

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: P685317

Luminaire Tested: **8CZL-24-UNV-L840-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685317
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-24-UNV-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT BASE MODEL @80 CRI and 4000K
Light Source: (1176) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

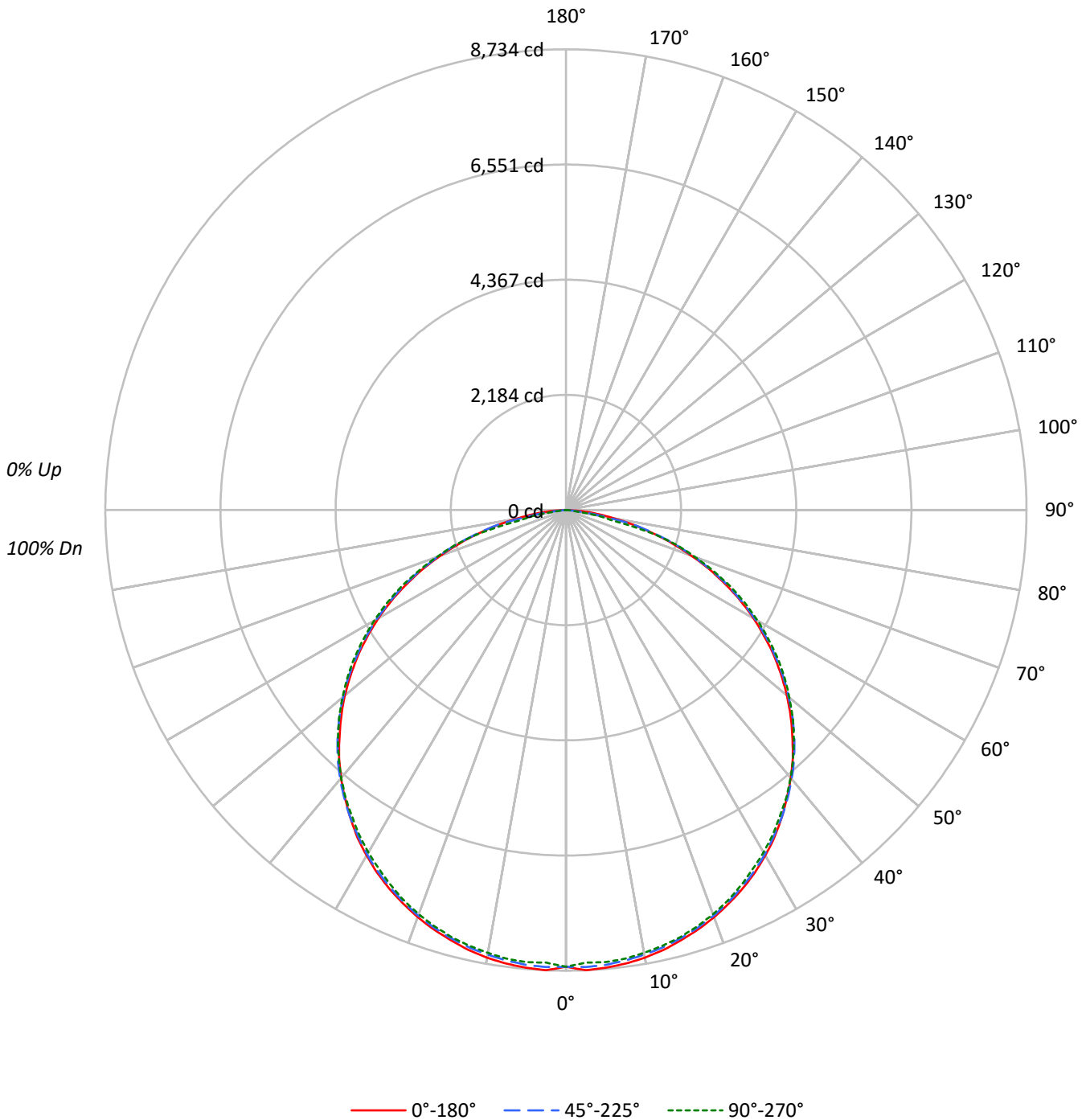
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25680.8 lumens
Efficiency: N/A
Efficacy: 166.8 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				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°	13978	13978	13978
5°	14117	14027	13941
10°	14128	14033	13973
15°	14109	14052	14008
20°	14113	14063	14009
25°	14116	14059	13989
30°	14099	14059	13971
35°	14047	14047	13948
40°	13981	14037	13970
45°	13863	13984	13954
50°	13746	13845	13892
55°	13562	13659	13793
60°	13266	13386	13547
65°	12772	12953	13175
70°	11945	12182	12294
75°	10749	10946	10386
80°	8979	7311	5691
85°	6697	1760	635



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	821.2	3.2
10°-20°	2367.9	9.2
20°-30°	3626.1	14.1
30°-40°	4439.6	17.3
40°-50°	4696.6	18.3
50°-60°	4331.0	16.9
60°-70°	3341.0	13.0
70°-80°	1784.3	6.9
80°-90°	273.1	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°	6815.3	26.5
0°-40°	11254.8	43.8
0°-60°	20282.5	79.0
0°-90°	25680.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	25680.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8657	8657	8657	8657	8657	
5°	8710	8607	8654	8618	8602	828
15°	8441	8351	8406	8377	8380	2385
25°	7924	7842	7892	7834	7852	3652
35°	7127	7084	7127	7066	7077	4459
45°	6071	6069	6124	6082	6111	4686
55°	4818	4813	4852	4881	4900	4298
65°	3343	3343	3390	3417	3449	3301
75°	1723	1720	1755	1768	1665	1824
85°	362	259	95	40	34	443
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8657.1	8657.1	8657.1	8657.1	8657.1
2.5°	8733.6	8630.7	8672.9	8641.2	8588.5
5°	8709.9	8606.9	8654.4	8617.5	8601.7
7.5°	8672.9	8567.4	8614.9	8585.8	8580.6
10°	8617.5	8509.3	8559.5	8527.8	8522.5
12.5°	8543.6	8438.1	8493.5	8456.6	8461.8
15°	8440.7	8351.0	8406.4	8377.4	8380.0
17.5°	8337.8	8245.5	8303.5	8274.5	8277.1
20°	8213.8	8124.1	8184.8	8139.9	8153.1
22.5°	8074.0	7994.8	8047.6	7989.5	8015.9
25°	7923.6	7841.8	7891.9	7833.9	7852.3
27.5°	7752.1	7675.5	7725.7	7665.0	7672.9
30°	7562.1	7493.5	7541.0	7480.3	7493.5
32.5°	7358.9	7298.2	7335.2	7279.8	7298.2
35°	7126.7	7084.5	7126.7	7066.0	7076.6
37.5°	6884.0	6841.8	6899.8	6847.0	6865.5
40°	6633.3	6593.7	6659.7	6606.9	6628.0
42.5°	6366.8	6337.8	6403.8	6351.0	6377.4
45°	6071.3	6068.7	6124.1	6081.9	6110.9
47.5°	5778.4	5773.1	5828.6	5799.5	5833.8
50°	5472.4	5467.1	5511.9	5509.3	5530.4
52.5°	5145.2	5153.1	5195.3	5203.2	5227.0
55°	4818.0	4812.7	4852.3	4881.3	4899.8
57.5°	4461.8	4472.3	4504.0	4538.3	4551.5
60°	4108.2	4102.9	4145.2	4174.2	4195.3
62.5°	3733.5	3733.5	3767.8	3810.1	3831.2
65°	3343.0	3343.0	3390.5	3416.9	3448.6
67.5°	2944.6	2936.7	2978.9	3037.0	3031.7
70°	2530.4	2533.0	2580.5	2609.5	2604.2
72.5°	2118.8	2126.7	2176.8	2190.0	2203.2
75°	1723.0	1720.3	1754.6	1767.8	1664.9
77.5°	1329.8	1332.5	1353.6	992.1	870.7
80°	965.7	971.0	786.3	612.1	612.1
82.5°	638.5	628.0	403.7	237.5	174.1
85°	361.5	258.6	95.0	39.6	34.3
87.5°	147.8	47.5	26.4	18.5	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)