

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: P685315

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

Issue Date: 05/10/2023



Test Information

Test Method: LM-79-08
Report Number: P685315
Test Lab: INNOVATION CENTER(G2)
Issue Date: 05/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8CZL-14-UNV-L840-CD-U
Description: METALUX CRUZE LINEAR 8FT BASE MODEL @80 CRI and 4000K
Light Source: (784) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

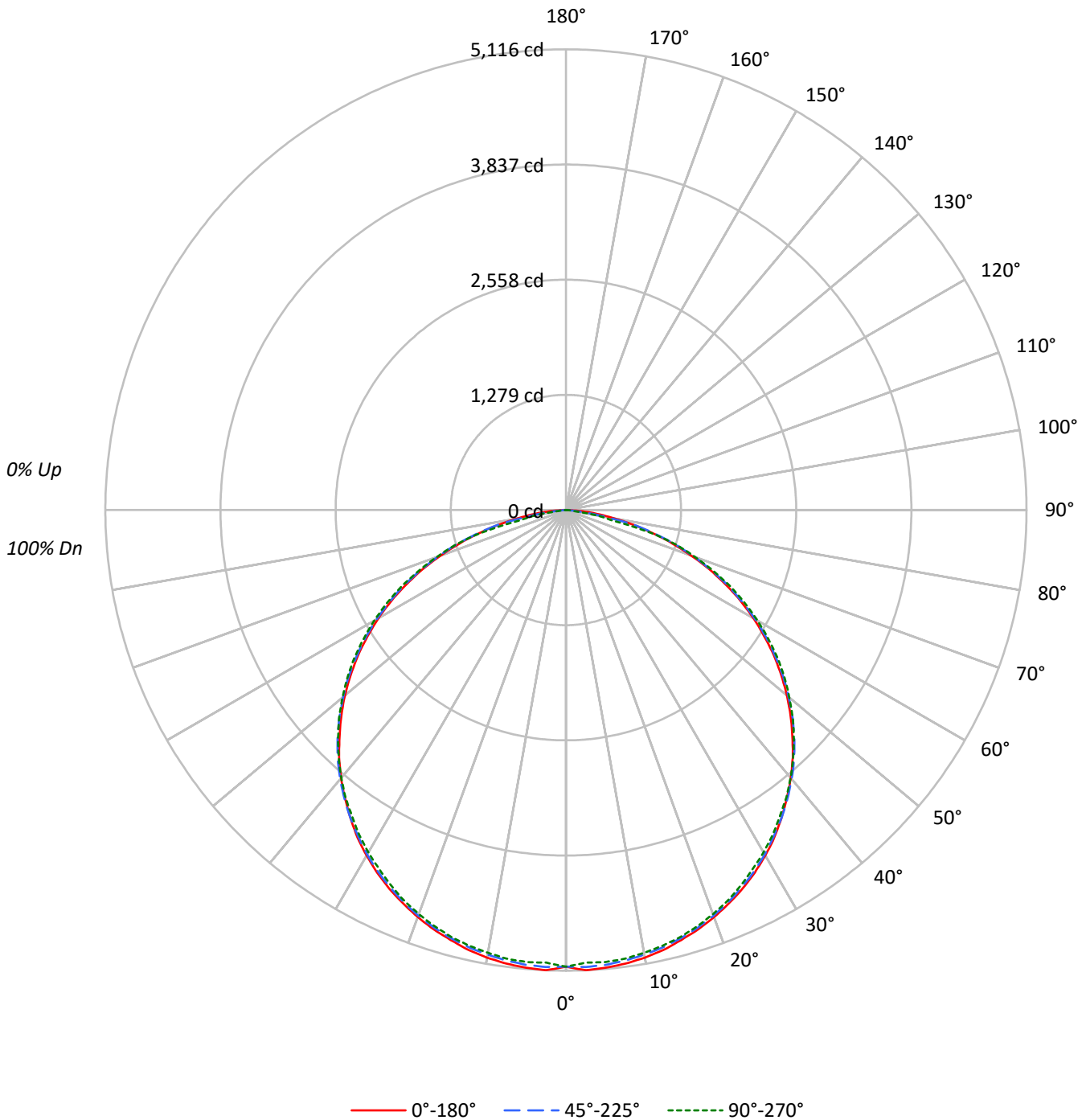
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15041.9 lumens
Efficiency: N/A
Efficacy: 169.0 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): 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	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°	8187	8187	8187
5°	8268	8216	8166
10°	8275	8220	8184
15°	8264	8230	8205
20°	8266	8237	8205
25°	8268	8235	8194
30°	8258	8235	8183
35°	8228	8228	8170
40°	8189	8222	8183
45°	8120	8190	8173
50°	8051	8110	8137
55°	7944	8000	8079
60°	7770	7840	7935
65°	7481	7587	7717
70°	6997	7135	7201
75°	6296	6411	6084
80°	5259	4282	3333
85°	3922	1030	372



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	481.0	3.2
10°-20°	1387.0	9.2
20°-30°	2123.9	14.1
30°-40°	2600.4	17.3
40°-50°	2750.9	18.3
50°-60°	2536.8	16.9
60°-70°	1956.9	13.0
70°-80°	1045.1	6.9
80°-90°	159.9	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°	3991.9	26.5
0°-40°	6592.2	43.8
0°-60°	11879.9	79.0
0°-90°	15041.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15041.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5071	5071	5071	5071	5071	
5°	5102	5041	5069	5048	5038	485
15°	4944	4891	4924	4907	4908	1397
25°	4641	4593	4622	4588	4599	2139
35°	4174	4150	4174	4139	4145	2612
45°	3556	3555	3587	3562	3579	2745
55°	2822	2819	2842	2859	2870	2518
65°	1958	1958	1986	2001	2020	1933
75°	1009	1008	1028	1036	975	1068
85°	212	152	56	23	20	260
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5070.7	5070.7	5070.7	5070.7	5070.7
2.5°	5115.5	5055.2	5079.9	5061.4	5030.5
5°	5101.6	5041.3	5069.1	5047.5	5038.2
7.5°	5079.9	5018.1	5045.9	5028.9	5025.8
10°	5047.5	4984.1	5013.5	4994.9	4991.8
12.5°	5004.2	4942.4	4974.8	4953.2	4956.3
15°	4943.9	4891.4	4923.8	4906.8	4908.4
17.5°	4883.7	4829.6	4863.6	4846.6	4848.1
20°	4811.0	4758.5	4794.0	4767.8	4775.5
22.5°	4729.1	4682.8	4713.7	4679.7	4695.1
25°	4641.0	4593.1	4622.5	4588.5	4599.3
27.5°	4540.6	4495.8	4525.1	4489.6	4494.2
30°	4429.3	4389.1	4416.9	4381.4	4389.1
32.5°	4310.3	4274.8	4296.4	4263.9	4274.8
35°	4174.3	4149.6	4174.3	4138.8	4144.9
37.5°	4032.1	4007.4	4041.4	4010.5	4021.3
40°	3885.3	3862.1	3900.8	3869.8	3882.2
42.5°	3729.2	3712.2	3750.8	3719.9	3735.4
45°	3556.1	3554.6	3587.0	3562.3	3579.3
47.5°	3384.6	3381.5	3413.9	3396.9	3417.0
50°	3205.3	3202.2	3228.5	3226.9	3239.3
52.5°	3013.7	3018.3	3043.0	3047.7	3061.6
55°	2822.0	2818.9	2842.1	2859.1	2869.9
57.5°	2613.4	2619.6	2638.1	2658.2	2665.9
60°	2406.3	2403.2	2427.9	2444.9	2457.3
62.5°	2186.8	2186.8	2206.9	2231.6	2244.0
65°	1958.1	1958.1	1985.9	2001.4	2019.9
67.5°	1724.7	1720.1	1744.8	1778.8	1775.7
70°	1482.1	1483.6	1511.5	1528.5	1525.4
72.5°	1241.0	1245.6	1275.0	1282.7	1290.5
75°	1009.2	1007.6	1027.7	1035.5	975.2
77.5°	778.9	780.5	792.8	581.1	510.0
80°	565.6	568.7	460.5	358.5	358.5
82.5°	374.0	367.8	236.5	139.1	102.0
85°	211.7	151.5	55.6	23.2	20.1
87.5°	86.5	27.8	15.5	10.8	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)