

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: P685325

Luminaire Tested: **8CZL-14-UNV-L850-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685325  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-14-UNV-L850-CD-U  
Description: METALUX CRUZE LINEAR 8FT BASE MODEL @80 CRI and 5000K  
Light Source: (784) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

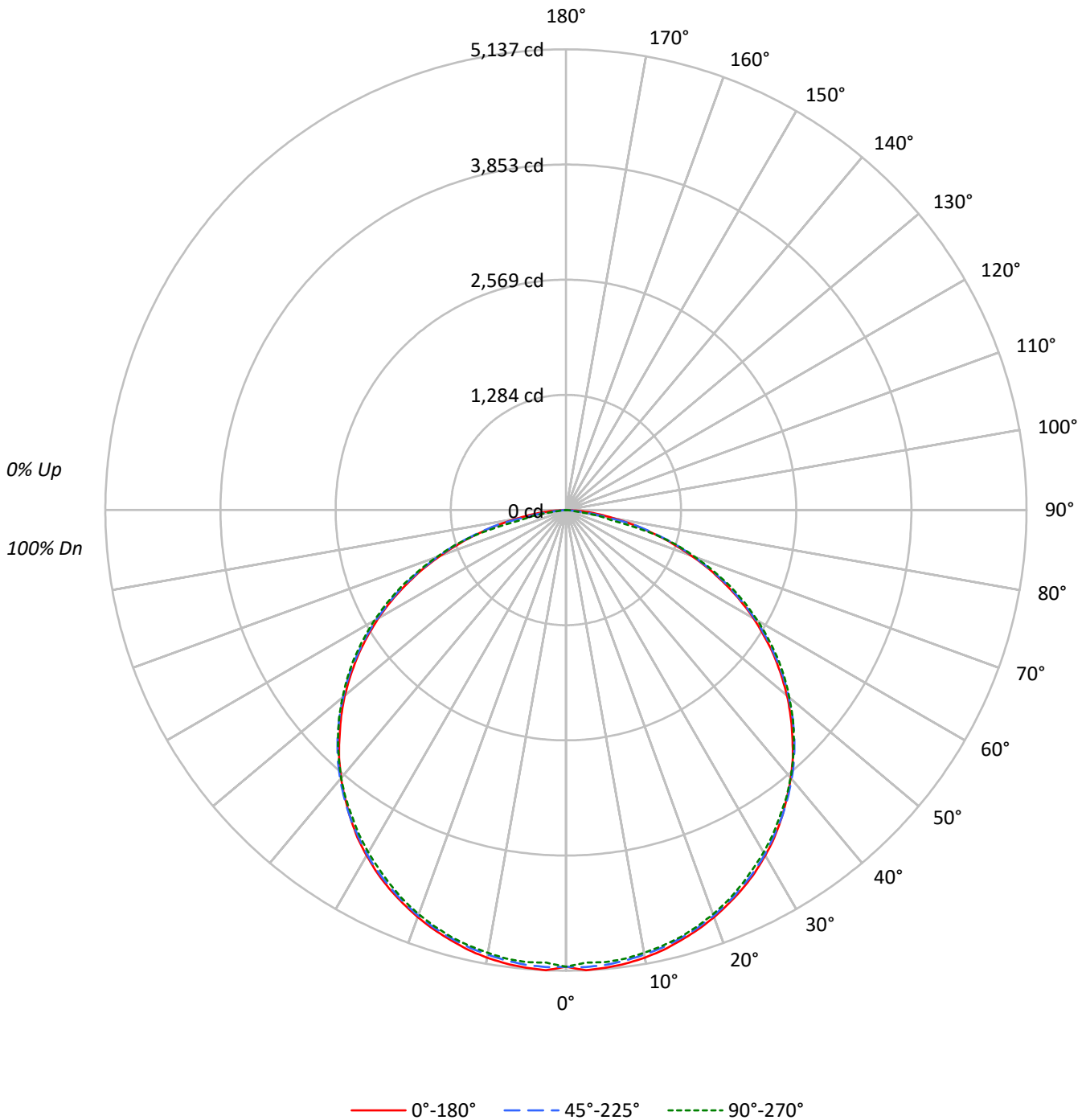
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15105.1 lumens  
Efficiency: N/A  
Efficacy: 169.7 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				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°	8222	8222	8222
5°	8303	8250	8200
10°	8310	8254	8218
15°	8299	8265	8239
20°	8301	8272	8240
25°	8303	8270	8228
30°	8293	8269	8217
35°	8262	8262	8204
40°	8223	8256	8217
45°	8154	8225	8207
50°	8085	8143	8171
55°	7977	8034	8113
60°	7803	7873	7968
65°	7512	7619	7749
70°	7026	7165	7231
75°	6322	6438	6109
80°	5281	4300	3348
85°	3938	1036	374



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	483.0	3.2
10°-20°	1392.8	9.2
20°-30°	2132.8	14.1
30°-40°	2611.3	17.3
40°-50°	2762.5	18.3
50°-60°	2547.4	16.9
60°-70°	1965.1	13.0
70°-80°	1049.5	6.9
80°-90°	160.6	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°	4008.6	26.5
0°-40°	6619.9	43.8
0°-60°	11929.9	79.0
0°-90°	15105.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15105.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5092	5092	5092	5092	5092	
5°	5123	5062	5090	5069	5059	487
15°	4965	4912	4944	4928	4929	1403
25°	4660	4612	4642	4608	4619	2148
35°	4192	4167	4192	4156	4162	2623
45°	3571	3570	3602	3577	3594	2757
55°	2834	2831	2854	2871	2882	2528
65°	1966	1966	1994	2010	2028	1941
75°	1013	1012	1032	1040	979	1073
85°	213	152	56	23	20	261
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5092.0	5092.0	5092.0	5092.0	5092.0
2.5°	5137.0	5076.4	5101.3	5082.7	5051.6
5°	5123.0	5062.5	5090.4	5068.7	5059.4
7.5°	5101.3	5039.2	5067.1	5050.1	5047.0
10°	5068.7	5005.1	5034.5	5015.9	5012.8
12.5°	5025.2	4963.2	4995.7	4974.0	4977.1
15°	4964.7	4911.9	4944.5	4927.5	4929.0
17.5°	4904.2	4849.9	4884.0	4866.9	4868.5
20°	4831.2	4778.5	4814.2	4787.8	4795.5
22.5°	4749.0	4702.4	4733.5	4699.3	4714.8
25°	4660.5	4612.4	4641.9	4607.8	4618.6
27.5°	4559.6	4514.6	4544.1	4508.4	4513.1
30°	4447.9	4407.6	4435.5	4399.8	4407.6
32.5°	4328.4	4292.7	4314.4	4281.8	4292.7
35°	4191.8	4167.0	4191.8	4156.1	4162.3
37.5°	4049.1	4024.2	4058.4	4027.3	4038.2
40°	3901.6	3878.3	3917.1	3886.1	3898.5
42.5°	3744.9	3727.8	3766.6	3735.6	3751.1
45°	3571.0	3569.5	3602.1	3577.3	3594.3
47.5°	3398.8	3395.7	3428.3	3411.2	3431.4
50°	3218.8	3215.7	3242.0	3240.5	3252.9
52.5°	3026.3	3031.0	3055.8	3060.5	3074.4
55°	2833.9	2830.8	2854.0	2871.1	2882.0
57.5°	2624.4	2630.6	2649.2	2669.4	2677.1
60°	2416.4	2413.3	2438.1	2455.2	2467.6
62.5°	2196.0	2196.0	2216.2	2241.0	2253.4
65°	1966.3	1966.3	1994.3	2009.8	2028.4
67.5°	1732.0	1727.3	1752.2	1786.3	1783.2
70°	1488.3	1489.9	1517.8	1534.9	1531.8
72.5°	1246.2	1250.9	1280.4	1288.1	1295.9
75°	1013.4	1011.9	1032.0	1039.8	979.3
77.5°	782.2	783.7	796.2	583.5	512.1
80°	568.0	571.1	462.5	360.1	360.1
82.5°	375.6	369.4	237.4	139.7	102.4
85°	212.6	152.1	55.9	23.3	20.2
87.5°	86.9	27.9	15.5	10.9	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)