

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: P685666

Luminaire Tested: **8CZL-18-UNV-LVR-L835-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685666
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-18-UNV-LVR-L835-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL @80 CRI and 3500K
Light Source: (1176) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

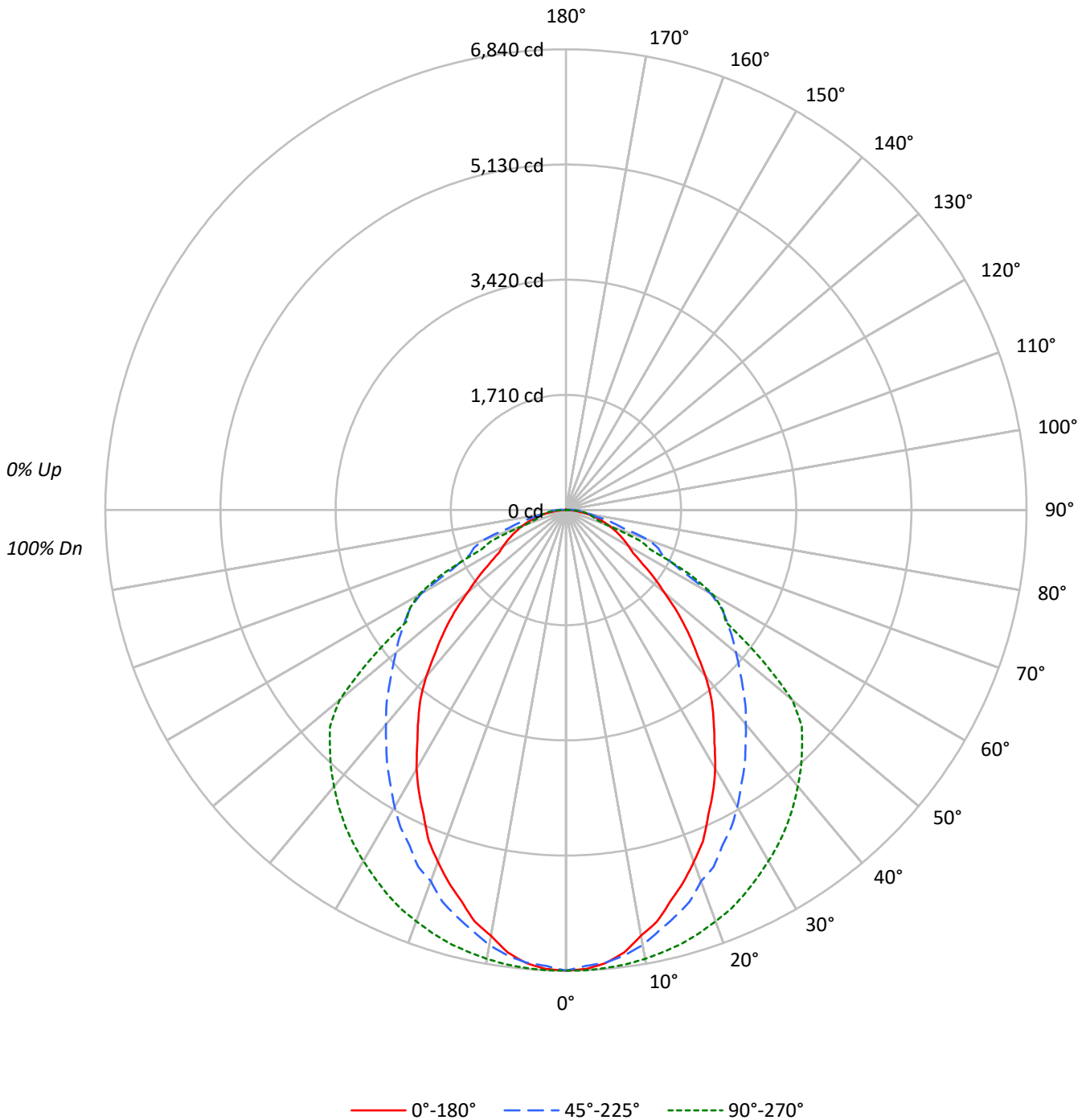
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15487.3 lumens
Efficiency: N/A
Efficacy: 142.1 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): 109
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°	11042	11042	11042
5°	10946	10931	11061
10°	10521	10752	11094
15°	10043	10451	11138
20°	9549	10080	11164
25°	8906	9790	11201
30°	8269	9489	11219
35°	7538	9117	11271
40°	6801	8762	11291
45°	5849	8480	11320
50°	4781	8281	11023
55°	3893	8248	8153
60°	3471	8018	8180
65°	3356	6017	5275
70°	3224	6167	2998
75°	3107	4346	2677
80°	2834	3535	3189
85°	2538	4407	3974



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	640.6	4.1
10°-20°	1775.7	11.5
20°-30°	2569.1	16.6
30°-40°	2932.2	18.9
40°-50°	2881.2	18.6
50°-60°	2298.1	14.8
60°-70°	1447.6	9.3
70°-80°	641.3	4.1
80°-90°	245.9	1.6
90°-100°	48.8	0.3
100°-110°	3.3	0.0
110°-120°	0.4	0.0
120°-130°	0.5	0.0
130°-140°	0.7	0.0
140°-150°	0.7	0.0
150°-160°	0.5	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	4985.4	32.2
0°-40°	7917.6	51.1
0°-60°	13096.9	84.6
0°-90°	15431.7	99.6
90°-120°	52.5	0.3
90°-150°	54.3	0.4
90°-180°	56.0	0.4
0°-180°	15487.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6839	6839	6839	6839	6839	
5°	6754	6768	6744	6800	6825	634
15°	6008	6068	6252	6546	6663	1691
25°	4999	5161	5495	5998	6287	2304
35°	3824	4056	4625	5307	5718	2391
45°	2562	2934	3714	4546	4958	1969
55°	1383	1872	2930	3160	2896	1271
65°	878	1196	1575	1678	1381	870
75°	498	576	697	528	429	522
85°	137	167	238	307	214	145
90°	1	57	125	183	35	8
95°	1	8	52	89	12	1
105°	1	1	1	3	0	1
115°	1	1	0	0	0	1
125°	1	2	0	0	0	1
135°	1	2	1	0	0	1
145°	2	2	1	0	0	1
155°	2	2	1	0	0	1
165°	3	3	2	1	0	1
175°	3	3	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°	6838.6	6838.6	6838.6	6838.6	6838.6
2.5°	6820.6	6816.3	6774.9	6833.3	6839.7
5°	6753.7	6768.5	6744.1	6800.4	6824.8
7.5°	6625.2	6641.1	6669.8	6772.8	6802.5
10°	6417.0	6457.4	6558.2	6702.7	6766.4
12.5°	6257.7	6307.6	6397.9	6643.2	6716.5
15°	6008.1	6067.6	6252.4	6545.5	6663.4
17.5°	5795.7	5904.0	6100.5	6422.3	6586.9
20°	5557.8	5644.9	5866.8	6301.2	6497.7
22.5°	5319.9	5430.3	5733.0	6139.8	6407.4
25°	4999.1	5160.6	5495.1	5998.5	6287.4
27.5°	4727.2	4931.2	5315.6	5831.8	6153.6
30°	4435.2	4593.4	5089.4	5661.9	6017.7
32.5°	4105.9	4354.5	4845.1	5467.5	5875.3
35°	3824.5	4056.0	4625.3	5307.1	5718.2
37.5°	3552.6	3770.3	4382.1	5125.5	5544.0
40°	3226.6	3513.3	4156.9	4918.4	5357.1
42.5°	2865.4	3217.0	3947.7	4723.0	5166.9
45°	2561.7	2934.5	3714.0	4545.6	4957.7
47.5°	2246.3	2639.2	3495.3	4330.0	4750.6
50°	1903.2	2381.1	3296.6	4130.4	4388.4
52.5°	1652.6	2112.4	3118.2	3769.3	3699.2
55°	1382.8	1872.4	2930.2	3159.6	2896.2
57.5°	1177.8	1655.8	2753.9	2481.0	2764.6
60°	1074.8	1482.6	2483.1	2362.0	2533.0
62.5°	978.2	1330.8	1899.0	2215.5	2083.8
65°	878.3	1195.9	1575.0	1678.1	1380.7
67.5°	781.7	1079.1	1484.8	1253.2	1202.3
70°	682.9	988.8	1306.3	1068.4	635.1
72.5°	589.4	884.7	893.2	591.6	471.6
75°	498.1	575.6	696.7	527.8	429.1
77.5°	398.3	493.9	466.2	472.6	388.7
80°	304.8	339.9	380.2	422.7	343.0
82.5°	215.6	252.8	308.0	369.6	281.4
85°	137.0	166.7	237.9	306.9	214.5
87.5°	54.2	105.1	177.4	247.5	126.4
90°	1.1	57.4	125.3	182.7	35.0
92.5°	1.1	26.6	83.9	133.8	18.1
95°	1.1	8.5	52.0	89.2	11.7
97.5°	1.1	3.2	27.6	55.2	6.4
100°	1.1	1.1	11.7	29.7	3.2
102.5°	1.1	1.1	4.2	11.7	1.1
105°	1.1	1.1	1.1	3.2	0.0
107.5°	1.1	1.1	0.0	0.0	0.0
110°	1.1	1.1	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.1	1.1	0.0	0.0	0.0
115°	1.1	1.1	0.0	0.0	0.0
117.5°	1.1	1.1	0.0	0.0	0.0
120°	1.1	1.1	0.0	0.0	0.0
122.5°	1.1	1.1	0.0	0.0	0.0
125°	1.1	2.1	0.0	0.0	0.0
127.5°	1.1	1.1	0.0	0.0	0.0
130°	1.1	2.1	1.1	0.0	0.0
132.5°	1.1	2.1	1.1	0.0	0.0
135°	1.1	2.1	1.1	0.0	0.0
137.5°	1.1	2.1	1.1	0.0	0.0
140°	2.1	2.1	1.1	0.0	0.0
142.5°	2.1	2.1	1.1	0.0	0.0
145°	2.1	2.1	1.1	0.0	0.0
147.5°	2.1	2.1	1.1	0.0	0.0
150°	2.1	2.1	1.1	0.0	0.0
152.5°	2.1	2.1	1.1	0.0	0.0
155°	2.1	2.1	1.1	0.0	0.0
157.5°	2.1	3.2	1.1	0.0	0.0
160°	3.2	3.2	1.1	0.0	0.0
162.5°	3.2	3.2	2.1	1.1	0.0
165°	3.2	3.2	2.1	1.1	0.0
167.5°	3.2	3.2	2.1	1.1	0.0
170°	3.2	3.2	2.1	1.1	1.1
172.5°	3.2	3.2	2.1	1.1	1.1
175°	3.2	3.2	2.1	1.1	1.1
177.5°	3.2	3.2	2.1	1.1	1.1
180°	2.1	2.1	2.1	2.1	2.1

(END OF REPORT)