

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: P685955

Luminaire Tested: **8CZL-14-UNV-LVRF-L950-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685955
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-14-UNV-LVRF-L950-CD-U
Description: METALUX CRUZE LINEAR 8FT LOUVER MODEL WITH FROSTED LAY-IN @90 CRI and 5000K
Light Source: (784) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

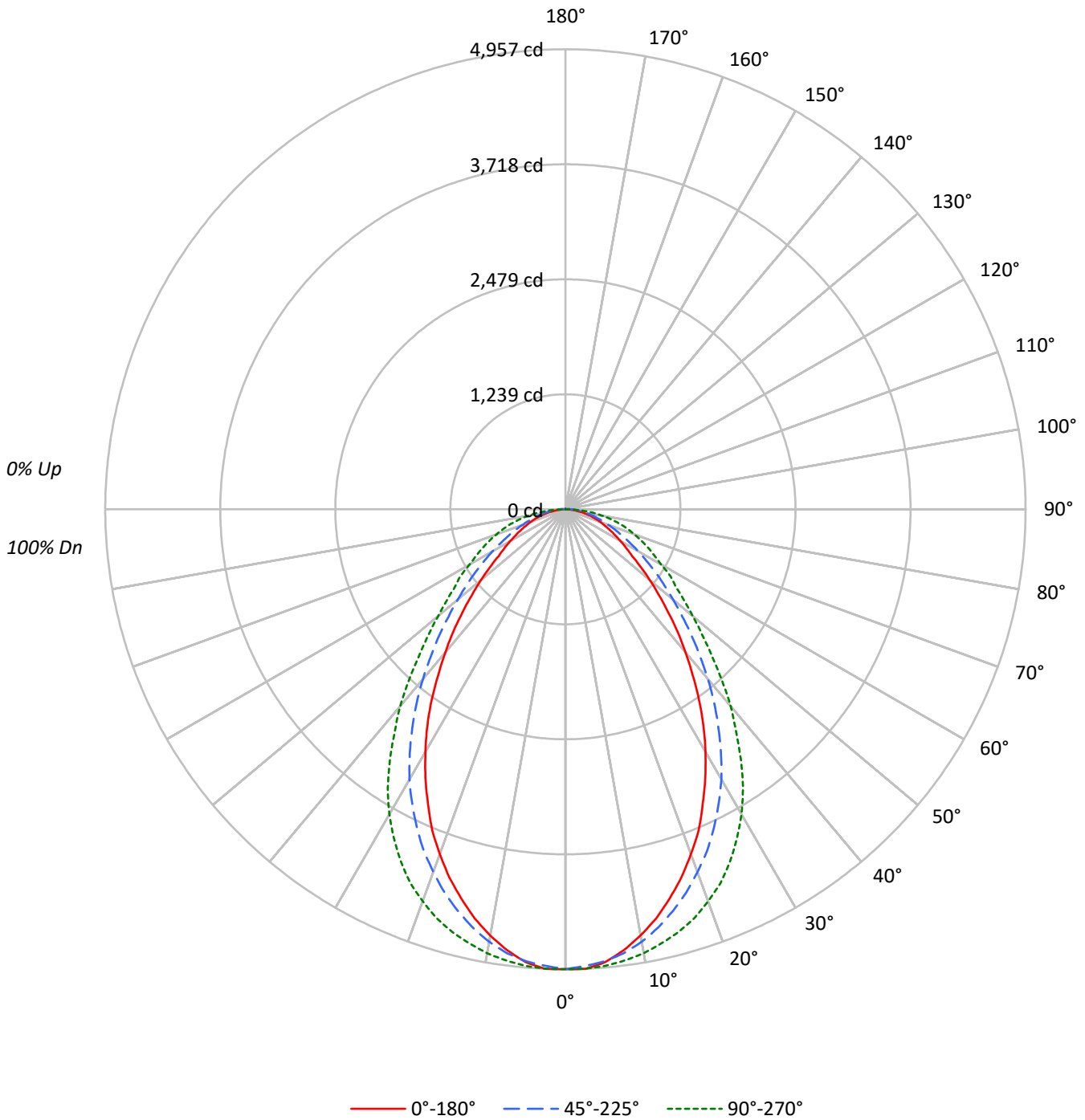
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9139.9 lumens
Efficiency: N/A
Efficacy: 102.7 lumens/watt
Spacing Criteria (0/90/45): 0.97 / 1.15 / 1.12
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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86	86	
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	74	74	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	65	65	
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	51	51	
6	75	63	55	49	73	62	54	48	60	53	48	58	52	48	57	51	47	45	45	
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41	41	
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37	37	
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34	34	
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31	31	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8000	8000	8000
5°	7942	7923	8003
10°	7645	7758	7963
15°	7254	7487	7880
20°	6793	7145	7723
25°	6238	6741	7467
30°	5622	6265	7071
35°	4952	5666	6494
40°	4239	5031	5840
45°	3571	4385	5086
50°	2982	3801	4497
55°	2468	3340	4077
60°	2224	2927	3845
65°	2021	2577	3760
70°	1883	2313	3731
75°	1746	2159	3807
80°	1583	2139	3814
85°	1358	2506	3774



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	463.6	5.1
10°-20°	1267.0	13.9
20°-30°	1750.6	19.2
30°-40°	1800.9	19.7
40°-50°	1476.4	16.2
50°-60°	1059.4	11.6
60°-70°	712.5	7.8
70°-80°	415.9	4.6
80°-90°	160.2	1.8
90°-100°	27.8	0.3
100°-110°	2.3	0.0
110°-120°	0.4	0.0
120°-130°	0.4	0.0
130°-140°	0.6	0.0
140°-150°	0.7	0.0
150°-160°	0.6	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	3481.2	38.1
0°-40°	5282.0	57.8
0°-60°	7817.8	85.5
0°-90°	9106.5	99.6
90°-120°	30.5	0.3
90°-150°	32.2	0.4
90°-180°	33.0	0.4
0°-180°	9139.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4955	4955	4955	4955	4955	
5°	4900	4904	4888	4934	4938	460
15°	4340	4384	4479	4653	4714	1217
25°	3501	3583	3784	4048	4191	1607
35°	2512	2628	2875	3144	3295	1565
45°	1564	1686	1920	2109	2227	1214
55°	877	981	1186	1349	1448	807
65°	529	560	674	866	984	527
75°	280	290	346	481	610	297
85°	73	91	135	202	204	79
90°	1	31	69	105	22	4
95°	1	5	29	51	9	0
105°	0	1	1	3	1	0
115°	1	1	1	0	0	1
125°	1	1	1	0	0	1
135°	1	1	1	1	0	1
145°	1	1	1	1	1	1
155°	1	2	1	1	1	1
165°	2	2	2	1	1	1
175°	2	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°	4954.8	4954.8	4954.8	4954.8	4954.8
2.5°	4956.9	4952.6	4924.9	4956.9	4955.5
5°	4899.9	4903.5	4888.5	4934.1	4937.7
7.5°	4793.8	4808.1	4824.5	4891.4	4903.5
10°	4662.8	4684.2	4731.9	4831.6	4857.2
12.5°	4515.4	4538.9	4616.5	4754.0	4789.6
15°	4339.5	4383.7	4479.1	4652.8	4714.1
17.5°	4157.9	4212.0	4330.3	4536.1	4618.7
20°	3953.6	4007.7	4158.6	4387.9	4494.8
22.5°	3748.5	3801.2	3985.6	4229.9	4363.0
25°	3501.4	3583.3	3784.1	4047.6	4191.4
27.5°	3265.0	3351.8	3575.4	3858.1	4001.3
30°	3015.7	3117.6	3360.4	3630.3	3792.6
32.5°	2768.6	2871.9	3119.7	3401.0	3561.9
35°	2512.3	2628.3	2874.7	3143.9	3294.9
37.5°	2252.4	2379.1	2632.6	2897.5	3019.3
40°	2011.0	2135.6	2386.9	2624.1	2770.8
42.5°	1788.1	1910.6	2143.4	2358.5	2490.2
45°	1563.8	1685.5	1920.5	2109.2	2227.4
47.5°	1363.0	1487.6	1706.2	1897.0	1996.0
50°	1187.1	1300.3	1513.2	1686.2	1790.2
52.5°	1026.1	1129.4	1340.2	1508.2	1608.6
55°	876.6	981.3	1186.4	1348.7	1448.4
57.5°	776.2	851.0	1035.4	1215.5	1343.7
60°	688.6	734.9	906.5	1120.1	1190.6
62.5°	599.6	641.6	782.6	970.6	1080.3
65°	529.1	560.4	674.4	865.9	984.1
67.5°	459.3	482.8	580.4	764.8	884.4
70°	398.8	413.7	489.9	665.1	790.4
72.5°	341.1	348.9	417.3	573.9	698.6
75°	279.9	289.8	346.1	480.7	610.3
77.5°	221.5	235.7	285.6	400.9	509.1
80°	170.2	181.6	230.0	329.7	410.2
82.5°	118.2	133.9	179.4	260.6	314.0
85°	73.3	91.1	135.3	202.2	203.7
87.5°	30.6	57.0	99.0	149.5	104.0
90°	0.7	30.6	69.1	105.4	22.1
92.5°	0.0	14.2	47.0	75.5	12.8
95°	0.7	5.0	29.2	50.6	9.3
97.5°	0.0	1.4	15.7	32.0	5.7
100°	0.0	0.7	6.4	17.8	3.6
102.5°	0.0	0.7	2.8	7.8	2.1
105°	0.0	0.7	1.4	2.8	1.4
107.5°	0.0	0.7	0.7	0.7	0.7
110°	0.7	0.7	0.7	0.7	0.0



TEST NUMBER: P685955
 CATALOG NUMBER: 8CZL-14-UNV-LVRF-L950-CD-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.7	0.7	0.0	0.0
115°	0.7	0.7	0.7	0.0	0.0
117.5°	0.7	0.7	0.7	0.0	0.0
120°	0.7	0.7	0.7	0.0	0.0
122.5°	0.7	0.7	0.7	0.0	0.0
125°	0.7	0.7	0.7	0.0	0.0
127.5°	0.7	0.7	0.7	0.0	0.0
130°	0.7	0.7	0.7	0.0	0.0
132.5°	0.7	1.4	0.7	0.7	0.0
135°	0.7	1.4	0.7	0.7	0.0
137.5°	0.7	1.4	0.7	0.7	0.0
140°	0.7	1.4	0.7	0.7	0.7
142.5°	1.4	1.4	1.4	0.7	0.7
145°	1.4	1.4	1.4	0.7	0.7
147.5°	1.4	1.4	1.4	0.7	0.7
150°	1.4	1.4	1.4	0.7	0.7
152.5°	1.4	2.1	1.4	0.7	0.7
155°	1.4	2.1	1.4	0.7	0.7
157.5°	1.4	2.1	1.4	0.7	0.7
160°	1.4	2.1	1.4	0.7	0.7
162.5°	2.1	2.1	1.4	1.4	0.7
165°	2.1	2.1	2.1	1.4	0.7
167.5°	2.1	2.1	2.1	1.4	0.7
170°	2.1	2.1	2.1	1.4	1.4
172.5°	2.1	2.1	2.1	1.4	1.4
175°	2.1	2.8	2.1	1.4	1.4
177.5°	2.1	2.8	2.1	1.4	1.4
180°	2.1	2.1	2.1	2.1	2.1

(END OF REPORT)