

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: P685327

Luminaire Tested: **8CZL-24-UNV-L850-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685327
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-24-UNV-L850-CD-U
Description: METALUX CRUZE LINEAR 8FT BASE MODEL @80 CRI and 5000K
Light Source: (1176) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

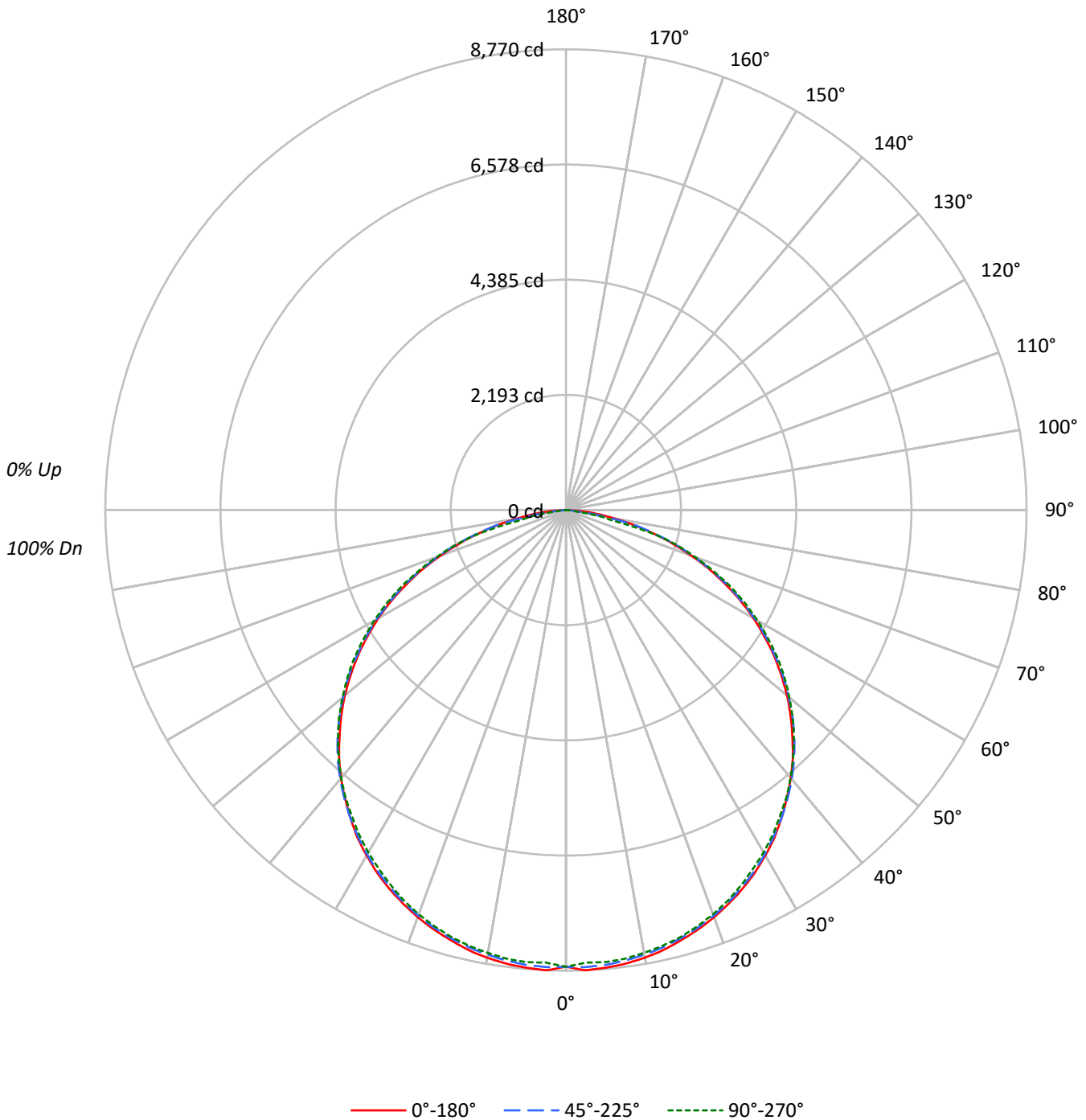
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25788.7 lumens
Efficiency: N/A
Efficacy: 167.5 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.29 / 1.41
Luminous Opening: Rectangular (W 0.83' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 154
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	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	72	72	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	61	61	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	52	52	52	50
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	45	45	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	39	39	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	35	35	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	31	31	31	29
9	56	42	34	29	55	42	34	29	41	33	28	40	33	28	39	33	28	28	28	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	25	25	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14036	14036	14036
5°	14176	14086	14000
10°	14188	14092	14031
15°	14168	14111	14066
20°	14172	14122	14068
25°	14175	14118	14048
30°	14158	14118	14029
35°	14106	14106	14007
40°	14040	14096	14029
45°	13921	14042	14012
50°	13803	13903	13950
55°	13619	13716	13851
60°	13322	13442	13604
65°	12826	13008	13231
70°	11995	12233	12346
75°	10794	10992	10430
80°	9017	7342	5716
85°	6725	1767	637



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	824.7	3.2
10°-20°	2377.9	9.2
20°-30°	3641.3	14.1
30°-40°	4458.2	17.3
40°-50°	4716.4	18.3
50°-60°	4349.2	16.9
60°-70°	3355.0	13.0
70°-80°	1791.8	6.9
80°-90°	274.2	1.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	6843.9	26.5
0°-40°	11302.1	43.8
0°-60°	20367.7	79.0
0°-90°	25788.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	25788.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8693	8693	8693	8693	8693	
5°	8746	8643	8691	8654	8638	832
15°	8476	8386	8442	8413	8415	2395
25°	7957	7875	7925	7867	7885	3668
35°	7157	7114	7157	7096	7106	4478
45°	6097	6094	6150	6107	6136	4706
55°	4838	4833	4873	4902	4920	4316
65°	3357	3357	3405	3431	3463	3314
75°	1730	1728	1762	1775	1672	1832
85°	363	260	95	40	34	445
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8693.4	8693.4	8693.4	8693.4	8693.4
2.5°	8770.3	8666.9	8709.3	8677.5	8624.5
5°	8746.4	8643.1	8690.8	8653.7	8637.8
7.5°	8709.3	8603.4	8651.0	8621.9	8616.6
10°	8653.7	8545.1	8595.4	8563.6	8558.3
12.5°	8579.5	8473.5	8529.2	8492.1	8497.4
15°	8476.2	8386.1	8441.7	8412.6	8415.2
17.5°	8372.8	8280.1	8338.4	8309.2	8311.9
20°	8248.3	8158.2	8219.2	8174.1	8187.4
22.5°	8107.9	8028.4	8081.4	8023.1	8049.6
25°	7956.8	7874.7	7925.0	7866.8	7885.3
27.5°	7784.6	7707.8	7758.1	7697.2	7705.1
30°	7593.8	7525.0	7572.6	7511.7	7525.0
32.5°	7389.8	7328.9	7366.0	7310.3	7328.9
35°	7156.7	7114.3	7156.7	7095.7	7106.3
37.5°	6912.9	6870.5	6928.8	6875.8	6894.3
40°	6661.2	6621.4	6687.7	6634.7	6655.9
42.5°	6393.6	6364.4	6430.7	6377.7	6404.2
45°	6096.8	6094.2	6149.8	6107.4	6136.5
47.5°	5802.7	5797.4	5853.0	5823.9	5858.3
50°	5495.3	5490.0	5535.1	5532.4	5553.6
52.5°	5166.8	5174.7	5217.1	5225.1	5248.9
55°	4838.2	4832.9	4872.7	4901.8	4920.4
57.5°	4480.5	4491.1	4522.9	4557.4	4570.6
60°	4125.5	4120.2	4162.6	4191.7	4212.9
62.5°	3749.2	3749.2	3783.7	3826.1	3847.3
65°	3357.1	3357.1	3404.8	3431.3	3463.1
67.5°	2957.0	2949.0	2991.4	3049.7	3044.4
70°	2541.0	2543.6	2591.3	2620.5	2615.2
72.5°	2127.7	2135.6	2185.9	2199.2	2212.4
75°	1730.2	1727.6	1762.0	1775.3	1671.9
77.5°	1335.4	1338.1	1359.3	996.3	874.4
80°	969.8	975.1	789.6	614.7	614.7
82.5°	641.2	630.6	405.4	238.5	174.9
85°	363.0	259.7	95.4	39.7	34.4
87.5°	148.4	47.7	26.5	18.5	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)