

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: P685837

Luminaire Tested: **8CZL-24-UNV-M-LVR-L950-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685837
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-L950-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH MEDIUM LENS @90 CRI and 5000K
Light Source: (1176) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

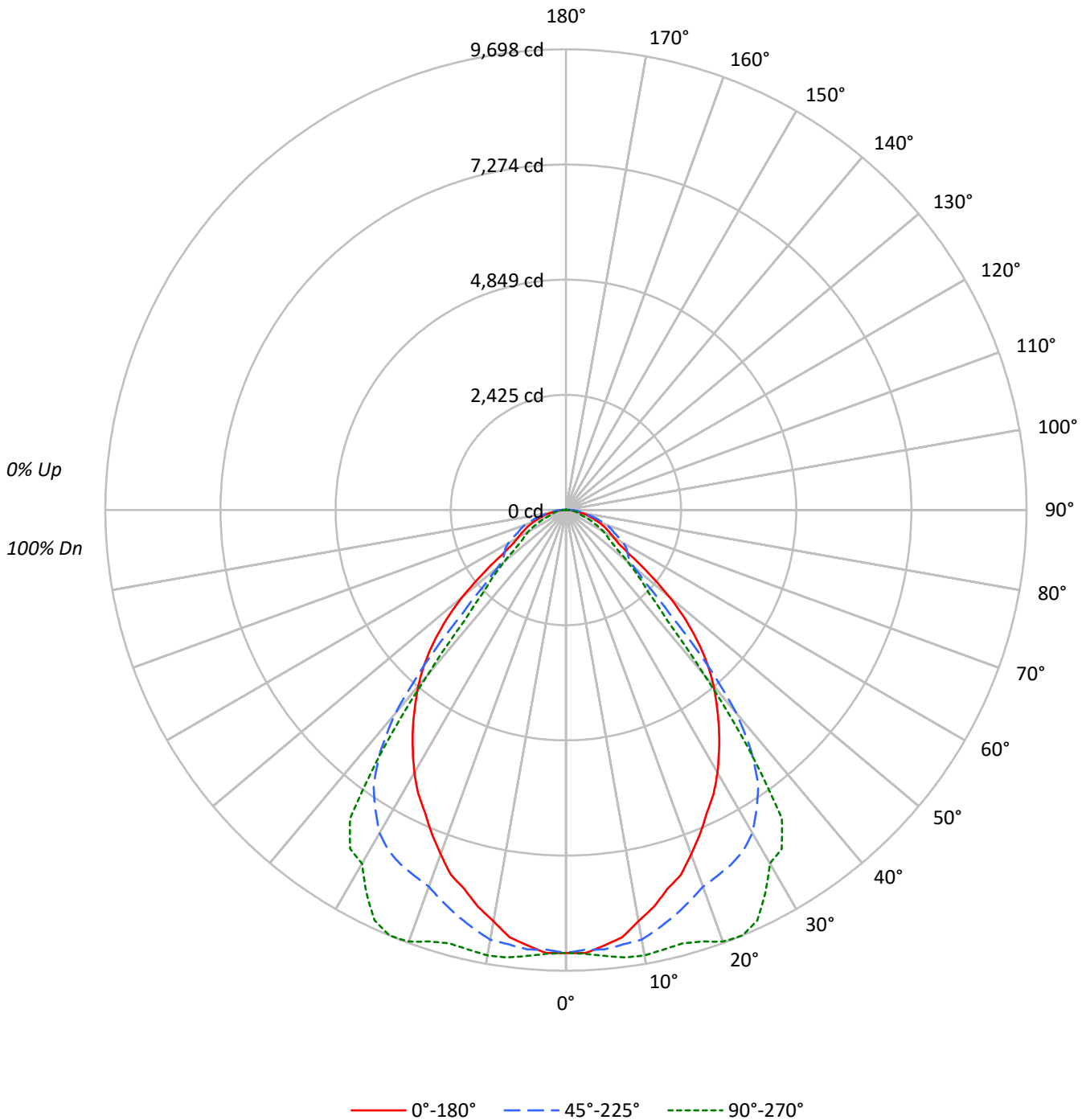
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17246.8 lumens
Efficiency: N/A
Efficacy: 112.0 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	100	100	100	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88	88	88	88
2	103	96	90	86	100	94	89	84	91	86	83	87	84	81	84	81	79	77	77	77	77
3	95	87	80	74	93	85	79	74	82	77	72	79	75	71	77	73	70	68	68	68	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	70	66	62	60	60	60	60
5	83	72	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54	54	54	54
6	77	65	58	52	75	65	57	52	63	56	51	61	55	51	60	55	51	49	49	49	49
7	72	60	53	47	70	59	52	47	58	51	47	57	51	46	55	50	46	44	44	44	44
8	68	56	48	43	66	55	48	43	54	47	42	52	47	42	51	46	42	40	40	40	40
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	42	39	37	37	37	37
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	35	34	34	34	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15054	15054	15054
5°	14914	15048	15273
10°	14409	15057	15607
15°	13802	14776	15790
20°	13246	14495	16611
25°	12514	14667	16980
30°	11895	14635	16016
35°	11076	13918	15616
40°	10196	11797	9517
45°	8983	7032	5641
50°	7130	4669	4257
55°	4617	4442	3231
60°	3769	4515	2968
65°	3590	4254	2424
70°	3409	4270	1917
75°	3238	3997	1782
80°	2996	3776	2001
85°	2681	4617	2455



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	884.7	5.1
10°-20°	2509.6	14.6
20°-30°	3784.3	21.9
30°-40°	4181.5	24.2
40°-50°	2621.8	15.2
50°-60°	1411.6	8.2
60°-70°	958.7	5.6
70°-80°	572.6	3.3
80°-90°	248.8	1.4
90°-100°	54.5	0.3
100°-110°	6.2	0.0
110°-120°	2.2	0.0
120°-130°	2.0	0.0
130°-140°	2.4	0.0
140°-150°	2.2	0.0
150°-160°	1.8	0.0
160°-170°	1.4	0.0
170°-180°	0.5	0.0
0°-30°	7178.6	41.6
0°-40°	11360.1	65.9
0°-60°	15393.5	89.3
0°-90°	17173.5	99.6
90°-120°	63.0	0.4
90°-150°	69.6	0.4
90°-180°	73.0	0.4
0°-180°	17246.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9324	9324	9324	9324	9324	
5°	9202	9218	9285	9394	9423	867
15°	8257	8547	8840	9268	9446	2331
25°	7024	7451	8233	9111	9531	3243
35°	5619	6279	7061	7596	7923	3507
45°	3934	4283	3080	2510	2470	3001
55°	1640	1715	1578	1365	1148	1593
65°	940	1033	1114	904	635	930
75°	519	578	641	526	286	547
85°	145	178	249	328	132	156
90°	4	55	126	210	39	10
95°	1	8	50	108	20	1
105°	1	2	4	8	4	1
115°	1	2	2	2	2	1
125°	1	2	2	2	2	1
135°	2	2	4	4	4	2
145°	2	4	4	4	5	2
155°	4	4	4	4	4	2
165°	4	5	5	5	5	1
175°	5	5	5	6	6	0
180°	6	6	6	6	6	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9323.5	9323.5	9323.5	9323.5	9323.5
2.5°	9335.6	9310.1	9262.7	9347.8	9349.0
5°	9201.9	9217.7	9284.6	9394.0	9423.1
7.5°	9071.8	9132.6	9222.5	9486.4	9499.7
10°	8788.5	8915.0	9183.6	9437.7	9519.2
12.5°	8552.7	8739.9	9017.1	9351.4	9477.9
15°	8257.3	8546.6	8839.6	9267.5	9446.2
17.5°	8050.6	8282.8	8641.4	9228.6	9521.6
20°	7709.0	8036.0	8436.0	9255.4	9667.5
22.5°	7377.1	7774.6	8332.6	9265.1	9697.9
25°	7024.5	7451.2	8232.9	9110.7	9531.3
27.5°	6732.7	7090.2	8084.6	8788.5	9092.5
30°	6380.2	6800.8	7850.0	8296.2	8590.4
32.5°	6000.9	6534.6	7469.5	7919.3	8454.2
35°	5619.1	6279.3	7061.0	7595.9	7922.9
37.5°	5220.4	6068.9	6419.1	6505.4	6281.7
40°	4837.4	5775.9	5597.2	4762.0	4515.2
42.5°	4419.2	5146.2	4365.7	3276.4	3165.8
45°	3934.1	4283.0	3079.5	2510.5	2470.4
47.5°	3417.4	3316.5	2296.5	2098.4	2075.3
50°	2838.7	2651.5	1858.9	1851.6	1694.7
52.5°	2212.6	2105.6	1666.8	1606.0	1356.8
55°	1640.0	1715.4	1578.0	1365.3	1147.7
57.5°	1313.0	1488.1	1516.0	1192.6	1026.1
60°	1167.1	1302.0	1398.1	1096.6	919.1
62.5°	1046.7	1153.7	1252.2	1017.6	792.7
65°	939.8	1033.4	1113.6	904.5	634.6
67.5°	826.7	924.0	1022.4	776.9	539.8
70°	722.1	825.5	904.5	689.3	406.1
72.5°	613.9	720.9	756.2	576.3	324.6
75°	519.1	577.5	640.7	526.4	285.7
77.5°	419.4	469.3	494.8	482.6	251.7
80°	322.2	362.3	406.1	438.9	215.2
82.5°	235.9	265.0	324.6	386.6	172.6
85°	144.7	177.5	249.2	328.2	132.5
87.5°	64.4	105.8	183.6	271.1	85.1
90°	3.6	54.7	126.4	210.3	38.9
92.5°	1.2	24.3	82.7	155.6	26.7
95°	1.2	8.5	49.8	108.2	19.5
97.5°	1.2	3.6	28.0	69.3	12.2
100°	1.2	2.4	13.4	40.1	8.5
102.5°	1.2	2.4	6.1	19.5	6.1
105°	1.2	2.4	3.6	8.5	3.6
107.5°	1.2	2.4	2.4	3.6	2.4
110°	1.2	2.4	2.4	2.4	2.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.2	2.4	2.4	2.4	2.4
115°	1.2	2.4	2.4	2.4	2.4
117.5°	1.2	2.4	2.4	2.4	2.4
120°	1.2	2.4	2.4	2.4	2.4
122.5°	1.2	2.4	2.4	2.4	2.4
125°	1.2	2.4	2.4	2.4	2.4
127.5°	1.2	2.4	2.4	2.4	2.4
130°	1.2	2.4	2.4	2.4	2.4
132.5°	2.4	2.4	3.6	3.6	3.6
135°	2.4	2.4	3.6	3.6	3.6
137.5°	2.4	3.6	3.6	3.6	3.6
140°	2.4	3.6	3.6	3.6	3.6
142.5°	2.4	3.6	3.6	3.6	3.6
145°	2.4	3.6	3.6	3.6	4.9
147.5°	2.4	3.6	3.6	3.6	4.9
150°	2.4	3.6	3.6	3.6	3.6
152.5°	3.6	3.6	3.6	3.6	3.6
155°	3.6	3.6	3.6	3.6	3.6
157.5°	3.6	3.6	3.6	4.9	4.9
160°	3.6	4.9	4.9	4.9	4.9
162.5°	3.6	4.9	4.9	4.9	4.9
165°	3.6	4.9	4.9	4.9	4.9
167.5°	3.6	4.9	4.9	4.9	6.1
170°	4.9	4.9	4.9	6.1	6.1
172.5°	4.9	4.9	4.9	6.1	6.1
175°	4.9	4.9	4.9	6.1	6.1
177.5°	4.9	6.1	4.9	6.1	7.3
180°	6.1	6.1	6.1	6.1	6.1

(END OF REPORT)