

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: P685655

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

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685655  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-14-UNV-FUL-L950-CD-U  
Description: METALUX CRUZE LINEAR 8FT FROSTED LENS MODEL WITH UPLIGHT @90 CRI and 5000K  
Light Source: (784) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

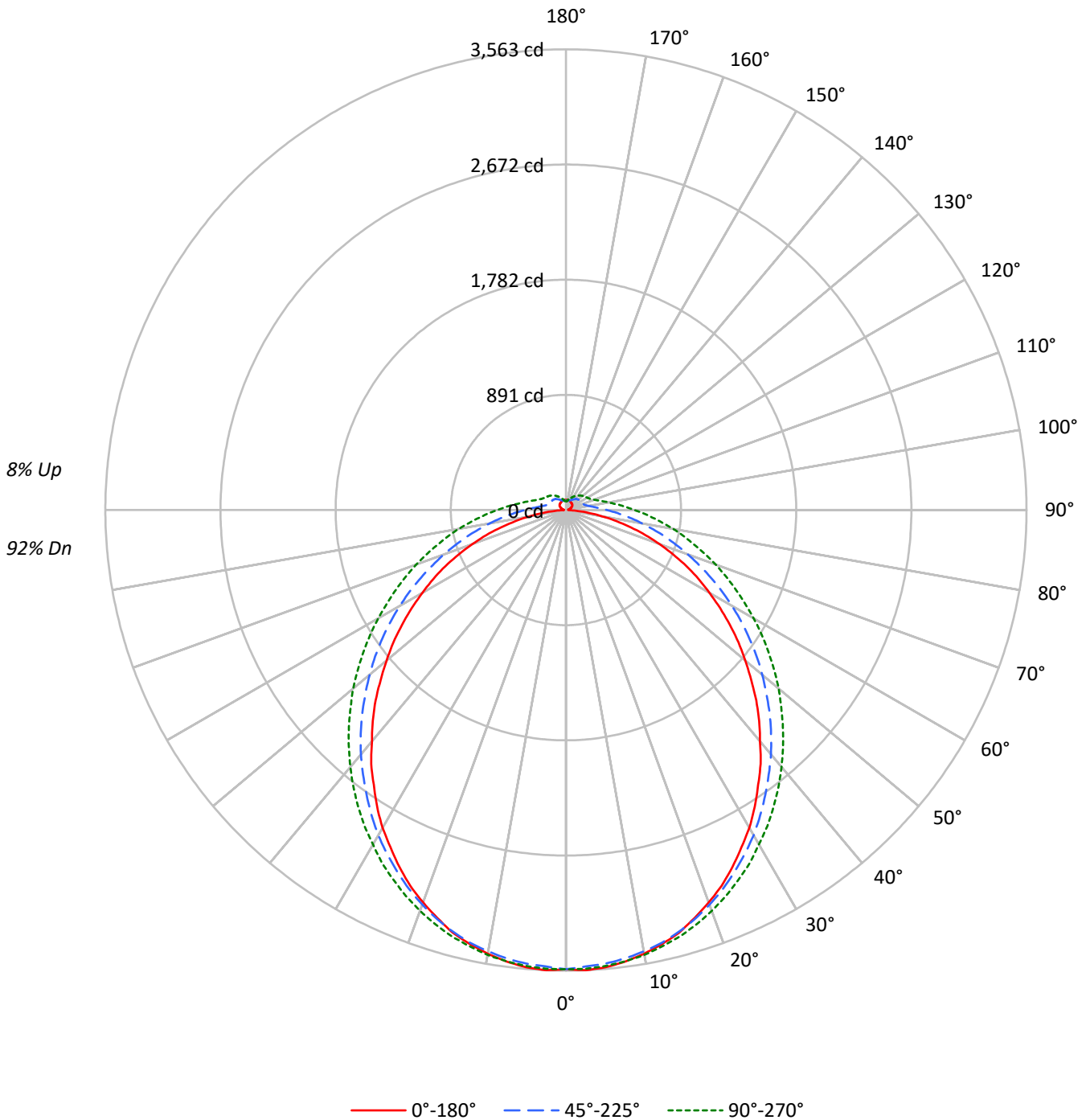
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11078.3 lumens  
Efficiency: N/A  
Efficacy: 124.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.83' x L: 8' x H: 0.17')  
CIE Type: Direct

Input Watts (W): 89  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	117	117	117	117	113	113	113	113	107	107	107	100	100	100	95	95	95	95	95	95	92
1	106	101	96	92	102	98	93	90	92	88	85	87	84	81	82	79	77	77	77	77	75
2	96	87	80	74	93	85	78	73	80	74	70	75	71	67	71	68	64	64	64	64	62
3	87	77	68	61	84	74	67	60	70	64	58	66	61	56	63	58	54	54	54	54	52
4	80	68	59	52	77	66	58	51	62	55	50	59	53	48	56	51	47	47	47	47	44
5	74	61	51	45	71	59	50	44	56	49	43	53	47	42	50	45	41	41	41	41	38
6	68	54	45	39	65	53	45	38	50	43	38	48	42	37	46	40	36	36	36	36	33
7	63	49	41	34	61	48	40	34	46	39	33	44	37	32	42	36	32	32	32	32	30
8	59	45	37	31	57	44	36	30	42	35	30	40	34	29	38	33	28	28	28	28	26
9	55	41	33	28	53	40	33	27	39	32	27	37	31	26	35	30	26	26	26	26	24
10	51	38	30	25	50	37	30	25	36	29	24	34	28	24	33	27	23	23	23	23	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5734	5734	5734
5°	5742	5630	5639
10°	5691	5531	5534
15°	5626	5418	5415
20°	5508	5281	5284
25°	5376	5125	5143
30°	5228	4966	4990
35°	5037	4777	4843
40°	4837	4598	4682
45°	4657	4400	4517
50°	4440	4198	4359
55°	4230	3989	4185
60°	3995	3768	4022
65°	3766	3540	3869
70°	3431	3319	3753
75°	3017	3115	3650
80°	2421	2964	3676
85°	1523	2923	3786



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	335.9	3.0
10°-20°	955.7	8.6
20°-30°	1427.1	12.9
30°-40°	1687.1	15.2
40°-50°	1719.1	15.5
50°-60°	1550.1	14.0
60°-70°	1226.5	11.1
70°-80°	828.9	7.5
80°-90°	463.6	4.2
90°-100°	252.3	2.3
100°-110°	165.5	1.5
110°-120°	131.2	1.2
120°-130°	111.7	1.0
130°-140°	89.3	0.8
140°-150°	63.9	0.6
150°-160°	41.2	0.4
160°-170°	22.2	0.2
170°-180°	7.0	0.1
0°-30°	2718.8	24.5
0°-40°	4405.8	39.8
0°-60°	7675.1	69.3
0°-90°	10194.1	92.0
90°-120°	548.9	5.0
90°-150°	813.8	7.3
90°-180°	884.0	8.0
0°-180°	11078.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3551	3551	3551	3551	3551	
5°	3549	3543	3521	3541	3540	337
15°	3384	3380	3377	3406	3413	952
25°	3047	3061	3086	3144	3156	1403
35°	2593	2628	2689	2774	2801	1623
45°	2082	2123	2228	2332	2374	1603
55°	1547	1605	1733	1864	1911	1384
65°	1030	1082	1237	1389	1447	1017
75°	521	593	790	966	1022	554
85°	102	229	439	610	672	125
90°	16	126	316	472	530	12
95°	17	83	232	371	423	15
105°	29	73	152	239	275	31
115°	46	79	135	185	206	45
125°	60	82	129	167	180	54
135°	67	80	120	149	159	52
145°	70	77	100	127	134	44
155°	75	76	83	105	108	34
165°	78	76	75	78	85	22
175°	78	77	74	65	66	7
180°	73	73	73	73	73	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3551.2	3551.2	3551.2	3551.2	3551.2
2.5°	3562.6	3556.9	3533.4	3551.9	3551.2
5°	3549.0	3543.3	3521.3	3541.2	3539.8
7.5°	3522.7	3519.1	3498.5	3520.5	3519.8
10°	3484.2	3484.2	3466.4	3492.1	3494.2
12.5°	3437.9	3437.2	3428.0	3454.3	3454.3
15°	3384.5	3380.3	3376.7	3405.9	3413.0
17.5°	3308.3	3311.2	3317.6	3352.5	3359.6
20°	3230.0	3236.4	3248.5	3289.8	3299.1
22.5°	3146.0	3153.1	3172.3	3217.2	3232.2
25°	3047.0	3061.2	3086.2	3143.9	3156.0
27.5°	2940.2	2965.1	2997.2	3058.4	3079.1
30°	2837.7	2857.6	2903.9	2968.0	2985.8
32.5°	2719.4	2743.7	2797.8	2874.7	2898.9
35°	2592.7	2628.3	2688.8	2774.3	2801.3
37.5°	2474.5	2503.0	2577.7	2668.9	2700.9
40°	2334.9	2381.2	2467.4	2557.1	2594.1
42.5°	2212.4	2252.3	2349.2	2448.1	2486.6
45°	2082.1	2123.4	2228.1	2332.1	2374.1
47.5°	1942.6	1991.7	2103.5	2219.6	2258.7
50°	1811.5	1862.8	1982.4	2099.9	2149.1
52.5°	1682.7	1736.1	1860.0	1983.9	2029.4
55°	1547.4	1605.0	1733.2	1864.2	1911.2
57.5°	1414.9	1472.6	1609.3	1744.6	1795.2
60°	1281.8	1335.9	1482.6	1621.4	1677.0
62.5°	1157.1	1209.8	1360.8	1510.3	1558.8
65°	1029.7	1081.7	1236.9	1389.3	1447.0
67.5°	897.9	960.6	1116.5	1276.1	1337.3
70°	768.3	832.4	1004.8	1170.7	1231.9
72.5°	645.9	718.5	892.2	1061.7	1124.4
75°	521.2	593.2	790.4	965.6	1021.8
77.5°	403.8	487.8	690.7	867.3	933.5
80°	291.2	386.7	601.0	774.0	843.8
82.5°	191.6	300.5	517.7	689.3	752.0
85°	101.8	228.6	439.4	610.3	671.5
87.5°	39.9	169.5	373.8	538.3	599.6
90°	15.7	126.0	316.2	472.1	530.5
92.5°	15.7	98.3	269.2	418.7	473.5
95°	17.1	82.6	232.1	371.0	423.0
97.5°	18.5	74.8	202.9	329.0	375.3
100°	21.4	71.9	180.9	294.8	336.8
102.5°	24.9	71.9	163.1	263.5	303.3
105°	29.2	73.3	151.7	239.3	274.9
107.5°	32.8	74.8	143.8	219.3	251.4
110°	37.0	76.9	139.6	204.4	232.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	41.3	78.3	136.7	193.7	217.9
115°	45.6	79.0	135.3	185.1	205.8
117.5°	49.8	80.5	133.9	179.4	197.2
120°	54.1	81.2	132.4	175.2	190.8
122.5°	57.7	81.2	131.0	170.9	185.1
125°	60.5	81.9	128.9	166.6	180.2
127.5°	62.7	82.6	127.5	162.4	174.5
130°	64.8	81.9	125.3	158.1	169.5
132.5°	66.2	81.2	122.5	153.8	164.5
135°	66.9	80.5	119.6	148.8	158.8
137.5°	67.6	79.8	115.4	143.8	153.1
140°	67.6	79.0	110.4	138.1	146.7
142.5°	68.4	77.6	105.4	132.4	140.3
145°	69.8	76.9	100.4	126.8	133.9
147.5°	71.2	75.5	96.1	120.3	126.8
150°	72.6	75.5	91.9	114.6	120.3
152.5°	73.3	75.5	87.6	109.7	113.9
155°	74.8	75.5	83.3	104.7	107.5
157.5°	75.5	75.5	80.5	98.3	101.1
160°	76.2	76.2	77.6	91.1	95.4
162.5°	77.6	76.2	76.2	84.0	89.7
165°	77.6	76.2	74.8	78.3	84.7
167.5°	78.3	76.9	74.1	74.1	80.5
170°	78.3	76.9	74.1	70.5	74.1
172.5°	78.3	76.9	74.1	67.6	69.1
175°	78.3	76.9	74.1	64.8	65.5
177.5°	78.3	76.9	73.3	62.7	65.5
180°	72.6	72.6	72.6	72.6	72.6

(END OF REPORT)