

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: P685716

Luminaire Tested: **8CZL-18-UNV-LVR-L950-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685716
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-L950-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL @90 CRI and 5000K
Light Source: (1176) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

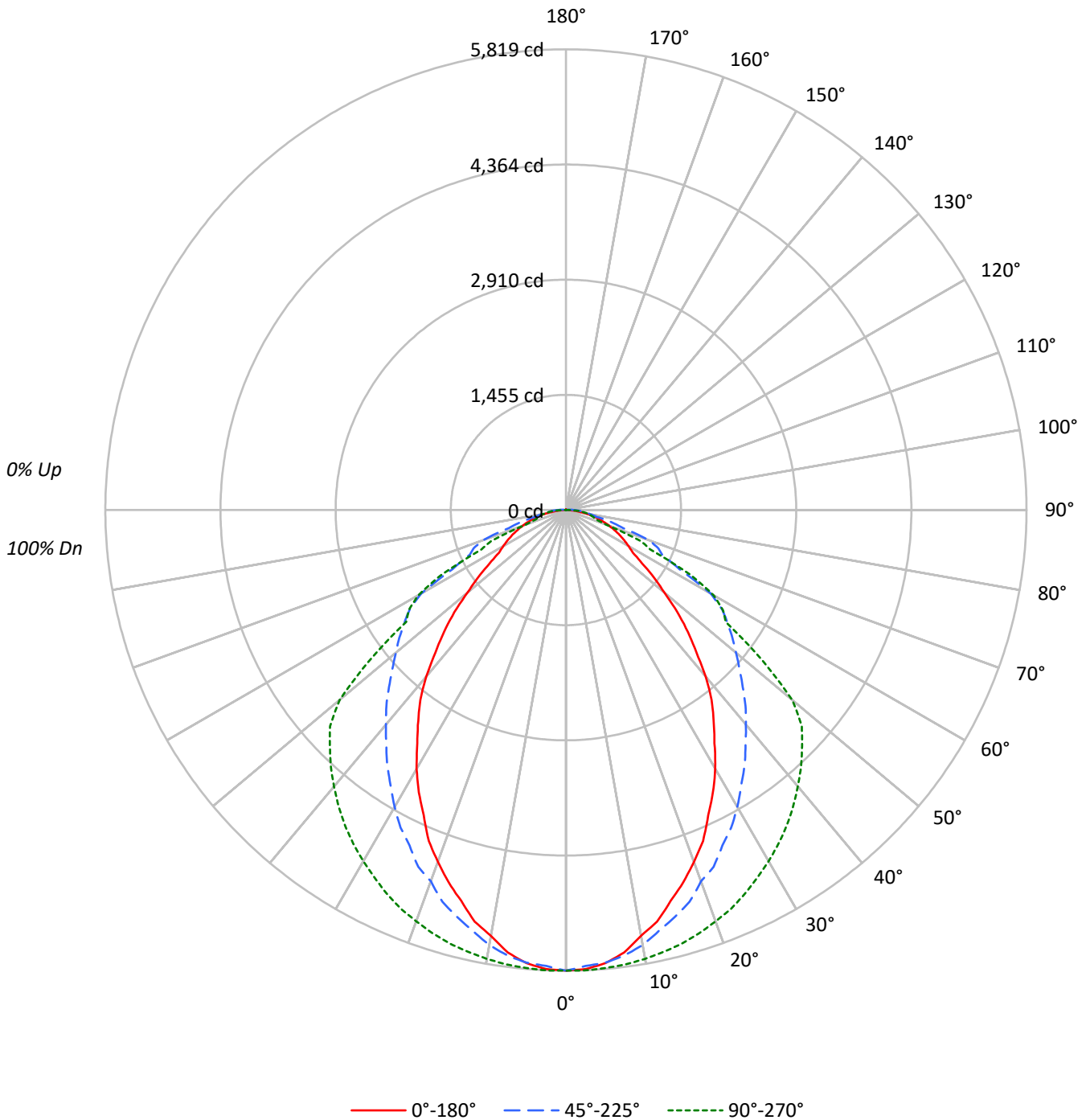
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13176.4 lumens
Efficiency: N/A
Efficacy: 120.9 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°	9394	9394	9394
5°	9313	9300	9411
10°	8951	9148	9438
15°	8544	8892	9476
20°	8125	8576	9499
25°	7577	8329	9530
30°	7035	8073	9545
35°	6413	7756	9589
40°	5786	7454	9606
45°	4977	7215	9631
50°	4067	7045	9378
55°	3312	7018	6936
60°	2953	6822	6959
65°	2855	5119	4488
70°	2743	5247	2551
75°	2644	3698	2278
80°	2411	3008	2714
85°	2160	3750	3381



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	545.0	4.1
10°-20°	1510.8	11.5
20°-30°	2185.7	16.6
30°-40°	2494.7	18.9
40°-50°	2451.3	18.6
50°-60°	1955.2	14.8
60°-70°	1231.6	9.3
70°-80°	545.6	4.1
80°-90°	209.2	1.6
90°-100°	41.5	0.3
100°-110°	2.8	0.0
110°-120°	0.3	0.0
120°-130°	0.4	0.0
130°-140°	0.6	0.0
140°-150°	0.6	0.0
150°-160°	0.5	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	4241.5	32.2
0°-40°	6736.2	51.1
0°-60°	11142.7	84.6
0°-90°	13129.1	99.6
90°-120°	44.6	0.3
90°-150°	46.2	0.4
90°-180°	47.0	0.4
0°-180°	13176.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5818	5818	5818	5818	5818	
5°	5746	5759	5738	5786	5806	539
15°	5112	5162	5319	5569	5669	1439
25°	4253	4391	4675	5104	5349	1960
35°	3254	3451	3935	4515	4865	2034
45°	2180	2497	3160	3867	4218	1675
55°	1176	1593	2493	2688	2464	1082
65°	747	1017	1340	1428	1175	740
75°	424	490	593	449	365	444
85°	117	142	202	261	182	123
90°	1	49	107	155	30	7
95°	1	7	44	76	10	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°	5818.2	5818.2	5818.2	5818.2	5818.2
2.5°	5802.9	5799.3	5764.0	5813.7	5819.1
5°	5745.9	5758.6	5737.8	5785.7	5806.5
7.5°	5636.6	5650.2	5674.6	5762.2	5787.5
10°	5459.5	5493.8	5579.7	5702.6	5756.8
12.5°	5324.0	5366.4	5443.2	5652.0	5714.3
15°	5111.6	5162.2	5319.4	5568.8	5669.1
17.5°	4930.9	5023.1	5190.2	5464.0	5604.1
20°	4728.5	4802.6	4991.4	5361.0	5528.2
22.5°	4526.1	4620.1	4877.6	5223.7	5451.4
25°	4253.2	4390.6	4675.2	5103.5	5349.3
27.5°	4021.9	4195.4	4522.5	4961.6	5235.4
30°	3773.4	3908.0	4330.0	4817.1	5119.8
32.5°	3493.3	3704.7	4122.2	4651.7	4998.7
35°	3253.8	3450.8	3935.1	4515.3	4864.9
37.5°	3022.5	3207.8	3728.2	4360.7	4716.8
40°	2745.1	2989.1	3536.7	4184.5	4557.7
42.5°	2437.9	2737.0	3358.7	4018.3	4396.0
45°	2179.5	2496.6	3159.9	3867.4	4218.0
47.5°	1911.1	2245.4	2973.7	3683.9	4041.8
50°	1619.2	2025.9	2804.8	3514.1	3733.6
52.5°	1406.0	1797.2	2652.9	3206.8	3147.2
55°	1176.5	1593.0	2493.0	2688.2	2464.1
57.5°	1002.1	1408.7	2343.0	2110.8	2352.1
60°	914.4	1261.4	2112.6	2009.6	2155.1
62.5°	832.2	1132.2	1615.6	1884.9	1772.8
65°	747.3	1017.4	1340.0	1427.7	1174.7
67.5°	665.0	918.0	1263.2	1066.2	1022.9
70°	581.0	841.2	1111.4	909.0	540.3
72.5°	501.5	752.7	759.9	503.3	401.2
75°	423.8	489.7	592.8	449.1	365.1
77.5°	338.8	420.2	396.7	402.1	330.7
80°	259.3	289.1	323.5	359.6	291.9
82.5°	183.4	215.1	262.0	314.5	239.5
85°	116.6	141.9	202.4	261.1	182.5
87.5°	46.1	89.5	150.9	210.5	107.5
90°	0.9	48.8	106.6	155.4	29.8
92.5°	0.9	22.6	71.4	113.9	15.4
95°	0.9	7.2	44.3	75.9	9.9
97.5°	0.9	2.7	23.5	47.0	5.4
100°	0.9	0.9	9.9	25.3	2.7
102.5°	0.9	0.9	3.6	9.9	0.9
105°	0.9	0.9	0.9	2.7	0.0
107.5°	0.9	0.9	0.0	0.0	0.0
110°	0.9	0.9	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	0.9	0.0	0.0	0.0
115°	0.9	0.9	0.0	0.0	0.0
117.5°	0.9	0.9	0.0	0.0	0.0
120°	0.9	0.9	0.0	0.0	0.0
122.5°	0.9	0.9	0.0	0.0	0.0
125°	0.9	1.8	0.0	0.0	0.0
127.5°	0.9	0.9	0.0	0.0	0.0
130°	0.9	1.8	0.9	0.0	0.0
132.5°	0.9	1.8	0.9	0.0	0.0
135°	0.9	1.8	0.9	0.0	0.0
137.5°	0.9	1.8	0.9	0.0	0.0
140°	1.8	1.8	0.9	0.0	0.0
142.5°	1.8	1.8	0.9	0.0	0.0
145°	1.8	1.8	0.9	0.0	0.0
147.5°	1.8	1.8	0.9	0.0	0.0
150°	1.8	1.8	0.9	0.0	0.0
152.5°	1.8	1.8	0.9	0.0	0.0
155°	1.8	1.8	0.9	0.0	0.0
157.5°	1.8	2.7	0.9	0.0	0.0
160°	2.7	2.7	0.9	0.0	0.0
162.5°	2.7	2.7	1.8	0.9	0.0
165°	2.7	2.7	1.8	0.9	0.0
167.5°	2.7	2.7	1.8	0.9	0.0
170°	2.7	2.7	1.8	0.9	0.9
172.5°	2.7	2.7	1.8	0.9	0.9
175°	2.7	2.7	1.8	0.9	0.9
177.5°	2.7	2.7	1.8	0.9	0.9
180°	1.8	1.8	1.8	1.8	1.8

(END OF REPORT)