

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: P685708

Luminaire Tested: **8CZL-32-UNV-LVR-L940-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685708
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-32-UNV-LVR-L940-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL @90 CRI and 4000K
Light Source: (1176) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

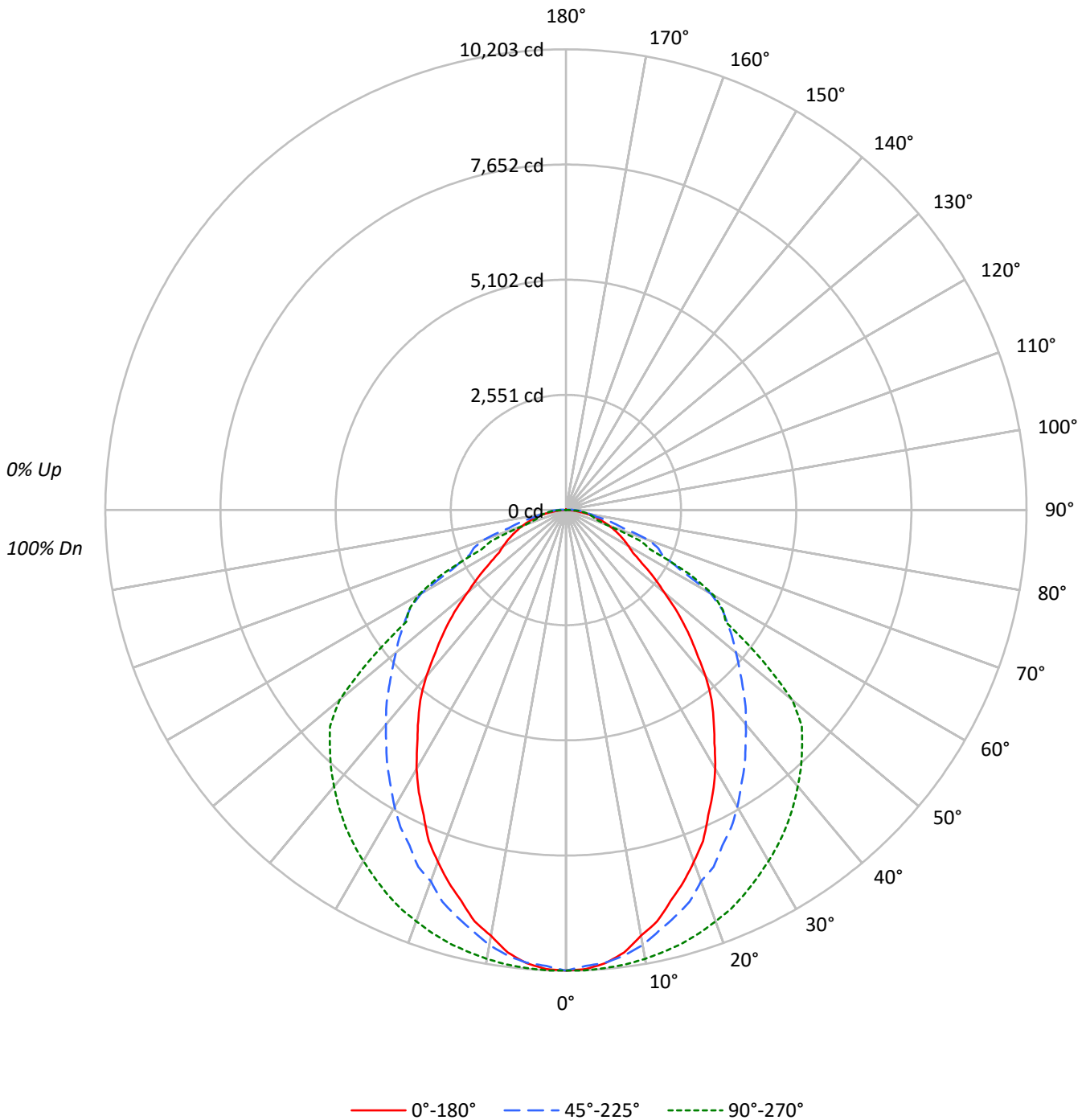
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23102.3 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.31 / 1.26
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 (Ain): 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				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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	88	85	85	85	85
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73	73	73	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63	63	63	63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	54	54	54	54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	49	47	47	47	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42	42	42	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37	37	37	37
8	63	50	42	36	61	49	42	36	48	41	36	47	40	36	46	40	35	34	34	34	34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30	30	30	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29	28	28	28	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16471	16471	16471
5°	16328	16305	16500
10°	15694	16039	16548
15°	14981	15590	16615
20°	14245	15037	16654
25°	13285	14603	16709
30°	12335	14154	16736
35°	11245	13599	16813
40°	10144	13069	16843
45°	8725	12650	16887
50°	7131	12352	16443
55°	5806	12304	12161
60°	5177	11961	12201
65°	5006	8976	7868
70°	4809	9199	4472
75°	4635	6483	3993
80°	4228	5274	4758
85°	3787	6575	5928



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	955.5	4.1
10°-20°	2648.9	11.5
20°-30°	3832.2	16.6
30°-40°	4374.0	18.9
40°-50°	4297.8	18.6
50°-60°	3428.1	14.8
60°-70°	2159.3	9.3
70°-80°	956.6	4.1
80°-90°	366.8	1.6
90°-100°	72.8	0.3
100°-110°	4.9	0.0
110°-120°	0.6	0.0
120°-130°	0.7	0.0
130°-140°	1.1	0.0
140°-150°	1.0	0.0
150°-160°	0.8	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	7436.6	32.2
0°-40°	11810.6	51.1
0°-60°	19536.5	84.6
0°-90°	23019.3	99.6
90°-120°	78.2	0.3
90°-150°	81.0	0.4
90°-180°	83.0	0.4
0°-180°	23102.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10201	10201	10201	10201	10201	
5°	10074	10096	10060	10144	10180	946
15°	8962	9051	9327	9764	9940	2523
25°	7457	7698	8197	8948	9379	3436
35°	5705	6050	6900	7917	8530	3566
45°	3821	4377	5540	6781	7395	2937
55°	2063	2793	4371	4713	4320	1897
65°	1310	1784	2350	2503	2060	1298
75°	743	859	1039	787	640	779
85°	204	249	355	458	320	216
90°	2	86	187	272	52	12
95°	2	13	78	133	17	1
105°	2	2	2	5	0	2
115°	2	2	0	0	0	2
125°	2	3	0	0	0	1
135°	2	3	2	0	0	1
145°	3	3	2	0	0	2
155°	3	3	2	0	0	2
165°	5	5	3	2	0	1
175°	5	5	3	2	2	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10201.1	10201.1	10201.1	10201.1	10201.1
2.5°	10174.2	10167.8	10106.1	10193.2	10202.7
5°	10074.4	10096.5	10060.1	10144.1	10180.5
7.5°	9882.7	9906.4	9949.2	10102.9	10147.2
10°	9572.2	9632.4	9782.9	9998.3	10093.4
12.5°	9334.5	9409.0	9543.6	9909.6	10018.9
15°	8962.2	9050.9	9326.6	9763.8	9939.7
17.5°	8645.4	8807.0	9100.0	9580.1	9825.6
20°	8290.5	8420.4	8751.5	9399.5	9692.6
22.5°	7935.6	8100.4	8551.9	9158.7	9557.9
25°	7457.2	7698.0	8197.0	8948.0	9378.9
27.5°	7051.6	7355.8	7929.3	8699.2	9179.3
30°	6615.9	6852.0	7591.8	8445.7	8976.5
32.5°	6124.8	6495.5	7227.4	8155.8	8764.2
35°	5705.0	6050.3	6899.5	7916.6	8529.7
37.5°	5299.4	5624.2	6536.7	7645.7	8269.9
40°	4813.0	5240.8	6200.8	7336.7	7991.1
42.5°	4274.4	4798.8	5888.7	7045.2	7707.5
45°	3821.3	4377.3	5540.2	6780.7	7395.4
47.5°	3350.7	3936.9	5213.8	6459.1	7086.4
50°	2839.0	3551.9	4917.6	6161.2	6546.2
52.5°	2465.1	3151.1	4651.4	5622.6	5518.0
55°	2062.7	2793.1	4371.0	4713.2	4320.3
57.5°	1757.0	2469.9	4108.0	3700.9	4123.9
60°	1603.3	2211.6	3704.0	3523.4	3778.5
62.5°	1459.1	1985.1	2832.7	3304.8	3108.3
65°	1310.2	1783.9	2349.5	2503.1	2059.5
67.5°	1166.0	1609.6	2214.8	1869.4	1793.4
70°	1018.7	1475.0	1948.7	1593.8	947.4
72.5°	879.3	1319.7	1332.4	882.4	703.4
75°	743.0	858.7	1039.3	787.4	640.0
77.5°	594.1	736.7	695.5	705.0	579.8
80°	454.7	507.0	567.2	630.5	511.7
82.5°	321.6	377.1	459.4	551.3	419.8
85°	204.4	248.7	354.9	457.9	320.0
87.5°	80.8	156.8	264.6	369.1	188.5
90°	1.6	85.6	186.9	272.5	52.3
92.5°	1.6	39.6	125.2	199.6	26.9
95°	1.6	12.7	77.6	133.1	17.4
97.5°	1.6	4.8	41.2	82.4	9.5
100°	1.6	1.6	17.4	44.4	4.8
102.5°	1.6	1.6	6.3	17.4	1.6
105°	1.6	1.6	1.6	4.8	0.0
107.5°	1.6	1.6	0.0	0.0	0.0
110°	1.6	1.6	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.6	1.6	0.0	0.0	0.0
115°	1.6	1.6	0.0	0.0	0.0
117.5°	1.6	1.6	0.0	0.0	0.0
120°	1.6	1.6	0.0	0.0	0.0
122.5°	1.6	1.6	0.0	0.0	0.0
125°	1.6	3.2	0.0	0.0	0.0
127.5°	1.6	1.6	0.0	0.0	0.0
130°	1.6	3.2	1.6	0.0	0.0
132.5°	1.6	3.2	1.6	0.0	0.0
135°	1.6	3.2	1.6	0.0	0.0
137.5°	1.6	3.2	1.6	0.0	0.0
140°	3.2	3.2	1.6	0.0	0.0
142.5°	3.2	3.2	1.6	0.0	0.0
145°	3.2	3.2	1.6	0.0	0.0
147.5°	3.2	3.2	1.6	0.0	0.0
150°	3.2	3.2	1.6	0.0	0.0
152.5°	3.2	3.2	1.6	0.0	0.0
155°	3.2	3.2	1.6	0.0	0.0
157.5°	3.2	4.8	1.6	0.0	0.0
160°	4.8	4.8	1.6	0.0	0.0
162.5°	4.8	4.8	3.2	1.6	0.0
165°	4.8	4.8	3.2	1.6	0.0
167.5°	4.8	4.8	3.2	1.6	0.0
170°	4.8	4.8	3.2	1.6	1.6
172.5°	4.8	4.8	3.2	1.6	1.6
175°	4.8	4.8	3.2	1.6	1.6
177.5°	4.8	4.8	3.2	1.6	1.6
180°	3.2	3.2	3.2	3.2	3.2

(END OF REPORT)