

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: P685737

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

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685737
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-24-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

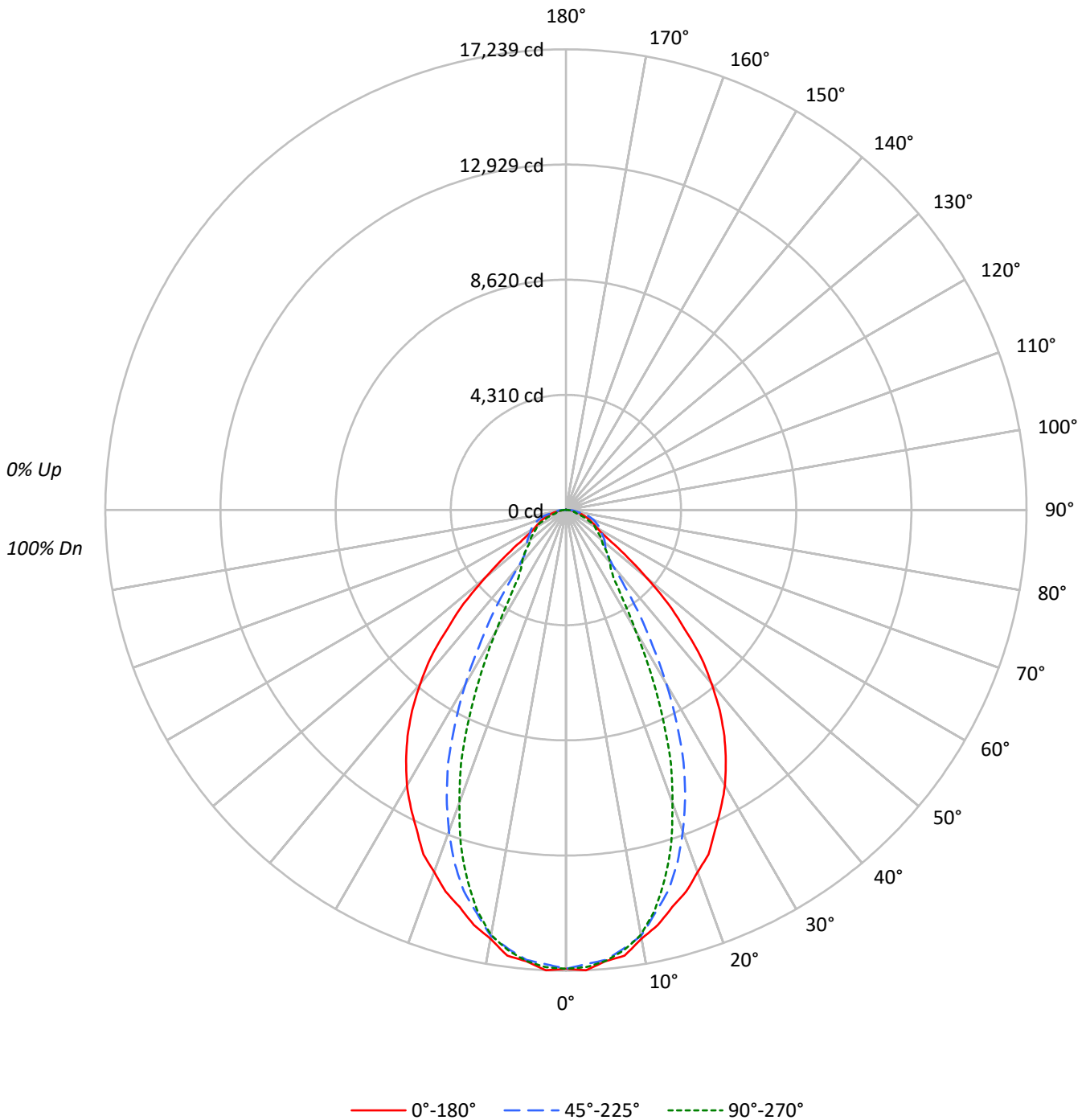
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20323.3 lumens
Efficiency: N/A
Efficacy: 132.0 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): 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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	88	
2	103	97	92	87	101	95	90	86	92	88	84	88	85	82	86	83	80	80	78	
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	72	70	
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	65	63	
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	59	58	
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	55	53	
7	75	64	57	51	73	63	56	51	62	55	51	60	55	51	59	54	50	50	49	
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	47	45	
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	43	43	42	
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	41	39	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27715	27715	27715
5°	27469	27392	27462
10°	26695	26531	26466
15°	25705	24679	23896
20°	24758	21985	20013
25°	23528	18563	15260
30°	22193	14042	9750
35°	20369	9520	6126
40°	17864	5799	5373
45°	14312	4832	4815
50°	9896	4775	4347
55°	5829	4733	4094
60°	4344	4917	4044
65°	4112	4951	3556
70°	3955	5280	2684
75°	3729	5298	2295
80°	3462	4394	2596
85°	3072	5335	3207



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1594.5	7.8
10°-20°	4128.7	20.3
20°-30°	4823.2	23.7
30°-40°	3578.3	17.6
40°-50°	2372.2	11.7
50°-60°	1573.2	7.7
60°-70°	1173.8	5.8
70°-80°	692.8	3.4
80°-90°	291.8	1.4
90°-100°	63.0	0.3
100°-110°	8.5	0.0
110°-120°	4.4	0.0
120°-130°	4.0	0.0
130°-140°	3.8	0.0
140°-150°	3.9	0.0
150°-160°	3.5	0.0
160°-170°	2.6	0.0
170°-180°	1.0	0.0
0°-30°	10546.4	51.9
0°-40°	14124.8	69.5
0°-60°	18070.2	88.9
0°-90°	20228.6	99.5
90°-120°	75.9	0.4
90°-150°	87.6	0.4
90°-180°	95.0	0.5
0°-180°	20323.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	17165	17165	17165	17165	17165	
5°	16948	16934	16900	16962	16944	1603
15°	15378	15195	14764	14510	14296	4338
25°	13207	12257	10420	8938	8566	6083
35°	10334	7657	4830	3265	3108	6415
45°	6268	3698	2116	2196	2109	4824
55°	2071	1819	1681	1623	1454	2038
65°	1076	1203	1296	1267	931	1073
75°	598	669	849	617	368	631
85°	166	202	288	382	173	179
90°	3	61	144	247	51	11
95°	2	10	57	124	26	1
105°	2	3	6	10	9	2
115°	2	3	4	6	6	1
125°	3	3	4	6	6	2
135°	3	4	4	6	6	2
145°	4	6	6	7	7	3
155°	6	7	7	9	9	3
165°	7	9	9	10	10	2
175°	7	9	10	12	13	1
180°	10	10	10	10	10	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	17165.2	17165.2	17165.2	17165.2	17165.2
2.5°	17239.4	17146.3	17012.5	17133.2	17123.0
5°	16948.5	16934.0	16900.5	16961.6	16944.1
7.5°	16817.6	16739.1	16552.9	16696.9	16615.5
10°	16282.4	16190.8	16182.1	16153.0	16142.8
12.5°	15902.8	15792.3	15438.9	15420.0	15341.5
15°	15377.8	15194.6	14764.1	14509.6	14295.8
17.5°	14970.6	14572.2	13853.7	13379.6	13104.8
20°	14409.3	13970.1	12795.0	11967.5	11647.5
22.5°	13946.8	13168.8	11657.7	10487.0	10267.4
25°	13206.6	12256.9	10420.1	8938.2	8565.9
27.5°	12563.8	11253.4	8960.0	7334.1	6877.4
30°	11903.5	10129.2	7531.9	5760.5	5229.7
32.5°	11134.2	8996.3	6061.6	4322.2	3938.3
35°	10334.3	7656.9	4829.8	3264.9	3107.9
37.5°	9453.0	6452.8	3630.0	2726.8	2753.0
40°	8475.7	5402.8	2751.5	2500.0	2549.4
42.5°	7501.3	4518.5	2289.1	2351.6	2366.2
45°	6268.1	3698.3	2116.0	2196.0	2108.7
47.5°	5190.4	3022.1	1993.9	1985.1	1861.5
50°	3939.7	2463.6	1900.8	1796.1	1730.6
52.5°	2917.3	2078.2	1812.1	1697.2	1630.3
55°	2070.9	1819.3	1681.2	1623.0	1454.3
57.5°	1556.1	1636.1	1580.8	1449.9	1332.1
60°	1345.2	1474.7	1522.7	1367.0	1252.2
62.5°	1214.3	1336.5	1428.1	1317.6	1146.0
65°	1076.2	1202.7	1295.8	1266.7	930.8
67.5°	955.5	1096.5	1211.4	1086.4	760.6
70°	837.7	968.6	1118.4	922.0	568.6
72.5°	711.2	810.0	990.4	717.0	414.5
75°	597.7	669.0	849.3	616.6	367.9
77.5°	478.5	538.1	581.7	561.4	324.3
80°	372.3	431.9	472.6	510.5	279.2
82.5°	270.5	309.8	375.2	452.3	232.7
85°	165.8	202.1	288.0	382.5	173.1
87.5°	71.3	123.6	210.9	317.0	113.4
90°	2.9	61.1	144.0	247.2	50.9
92.5°	1.5	26.2	93.1	181.8	33.4
95°	1.5	10.2	56.7	123.6	26.2
97.5°	1.5	4.4	29.1	80.0	18.9
100°	1.5	2.9	16.0	46.5	13.1
102.5°	1.5	2.9	7.3	23.3	10.2
105°	1.5	2.9	5.8	10.2	8.7
107.5°	1.5	2.9	4.4	7.3	7.3
110°	1.5	2.9	4.4	7.3	7.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.5	2.9	4.4	7.3	7.3
115°	1.5	2.9	4.4	5.8	5.8
117.5°	1.5	2.9	4.4	5.8	5.8
120°	1.5	2.9	4.4	5.8	5.8
122.5°	1.5	2.9	4.4	5.8	5.8
125°	2.9	2.9	4.4	5.8	5.8
127.5°	2.9	4.4	4.4	5.8	5.8
130°	2.9	4.4	4.4	5.8	5.8
132.5°	2.9	4.4	4.4	5.8	5.8
135°	2.9	4.4	4.4	5.8	5.8
137.5°	2.9	4.4	5.8	5.8	5.8
140°	4.4	5.8	5.8	5.8	5.8
142.5°	4.4	5.8	5.8	7.3	5.8
145°	4.4	5.8	5.8	7.3	7.3
147.5°	4.4	5.8	7.3	7.3	7.3
150°	4.4	5.8	7.3	8.7	8.7
152.5°	5.8	5.8	7.3	8.7	8.7
155°	5.8	7.3	7.3	8.7	8.7
157.5°	5.8	7.3	7.3	8.7	10.2
160°	5.8	7.3	8.7	10.2	10.2
162.5°	5.8	7.3	8.7	10.2	10.2
165°	7.3	8.7	8.7	10.2	10.2
167.5°	7.3	8.7	10.2	10.2	11.6
170°	7.3	8.7	10.2	11.6	11.6
172.5°	7.3	8.7	10.2	11.6	11.6
175°	7.3	8.7	10.2	11.6	13.1
177.5°	7.3	8.7	10.2	11.6	13.1
180°	10.2	10.2	10.2	10.2	10.2

(END OF REPORT)