

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: P685375

Luminaire Tested: **8CZL-14-UNV-N-L840-CD-U**

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685375
Test Lab: INNOVATION CENTER(G3)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-14-UNV-N-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT NARROW LENS MODEL @80 CRI and 4000K
Light Source: (784) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

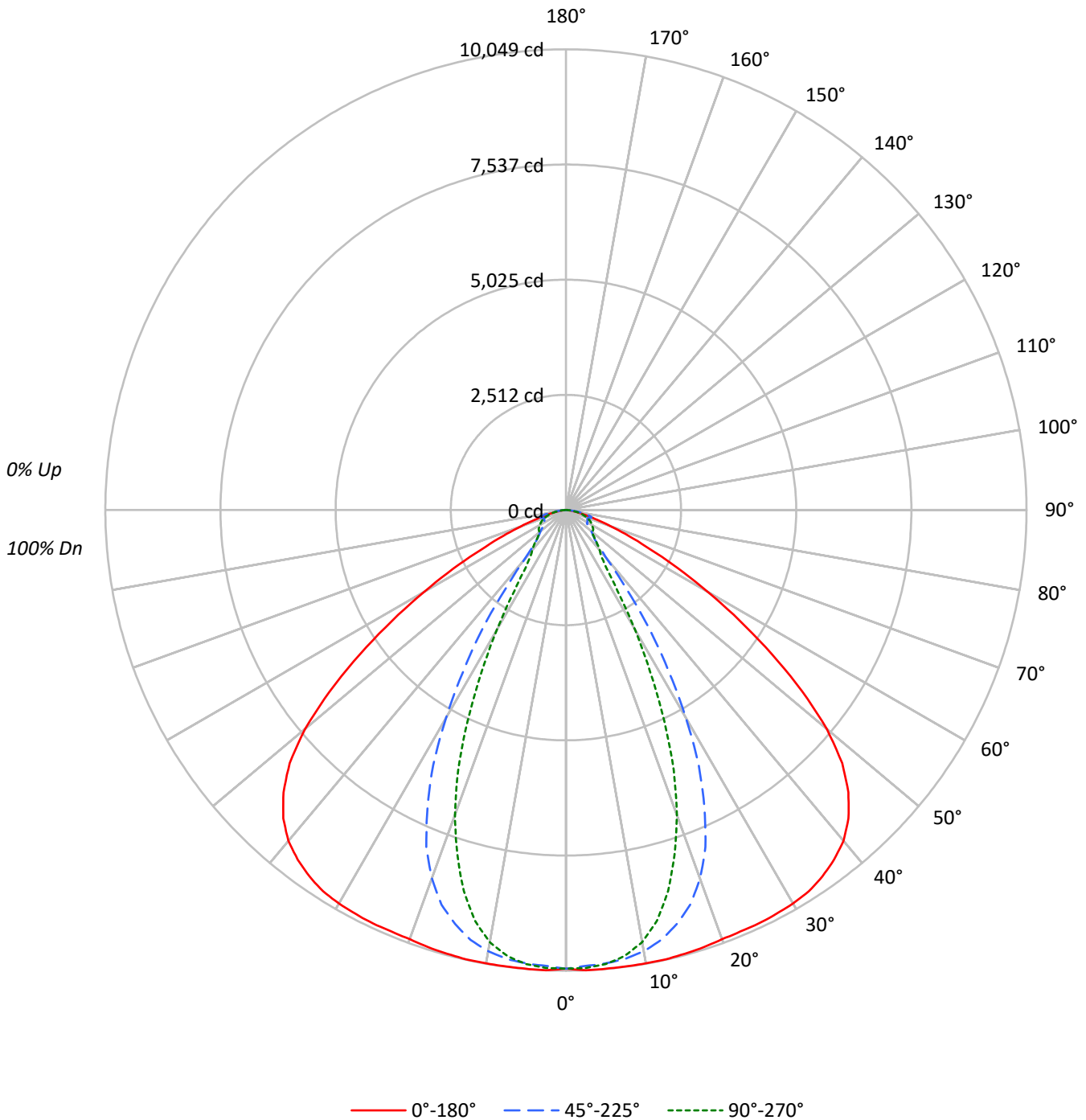
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14124.7 lumens
Efficiency: N/A
Efficacy: 158.7 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 0.81 / 0.89
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 (A_{in}): 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	100	100	100	100
1	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89	89	89	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	80	79	79	79	79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70	70	70	70
4	90	80	73	68	88	79	72	67	77	71	66	74	70	66	72	68	65	63	63	63	63
5	84	74	66	61	82	73	66	60	71	64	60	69	63	59	67	62	59	57	57	57	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52	52	52	52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47	47	47	47
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44	44	44	44
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40	40	40	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37	37	37	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16154	16154	16154
5°	16279	16092	16117
10°	16460	16023	15691
15°	16748	15626	14386
20°	17117	14695	12162
25°	17732	12737	9037
30°	18473	9755	5607
35°	19233	6306	3008
40°	19856	2936	2408
45°	19899	1992	2051
50°	18656	1825	1887
55°	15424	1644	2048
60°	11545	1734	2102
65°	7783	1982	2251
70°	4940	2417	2316
75°	2981	3601	2311
80°	1819	3214	2153
85°	1176	2082	1478



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	947.1	6.7
10°-20°	2614.9	18.5
20°-30°	3339.6	23.6
30°-40°	2708.6	19.2
40°-50°	1916.5	13.6
50°-60°	1248.2	8.8
60°-70°	766.5	5.4
70°-80°	455.3	3.2
80°-90°	127.9	0.9
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°	6901.6	48.9
0°-40°	9610.3	68.0
0°-60°	12775.0	90.4
0°-90°	14124.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14124.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10005	10005	10005	10005	10005	
5°	10044	10023	9928	9969	9944	959
15°	10019	9884	9348	8863	8607	2838
25°	9953	9132	7149	5558	5073	4602
35°	9758	6624	3199	1716	1526	6103
45°	8715	3335	872	927	898	6647
55°	5479	1123	584	682	727	4897
65°	2037	576	519	623	589	2116
75°	478	327	577	423	370	557
85°	64	127	112	100	80	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10004.7	10004.7	10004.7	10004.7	10004.7
2.5°	10049.3	10029.6	9953.2	10013.3	9996.1
5°	10044.2	10022.7	9928.4	9968.7	9943.8
7.5°	10040.7	10009.0	9875.2	9863.2	9811.7
10°	10039.9	9984.1	9773.1	9657.3	9570.7
12.5°	10041.6	9942.9	9605.9	9350.2	9174.4
15°	10019.3	9883.8	9348.5	8863.0	8606.6
17.5°	9998.7	9748.2	9024.3	8266.9	7881.8
20°	9961.8	9614.4	8552.5	7536.1	7078.1
22.5°	9951.5	9412.0	7956.4	6595.2	6141.4
25°	9953.2	9131.5	7149.3	5558.2	5072.7
27.5°	9934.4	8757.5	6270.1	4555.5	3980.8
30°	9908.6	8227.5	5232.2	3480.7	3007.2
32.5°	9863.2	7483.8	4169.5	2480.6	2087.7
35°	9757.7	6624.3	3199.4	1716.3	1525.9
37.5°	9611.0	5668.8	2157.2	1288.3	1257.4
40°	9420.6	4801.6	1393.0	1126.2	1142.5
42.5°	9125.5	4052.8	1017.3	1024.1	1025.9
45°	8714.7	3334.9	872.3	927.2	898.1
47.5°	8174.3	2618.7	792.6	808.0	803.7
50°	7427.2	1960.8	726.5	723.1	751.4
52.5°	6503.4	1450.4	658.7	687.9	741.1
55°	5479.3	1122.8	584.1	681.9	727.4
57.5°	4497.1	910.1	541.2	664.8	691.3
60°	3575.1	758.2	536.9	633.0	651.0
62.5°	2761.9	650.2	534.4	617.6	624.4
65°	2037.1	575.5	518.9	622.7	589.3
67.5°	1483.9	551.5	506.9	614.1	543.0
70°	1046.4	484.6	512.1	567.0	490.6
72.5°	710.2	404.9	569.5	500.1	429.7
75°	477.8	326.8	577.3	422.9	370.5
77.5°	310.5	271.9	490.6	345.7	307.1
80°	195.6	226.4	345.7	265.9	231.6
82.5°	126.9	174.1	218.7	187.8	159.5
85°	63.5	126.9	112.4	100.4	79.8
87.5°	37.7	77.2	60.0	43.7	40.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)