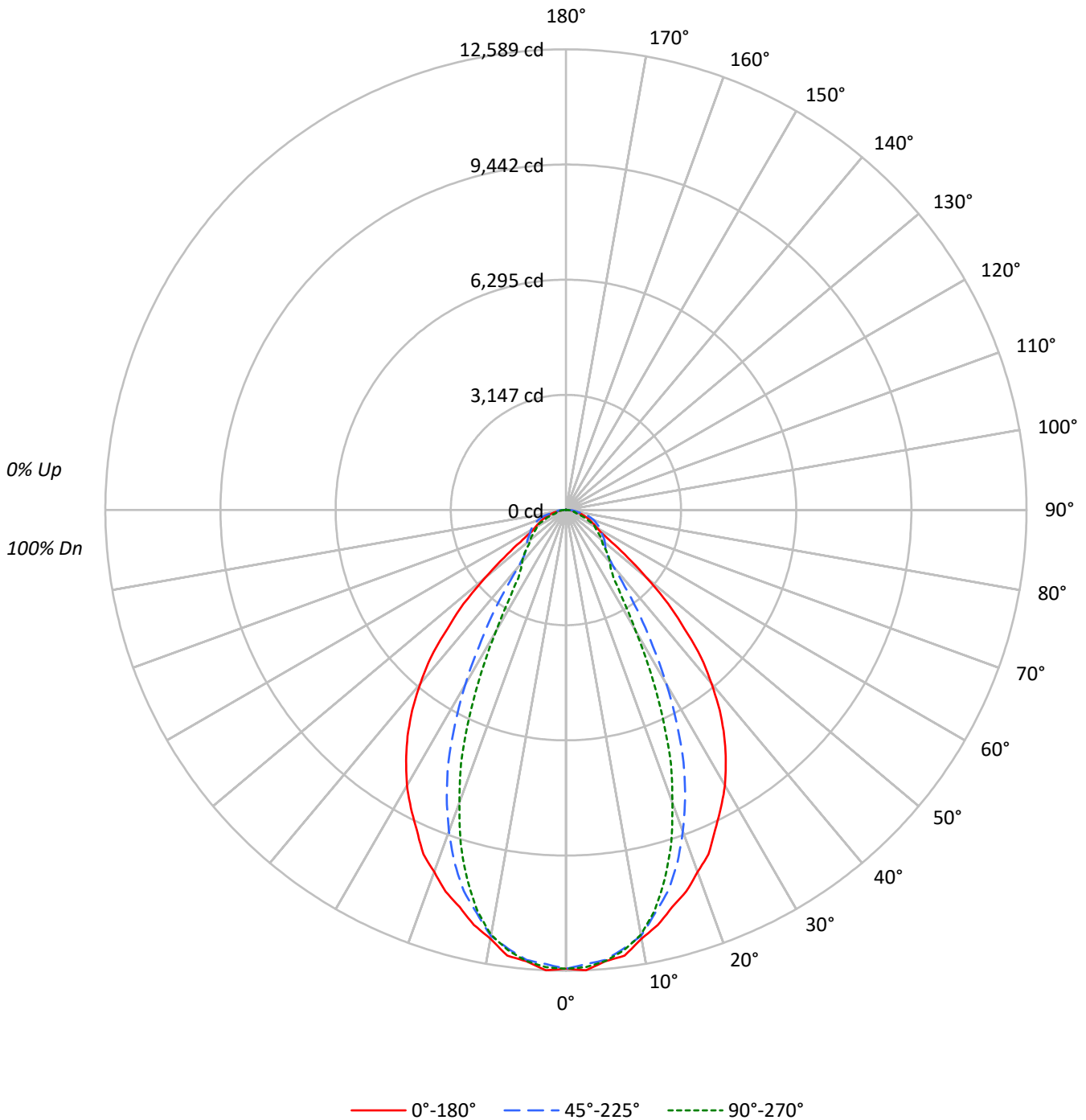
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14840.5 lumens
Efficiency: N/A
Efficacy: 136.2 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): 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	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	93	92	90	88
2	103	97	92	87	101	95	90	86	92	88	84	88	85	82	86	83	80	86	83	80	78
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	79	75	72	70
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	73	69	65	63
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	68	63	59	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	63	58	55	53
7	75	64	57	51	73	63	56	51	62	55	51	60	55	51	59	54	50	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	55	50	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	43	52	47	43	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20238	20238	20238
5°	20059	20002	20054
10°	19494	19373	19326
15°	18770	18021	17450
20°	18079	16054	14614
25°	17180	13556	11143
30°	16206	10254	7120
35°	14874	6952	4473
40°	13045	4235	3924
45°	10451	3528	3516
50°	7226	3486	3174
55°	4257	3456	2989
60°	3172	3591	2953
65°	3002	3615	2597
70°	2888	3855	1960
75°	2723	3869	1676
80°	2528	3209	1896
85°	2243	3896	2342



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1164.4	7.8
10°-20°	3014.9	20.3
20°-30°	3522.1	23.7
30°-40°	2613.0	17.6
40°-50°	1732.2	11.7
50°-60°	1148.8	7.7
60°-70°	857.2	5.8
70°-80°	505.9	3.4
80°-90°	213.1	1.4
90°-100°	46.0	0.3
100°-110°	6.2	0.0
110°-120°	3.2	0.0
120°-130°	2.9	0.0
130°-140°	2.8	0.0
140°-150°	2.9	0.0
150°-160°	2.6	0.0
160°-170°	1.9	0.0
170°-180°	0.7	0.0
0°-30°	7701.3	51.9
0°-40°	10314.3	69.5
0°-60°	13195.4	88.9
0°-90°	14771.5	99.5
90°-120°	55.4	0.4
90°-150°	63.9	0.4
90°-180°	69.0	0.5
0°-180°	14840.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12534	12534	12534	12534	12534	
5°	12376	12366	12341	12386	12373	1171
15°	11229	11096	10781	10595	10439	3168
25°	9644	8950	7609	6527	6255	4442
35°	7546	5591	3527	2384	2269	4684
45°	4577	2701	1545	1604	1540	3523
55°	1512	1328	1228	1185	1062	1488
65°	786	878	946	925	680	784
75°	436	488	620	450	269	461
85°	121	148	210	279	126	131
90°	2	45	105	180	37	8
95°	1	7	41	90	19	1
105°	1	2	4	7	6	1
115°	1	2	3	4	4	1
125°	2	2	3	4	4	2
135°	2	3	3	4	4	2
145°	3	4	4	5	5	2
155°	4	5	5	6	6	2
165°	5	6	6	7	7	1
175°	5	6	7	8	10	1
180°	7	7	7	7	7	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12534.5	12534.5	12534.5	12534.5	12534.5
2.5°	12588.7	12520.7	12423.0	12511.1	12503.7
5°	12376.3	12365.6	12341.2	12385.8	12373.1
7.5°	12280.7	12223.3	12087.4	12192.5	12133.1
10°	11889.9	11823.0	11816.6	11795.4	11787.9
12.5°	11612.7	11532.0	11273.9	11260.1	11202.8
15°	11229.3	11095.5	10781.2	10595.3	10439.2
17.5°	10932.0	10641.0	10116.4	9770.2	9569.5
20°	10522.1	10201.3	9343.3	8739.0	8505.4
22.5°	10184.3	9616.2	8512.8	7657.9	7497.5
25°	9643.8	8950.3	7609.1	6526.9	6255.0
27.5°	9174.4	8217.6	6542.8	5355.5	5022.1
30°	8692.3	7396.7	5500.0	4206.5	3818.9
32.5°	8130.5	6569.4	4426.3	3156.2	2875.8
35°	7546.4	5591.3	3526.8	2384.1	2269.4
37.5°	6902.8	4712.0	2650.7	1991.2	2010.3
40°	6189.2	3945.2	2009.3	1825.5	1861.6
42.5°	5477.7	3299.6	1671.5	1717.2	1727.8
45°	4577.1	2700.6	1545.2	1603.6	1539.9
47.5°	3790.2	2206.8	1456.0	1449.6	1359.3
50°	2876.9	1799.0	1388.0	1311.5	1263.8
52.5°	2130.3	1517.6	1323.2	1239.3	1190.5
55°	1512.3	1328.5	1227.6	1185.2	1062.0
57.5°	1136.3	1194.7	1154.4	1058.8	972.8
60°	982.3	1076.8	1111.9	998.3	914.4
62.5°	886.7	976.0	1042.9	962.1	836.8
65°	785.9	878.3	946.2	925.0	679.7
67.5°	697.7	800.7	884.6	793.3	555.4
70°	611.7	707.3	816.7	673.3	415.2
72.5°	519.3	591.5	723.2	523.6	302.7
75°	436.5	488.5	620.2	450.3	268.7
77.5°	349.4	392.9	424.8	409.9	236.8
80°	271.9	315.4	345.1	372.8	203.9
82.5°	197.5	226.2	274.0	330.3	169.9
85°	121.1	147.6	210.3	279.3	126.4
87.5°	52.0	90.3	154.0	231.5	82.8
90°	2.1	44.6	105.1	180.5	37.2
92.5°	1.1	19.1	68.0	132.7	24.4
95°	1.1	7.4	41.4	90.3	19.1
97.5°	1.1	3.2	21.2	58.4	13.8
100°	1.1	2.1	11.7	34.0	9.6
102.5°	1.1	2.1	5.3	17.0	7.4
105°	1.1	2.1	4.2	7.4	6.4
107.5°	1.1	2.1	3.2	5.3	5.3
110°	1.1	2.1	3.2	5.3	5.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.1	2.1	3.2	5.3	5.3
115°	1.1	2.1	3.2	4.2	4.2
117.5°	1.1	2.1	3.2	4.2	4.2
120°	1.1	2.1	3.2	4.2	4.2
122.5°	1.1	2.1	3.2	4.2	4.2
125°	2.1	2.1	3.2	4.2	4.2
127.5°	2.1	3.2	3.2	4.2	4.2
130°	2.1	3.2	3.2	4.2	4.2
132.5°	2.1	3.2	3.2	4.2	4.2
135°	2.1	3.2	3.2	4.2	4.2
137.5°	2.1	3.2	4.2	4.2	4.2
140°	3.2	4.2	4.2	4.2	4.2
142.5°	3.2	4.2	4.2	5.3	4.2
145°	3.2	4.2	4.2	5.3	5.3
147.5°	3.2	4.2	5.3	5.3	5.3
150°	3.2	4.2	5.3	6.4	6.4
152.5°	4.2	4.2	5.3	6.4	6.4
155°	4.2	5.3	5.3	6.4	6.4
157.5°	4.2	5.3	5.3	6.4	7.4
160°	4.2	5.3	6.4	7.4	7.4
162.5°	4.2	5.3	6.4	7.4	7.4
165°	5.3	6.4	6.4	7.4	7.4
167.5°	5.3	6.4	7.4	7.4	8.5
170°	5.3	6.4	7.4	8.5	8.5
172.5°	5.3	6.4	7.4	8.5	8.5
175°	5.3	6.4	7.4	8.5	9.6
177.5°	5.3	6.4	7.4	8.5	9.6
180°	7.4	7.4	7.4	7.4	7.4

(END OF REPORT)