

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: P685498

Luminaire Tested: **8CZL-32-UNV-W-L840-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685498  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-32-UNV-W-L840-CD-U  
Description: METALUX CRUZE LINEAR 8FT WIDE LENS MODEL @80 CRI and 4000K  
Light Source: (1176) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

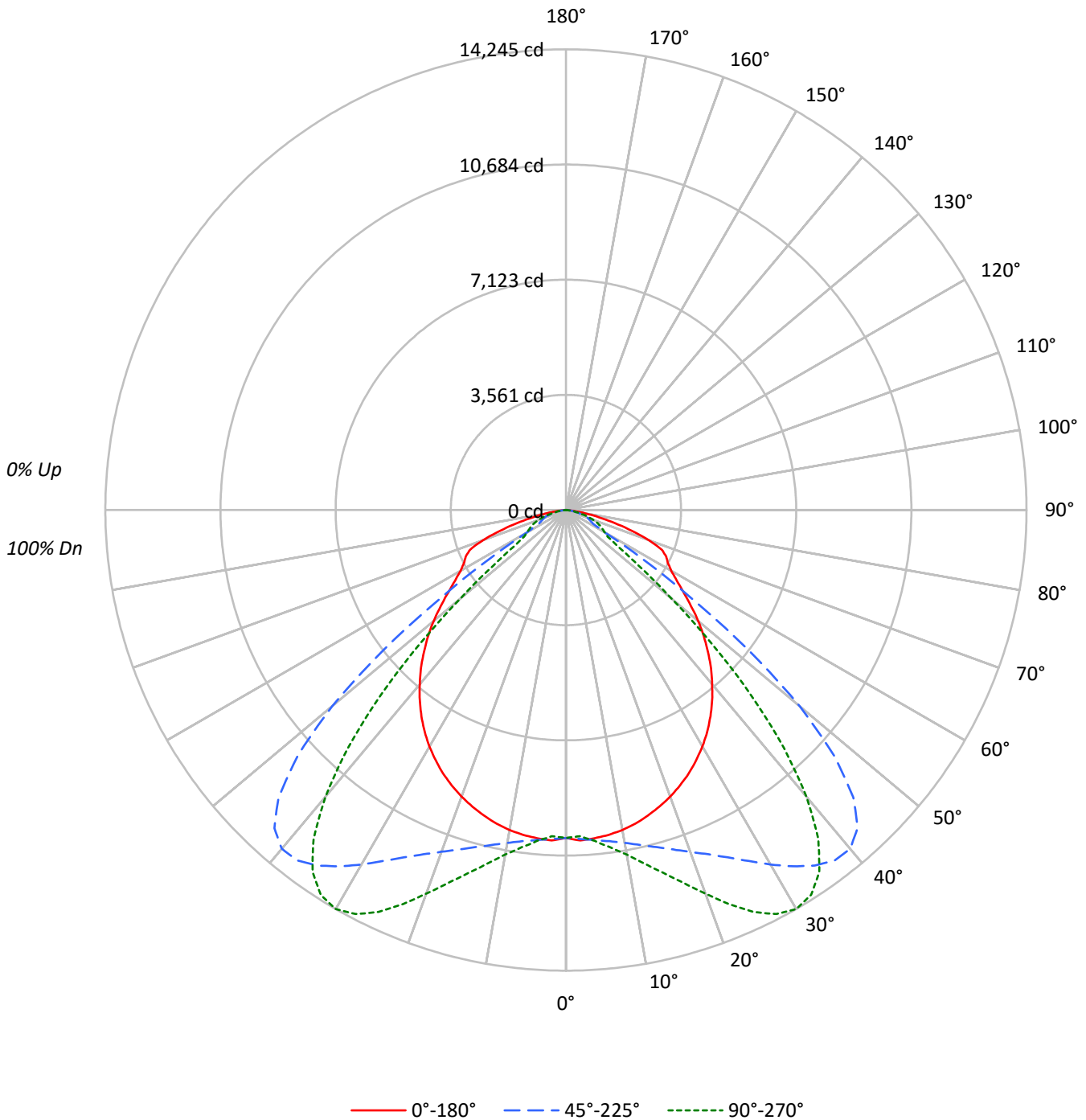
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 32424.5 lumens  
Efficiency: N/A  
Efficacy: 157.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.69 / 1.65  
Luminous Opening: Rectangular (W 0.83' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 206  
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	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	89	89	89	87
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77	77	77	77	75
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	67	67	67	65
4	86	75	67	61	84	73	66	60	71	65	59	69	63	59	67	62	58	58	58	58	56
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	51	51	51	49
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	45	45	45	43
7	68	55	46	40	66	54	46	40	52	45	40	51	45	40	50	44	39	39	39	39	38
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	35	35	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	32	32	32	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	29	29	29	27

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

	0°	45°	90°
0°	16369	16369	16369
5°	16512	16597	16649
10°	16471	17130	17731
15°	16351	18037	19410
20°	16208	19321	21684
25°	16014	21113	24423
30°	15740	23594	26558
35°	15356	26445	26924
40°	14823	28813	24392
45°	14183	28703	18513
50°	13415	23722	10670
55°	12503	13049	5487
60°	12135	4553	4474
65°	13077	3313	4485
70°	12914	3395	4327
75°	9764	2969	3475
80°	5900	2426	2458
85°	2938	1241	522



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	981.2	3.0
10°-20°	3051.1	9.4
20°-30°	5359.7	16.5
30°-40°	7446.0	23.0
40°-50°	7551.2	23.3
50°-60°	4845.9	14.9
60°-70°	2266.5	7.0
70°-80°	785.9	2.4
80°-90°	137.0	0.4
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°	9392.0	29.0
0°-40°	16838.0	51.9
0°-60°	29235.0	90.2
0°-90°	32424.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	32424.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10138	10138	10138	10138	10138	
5°	10188	10115	10240	10273	10272	968
15°	9782	10015	10790	11369	11612	2760
25°	8989	9910	11851	13239	13709	4137
35°	7790	9994	13417	13878	13660	4865
45°	6211	10698	12571	9376	8108	4788
55°	4442	11050	4636	2231	1949	4009
65°	3423	3530	867	1086	1174	3330
75°	1565	541	476	548	557	1694
85°	159	143	67	38	28	240
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°	
0°	10138.2	10138.2	10138.2	10138.2	10138.2	10138.2	10138.2	10138.2	10138.2	10138.2	10138.2	10138.2
2.5°	10226.4	10194.6	10141.8	10120.6	10131.2	10184.1	10201.7	10162.9	10152.3	10124.1	10124.1	10095.9
5°	10187.6	10159.4	10120.6	10113.6	10152.3	10240.5	10279.2	10268.7	10286.3	10289.8	10289.8	10272.2
7.5°	10131.2	10106.5	10074.8	10106.5	10187.6	10328.6	10416.7	10444.9	10508.4	10522.5	10522.5	10518.9
10°	10046.6	10025.4	10014.9	10095.9	10236.9	10448.4	10603.5	10681.1	10772.8	10804.5	10804.5	10815.1
12.5°	9933.8	9912.6	9940.8	10081.8	10303.9	10607.1	10836.2	10973.7	11104.1	11171.1	11171.1	11192.2
15°	9782.2	9775.1	9845.6	10071.3	10388.5	10790.4	11107.6	11322.7	11509.5	11583.5	11583.5	11611.7
17.5°	9616.5	9620.0	9746.9	10067.7	10490.7	11005.4	11410.8	11717.5	11946.6	12052.4	12052.4	12084.1
20°	9433.2	9443.8	9634.1	10064.2	10617.7	11245.1	11745.7	12147.6	12433.1	12574.1	12574.1	12619.9
22.5°	9218.2	9239.3	9510.8	10067.7	10751.6	11520.1	12140.5	12619.9	12961.9	13131.1	13131.1	13187.5
25°	8989.0	9020.8	9383.9	10085.4	10920.8	11851.4	12591.7	13152.2	13497.7	13645.7	13645.7	13709.2
27.5°	8724.7	8777.5	9246.4	10110.0	11121.7	12235.7	13053.5	13592.8	13913.6	14026.4	14026.4	14082.8
30°	8442.7	8502.6	9112.4	10159.4	11382.6	12655.2	13480.0	13934.8	14149.8	14213.3	14213.3	14245.0
32.5°	8132.4	8231.1	8978.5	10240.5	11689.3	13060.6	13793.8	14065.2	14118.1	14096.9	14096.9	14107.5
35°	7790.5	7896.3	8851.6	10374.4	12038.3	13416.6	13917.2	13917.2	13762.1	13666.9	13666.9	13659.8
37.5°	7427.4	7561.4	8724.7	10529.5	12443.7	13652.8	13783.2	13434.2	13057.0	12852.6	12852.6	12820.8
40°	7032.6	7212.4	8636.5	10741.0	12810.3	13670.4	13303.8	12584.7	11943.1	11611.7	11611.7	11573.0
42.5°	6641.3	6863.4	8597.8	11016.0	13085.2	13346.1	12401.4	11290.9	10420.2	10029.0	10029.0	9986.7
45°	6211.3	6503.8	8611.9	11393.2	13159.3	12570.6	11058.3	9620.0	8643.6	8150.1	8150.1	8107.8
47.5°	5784.7	6147.8	8647.1	11819.7	12834.9	11255.7	9271.1	7607.2	6637.8	6119.6	6119.6	6112.6
50°	5340.6	5812.9	8731.7	12168.7	11957.2	9443.8	7074.9	5449.8	4674.3	4279.5	4279.5	4247.8
52.5°	4878.8	5520.3	8915.0	12232.2	10395.6	7117.2	4801.2	3637.9	3133.8	2883.5	2883.5	2834.2
55°	4441.6	5273.6	9214.7	11661.1	8150.1	4635.5	3024.5	2294.9	2041.0	1938.8	1938.8	1949.4
57.5°	4064.5	5090.3	9563.6	10170.0	5291.2	2728.4	1752.0	1526.4	1519.3	1529.9	1529.9	1533.4
60°	3757.8	4977.5	9718.7	7628.4	2904.7	1410.0	1223.2	1272.6	1339.5	1378.3	1378.3	1385.4
62.5°	3556.8	4917.5	9246.4	4420.5	1290.2	983.5	1068.1	1159.8	1237.3	1272.6	1272.6	1276.1
65°	3422.9	4758.9	7564.9	2185.6	789.6	867.2	972.9	1068.1	1138.6	1166.8	1166.8	1173.9
67.5°	3214.9	4311.2	5185.4	906.0	694.4	782.6	884.8	976.5	1036.4	1057.5	1057.5	1061.1
70°	2735.5	3609.7	3014.0	602.8	627.5	719.1	800.2	870.7	909.5	920.1	920.1	916.5
72.5°	2136.2	2858.9	1522.9	546.4	581.6	631.0	676.8	715.6	736.7	747.3	747.3	747.3
75°	1565.2	2090.4	715.6	482.9	433.6	475.9	521.7	546.4	553.4	557.0	557.0	557.0
77.5°	1050.5	1441.8	426.5	373.7	334.9	370.1	387.8	377.2	370.1	377.2	377.2	377.2
80°	634.5	888.3	373.7	271.4	257.3	260.9	246.8	246.8	260.9	267.9	267.9	264.4
82.5°	341.9	504.1	327.8	197.4	172.7	158.6	155.1	148.1	141.0	137.5	137.5	137.5
85°	158.6	257.3	211.5	119.9	91.7	67.0	52.9	38.8	35.3	28.2	28.2	28.2
87.5°	63.5	98.7	63.5	38.8	21.2	14.1	10.6	7.1	3.5	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)