

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: P685725

Luminaire Tested: **8CZL-14-UNV-N-LVR-L835-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685725
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-14-UNV-N-LVR-L835-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH NARROW LENS @80 CRI and 3500K
Light Source: (784) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

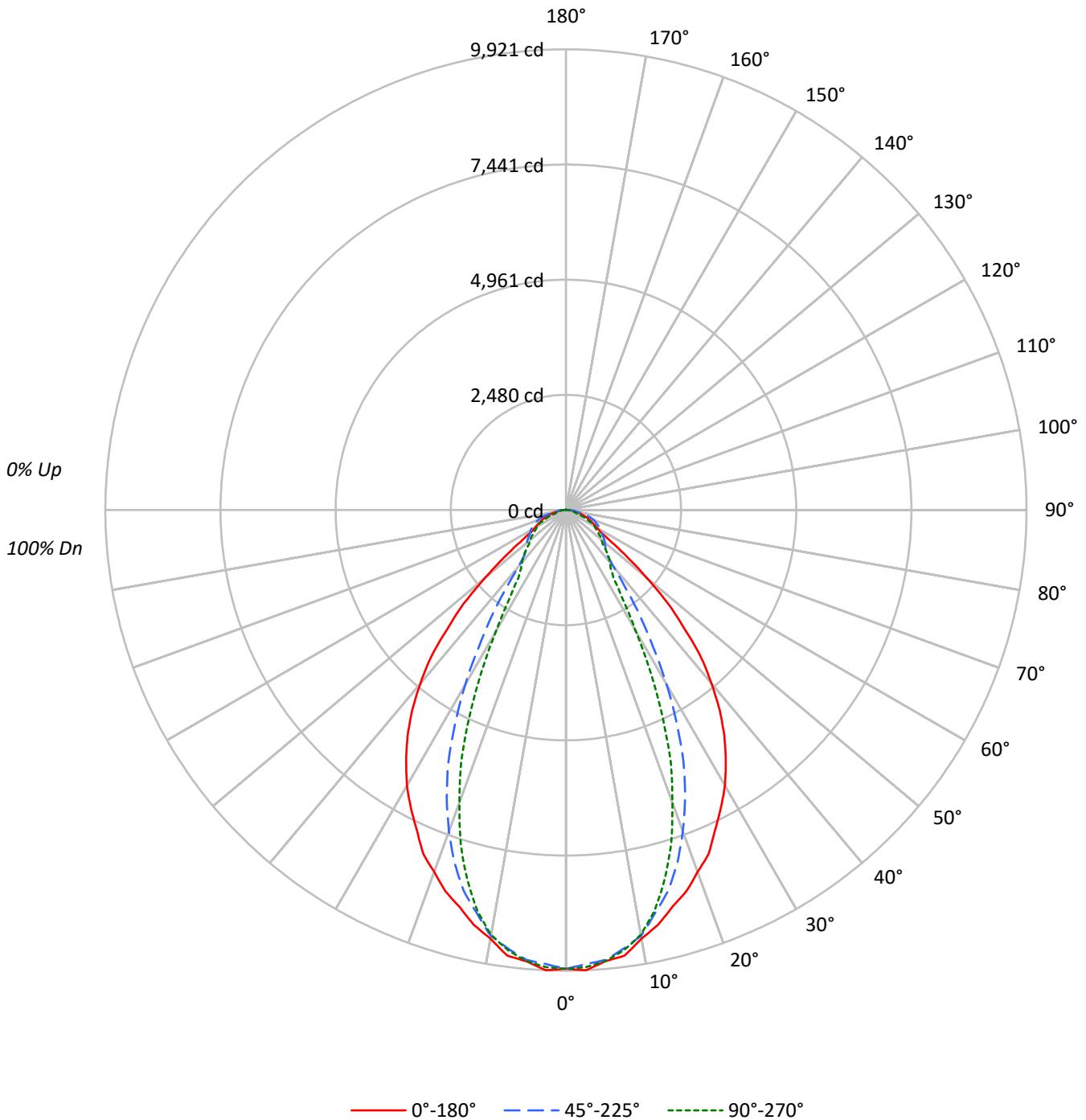
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11695.5 lumens
Efficiency: N/A
Efficacy: 131.4 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): 89
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				
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°	15949	15949	15949
5°	15808	15763	15804
10°	15362	15268	15231
15°	14793	14202	13752
20°	14248	12652	11517
25°	13539	10683	8782
30°	12771	8081	5611
35°	11722	5478	3525
40°	10281	3337	3092
45°	8236	2780	2771
50°	5695	2748	2502
55°	3355	2723	2356
60°	2500	2830	2327
65°	2366	2849	2046
70°	2276	3038	1545
75°	2146	3049	1321
80°	1993	2529	1494
85°	1767	3070	1845



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	917.6	7.8
10°-20°	2375.9	20.3
20°-30°	2775.6	23.7
30°-40°	2059.2	17.6
40°-50°	1365.1	11.7
50°-60°	905.4	7.7
60°-70°	675.5	5.8
70°-80°	398.7	3.4
80°-90°	167.9	1.4
90°-100°	36.3	0.3
100°-110°	4.9	0.0
110°-120°	2.5	0.0
120°-130°	2.3	0.0
130°-140°	2.2	0.0
140°-150°	2.2	0.0
150°-160°	2.0	0.0
160°-170°	1.5	0.0
170°-180°	0.6	0.0
0°-30°	6069.2	51.9
0°-40°	8128.4	69.5
0°-60°	10398.9	88.9
0°-90°	11641.1	99.5
90°-120°	43.7	0.4
90°-150°	50.4	0.4
90°-180°	54.0	0.5
0°-180°	11695.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9878	9878	9878	9878	9878	
5°	9753	9745	9726	9761	9751	923
15°	8850	8744	8496	8350	8227	2497
25°	7600	7054	5996	5144	4929	3501
35°	5947	4406	2779	1879	1788	3692
45°	3607	2128	1218	1264	1214	2776
55°	1192	1047	968	934	837	1173
65°	619	692	746	729	536	618
75°	344	385	489	355	212	363
85°	95	116	166	220	100	103
90°	2	35	83	142	29	6
95°	1	6	33	71	15	1
105°	1	2	3	6	5	1
115°	1	2	2	3	3	1
125°	2	2	2	3	3	1
135°	2	2	2	3	3	1
145°	2	3	3	4	4	2
155°	3	4	4	5	5	1
165°	4	5	5	6	6	1
175°	4	5	6	7	8	0
180°	6	6	6	6	6	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9878.1	9878.1	9878.1	9878.1	9878.1
2.5°	9920.8	9867.3	9790.3	9859.7	9853.9
5°	9753.4	9745.1	9725.8	9761.0	9750.9
7.5°	9678.1	9632.9	9525.8	9608.6	9561.8
10°	9370.1	9317.4	9312.4	9295.6	9289.8
12.5°	9151.7	9088.1	8884.7	8873.8	8828.6
15°	8849.6	8744.1	8496.4	8349.9	8226.9
17.5°	8615.2	8385.9	7972.5	7699.6	7541.5
20°	8292.2	8039.4	7363.2	6887.0	6702.9
22.5°	8026.0	7578.3	6708.7	6035.0	5908.6
25°	7600.0	7053.5	5996.5	5143.7	4929.4
27.5°	7230.1	6476.1	5156.2	4220.6	3957.8
30°	6850.2	5829.1	4334.4	3315.0	3009.6
32.5°	6407.4	5177.2	3488.3	2487.3	2266.4
35°	5947.1	4406.4	2779.4	1878.9	1788.5
37.5°	5440.0	3713.4	2088.9	1569.2	1584.3
40°	4877.6	3109.1	1583.4	1438.7	1467.1
42.5°	4316.8	2600.3	1317.3	1353.3	1361.7
45°	3607.1	2128.3	1217.7	1263.7	1213.5
47.5°	2987.0	1739.1	1147.4	1142.4	1071.3
50°	2267.2	1417.7	1093.9	1033.6	995.9
52.5°	1678.9	1196.0	1042.8	976.7	938.2
55°	1191.8	1047.0	967.5	934.0	836.9
57.5°	895.5	941.5	909.7	834.4	766.6
60°	774.1	848.6	876.3	786.7	720.6
62.5°	698.8	769.1	821.9	758.2	659.5
65°	619.3	692.1	745.7	729.0	535.6
67.5°	549.9	631.0	697.2	625.2	437.7
70°	482.1	557.4	643.6	530.6	327.2
72.5°	409.3	466.2	569.9	412.6	238.5
75°	344.0	385.0	488.8	354.9	211.7
77.5°	275.3	309.7	334.8	323.0	186.6
80°	214.3	248.6	272.0	293.8	160.7
82.5°	155.7	178.3	215.9	260.3	133.9
85°	95.4	116.3	165.7	220.1	99.6
87.5°	41.0	71.1	121.4	182.4	65.3
90°	1.7	35.2	82.9	142.3	29.3
92.5°	0.8	15.1	53.6	104.6	19.2
95°	0.8	5.9	32.6	71.1	15.1
97.5°	0.8	2.5	16.7	46.0	10.9
100°	0.8	1.7	9.2	26.8	7.5
102.5°	0.8	1.7	4.2	13.4	5.9
105°	0.8	1.7	3.3	5.9	5.0
107.5°	0.8	1.7	2.5	4.2	4.2
110°	0.8	1.7	2.5	4.2	4.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.8	1.7	2.5	4.2	4.2
115°	0.8	1.7	2.5	3.3	3.3
117.5°	0.8	1.7	2.5	3.3	3.3
120°	0.8	1.7	2.5	3.3	3.3
122.5°	0.8	1.7	2.5	3.3	3.3
125°	1.7	1.7	2.5	3.3	3.3
127.5°	1.7	2.5	2.5	3.3	3.3
130°	1.7	2.5	2.5	3.3	3.3
132.5°	1.7	2.5	2.5	3.3	3.3
135°	1.7	2.5	2.5	3.3	3.3
137.5°	1.7	2.5	3.3	3.3	3.3
140°	2.5	3.3	3.3	3.3	3.3
142.5°	2.5	3.3	3.3	4.2	3.3
145°	2.5	3.3	3.3	4.2	4.2
147.5°	2.5	3.3	4.2	4.2	4.2
150°	2.5	3.3	4.2	5.0	5.0
152.5°	3.3	3.3	4.2	5.0	5.0
155°	3.3	4.2	4.2	5.0	5.0
157.5°	3.3	4.2	4.2	5.0	5.9
160°	3.3	4.2	5.0	5.9	5.9
162.5°	3.3	4.2	5.0	5.9	5.9
165°	4.2	5.0	5.0	5.9	5.9
167.5°	4.2	5.0	5.9	5.9	6.7
170°	4.2	5.0	5.9	6.7	6.7
172.5°	4.2	5.0	5.9	6.7	6.7
175°	4.2	5.0	5.9	6.7	7.5
177.5°	4.2	5.0	5.9	6.7	7.5
180°	5.9	5.9	5.9	5.9	5.9

(END OF REPORT)