

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: P881089

Luminaire Tested: **22CZ2-29VHE-UNV-B35**

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: P881089  
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-B35  
Description: 2X2 2900 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND RIBBED LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

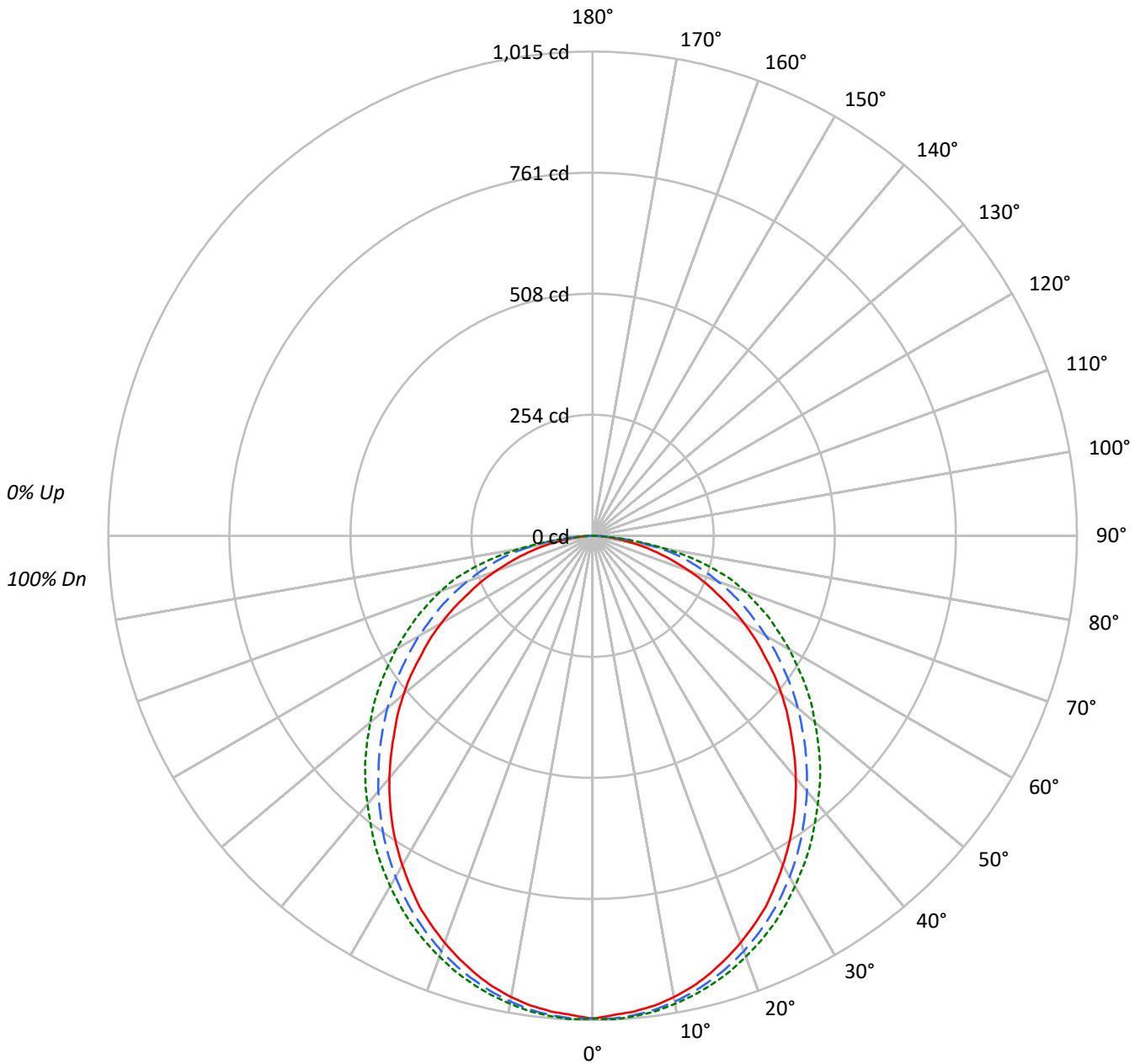
Lumens per Lamp: N/A  
Luminaire Lumens: 2791.0 lumens  
Efficiency: N/A  
Efficacy: 126.9 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33  
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')  
CIE Type: Direct

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°	2872	2872	2872
5°	2851	2873	2880
10°	2830	2857	2871
15°	2791	2831	2857
20°	2741	2798	2836
25°	2687	2755	2813
30°	2613	2706	2779
35°	2539	2648	2752
40°	2454	2589	2718
45°	2360	2530	2705
50°	2283	2479	2684
55°	2177	2425	2690
60°	2079	2383	2698
65°	1932	2352	2741
70°	1786	2319	2808
75°	1597	2309	2826
80°	1338	2188	2467
85°	1039	1501	1400



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.6	3.4
10°-20°	271.5	9.7
20°-30°	404.8	14.5
30°-40°	477.8	17.1
40°-50°	487.0	17.4
50°-60°	439.2	15.7
60°-70°	345.2	12.4
70°-80°	216.1	7.7
80°-90°	53.9	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°	771.8	27.7
0°-40°	1249.7	44.8
0°-60°	2175.8	78.0
0°-90°	2791.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2791.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1012	1012	1012	1012	1012	
5°	1001	1003	1009	1011	1011	95
15°	950	954	964	971	973	268
25°	858	865	880	894	898	395
35°	733	743	764	786	795	458
45°	588	601	630	661	674	455
55°	440	454	490	528	544	395
65°	288	306	350	389	408	287
75°	146	168	211	248	258	155
85°	32	41	46	46	43	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1012.2	1012.2	1012.2	1012.2	1012.2
2.5°	1005.6	1008.1	1012.8	1014.6	1014.6
5°	1001.0	1003.3	1008.6	1011.0	1011.0
7.5°	993.3	995.6	1002.2	1005.1	1005.6
10°	982.1	985.0	991.5	996.3	996.3
12.5°	968.0	970.8	979.1	985.0	985.6
15°	950.2	954.3	963.8	970.8	972.6
17.5°	929.6	936.1	946.6	955.6	957.4
20°	907.7	914.2	926.6	936.6	939.1
22.5°	883.5	889.4	904.2	916.7	919.6
25°	858.2	864.7	880.1	893.6	898.4
27.5°	828.1	835.8	854.1	869.4	874.2
30°	797.5	806.9	825.8	842.8	848.2
32.5°	766.2	775.0	796.2	814.5	821.7
35°	733.1	742.6	764.5	785.6	794.6
37.5°	698.3	707.8	731.5	755.5	763.8
40°	662.4	673.6	699.0	724.9	733.8
42.5°	625.9	637.6	664.1	693.1	704.8
45°	588.1	601.0	630.5	661.2	674.1
47.5°	553.8	564.4	595.2	628.8	641.1
50°	517.2	527.3	561.5	595.2	608.1
52.5°	480.1	489.6	526.2	561.5	577.5
55°	440.0	453.6	490.2	527.8	543.8
57.5°	404.6	417.0	454.8	493.1	508.4
60°	366.3	379.2	419.9	459.0	475.5
62.5°	327.9	342.1	383.3	425.3	440.7
65°	287.8	305.5	350.3	389.2	408.2
67.5°	253.7	270.7	315.0	355.7	372.2
70°	215.3	235.4	279.5	320.9	338.5
72.5°	179.3	199.4	244.7	286.1	303.7
75°	145.7	167.5	210.6	248.3	257.8
77.5°	113.3	133.9	177.0	198.8	208.9
80°	81.9	102.0	133.9	148.6	151.0
82.5°	55.4	72.6	90.9	95.0	92.7
85°	31.9	40.7	46.1	46.1	43.0
87.5°	12.9	12.9	11.3	7.0	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)