

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: P881135

Luminaire Tested: **22CZ2-44VHE-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: P881135  
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: 22CZ2-44VHE-UNV-B40  
Description: 2X2 4400 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND RIBBED LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

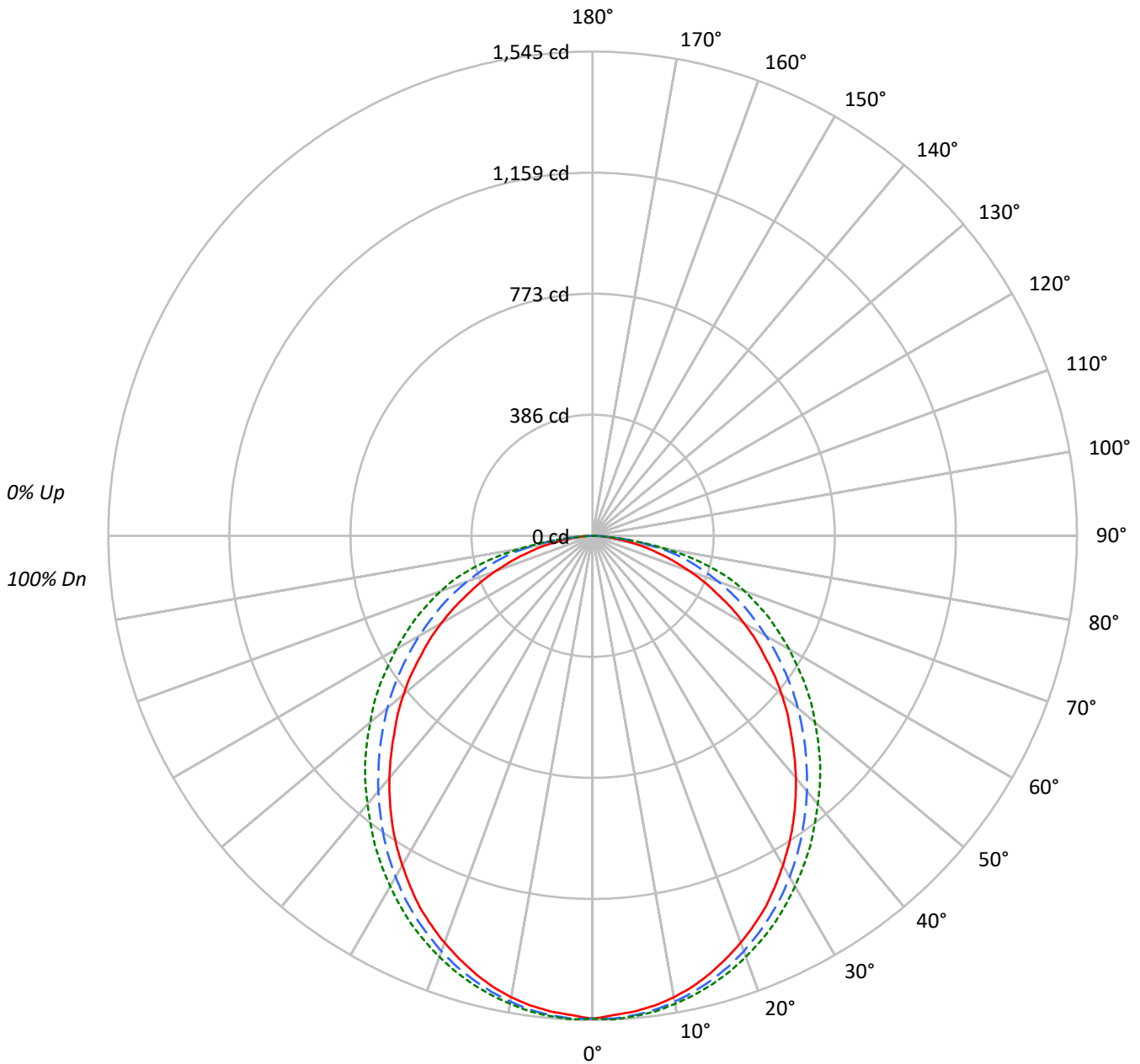
Lumens per Lamp: N/A  
Luminaire Lumens: 4249.0 lumens  
Efficiency: N/A  
Efficacy: 114.8 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33  
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 37  
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°	4373	4373	4373
5°	4340	4374	4384
10°	4308	4349	4370
15°	4250	4310	4350
20°	4173	4260	4317
25°	4091	4195	4282
30°	3978	4119	4231
35°	3866	4031	4190
40°	3736	3942	4138
45°	3593	3852	4118
50°	3476	3774	4087
55°	3314	3692	4096
60°	3164	3628	4108
65°	2941	3581	4173
70°	2720	3530	4275
75°	2433	3516	4303
80°	2039	3332	3755
85°	1582	2282	2132



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.6	3.4
10°-20°	413.3	9.7
20°-30°	616.2	14.5
30°-40°	727.4	17.1
40°-50°	741.4	17.4
50°-60°	668.6	15.7
60°-70°	525.5	12.4
70°-80°	329.0	7.7
80°-90°	82.1	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°	1175.0	27.7
0°-40°	1902.5	44.8
0°-60°	3312.4	78.0
0°-90°	4249.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4249.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1541	1541	1541	1541	1541	
5°	1524	1527	1536	1539	1539	145
15°	1447	1453	1467	1478	1481	408
25°	1307	1316	1340	1360	1368	601
35°	1116	1130	1164	1196	1210	697
45°	895	915	960	1007	1026	693
55°	670	690	746	804	828	601
65°	438	465	533	593	622	437
75°	222	255	321	378	392	236
85°	49	62	70	70	66	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1541.0	1541.0	1541.0	1541.0	1541.0
2.5°	1531.0	1534.7	1541.8	1544.6	1544.6
5°	1523.8	1527.4	1535.6	1539.1	1539.1
7.5°	1512.1	1515.7	1525.7	1530.1	1531.0
10°	1495.2	1499.6	1509.4	1516.7	1516.7
12.5°	1473.6	1478.0	1490.6	1499.6	1500.4
15°	1446.6	1452.9	1467.3	1478.0	1480.7
17.5°	1415.2	1425.0	1441.2	1454.8	1457.5
20°	1381.9	1391.8	1410.6	1425.9	1429.6
22.5°	1345.1	1354.1	1376.5	1395.5	1399.9
25°	1306.6	1316.4	1339.8	1360.4	1367.7
27.5°	1260.7	1272.4	1300.3	1323.5	1330.8
30°	1214.0	1228.5	1257.2	1283.1	1291.3
32.5°	1166.5	1179.9	1212.2	1240.0	1250.9
35°	1116.1	1130.5	1163.8	1196.0	1209.7
37.5°	1063.1	1077.6	1113.6	1150.2	1162.8
40°	1008.5	1025.5	1064.2	1103.5	1117.1
42.5°	952.8	970.6	1011.0	1055.2	1073.0
45°	895.3	914.9	959.9	1006.6	1026.3
47.5°	843.1	859.3	906.1	957.2	976.1
50°	787.5	802.7	854.9	906.1	925.8
52.5°	730.9	745.4	801.1	854.9	879.1
55°	669.8	690.5	746.2	803.6	827.9
57.5°	616.0	634.9	692.4	750.6	774.1
60°	557.6	577.3	639.3	698.7	723.8
62.5°	499.2	520.8	583.6	647.4	670.9
65°	438.1	465.1	533.3	592.6	621.5
67.5°	386.2	412.1	479.5	541.5	566.6
70°	327.8	358.4	425.5	488.5	515.3
72.5°	273.0	303.5	372.6	435.6	462.4
75°	221.9	255.0	320.7	378.0	392.5
77.5°	172.5	203.9	269.4	302.7	318.0
80°	124.8	155.3	203.9	226.3	229.8
82.5°	84.4	110.5	138.4	144.6	141.1
85°	48.6	62.0	70.1	70.1	65.5
87.5°	19.7	19.7	17.2	10.7	6.3
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)