

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: P881090

Luminaire Tested: **22CZ2-29VHE-UNV-B40**

Issue Date: 10/2/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P881090  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P474795)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-29VHE-UNV-B40  
Description: 2X2 2900 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND RIBBED LENS  
  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

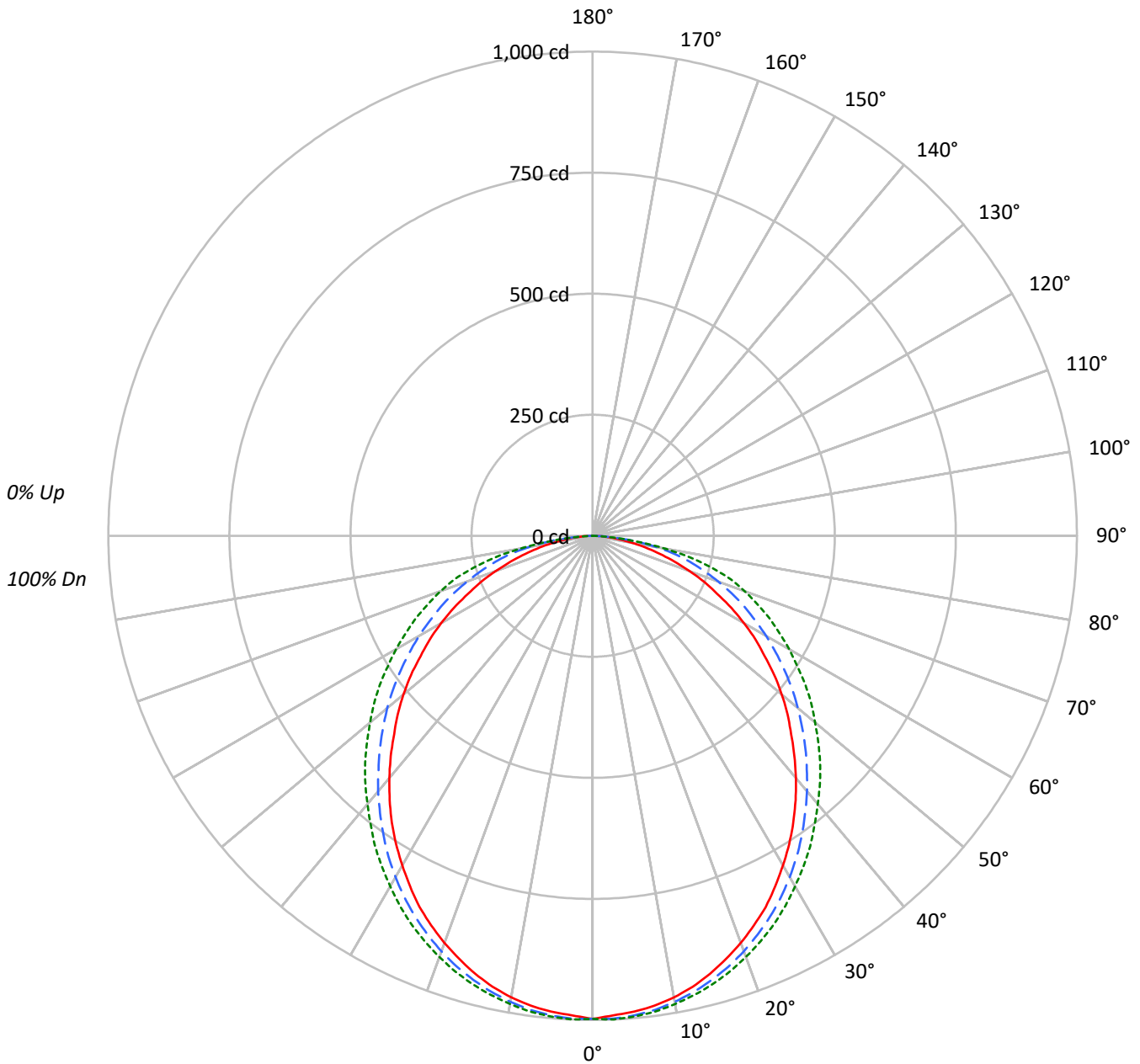
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2751.0 lumens  
Efficiency: N/A  
Efficacy: 125.0 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33  
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 22  
Input Voltage (V): NR  
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									
RC	80									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																			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83																			
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69																			
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58																			
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50																			
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	56	50	45	43																			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38																			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33																			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30																			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27																			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24																			

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

	0°	45°	90°
0°	2831	2831	2831
5°	2810	2832	2838
10°	2789	2816	2829
15°	2751	2791	2816
20°	2702	2758	2795
25°	2648	2716	2772
30°	2575	2667	2739
35°	2503	2610	2713
40°	2418	2552	2679
45°	2326	2494	2667
50°	2250	2443	2646
55°	2146	2390	2652
60°	2049	2349	2659
65°	1904	2318	2702
70°	1760	2286	2769
75°	1575	2276	2786
80°	1320	2157	2431
85°	1022	1478	1380



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.3	3.4
10°-20°	267.6	9.7
20°-30°	399.0	14.5
30°-40°	471.0	17.1
40°-50°	480.0	17.4
50°-60°	432.9	15.7
60°-70°	340.2	12.4
70°-80°	213.0	7.7
80°-90°	53.1	1.9
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°	760.8	27.7
0°-40°	1231.7	44.8
0°-60°	2144.6	78.0
0°-90°	2751.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2751.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	998	998	998	998	998	
5°	987	989	994	996	996	94
15°	937	941	950	957	959	264
25°	846	852	868	881	886	389
35°	723	732	754	774	783	452
45°	580	592	622	652	664	448
55°	434	447	483	520	536	389
65°	284	301	345	384	402	283
75°	144	165	208	245	254	153
85°	31	40	45	45	42	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	997.7	997.7	997.7	997.7	997.7
2.5°	991.2	993.7	998.3	1000.0	1000.0
5°	986.6	988.9	994.2	996.5	996.5
7.5°	979.0	981.3	987.8	990.7	991.2
10°	968.0	970.9	977.3	982.0	982.0
12.5°	954.1	956.9	965.1	970.9	971.4
15°	936.6	940.7	950.0	956.9	958.7
17.5°	916.3	922.6	933.1	941.9	943.6
20°	894.7	901.1	913.3	923.2	925.6
22.5°	870.9	876.7	891.2	903.5	906.4
25°	845.9	852.3	867.5	880.8	885.5
27.5°	816.3	823.8	841.9	856.9	861.7
30°	786.0	795.4	813.9	830.8	836.0
32.5°	755.3	763.9	784.8	802.8	809.9
35°	722.6	732.0	753.5	774.4	783.2
37.5°	688.3	697.7	721.0	744.7	752.8
40°	652.9	663.9	689.0	714.5	723.3
42.5°	616.9	628.4	654.6	683.2	694.7
45°	579.6	592.4	621.5	651.7	664.5
47.5°	545.9	556.3	586.7	619.7	631.9
50°	509.8	519.7	553.5	586.7	599.4
52.5°	473.2	482.6	518.6	553.5	569.2
55°	433.7	447.1	483.1	520.3	536.0
57.5°	398.8	411.0	448.3	486.0	501.2
60°	361.0	373.8	413.9	452.4	468.6
62.5°	323.2	337.2	377.8	419.2	434.4
65°	283.6	301.1	345.3	383.7	402.4
67.5°	250.0	266.8	310.5	350.6	366.9
70°	212.2	232.0	275.5	316.3	333.7
72.5°	176.7	196.5	241.2	282.0	299.4
75°	143.7	165.1	207.6	244.8	254.1
77.5°	111.7	132.0	174.4	196.0	205.9
80°	80.8	100.6	132.0	146.5	148.8
82.5°	54.6	71.6	89.6	93.6	91.3
85°	31.4	40.1	45.4	45.4	42.4
87.5°	12.7	12.7	11.1	6.9	4.1
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)