

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: P881088

Luminaire Tested: **22CZ2-29VHE-SQR-UNV-B50**

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: P881088  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P475230)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-29VHE-SQR-UNV-B50  
Description: 2X2 2900 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND SQR LENS  
  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

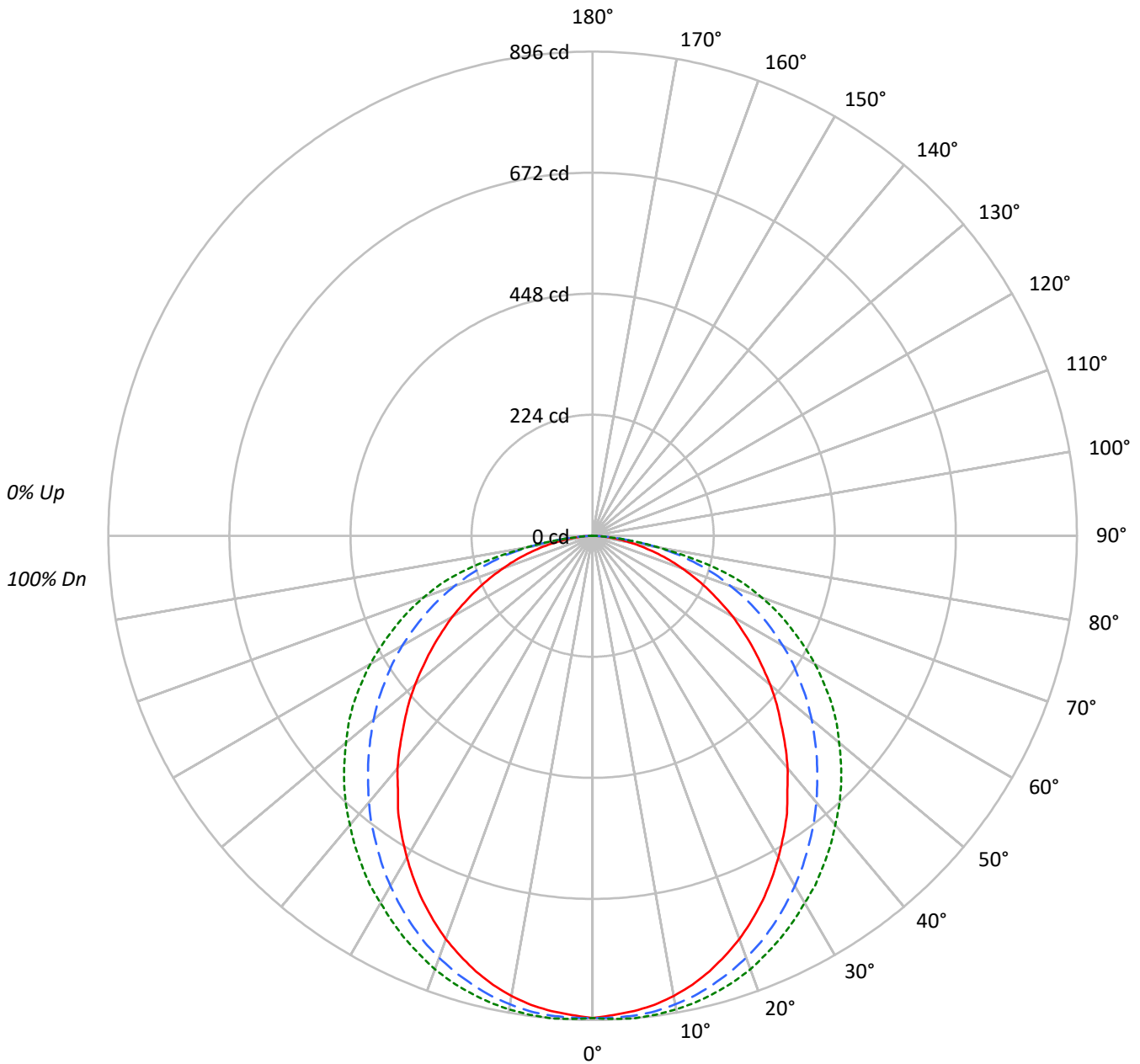
Lumens per Lamp: N/A  
Luminaire Lumens: 2555.0 lumens  
Efficiency: N/A  
Efficacy: 116.1 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37  
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')  
CIE Type: Direct

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	76	85	79	75	81	77	73	78	75	71	69																			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58																			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49																			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43																			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37																			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33																			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29																			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26																			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24																			

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

	0°	45°	90°
0°	2533	2533	2533
5°	2515	2539	2553
10°	2491	2537	2564
15°	2451	2525	2572
20°	2398	2508	2578
25°	2331	2483	2574
30°	2253	2451	2571
35°	2172	2415	2579
40°	2080	2385	2587
45°	1980	2355	2609
50°	1895	2334	2628
55°	1794	2315	2670
60°	1700	2306	2698
65°	1587	2288	2719
70°	1458	2253	2756
75°	1317	2193	2658
80°	1129	1943	2002
85°	908	1143	908



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.6	3.3
10°-20°	241.9	9.5
20°-30°	363.4	14.2
30°-40°	433.3	17.0
40°-50°	448.0	17.5
50°-60°	411.9	16.1
60°-70°	327.9	12.8
70°-80°	200.3	7.8
80°-90°	43.5	1.7
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°	689.9	27.0
0°-40°	1123.2	44.0
0°-60°	1983.2	77.6
0°-90°	2555.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2555.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	892	892	892	892	892	
5°	883	885	891	895	896	84
15°	834	844	860	872	876	235
25°	745	763	793	815	822	342
35°	627	654	697	734	745	391
45°	494	529	587	634	650	382
55°	363	402	468	521	540	324
65°	236	276	341	388	405	234
75°	120	155	200	235	242	128
85°	28	34	35	30	28	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	892.5	892.5	892.5	892.5	892.5
2.5°	887.7	888.8	892.5	895.0	895.0
5°	882.8	885.2	891.3	895.0	896.2
7.5°	875.6	879.2	887.7	892.5	893.9
10°	864.6	869.6	880.4	887.7	890.0
12.5°	851.3	858.6	871.9	881.7	884.0
15°	834.4	844.0	859.7	871.9	875.6
17.5°	814.9	827.0	846.5	861.1	865.9
20°	794.2	806.4	830.7	847.6	853.7
22.5°	770.0	785.8	813.7	833.2	838.0
25°	744.6	762.8	793.1	814.9	822.2
27.5°	716.6	738.6	771.3	798.1	804.1
30°	687.5	710.6	748.2	777.3	784.6
32.5°	657.2	684.0	723.9	756.7	766.5
35°	626.9	653.6	697.3	733.8	744.6
37.5°	591.7	623.3	671.9	709.5	722.7
40°	561.5	591.7	644.0	685.2	698.5
42.5°	527.5	560.3	614.9	659.7	675.5
45°	493.5	528.7	586.9	634.3	650.1
47.5°	462.0	497.1	557.8	607.6	623.3
50°	429.3	465.7	528.7	579.6	595.4
52.5°	394.2	434.1	499.6	550.5	568.8
55°	362.6	402.5	468.0	521.4	539.7
57.5°	329.8	371.1	439.0	490.0	507.0
60°	299.6	339.5	406.4	455.9	475.4
62.5°	266.7	307.9	373.4	422.0	440.3
65°	236.4	276.5	340.7	388.1	405.0
67.5°	206.1	246.3	306.7	351.7	371.1
70°	175.7	216.0	271.6	315.3	332.2
72.5°	149.2	184.4	237.6	277.7	293.5
75°	120.1	155.3	200.0	235.2	242.4
77.5°	93.4	124.9	162.5	178.2	180.8
80°	69.1	93.4	118.9	122.5	122.5
82.5°	46.0	64.3	74.0	75.1	74.0
85°	27.9	33.9	35.1	30.3	27.9
87.5°	9.6	9.6	6.0	3.6	1.2
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)