

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: P685346

Luminaire Tested: **8CZL-18-UNV-L940-CD-U**

Issue Date: 05/10/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P685346  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-18-UNV-L940-CD-U  
Description: METALUX CRUZE LINEAR 8FT BASE MODEL @90 CRI and 4000K  
Light Source: (1176) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

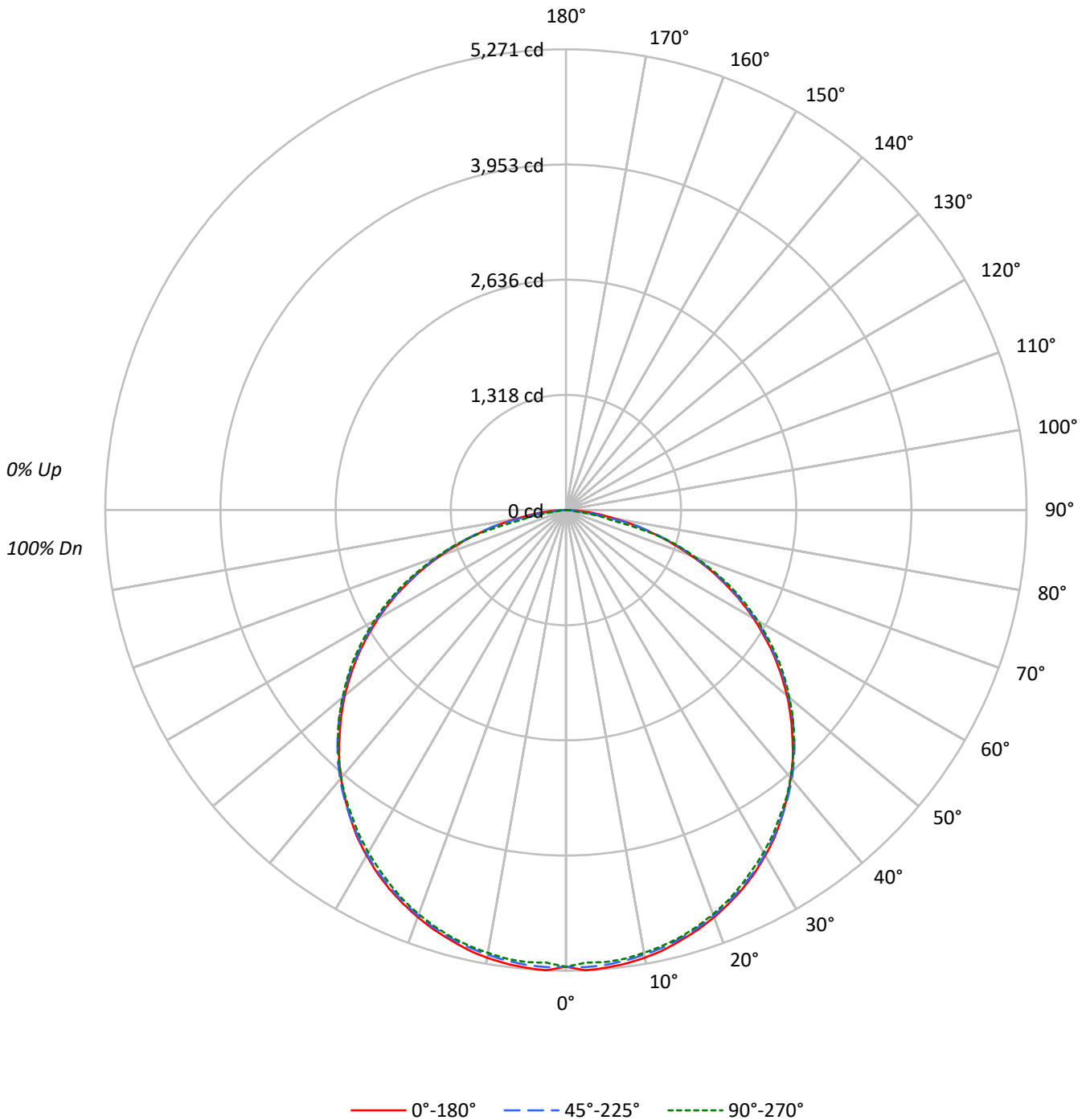
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15500.5 lumens  
Efficiency: N/A  
Efficacy: 142.2 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): 109  
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	100	100	100	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84	84	84	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70	70	70	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58	58	58	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50	50	50	50
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43	43	43	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37	37	37	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33	33	33	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29	29	29	29
9	56	42	34	29	55	42	34	29	41	33	28	40	33	28	39	33	28	26	26	26	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24	24	24	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8437	8437	8437
5°	8521	8466	8415
10°	8528	8470	8434
15°	8516	8481	8455
20°	8518	8488	8456
25°	8520	8486	8443
30°	8510	8486	8432
35°	8479	8479	8419
40°	8439	8472	8432
45°	8367	8440	8422
50°	8297	8357	8385
55°	8186	8244	8325
60°	8007	8079	8177
65°	7709	7819	7952
70°	7210	7353	7421
75°	6488	6607	6269
80°	5420	4413	3436
85°	4042	1062	383



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	495.7	3.2
10°-20°	1429.2	9.2
20°-30°	2188.7	14.1
30°-40°	2679.6	17.3
40°-50°	2834.8	18.3
50°-60°	2614.1	16.9
60°-70°	2016.5	13.0
70°-80°	1077.0	6.9
80°-90°	164.8	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°	4113.6	26.5
0°-40°	6793.2	43.8
0°-60°	12242.1	79.0
0°-90°	15500.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15500.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5225	5225	5225	5225	5225	
5°	5257	5195	5224	5201	5192	500
15°	5095	5040	5074	5056	5058	1440
25°	4782	4733	4763	4728	4740	2204
35°	4302	4276	4302	4265	4271	2692
45°	3664	3663	3696	3671	3688	2829
55°	2908	2905	2929	2946	2957	2594
65°	2018	2018	2046	2062	2082	1992
75°	1040	1038	1059	1067	1005	1101
85°	218	156	57	24	21	268
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5225.2	5225.2	5225.2	5225.2	5225.2
2.5°	5271.4	5209.3	5234.8	5215.7	5183.8
5°	5257.1	5195.0	5223.7	5201.4	5191.8
7.5°	5234.8	5171.1	5199.8	5182.2	5179.1
10°	5201.4	5136.1	5166.3	5147.2	5144.0
12.5°	5156.8	5093.1	5126.5	5104.2	5107.4
15°	5094.7	5040.5	5074.0	5056.4	5058.0
17.5°	5032.5	4976.8	5011.8	4994.3	4995.9
20°	4957.7	4903.5	4940.2	4913.1	4921.1
22.5°	4873.3	4825.5	4857.4	4822.3	4838.2
25°	4782.5	4733.1	4763.4	4728.4	4739.5
27.5°	4679.0	4632.8	4663.1	4626.4	4631.2
30°	4564.3	4522.9	4551.6	4515.0	4522.9
32.5°	4441.7	4405.1	4427.4	4393.9	4405.1
35°	4301.6	4276.1	4301.6	4264.9	4271.3
37.5°	4155.0	4129.6	4164.6	4132.7	4143.9
40°	4003.7	3979.9	4019.7	3987.8	4000.6
42.5°	3842.9	3825.4	3865.2	3833.3	3849.3
45°	3664.5	3662.9	3696.4	3670.9	3688.4
47.5°	3487.7	3484.6	3518.0	3500.5	3521.2
50°	3303.0	3299.8	3326.9	3325.3	3338.0
52.5°	3105.5	3110.3	3135.8	3140.6	3154.9
55°	2908.0	2904.9	2928.7	2946.3	2957.4
57.5°	2693.0	2699.4	2718.5	2739.2	2747.2
60°	2479.6	2476.5	2501.9	2519.5	2532.2
62.5°	2253.5	2253.5	2274.2	2299.7	2312.4
65°	2017.8	2017.8	2046.5	2062.4	2081.5
67.5°	1777.3	1772.5	1798.0	1833.1	1829.9
70°	1527.3	1528.9	1557.5	1575.1	1571.9
72.5°	1278.8	1283.6	1313.9	1321.8	1329.8
75°	1040.0	1038.4	1059.1	1067.0	1004.9
77.5°	802.7	804.3	817.0	598.8	525.6
80°	582.9	586.1	474.6	369.5	369.5
82.5°	385.4	379.0	243.7	143.3	105.1
85°	218.2	156.1	57.3	23.9	20.7
87.5°	89.2	28.7	15.9	11.1	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)