

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: P685768

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

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685768
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-32-UNV-N-LVR-L940-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH NARROW LENS @90 CRI and 4000K
Light Source: (1176) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

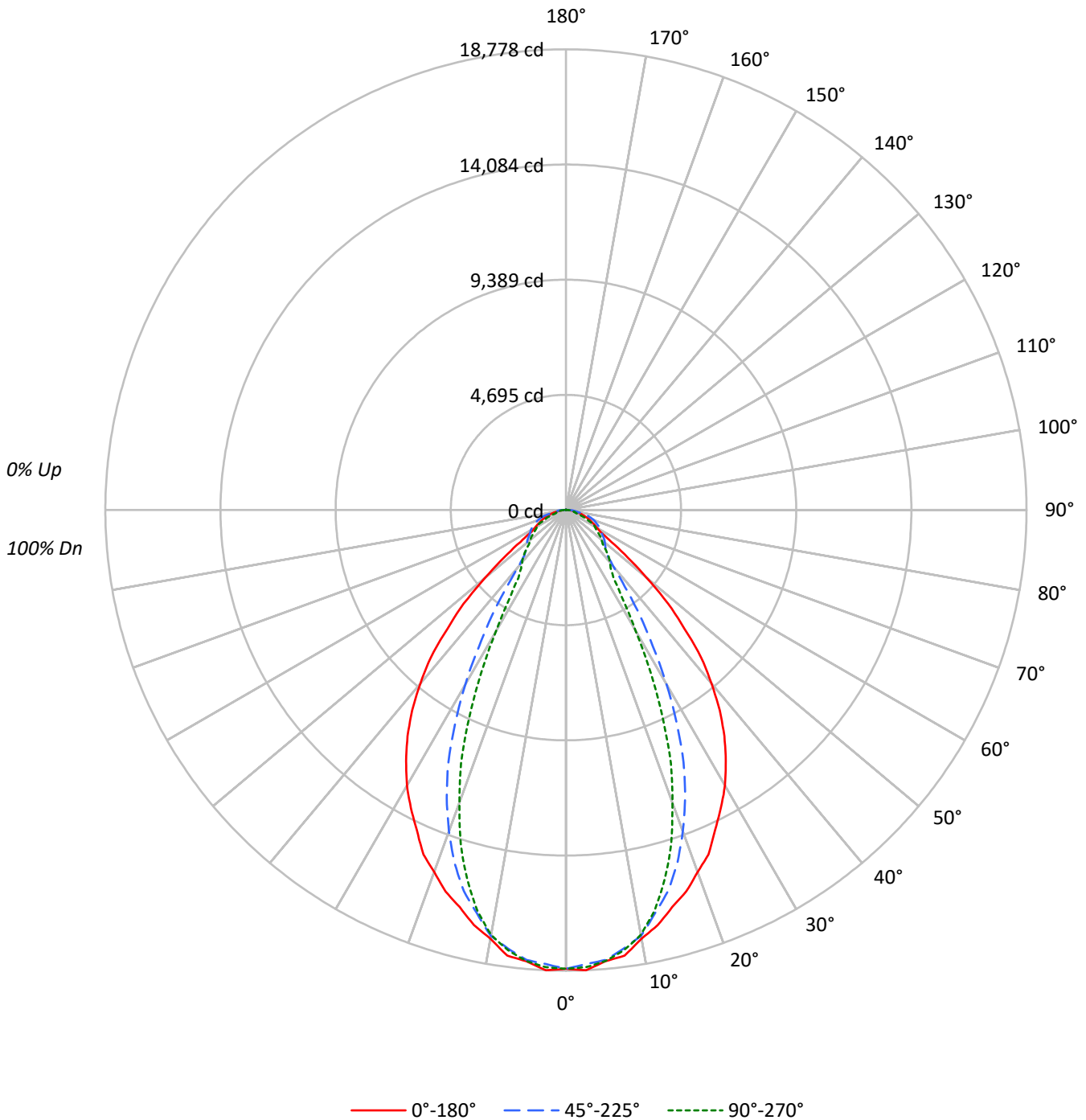
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22137.5 lumens
Efficiency: N/A
Efficacy: 107.5 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): 206
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	90	90	90	88
2	103	97	92	87	101	95	90	86	92	88	84	88	85	82	86	83	80	80	80	80	78
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	72	72	72	70
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	65	65	65	63
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	59	59	59	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	55	55	55	53
7	75	64	57	51	73	63	56	51	62	55	51	60	55	51	59	54	50	50	50	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	47	47	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	43	43	43	43	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	41	41	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	30189	30189	30189
5°	29922	29837	29914
10°	29078	28899	28829
15°	28000	26882	26030
20°	26968	23947	21800
25°	25628	20221	16623
30°	24174	15296	10621
35°	22188	10370	6673
40°	19459	6317	5853
45°	15590	5263	5245
50°	10779	5201	4735
55°	6350	5155	4459
60°	4732	5356	4404
65°	4479	5393	3873
70°	4308	5751	2924
75°	4062	5771	2500
80°	3770	4787	2828
85°	3346	5811	3492



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1736.9	7.8
10°-20°	4497.3	20.3
20°-30°	5253.8	23.7
30°-40°	3897.8	17.6
40°-50°	2583.9	11.7
50°-60°	1713.7	7.7
60°-70°	1278.6	5.8
70°-80°	754.6	3.4
80°-90°	317.8	1.4
90°-100°	68.7	0.3
100°-110°	9.3	0.0
110°-120°	4.8	0.0
120°-130°	4.3	0.0
130°-140°	4.2	0.0
140°-150°	4.3	0.0
150°-160°	3.8	0.0
160°-170°	2.8	0.0
170°-180°	1.0	0.0
0°-30°	11488.0	51.9
0°-40°	15385.7	69.5
0°-60°	19683.4	88.9
0°-90°	22034.4	99.5
90°-120°	82.7	0.4
90°-150°	95.4	0.4
90°-180°	103.0	0.5
0°-180°	22137.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	18698	18698	18698	18698	18698	
5°	18462	18446	18409	18476	18457	1747
15°	16751	16551	16082	15805	15572	4725
25°	14386	13351	11350	9736	9331	6626
35°	11257	8340	5261	3556	3385	6988
45°	6828	4028	2305	2392	2297	5255
55°	2256	1982	1831	1768	1584	2220
65°	1172	1310	1412	1380	1014	1169
75°	651	729	925	672	401	687
85°	181	220	314	417	188	195
90°	3	66	157	269	55	12
95°	2	11	62	135	28	1
105°	2	3	6	11	10	2
115°	2	3	5	6	6	2
125°	3	3	5	6	6	2
135°	3	5	5	6	6	3
145°	5	6	6	8	8	3
155°	6	8	8	10	10	3
165°	8	10	10	11	11	2
175°	8	10	11	13	14	1
180°	11	11	11	11	11	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	18697.6	18697.6	18697.6	18697.6	18697.6
2.5°	18778.4	18677.0	18531.2	18662.7	18651.6
5°	18461.5	18445.7	18409.2	18475.8	18456.8
7.5°	18319.0	18233.4	18030.6	18187.5	18098.8
10°	17736.0	17636.2	17626.7	17595.0	17583.9
12.5°	17322.5	17202.1	16817.2	16796.6	16711.1
15°	16750.7	16551.1	16082.2	15804.9	15572.1
17.5°	16307.1	15873.0	15090.5	14574.1	14274.7
20°	15695.6	15217.2	13937.2	13035.9	12687.3
22.5°	15191.9	14344.4	12698.4	11423.2	11184.0
25°	14385.5	13351.1	11350.3	9736.1	9330.6
27.5°	13685.4	12258.0	9759.9	7988.8	7491.4
30°	12966.2	11033.5	8204.2	6274.8	5696.6
32.5°	12128.1	9799.5	6602.7	4708.1	4289.8
35°	11256.9	8340.5	5260.9	3556.4	3385.3
37.5°	10296.9	7028.8	3954.0	2970.3	2998.8
40°	9232.3	5885.1	2997.2	2723.1	2777.0
42.5°	8171.0	4921.9	2493.4	2561.5	2577.4
45°	6827.6	4028.5	2304.9	2392.0	2297.0
47.5°	5653.8	3291.8	2171.9	2162.3	2027.7
50°	4291.4	2683.5	2070.5	1956.4	1885.1
52.5°	3177.8	2263.7	1973.8	1848.7	1775.8
55°	2255.8	1981.8	1831.3	1767.9	1584.1
57.5°	1695.0	1782.2	1722.0	1579.4	1451.1
60°	1465.3	1606.3	1658.6	1489.1	1363.9
62.5°	1322.8	1455.8	1555.6	1435.2	1248.3
65°	1172.3	1310.1	1411.5	1379.8	1013.8
67.5°	1040.8	1194.4	1319.6	1183.3	828.5
70°	912.5	1055.0	1218.2	1004.3	619.4
72.5°	774.6	882.4	1078.8	781.0	451.5
75°	651.1	728.7	925.1	671.7	400.8
77.5°	521.2	586.1	633.7	611.5	353.3
80°	405.5	470.5	514.8	556.0	304.2
82.5°	294.6	337.4	408.7	492.7	253.5
85°	180.6	220.2	313.7	416.6	188.5
87.5°	77.6	134.7	229.7	345.3	123.6
90°	3.2	66.5	156.8	269.3	55.4
92.5°	1.6	28.5	101.4	198.0	36.4
95°	1.6	11.1	61.8	134.7	28.5
97.5°	1.6	4.8	31.7	87.1	20.6
100°	1.6	3.2	17.4	50.7	14.3
102.5°	1.6	3.2	7.9	25.3	11.1
105°	1.6	3.2	6.3	11.1	9.5
107.5°	1.6	3.2	4.8	7.9	7.9
110°	1.6	3.2	4.8	7.9	7.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.6	3.2	4.8	7.9	7.9
115°	1.6	3.2	4.8	6.3	6.3
117.5°	1.6	3.2	4.8	6.3	6.3
120°	1.6	3.2	4.8	6.3	6.3
122.5°	1.6	3.2	4.8	6.3	6.3
125°	3.2	3.2	4.8	6.3	6.3
127.5°	3.2	4.8	4.8	6.3	6.3
130°	3.2	4.8	4.8	6.3	6.3
132.5°	3.2	4.8	4.8	6.3	6.3
135°	3.2	4.8	4.8	6.3	6.3
137.5°	3.2	4.8	6.3	6.3	6.3
140°	4.8	6.3	6.3	6.3	6.3
142.5°	4.8	6.3	6.3	7.9	6.3
145°	4.8	6.3	6.3	7.9	7.9
147.5°	4.8	6.3	7.9	7.9	7.9
150°	4.8	6.3	7.9	9.5	9.5
152.5°	6.3	6.3	7.9	9.5	9.5
155°	6.3	7.9	7.9	9.5	9.5
157.5°	6.3	7.9	7.9	9.5	11.1
160°	6.3	7.9	9.5	11.1	11.1
162.5°	6.3	7.9	9.5	11.1	11.1
165°	7.9	9.5	9.5	11.1	11.1
167.5°	7.9	9.5	11.1	11.1	12.7
170°	7.9	9.5	11.1	12.7	12.7
172.5°	7.9	9.5	11.1	12.7	12.7
175°	7.9	9.5	11.1	12.7	14.3
177.5°	7.9	9.5	11.1	12.7	14.3
180°	11.1	11.1	11.1	11.1	11.1

(END OF REPORT)