

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: P685916

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

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685916
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-18-UNV-LVRF-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH FROSTED LAY-IN @80 CRI and 4000K
Light Source: (1176) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

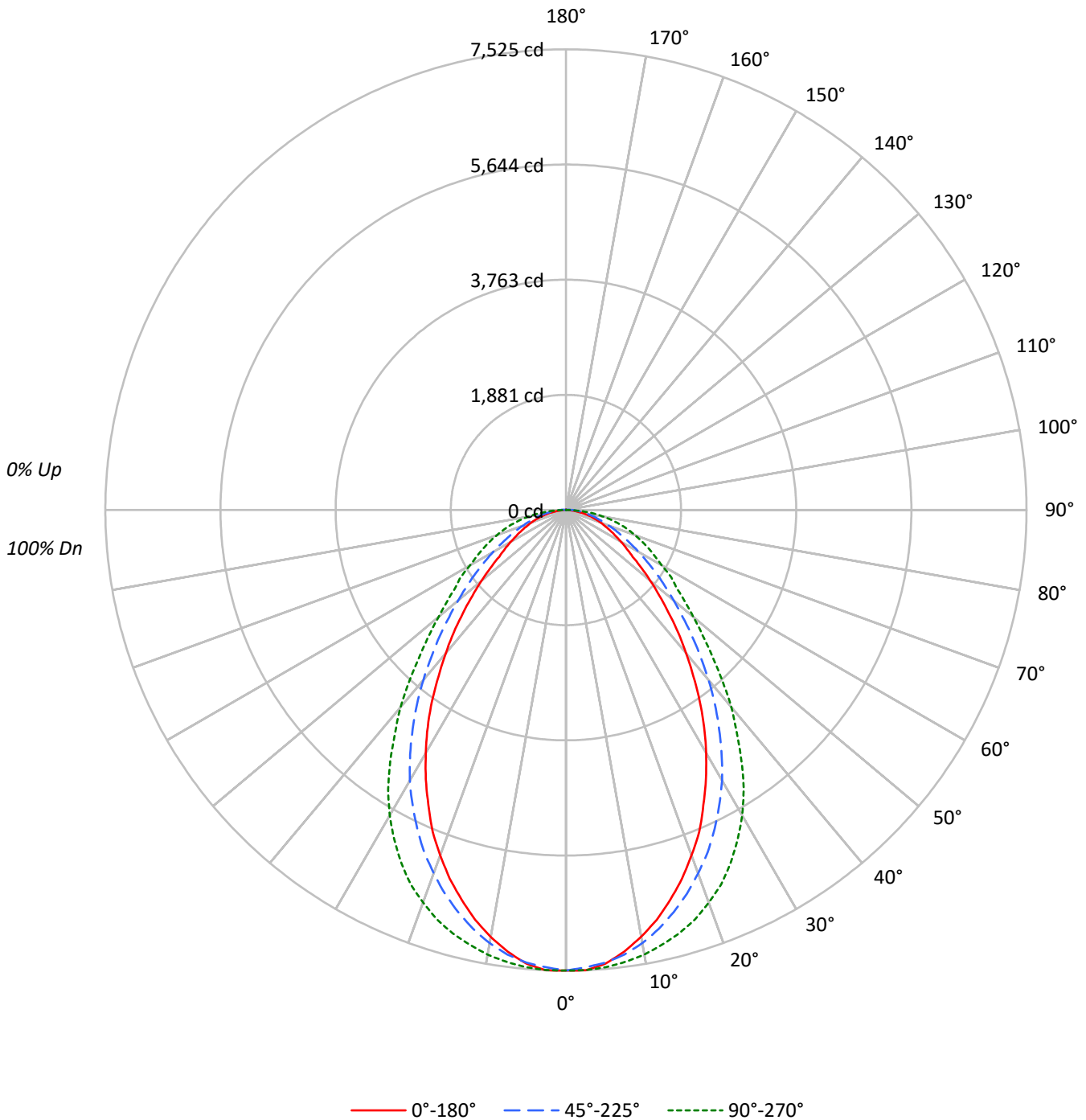
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13874.8 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Spacing Criteria (0/90/45): 0.97 / 1.15 / 1.12
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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86	86	86
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	74	74	74
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	65	65	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	57
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	51	51	51
6	75	63	55	49	73	62	54	48	60	53	48	58	52	48	57	51	47	45	45	45
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41	41	41
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37	37	37
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34	34	34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31	31	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12144	12144	12144
5°	12056	12028	12148
10°	11605	11777	12089
15°	11011	11365	11962
20°	10312	10847	11724
25°	9469	10234	11335
30°	8535	9510	10734
35°	7517	8601	9859
40°	6434	7637	8865
45°	5420	6657	7721
50°	4526	5770	6826
55°	3746	5069	6189
60°	3375	4444	5836
65°	3069	3911	5707
70°	2857	3511	5664
75°	2650	3278	5779
80°	2403	3247	5789
85°	2062	3805	5728



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	703.8	5.1
10°-20°	1923.3	13.9
20°-30°	2657.4	19.2
30°-40°	2733.7	19.7
40°-50°	2241.2	16.2
50°-60°	1608.2	11.6
60°-70°	1081.7	7.8
70°-80°	631.3	4.6
80°-90°	243.3	1.8
90°-100°	42.2	0.3
100°-110°	3.6	0.0
110°-120°	0.7	0.0
120°-130°	0.6	0.0
130°-140°	0.9	0.0
140°-150°	1.1	0.0
150°-160°	0.9	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	5284.5	38.1
0°-40°	8018.2	57.8
0°-60°	11867.6	85.5
0°-90°	13823.8	99.6
90°-120°	46.4	0.3
90°-150°	49.0	0.4
90°-180°	51.0	0.4
0°-180°	13874.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7521	7521	7521	7521	7521	
5°	7438	7444	7421	7490	7496	698
15°	6588	6654	6799	7063	7156	1848
25°	5315	5440	5744	6144	6363	2440
35°	3814	3990	4364	4772	5002	2376
45°	2374	2559	2915	3202	3381	1842
55°	1331	1490	1801	2047	2199	1225
65°	803	851	1024	1314	1494	800
75°	425	440	525	730	926	451
85°	111	138	205	307	309	121
90°	1	46	105	160	34	7
95°	1	8	44	77	14	0
105°	0	1	2	4	2	0
115°	1	1	1	0	0	1
125°	1	1	1	0	0	1
135°	1	2	1	1	0	1
145°	2	2	2	1	1	1
155°	2	3	2	1	1	1
165°	3	3	3	2	1	1
175°	3	4	3	2	2	0
180°	3	3	3	3	3	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7521.4	7521.4	7521.4	7521.4	7521.4
2.5°	7524.7	7518.2	7476.0	7524.7	7522.5
5°	7438.2	7443.6	7420.9	7490.1	7495.5
7.5°	7277.1	7298.8	7323.6	7425.2	7443.6
10°	7078.2	7110.7	7183.1	7334.4	7373.3
12.5°	6854.5	6890.1	7008.0	7216.6	7270.7
15°	6587.5	6654.5	6799.3	7063.1	7156.1
17.5°	6311.8	6394.0	6573.4	6885.8	7011.2
20°	6001.6	6083.7	6312.9	6661.0	6823.1
22.5°	5690.3	5770.3	6050.2	6421.0	6623.1
25°	5315.2	5439.5	5744.3	6144.3	6362.6
27.5°	4956.3	5088.2	5427.6	5856.7	6074.0
30°	4577.9	4732.5	5101.1	5510.8	5757.3
32.5°	4202.8	4359.6	4735.8	5162.7	5407.0
35°	3813.7	3989.9	4363.9	4772.5	5001.7
37.5°	3419.1	3611.5	3996.4	4398.5	4583.3
40°	3052.7	3241.9	3623.4	3983.4	4206.1
42.5°	2714.3	2900.3	3253.7	3580.2	3780.2
45°	2373.8	2558.7	2915.4	3201.9	3381.3
47.5°	2069.0	2258.2	2590.0	2879.7	3030.0
50°	1802.0	1973.9	2297.1	2559.8	2717.6
52.5°	1557.7	1714.4	2034.4	2289.5	2441.9
55°	1330.7	1489.6	1800.9	2047.4	2198.7
57.5°	1178.3	1291.8	1571.7	1845.2	2039.8
60°	1045.3	1115.6	1376.1	1700.4	1807.4
62.5°	910.2	974.0	1188.0	1473.4	1639.8
65°	803.2	850.7	1023.7	1314.5	1493.9
67.5°	697.2	732.9	881.0	1161.0	1342.6
70°	605.3	628.0	743.7	1009.6	1199.9
72.5°	517.8	529.7	633.5	871.3	1060.4
75°	424.8	440.0	525.4	729.7	926.4
77.5°	336.2	357.8	433.5	608.6	772.9
80°	258.4	275.6	349.2	500.5	622.6
82.5°	179.4	203.2	272.4	395.6	476.7
85°	111.3	138.4	205.4	307.0	309.2
87.5°	46.5	86.5	150.3	227.0	157.8
90°	1.1	46.5	104.9	160.0	33.5
92.5°	0.0	21.6	71.3	114.6	19.5
95°	1.1	7.6	44.3	76.7	14.1
97.5°	0.0	2.2	23.8	48.6	8.6
100°	0.0	1.1	9.7	27.0	5.4
102.5°	0.0	1.1	4.3	11.9	3.2
105°	0.0	1.1	2.2	4.3	2.2
107.5°	0.0	1.1	1.1	1.1	1.1
110°	1.1	1.1	1.1	1.1	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°	1.1	1.1	1.1	0.0	0.0
117.5°	1.1	1.1	1.1	0.0	0.0
120°	1.1	1.1	1.1	0.0	0.0
122.5°	1.1	1.1	1.1	0.0	0.0
125°	1.1	1.1	1.1	0.0	0.0
127.5°	1.1	1.1	1.1	0.0	0.0
130°	1.1	1.1	1.1	0.0	0.0
132.5°	1.1	2.2	1.1	1.1	0.0
135°	1.1	2.2	1.1	1.1	0.0
137.5°	1.1	2.2	1.1	1.1	0.0
140°	1.1	2.2	1.1	1.1	1.1
142.5°	2.2	2.2	2.2	1.1	1.1
145°	2.2	2.2	2.2	1.1	1.1
147.5°	2.2	2.2	2.2	1.1	1.1
150°	2.2	2.2	2.2	1.1	1.1
152.5°	2.2	3.2	2.2	1.1	1.1
155°	2.2	3.2	2.2	1.1	1.1
157.5°	2.2	3.2	2.2	1.1	1.1
160°	2.2	3.2	2.2	1.1	1.1
162.5°	3.2	3.2	2.2	2.2	1.1
165°	3.2	3.2	3.2	2.2	1.1
167.5°	3.2	3.2	3.2	2.2	1.1
170°	3.2	3.2	3.2	2.2	2.2
172.5°	3.2	3.2	3.2	2.2	2.2
175°	3.2	4.3	3.2	2.2	2.2
177.5°	3.2	4.3	3.2	2.2	2.2
180°	3.2	3.2	3.2	3.2	3.2

(END OF REPORT)