

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: P685944

Luminaire Tested: **8CZL-10-UNV-LVRF-L940-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685944
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-10-UNV-LVRF-L940-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH FROSTED LAY-IN @90 CRI and 4000K
Light Source: (784) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

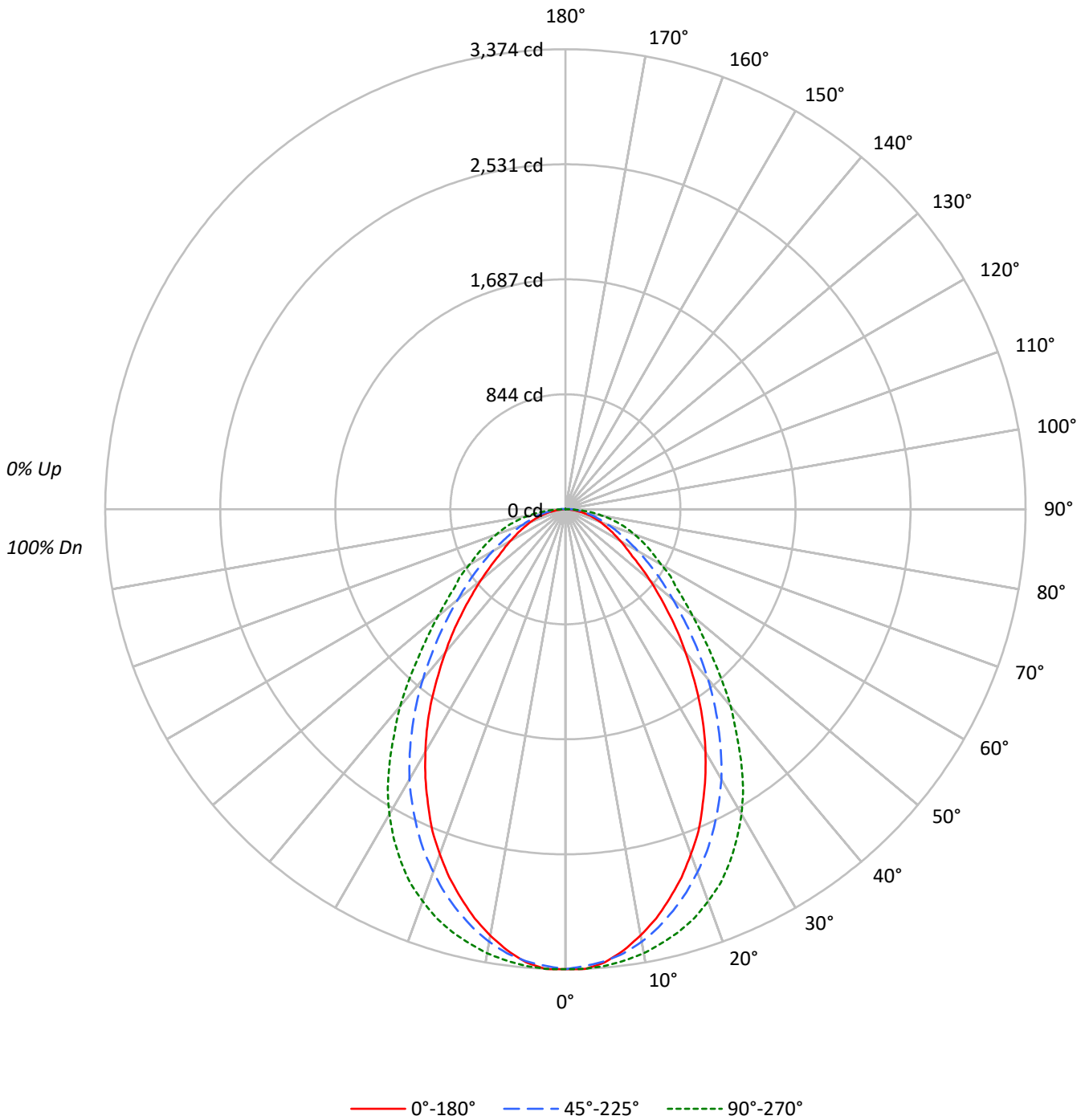
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6221.6 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Spacing Criteria (0/90/45): 0.97 / 1.15 / 1.12
Luminous Opening: Rectangular (W 0.83' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 63
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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	88	88	88	86
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	76	76	76	74
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	59	59	59	57
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	53	53	53	51
6	75	63	55	49	73	62	54	48	60	53	48	58	52	48	57	51	47	47	47	47	45
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	43	43	43	41
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	39	39	39	37
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	36	36	36	34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	33	33	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5446	5446	5446
5°	5406	5393	5447
10°	5204	5281	5421
15°	4938	5096	5364
20°	4624	4864	5257
25°	4246	4589	5083
30°	3827	4265	4813
35°	3371	3857	4421
40°	2885	3425	3975
45°	2430	2985	3462
50°	2030	2587	3061
55°	1680	2273	2775
60°	1514	1992	2617
65°	1376	1754	2559
70°	1281	1574	2540
75°	1188	1470	2591
80°	1077	1456	2596
85°	924	1706	2568



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	315.6	5.1
10°-20°	862.4	13.9
20°-30°	1191.6	19.2
30°-40°	1225.8	19.7
40°-50°	1004.9	16.2
50°-60°	721.1	11.6
60°-70°	485.0	7.8
70°-80°	283.1	4.6
80°-90°	109.1	1.8
90°-100°	18.9	0.3
100°-110°	1.6	0.0
110°-120°	0.3	0.0
120°-130°	0.3	0.0
130°-140°	0.4	0.0
140°-150°	0.5	0.0
150°-160°	0.4	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	2369.6	38.1
0°-40°	3595.4	57.8
0°-60°	5321.5	85.5
0°-90°	6198.7	99.6
90°-120°	20.8	0.3
90°-150°	22.0	0.4
90°-180°	23.0	0.4
0°-180°	6221.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3373	3373	3373	3373	3373	
5°	3335	3338	3328	3359	3361	313
15°	2954	2984	3049	3167	3209	829
25°	2383	2439	2576	2755	2853	1094
35°	1710	1789	1957	2140	2243	1066
45°	1064	1147	1307	1436	1516	826
55°	597	668	808	918	986	549
65°	360	382	459	589	670	359
75°	190	197	236	327	415	202
85°	50	62	92	138	139	54
90°	0	21	47	72	15	3
95°	0	3	20	34	6	0
105°	0	0	1	2	1	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	1	0	0	0	0
145°	1	1	1	0	0	1
155°	1	2	1	0	0	0
165°	2	2	2	1	0	0
175°	2	2	2	1	1	0
180°	2	2	2	2	2	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3372.7	3372.7	3372.7	3372.7	3372.7
2.5°	3374.1	3371.2	3352.3	3374.1	3373.1
5°	3335.3	3337.8	3327.6	3358.6	3361.0
7.5°	3263.1	3272.8	3284.0	3329.5	3337.8
10°	3173.9	3188.5	3220.9	3288.8	3306.3
12.5°	3073.6	3089.6	3142.4	3236.0	3260.2
15°	2953.9	2983.9	3048.9	3167.1	3208.8
17.5°	2830.3	2867.1	2947.6	3087.6	3143.9
20°	2691.1	2728.0	2830.7	2986.8	3059.5
22.5°	2551.5	2587.4	2713.0	2879.2	2969.9
25°	2383.4	2439.1	2575.8	2755.1	2853.0
27.5°	2222.4	2281.6	2433.8	2626.2	2723.6
30°	2052.8	2122.1	2287.4	2471.1	2581.6
32.5°	1884.6	1954.9	2123.5	2315.0	2424.6
35°	1710.1	1789.1	1956.8	2140.0	2242.8
37.5°	1533.2	1619.4	1792.0	1972.3	2055.2
40°	1368.8	1453.7	1624.8	1786.2	1886.0
42.5°	1217.1	1300.5	1459.0	1605.4	1695.1
45°	1064.4	1147.3	1307.3	1435.7	1516.2
47.5°	927.7	1012.6	1161.4	1291.3	1358.7
50°	808.0	885.1	1030.0	1147.8	1218.6
52.5°	698.5	768.8	912.2	1026.6	1095.0
55°	596.7	667.9	807.5	918.1	985.9
57.5°	528.3	579.2	704.8	827.4	914.7
60°	468.7	500.2	617.0	762.5	810.4
62.5°	408.1	436.7	532.7	660.7	735.3
65°	360.1	381.5	459.0	589.4	669.9
67.5°	312.6	328.6	395.0	520.6	602.0
70°	271.4	281.6	333.5	452.7	538.0
72.5°	232.2	237.5	284.0	390.7	475.5
75°	190.5	197.3	235.6	327.2	415.4
77.5°	150.7	160.4	194.4	272.9	346.6
80°	115.8	123.6	156.6	224.4	279.2
82.5°	80.5	91.1	122.1	177.4	213.8
85°	49.9	62.0	92.1	137.7	138.6
87.5°	20.8	38.8	67.4	101.8	70.8
90°	0.5	20.8	47.0	71.7	15.0
92.5°	0.0	9.7	32.0	51.4	8.7
95°	0.5	3.4	19.9	34.4	6.3
97.5°	0.0	1.0	10.7	21.8	3.9
100°	0.0	0.5	4.4	12.1	2.4
102.5°	0.0	0.5	1.9	5.3	1.5
105°	0.0	0.5	1.0	1.9	1.0
107.5°	0.0	0.5	0.5	0.5	0.5
110°	0.5	0.5	0.5	0.5	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.5	0.5	0.0	0.0
115°	0.5	0.5	0.5	0.0	0.0
117.5°	0.5	0.5	0.5	0.0	0.0
120°	0.5	0.5	0.5	0.0	0.0
122.5°	0.5	0.5	0.5	0.0	0.0
125°	0.5	0.5	0.5	0.0	0.0
127.5°	0.5	0.5	0.5	0.0	0.0
130°	0.5	0.5	0.5	0.0	0.0
132.5°	0.5	1.0	0.5	0.5	0.0
135°	0.5	1.0	0.5	0.5	0.0
137.5°	0.5	1.0	0.5	0.5	0.0
140°	0.5	1.0	0.5	0.5	0.5
142.5°	1.0	1.0	1.0	0.5	0.5
145°	1.0	1.0	1.0	0.5	0.5
147.5°	1.0	1.0	1.0	0.5	0.5
150°	1.0	1.0	1.0	0.5	0.5
152.5°	1.0	1.5	1.0	0.5	0.5
155°	1.0	1.5	1.0	0.5	0.5
157.5°	1.0	1.5	1.0	0.5	0.5
160°	1.0	1.5	1.0	0.5	0.5
162.5°	1.5	1.5	1.0	1.0	0.5
165°	1.5	1.5	1.5	1.0	0.5
167.5°	1.5	1.5	1.5	1.0	0.5
170°	1.5	1.5	1.5	1.0	1.0
172.5°	1.5	1.5	1.5	1.0	1.0
175°	1.5	1.9	1.5	1.0	1.0
177.5°	1.5	1.9	1.5	1.0	1.0
180°	1.5	1.5	1.5	1.5	1.5

(END OF REPORT)