

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: P685738

Luminaire Tested: **8CZL-32-UNV-N-LVR-L840-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685738
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-32-UNV-N-LVR-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH NARROW LENS @80 CRI and 4000K
Light Source: (1176) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

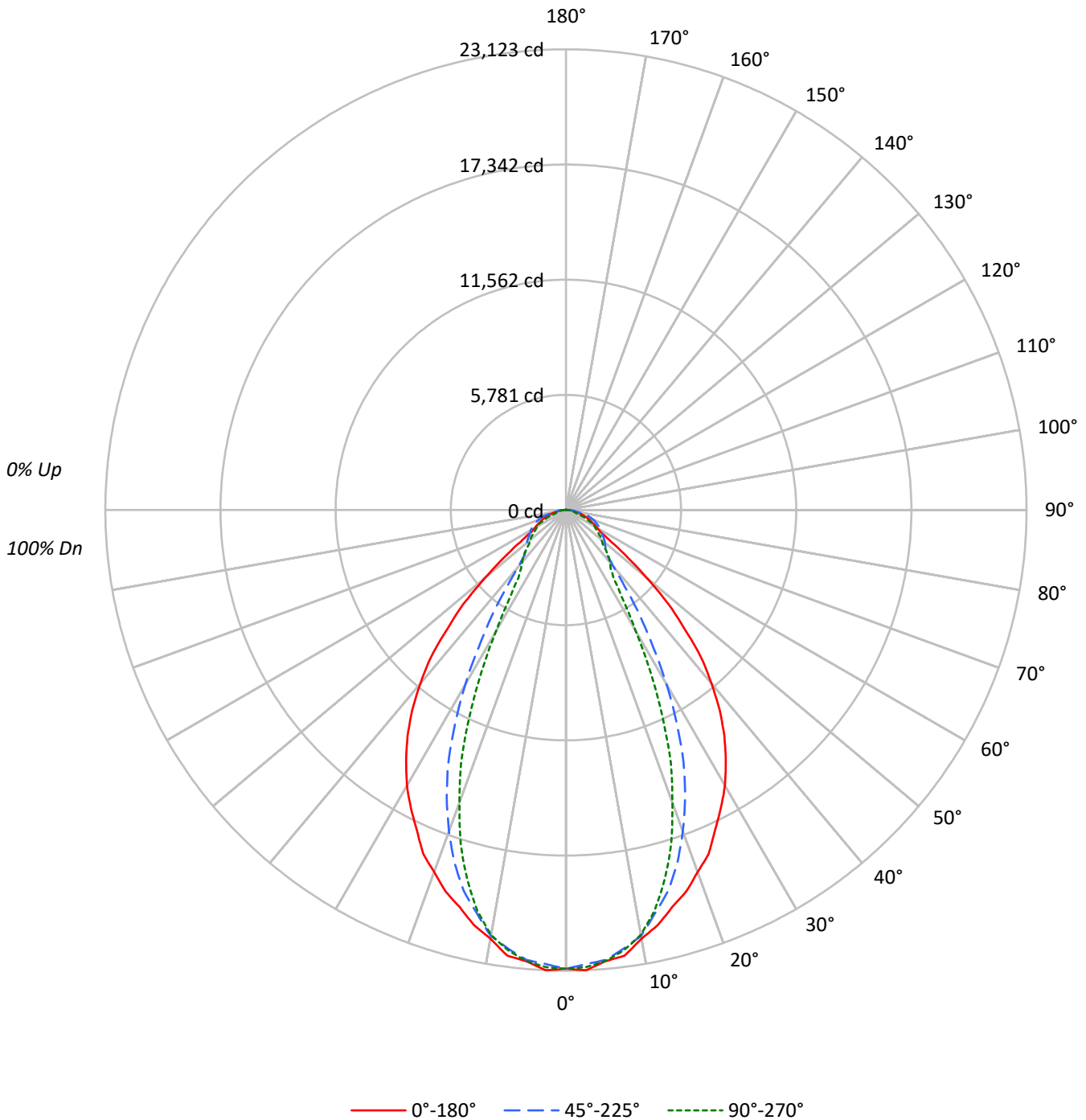
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27259.7 lumens
Efficiency: N/A
Efficacy: 132.3 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): 206
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	90	90	90	88
2	103	97	92	87	101	95	90	86	92	88	84	88	85	82	86	83	80	80	80	80	78
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	72	72	72	70
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	65	65	65	63
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	59	59	59	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	55	55	55	53
7	75	64	57	51	73	63	56	51	62	55	51	60	55	51	59	54	50	50	50	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	47	47	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	43	43	43	43	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	41	41	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	37174	37174	37174
5°	36845	36741	36835
10°	35806	35586	35499
15°	34478	33102	32052
20°	33208	29488	26843
25°	31558	24899	20468
30°	29767	18835	13078
35°	27322	12769	8217
40°	23961	7779	7207
45°	19197	6481	6459
50°	13274	6404	5831
55°	7819	6348	5491
60°	5827	6595	5423
65°	5515	6640	4769
70°	5304	7082	3601
75°	5001	7107	3079
80°	4643	5895	3482
85°	4120	7155	4300



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2138.8	7.8
10°-20°	5537.8	20.3
20°-30°	6469.4	23.7
30°-40°	4799.6	17.6
40°-50°	3181.8	11.7
50°-60°	2110.2	7.7
60°-70°	1574.4	5.8
70°-80°	929.3	3.4
80°-90°	391.3	1.4
90°-100°	84.5	0.3
100°-110°	11.4	0.0
110°-120°	5.9	0.0
120°-130°	5.3	0.0
130°-140°	5.1	0.0
140°-150°	5.3	0.0
150°-160°	4.7	0.0
160°-170°	3.4	0.0
170°-180°	1.3	0.0
0°-30°	14146.0	51.9
0°-40°	18945.6	69.5
0°-60°	24237.6	88.9
0°-90°	27132.6	99.5
90°-120°	101.9	0.4
90°-150°	117.6	0.4
90°-180°	127.0	0.5
0°-180°	27259.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	23024	23024	23024	23024	23024	
5°	22733	22714	22669	22751	22727	2151
15°	20626	20381	19803	19462	19175	5819
25°	17714	16440	13976	11989	11489	8159
35°	13861	10270	6478	4379	4169	8604
45°	8407	4960	2838	2946	2828	6471
55°	2778	2440	2255	2177	1951	2733
65°	1444	1613	1738	1699	1248	1439
75°	802	897	1139	827	494	846
85°	222	271	386	513	232	240
90°	4	82	193	332	68	14
95°	2	14	76	166	35	2
105°	2	4	8	14	12	2
115°	2	4	6	8	8	2
125°	4	4	6	8	8	3
135°	4	6	6	8	8	3
145°	6	8	8	10	10	4
155°	8	10	10	12	12	3
165°	10	12	12	14	14	3
175°	10	12	14	16	18	1
180°	14	14	14	14	14	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	23023.7	23023.7	23023.7	23023.7	23023.7
2.5°	23123.2	22998.4	22818.9	22980.8	22967.1
5°	22733.1	22713.6	22668.7	22750.6	22727.2
7.5°	22557.5	22452.2	22202.5	22395.6	22286.4
10°	21839.7	21716.8	21705.1	21666.1	21652.4
12.5°	21330.5	21182.3	20708.3	20682.9	20577.6
15°	20626.3	20380.6	19803.2	19461.8	19175.1
17.5°	20080.2	19545.7	18582.0	17946.1	17577.5
20°	19327.2	18738.1	17162.0	16052.0	15622.9
22.5°	18706.9	17663.3	15636.5	14066.3	13771.7
25°	17714.0	16440.2	13976.5	11988.8	11489.4
27.5°	16851.8	15094.3	12018.1	9837.2	9224.7
30°	15966.2	13586.4	10102.5	7726.6	7014.6
32.5°	14934.3	12066.8	8130.4	5797.4	5282.4
35°	13861.4	10270.3	6478.2	4379.2	4168.6
37.5°	12679.3	8655.1	4868.9	3657.5	3692.6
40°	11368.5	7246.7	3690.7	3353.2	3419.5
42.5°	10061.5	6060.7	3070.3	3154.2	3173.7
45°	8407.4	4960.5	2838.2	2945.5	2828.5
47.5°	6961.9	4053.5	2674.4	2662.7	2496.9
50°	5284.4	3304.4	2549.5	2409.1	2321.3
52.5°	3913.0	2787.5	2430.5	2276.4	2186.7
55°	2777.7	2440.3	2255.0	2176.9	1950.7
57.5°	2087.2	2194.5	2120.4	1944.8	1786.8
60°	1804.4	1978.0	2042.3	1833.6	1679.5
62.5°	1628.8	1792.7	1915.6	1767.3	1537.1
65°	1443.5	1613.2	1738.0	1699.0	1248.4
67.5°	1281.6	1470.8	1624.9	1457.1	1020.2
70°	1123.6	1299.1	1500.1	1236.7	762.7
72.5°	953.9	1086.5	1328.4	961.7	555.9
75°	801.7	897.3	1139.2	827.1	493.5
77.5°	641.8	721.7	780.3	753.0	435.0
80°	499.4	579.3	634.0	684.7	374.5
82.5°	362.8	415.5	503.3	606.7	312.1
85°	222.4	271.1	386.2	513.0	232.1
87.5°	95.6	165.8	282.8	425.2	152.2
90°	3.9	81.9	193.1	331.6	68.3
92.5°	2.0	35.1	124.8	243.8	44.9
95°	2.0	13.7	76.1	165.8	35.1
97.5°	2.0	5.9	39.0	107.3	25.4
100°	2.0	3.9	21.5	62.4	17.6
102.5°	2.0	3.9	9.8	31.2	13.7
105°	2.0	3.9	7.8	13.7	11.7
107.5°	2.0	3.9	5.9	9.8	9.8
110°	2.0	3.9	5.9	9.8	9.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.0	3.9	5.9	9.8	9.8
115°	2.0	3.9	5.9	7.8	7.8
117.5°	2.0	3.9	5.9	7.8	7.8
120°	2.0	3.9	5.9	7.8	7.8
122.5°	2.0	3.9	5.9	7.8	7.8
125°	3.9	3.9	5.9	7.8	7.8
127.5°	3.9	5.9	5.9	7.8	7.8
130°	3.9	5.9	5.9	7.8	7.8
132.5°	3.9	5.9	5.9	7.8	7.8
135°	3.9	5.9	5.9	7.8	7.8
137.5°	3.9	5.9	7.8	7.8	7.8
140°	5.9	7.8	7.8	7.8	7.8
142.5°	5.9	7.8	7.8	9.8	7.8
145°	5.9	7.8	7.8	9.8	9.8
147.5°	5.9	7.8	9.8	9.8	9.8
150°	5.9	7.8	9.8	11.7	11.7
152.5°	7.8	7.8	9.8	11.7	11.7
155°	7.8	9.8	9.8	11.7	11.7
157.5°	7.8	9.8	9.8	11.7	13.7
160°	7.8	9.8	11.7	13.7	13.7
162.5°	7.8	9.8	11.7	13.7	13.7
165°	9.8	11.7	11.7	13.7	13.7
167.5°	9.8	11.7	13.7	13.7	15.6
170°	9.8	11.7	13.7	15.6	15.6
172.5°	9.8	11.7	13.7	15.6	15.6
175°	9.8	11.7	13.7	15.6	17.6
177.5°	9.8	11.7	13.7	15.6	17.6
180°	13.7	13.7	13.7	13.7	13.7

(END OF REPORT)