

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: P881102

Luminaire Tested: **22CZ2-34VHE-SQR-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: P881102  
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: 22CZ2-34VHE-SQR-UNV-B40  
Description: 2X2 3400 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SQR LENS  
  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

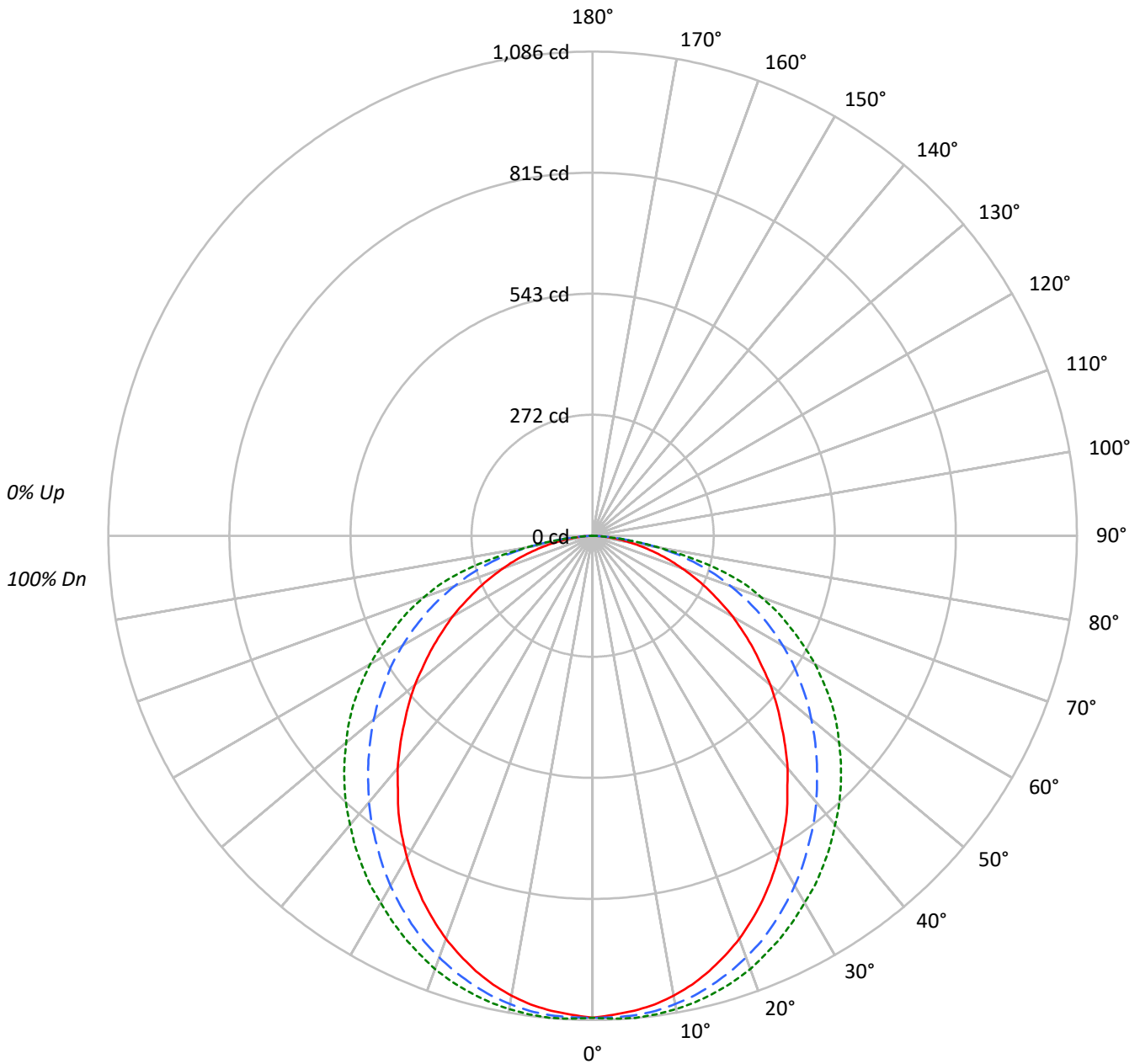
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3095.0 lumens  
Efficiency: N/A  
Efficacy: 114.6 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): 27  
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°	3068	3068	3068
5°	3046	3075	3092
10°	3018	3073	3106
15°	2969	3059	3116
20°	2905	3039	3123
25°	2824	3008	3118
30°	2729	2970	3114
35°	2630	2926	3125
40°	2520	2890	3134
45°	2399	2853	3160
50°	2295	2827	3184
55°	2173	2805	3234
60°	2059	2794	3268
65°	1923	2772	3294
70°	1766	2729	3339
75°	1595	2656	3220
80°	1368	2353	2423
85°	1100	1387	1100



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.5	3.3
10°-20°	293.1	9.5
20°-30°	440.2	14.2
30°-40°	524.9	17.0
40°-50°	542.7	17.5
50°-60°	499.0	16.1
60°-70°	397.2	12.8
70°-80°	242.7	7.8
80°-90°	52.7	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°	835.7	27.0
0°-40°	1360.7	44.0
0°-60°	2402.4	77.6
0°-90°	3095.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3095.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1081	1081	1081	1081	1081	
5°	1069	1072	1080	1084	1086	101
15°	1011	1022	1041	1056	1061	285
25°	902	924	961	987	996	415
35°	759	792	845	889	902	474
45°	598	640	711	768	787	462
55°	439	488	567	632	654	393
65°	286	335	413	470	491	284
75°	146	188	242	285	294	155
85°	34	41	43	37	34	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1081.1	1081.1	1081.1	1081.1	1081.1
2.5°	1075.3	1076.6	1081.1	1084.1	1084.1
5°	1069.3	1072.3	1079.6	1084.1	1085.6
7.5°	1060.7	1065.0	1075.3	1081.1	1082.8
10°	1047.4	1053.4	1066.5	1075.3	1078.1
12.5°	1031.2	1040.1	1056.2	1068.0	1070.8
15°	1010.8	1022.4	1041.4	1056.2	1060.7
17.5°	987.2	1001.8	1025.4	1043.1	1048.9
20°	962.1	976.9	1006.3	1026.8	1034.1
22.5°	932.8	951.9	985.7	1009.3	1015.1
25°	902.0	924.0	960.7	987.2	996.0
27.5°	868.1	894.7	934.3	966.7	974.0
30°	832.8	860.8	906.4	941.6	950.4
32.5°	796.1	828.5	876.9	916.7	928.5
35°	759.3	791.8	844.7	888.9	902.0
37.5°	716.8	755.0	813.9	859.5	875.4
40°	680.2	716.8	780.1	830.0	846.1
42.5°	638.9	678.7	744.9	799.1	818.2
45°	597.9	640.4	710.9	768.3	787.4
47.5°	559.6	602.2	675.7	736.1	755.0
50°	520.0	564.1	640.4	702.1	721.3
52.5°	477.5	525.9	605.2	666.9	689.0
55°	439.2	487.6	566.9	631.6	653.7
57.5°	399.5	449.5	531.8	593.5	614.2
60°	362.9	411.3	492.3	552.3	575.9
62.5°	323.1	373.0	452.3	511.2	533.3
65°	286.4	334.9	412.8	470.1	490.6
67.5°	249.6	298.3	371.5	426.1	449.5
70°	212.9	261.6	328.9	382.0	402.5
72.5°	180.8	223.3	287.9	336.4	355.6
75°	145.5	188.1	242.3	284.9	293.7
77.5°	113.1	151.3	196.9	215.9	219.0
80°	83.7	113.1	144.0	148.3	148.3
82.5°	55.7	77.8	89.6	91.0	89.6
85°	33.8	41.1	42.6	36.8	33.8
87.5°	11.6	11.6	7.3	4.3	1.5
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)