

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: P685727

Luminaire Tested: **8CZL-24-UNV-N-LVR-L835-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685727
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-L835-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH NARROW LENS @80 CRI and 3500K
Light Source: (1176) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

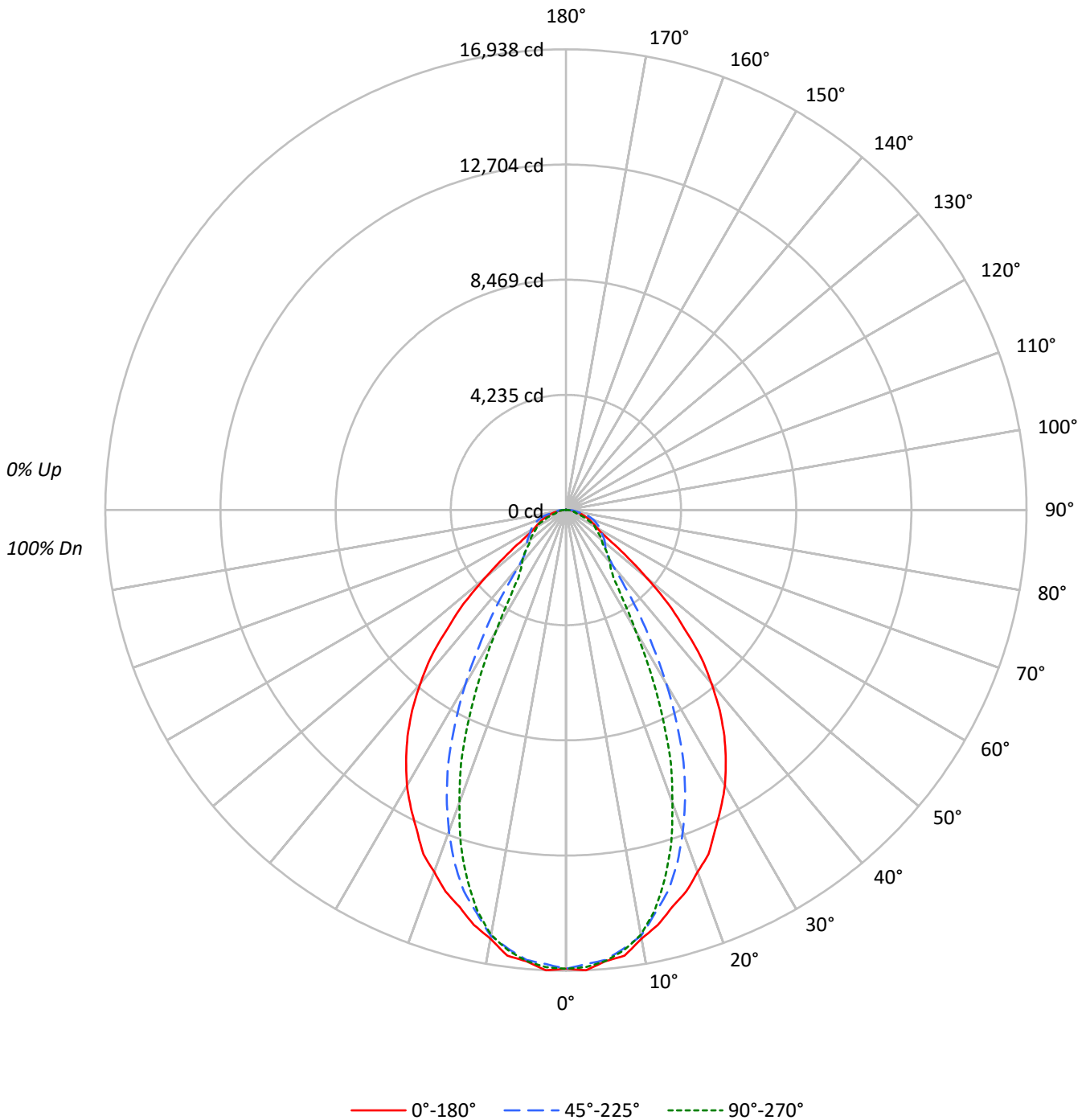
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19967.6 lumens
Efficiency: N/A
Efficacy: 129.7 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	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	93	92	90	88
2	103	97	92	87	101	95	90	86	92	88	84	88	85	82	86	83	80	86	83	80	78
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	79	75	72	70
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	73	69	65	63
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	68	63	59	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	63	58	55	53
7	75	64	57	51	73	63	56	51	62	55	51	60	55	51	59	54	50	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	55	50	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	43	52	47	43	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27230	27230	27230
5°	26989	26912	26982
10°	26228	26066	26003
15°	25255	24247	23478
20°	24325	21600	19663
25°	23116	18239	14993
30°	21804	13796	9580
35°	20013	9353	6019
40°	17552	5698	5279
45°	14062	4747	4731
50°	9723	4691	4271
55°	5728	4650	4022
60°	4268	4831	3973
65°	4040	4864	3494
70°	3885	5187	2637
75°	3664	5206	2255
80°	3401	4318	2550
85°	3018	5241	3149



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1566.6	7.8
10°-20°	4056.4	20.3
20°-30°	4738.8	23.7
30°-40°	3515.7	17.6
40°-50°	2330.7	11.7
50°-60°	1545.7	7.7
60°-70°	1153.3	5.8
70°-80°	680.7	3.4
80°-90°	286.7	1.4
90°-100°	61.9	0.3
100°-110°	8.4	0.0
110°-120°	4.3	0.0
120°-130°	3.9	0.0
130°-140°	3.7	0.0
140°-150°	3.8	0.0
150°-160°	3.4	0.0
160°-170°	2.5	0.0
170°-180°	0.9	0.0
0°-30°	10361.9	51.9
0°-40°	13877.6	69.5
0°-60°	17754.0	88.9
0°-90°	19874.6	99.5
90°-120°	74.6	0.4
90°-150°	86.1	0.4
90°-180°	93.0	0.5
0°-180°	19967.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16865	16865	16865	16865	16865	
5°	16652	16638	16605	16665	16648	1575
15°	15109	14929	14506	14256	14046	4262
25°	12975	12042	10238	8782	8416	5977
35°	10154	7523	4745	3208	3054	6303
45°	6158	3634	2079	2158	2072	4740
55°	2035	1788	1652	1595	1429	2002
65°	1057	1182	1273	1244	914	1054
75°	587	657	834	606	362	620
85°	163	199	283	376	170	176
90°	3	60	142	243	50	11
95°	1	10	56	122	26	1
105°	1	3	6	10	9	1
115°	1	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	11	13	1
180°	10	10	10	10	10	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	16864.8	16864.8	16864.8	16864.8	16864.8
2.5°	16937.7	16846.2	16714.8	16833.4	16823.4
5°	16651.9	16637.6	16604.7	16664.8	16647.6
7.5°	16523.3	16446.1	16263.2	16404.7	16324.7
10°	15997.5	15907.5	15898.9	15870.3	15860.3
12.5°	15624.5	15516.0	15168.7	15150.2	15073.0
15°	15108.7	14928.7	14505.8	14255.7	14045.7
17.5°	14708.7	14317.1	13611.3	13145.5	12875.4
20°	14157.1	13725.6	12571.1	11758.1	11443.7
22.5°	13702.7	12938.3	11453.7	10303.5	10087.7
25°	12975.4	12042.4	10237.8	8781.8	8416.0
27.5°	12343.9	11056.5	8803.2	7205.7	6757.1
30°	11695.2	9952.0	7400.0	5659.7	5138.2
32.5°	10939.3	8838.9	5955.5	4246.6	3869.3
35°	10153.5	7522.9	4745.2	3207.8	3053.5
37.5°	9287.6	6339.8	3566.4	2679.1	2704.8
40°	8327.4	5308.2	2703.4	2456.2	2504.8
42.5°	7370.0	4439.5	2249.0	2310.5	2324.8
45°	6158.4	3633.6	2079.0	2157.6	2071.8
47.5°	5099.6	2969.2	1959.0	1950.4	1828.9
50°	3870.8	2420.5	1867.5	1764.6	1700.3
52.5°	2866.3	2041.8	1780.4	1667.5	1601.7
55°	2034.7	1787.5	1651.8	1594.6	1428.9
57.5°	1528.9	1607.5	1553.2	1424.6	1308.8
60°	1321.7	1448.9	1496.0	1343.1	1230.2
62.5°	1193.1	1313.1	1403.1	1294.5	1125.9
65°	1057.4	1181.7	1273.1	1244.5	914.5
67.5°	938.8	1077.4	1190.2	1067.4	747.3
70°	823.0	951.6	1098.8	905.9	558.7
72.5°	698.7	795.9	973.1	704.4	407.2
75°	587.3	657.3	834.5	605.8	361.5
77.5°	470.1	528.7	571.5	551.5	318.6
80°	365.8	424.4	464.4	501.5	274.3
82.5°	265.8	304.3	368.6	444.4	228.6
85°	162.9	198.6	282.9	375.8	170.0
87.5°	70.0	121.5	207.2	311.5	111.5
90°	2.9	60.0	141.5	242.9	50.0
92.5°	1.4	25.7	91.4	178.6	32.9
95°	1.4	10.0	55.7	121.5	25.7
97.5°	1.4	4.3	28.6	78.6	18.6
100°	1.4	2.9	15.7	45.7	12.9
102.5°	1.4	2.9	7.1	22.9	10.0
105°	1.4	2.9	5.7	10.0	8.6
107.5°	1.4	2.9	4.3	7.1	7.1
110°	1.4	2.9	4.3	7.1	7.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.4	2.9	4.3	7.1	7.1
115°	1.4	2.9	4.3	5.7	5.7
117.5°	1.4	2.9	4.3	5.7	5.7
120°	1.4	2.9	4.3	5.7	5.7
122.5°	1.4	2.9	4.3	5.7	5.7
125°	2.9	2.9	4.3	5.7	5.7
127.5°	2.9	4.3	4.3	5.7	5.7
130°	2.9	4.3	4.3	5.7	5.7
132.5°	2.9	4.3	4.3	5.7	5.7
135°	2.9	4.3	4.3	5.7	5.7
137.5°	2.9	4.3	5.7	5.7	5.7
140°	4.3	5.7	5.7	5.7	5.7
142.5°	4.3	5.7	5.7	7.1	5.7
145°	4.3	5.7	5.7	7.1	7.1
147.5°	4.3	5.7	7.1	7.1	7.1
150°	4.3	5.7	7.1	8.6	8.6
152.5°	5.7	5.7	7.1	8.6	8.6
155°	5.7	7.1	7.1	8.6	8.6
157.5°	5.7	7.1	7.1	8.6	10.0
160°	5.7	7.1	8.6	10.0	10.0
162.5°	5.7	7.1	8.6	10.0	10.0
165°	7.1	8.6	8.6	10.0	10.0
167.5°	7.1	8.6	10.0	10.0	11.4
170°	7.1	8.6	10.0	11.4	11.4
172.5°	7.1	8.6	10.0	11.4	11.4
175°	7.1	8.6	10.0	11.4	12.9
177.5°	7.1	8.6	10.0	11.4	12.9
180°	10.0	10.0	10.0	10.0	10.0

(END OF REPORT)