

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: P685856

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

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685856
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-18-UNV-W-LVR-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH WIDE LENS @80 CRI and 4000K
Light Source: (1176) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

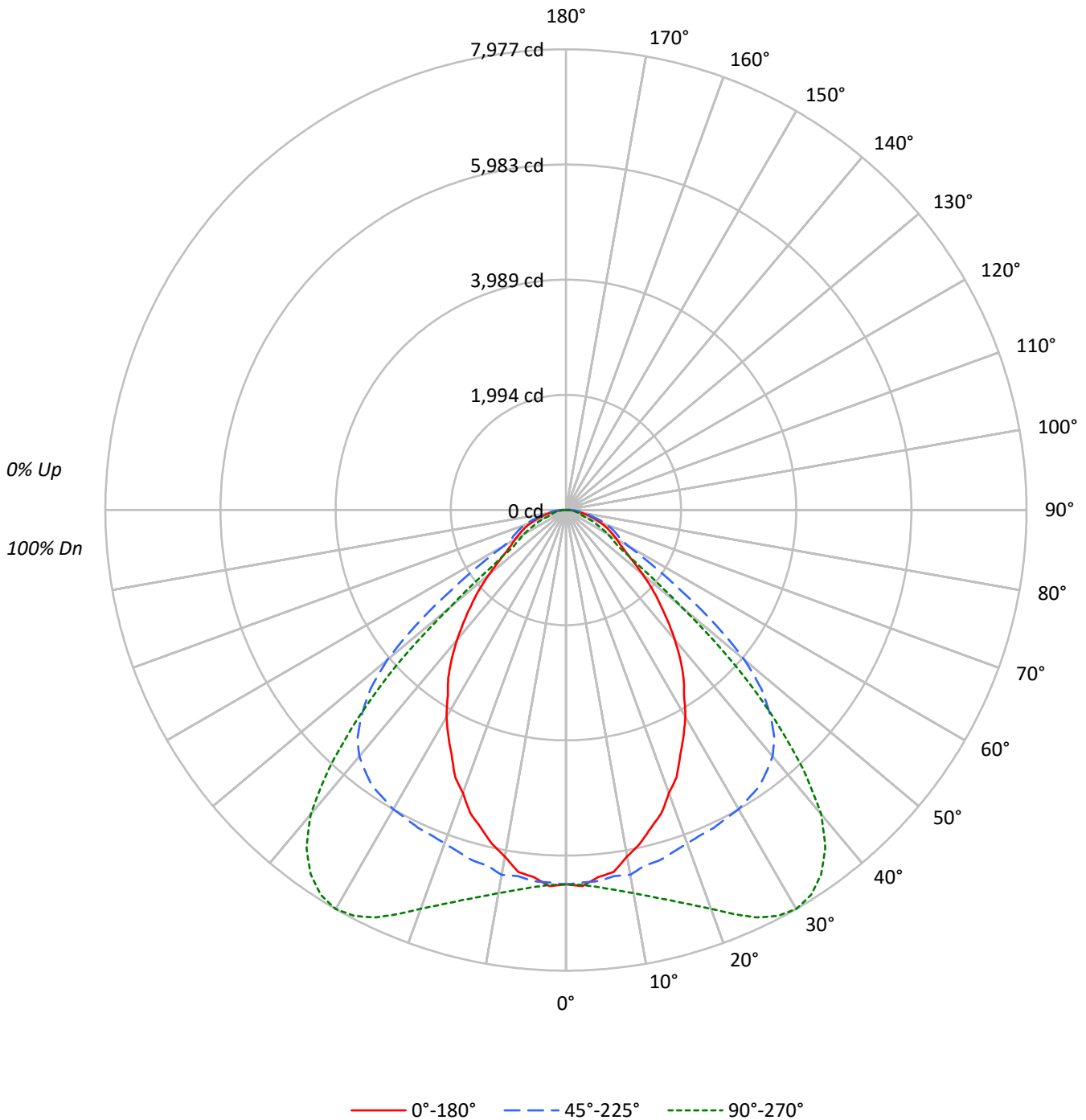
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15418.7 lumens
Efficiency: N/A
Efficacy: 141.5 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.64 / 1.46
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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	89	89	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	77	77	77	75
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	68	68	68	66
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	59	59	59	59	57
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	53	53	53	51
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	47	47	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	38	38	38	36
9	61	48	40	35	59	47	40	35	46	40	35	45	39	35	44	39	34	34	34	34	33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	35	31	31	31	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10464	10464	10464
5°	10344	10451	10623
10°	9987	10515	11045
15°	9517	10495	11695
20°	8958	10552	12623
25°	8341	10812	13864
30°	7711	11153	14872
35°	7006	11515	15184
40°	6177	11732	14486
45°	5265	11411	11614
50°	4364	10147	6590
55°	3554	6856	3152
60°	3282	3986	2723
65°	3164	3667	2214
70°	2985	3598	1582
75°	2779	3284	1538
80°	2533	3226	1689
85°	1943	3864	1862



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	616.2	4.0
10°-20°	1788.7	11.6
20°-30°	2838.7	18.4
30°-40°	3545.4	23.0
40°-50°	3256.3	21.1
50°-60°	1737.8	11.3
60°-70°	894.4	5.8
70°-80°	491.8	3.2
80°-90°	202.9	1.3
90°-100°	39.1	0.3
100°-110°	2.2	0.0
110°-120°	0.5	0.0
120°-130°	0.7	0.0
130°-140°	1.2	0.0
140°-150°	1.0	0.0
150°-160°	0.8	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	5243.6	34.0
0°-40°	8789.0	57.0
0°-60°	13783.2	89.4
0°-90°	15372.3	99.7
90°-120°	41.8	0.3
90°-150°	44.8	0.3
90°-180°	46.0	0.3
0°-180°	15418.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6481	6481	6481	6481	6481	
5°	6382	6398	6448	6548	6554	603
15°	5694	5880	6278	6790	6996	1601
25°	4682	5122	6069	7180	7782	2157
35°	3554	4210	5842	7116	7703	2207
45°	2306	3324	4998	5179	5086	1785
55°	1263	2264	2436	1364	1120	1166
65°	828	1085	960	783	579	818
75°	445	494	526	468	246	473
85°	105	137	209	275	100	120
90°	0	39	103	166	22	4
95°	0	4	39	77	10	0
105°	0	1	1	1	0	0
115°	0	1	1	0	0	0
125°	0	1	1	0	0	1
135°	1	2	2	1	1	1
145°	1	2	2	1	1	1
155°	2	2	2	1	1	1
165°	2	3	2	1	1	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°	6480.7	6480.7	6480.7	6480.7	6480.7
2.5°	6518.5	6504.5	6458.0	6500.1	6496.9
5°	6382.3	6398.5	6448.2	6547.7	6554.2
7.5°	6321.8	6366.1	6394.2	6609.3	6637.4
10°	6091.5	6160.7	6413.6	6637.4	6736.9
12.5°	5918.5	6058.0	6303.4	6682.8	6855.8
15°	5693.7	5879.6	6278.5	6789.8	6996.3
17.5°	5502.4	5692.6	6202.8	6870.9	7159.5
20°	5213.7	5558.6	6141.2	6955.2	7346.6
22.5°	5007.2	5356.4	6093.7	7029.8	7568.2
25°	4681.9	5121.8	6068.8	7180.1	7782.2
27.5°	4409.4	4924.0	6013.7	7276.3	7923.8
30°	4136.0	4681.9	5982.3	7293.6	7976.8
32.5°	3806.2	4485.1	5903.4	7253.6	7901.1
35°	3554.4	4210.5	5841.8	7116.3	7703.3
37.5°	3247.4	3994.3	5706.7	6867.7	7379.0
40°	2930.6	3794.4	5566.1	6479.6	6873.1
42.5°	2610.6	3569.5	5341.3	5961.8	6081.8
45°	2305.8	3324.1	4997.5	5179.1	5086.2
47.5°	2032.3	3060.3	4591.1	4197.6	3979.2
50°	1737.2	2792.3	4039.7	3195.5	2623.6
52.5°	1471.3	2568.5	3280.9	2164.2	1632.3
55°	1262.6	2263.6	2435.5	1364.2	1119.9
57.5°	1114.5	2030.1	1757.7	1078.9	958.9
60°	1016.2	1738.3	1234.5	990.2	843.2
62.5°	918.9	1375.0	1056.1	902.6	709.1
65°	828.1	1085.3	959.9	782.7	579.4
67.5°	734.0	881.0	867.0	710.2	483.2
70°	632.4	724.3	762.1	594.6	335.1
72.5°	541.6	607.5	648.6	508.1	284.3
75°	445.4	494.0	526.5	468.1	246.5
77.5°	353.5	397.8	429.2	423.8	216.2
80°	272.4	301.6	347.0	379.4	181.6
82.5°	185.9	207.6	273.5	327.5	141.6
85°	104.9	137.3	208.6	274.6	100.5
87.5°	30.3	81.1	151.3	220.5	58.4
90°	0.0	38.9	102.7	166.5	21.6
92.5°	0.0	15.1	67.0	116.7	15.1
95°	0.0	4.3	38.9	76.8	9.7
97.5°	0.0	1.1	18.4	45.4	4.3
100°	0.0	1.1	6.5	21.6	1.1
102.5°	0.0	1.1	2.2	7.6	0.0
105°	0.0	1.1	1.1	1.1	0.0
107.5°	0.0	1.1	1.1	0.0	0.0
110°	0.0	1.1	1.1	0.0	0.0



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CANDELA DISTRIBUTION (continued):

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

(END OF REPORT)