

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: P685797

Luminaire Tested: **8CZL-24-UNV-M-LVR-L840-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685797
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-24-UNV-M-LVR-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH MEDIUM LENS @80 CRI and 4000K
Light Source: (1176) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

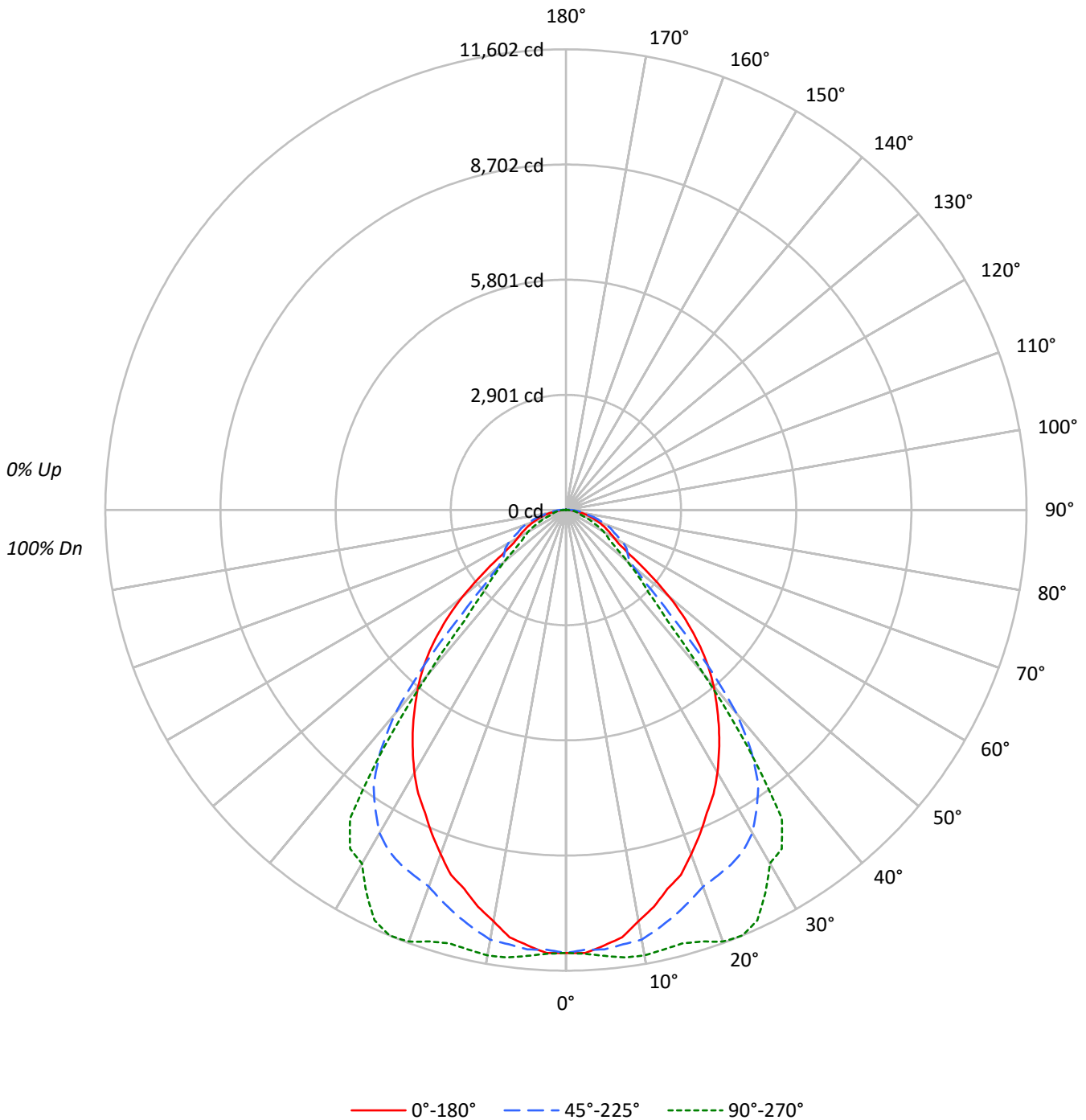
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20632.8 lumens
Efficiency: N/A
Efficacy: 134.0 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): 154
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	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	90	90	90	88
2	103	96	90	86	100	94	89	84	91	86	83	87	84	81	84	81	79	79	79	79	77
3	95	87	80	74	93	85	79	74	82	77	72	79	75	71	77	73	70	70	70	70	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	70	66	62	62	62	62	60
5	83	72	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	56	56	56	54
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	51	51	51	49
7	72	60	53	47	70	59	52	47	58	51	47	57	51	46	55	50	46	46	46	46	44
8	68	56	48	43	66	55	48	43	54	47	42	52	47	42	51	46	42	42	42	42	40
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	42	39	39	39	39	37
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	35	35	35	35	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18009	18009	18009
5°	17842	18002	18271
10°	17238	18012	18671
15°	16512	17676	18890
20°	15846	17340	19872
25°	14971	17546	20314
30°	14230	17509	19160
35°	13250	16650	18682
40°	12197	14113	11385
45°	10747	8412	6748
50°	8530	5586	5093
55°	5523	5314	3865
60°	4509	5401	3550
65°	4295	5090	2900
70°	4078	5108	2293
75°	3874	4782	2132
80°	3583	4517	2393
85°	3207	5524	2936



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1058.4	5.1
10°-20°	3002.2	14.6
20°-30°	4527.2	21.9
30°-40°	5002.4	24.2
40°-50°	3136.5	15.2
50°-60°	1688.7	8.2
60°-70°	1146.8	5.6
70°-80°	685.0	3.3
80°-90°	297.6	1.4
90°-100°	65.2	0.3
100°-110°	7.5	0.0
110°-120°	2.7	0.0
120°-130°	2.4	0.0
130°-140°	3.0	0.0
140°-150°	2.7	0.0
150°-160°	2.1	0.0
160°-170°	1.6	0.0
170°-180°	0.6	0.0
0°-30°	8587.9	41.6
0°-40°	13590.3	65.9
0°-60°	18415.5	89.3
0°-90°	20544.9	99.6
90°-120°	75.4	0.4
90°-150°	83.5	0.4
90°-180°	88.0	0.4
0°-180°	20632.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11154	11154	11154	11154	11154	
5°	11008	11027	11107	11238	11273	1037
15°	9878	10224	10575	11087	11301	2789
25°	8404	8914	9849	10899	11402	3880
35°	6722	7512	8447	9087	9478	4195
45°	4706	5124	3684	3003	2955	3590
55°	1962	2052	1888	1633	1373	1906
65°	1124	1236	1332	1082	759	1112
75°	621	691	766	630	342	655
85°	173	212	298	393	158	187
90°	4	65	151	252	46	12
95°	2	10	60	129	23	1
105°	2	3	4	10	4	2
115°	2	3	3	3	3	1
125°	2	3	3	3	3	1
135°	3	3	4	4	4	2
145°	3	4	4	4	6	2
155°	4	4	4	4	4	2
165°	4	6	6	6	6	1
175°	6	6	6	7	7	1
180°	7	7	7	7	7	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	11153.8	11153.8	11153.8	11153.8	11153.8
2.5°	11168.3	11137.8	11081.1	11182.9	11184.3
5°	11008.4	11027.3	11107.3	11238.1	11273.1
7.5°	10852.7	10925.5	11033.1	11348.7	11364.7
10°	10513.9	10665.1	10986.5	11290.5	11388.0
12.5°	10231.7	10455.7	10787.3	11187.2	11338.5
15°	9878.3	10224.4	10574.9	11086.9	11300.7
17.5°	9631.0	9908.8	10337.9	11040.3	11390.9
20°	9222.3	9613.6	10092.1	11072.3	11565.4
22.5°	8825.3	9300.9	9968.5	11084.0	11601.7
25°	8403.5	8914.0	9849.2	10899.3	11402.5
27.5°	8054.5	8482.1	9671.8	10513.9	10877.5
30°	7632.7	8135.9	9391.1	9924.8	10276.8
32.5°	7178.9	7817.4	8935.8	9474.0	10113.9
35°	6722.2	7512.0	8447.2	9087.1	9478.3
37.5°	6245.2	7260.4	7679.2	7782.5	7514.9
40°	5787.1	6909.9	6696.1	5696.9	5401.6
42.5°	5286.7	6156.5	5222.7	3919.6	3787.3
45°	4706.4	5123.9	3684.0	3003.3	2955.3
47.5°	4088.3	3967.6	2747.4	2510.3	2482.7
50°	3396.0	3172.0	2223.8	2215.1	2027.4
52.5°	2647.0	2519.0	1994.0	1921.3	1623.1
55°	1962.0	2052.2	1887.8	1633.3	1373.0
57.5°	1570.8	1780.2	1813.6	1426.8	1227.5
60°	1396.2	1557.7	1672.6	1311.9	1099.5
62.5°	1252.2	1380.2	1498.0	1217.3	948.3
65°	1124.3	1236.2	1332.2	1082.1	759.2
67.5°	989.0	1105.3	1223.2	929.4	645.8
70°	863.9	987.5	1082.1	824.6	485.8
72.5°	734.5	862.5	904.6	689.4	388.3
75°	621.0	690.8	766.5	629.8	341.8
77.5°	501.8	561.4	591.9	577.4	301.1
80°	385.4	433.4	485.8	525.0	257.4
82.5°	282.2	317.1	388.3	462.5	206.5
85°	173.1	212.3	298.2	392.7	158.5
87.5°	77.1	126.5	219.6	324.3	101.8
90°	4.4	65.4	151.3	251.6	46.5
92.5°	1.5	29.1	98.9	186.2	32.0
95°	1.5	10.2	59.6	129.4	23.3
97.5°	1.5	4.4	33.5	82.9	14.5
100°	1.5	2.9	16.0	48.0	10.2
102.5°	1.5	2.9	7.3	23.3	7.3
105°	1.5	2.9	4.4	10.2	4.4
107.5°	1.5	2.9	2.9	4.4	2.9
110°	1.5	2.9	2.9	2.9	2.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.5	2.9	2.9	2.9	2.9
115°	1.5	2.9	2.9	2.9	2.9
117.5°	1.5	2.9	2.9	2.9	2.9
120°	1.5	2.9	2.9	2.9	2.9
122.5°	1.5	2.9	2.9	2.9	2.9
125°	1.5	2.9	2.9	2.9	2.9
127.5°	1.5	2.9	2.9	2.9	2.9
130°	1.5	2.9	2.9	2.9	2.9
132.5°	2.9	2.9	4.4	4.4	4.4
135°	2.9	2.9	4.4	4.4	4.4
137.5°	2.9	4.4	4.4	4.4	4.4
140°	2.9	4.4	4.4	4.4	4.4
142.5°	2.9	4.4	4.4	4.4	4.4
145°	2.9	4.4	4.4	4.4	5.8
147.5°	2.9	4.4	4.4	4.4	5.8
150°	2.9	4.4	4.4	4.4	4.4
152.5°	4.4	4.4	4.4	4.4	4.4
155°	4.4	4.4	4.4	4.4	4.4
157.5°	4.4	4.4	4.4	5.8	5.8
160°	4.4	5.8	5.8	5.8	5.8
162.5°	4.4	5.8	5.8	5.8	5.8
165°	4.4	5.8	5.8	5.8	5.8
167.5°	4.4	5.8	5.8	5.8	7.3
170°	5.8	5.8	5.8	7.3	7.3
172.5°	5.8	5.8	5.8	7.3	7.3
175°	5.8	5.8	5.8	7.3	7.3
177.5°	5.8	7.3	5.8	7.3	8.7
180°	7.3	7.3	7.3	7.3	7.3

(END OF REPORT)