

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: P881150

Luminaire Tested: **22CZ2-50VHE-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: P881150  
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: 22CZ2-50VHE-UNV-B40  
Description: 2X2 5000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND RIBBED LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

**Summary**

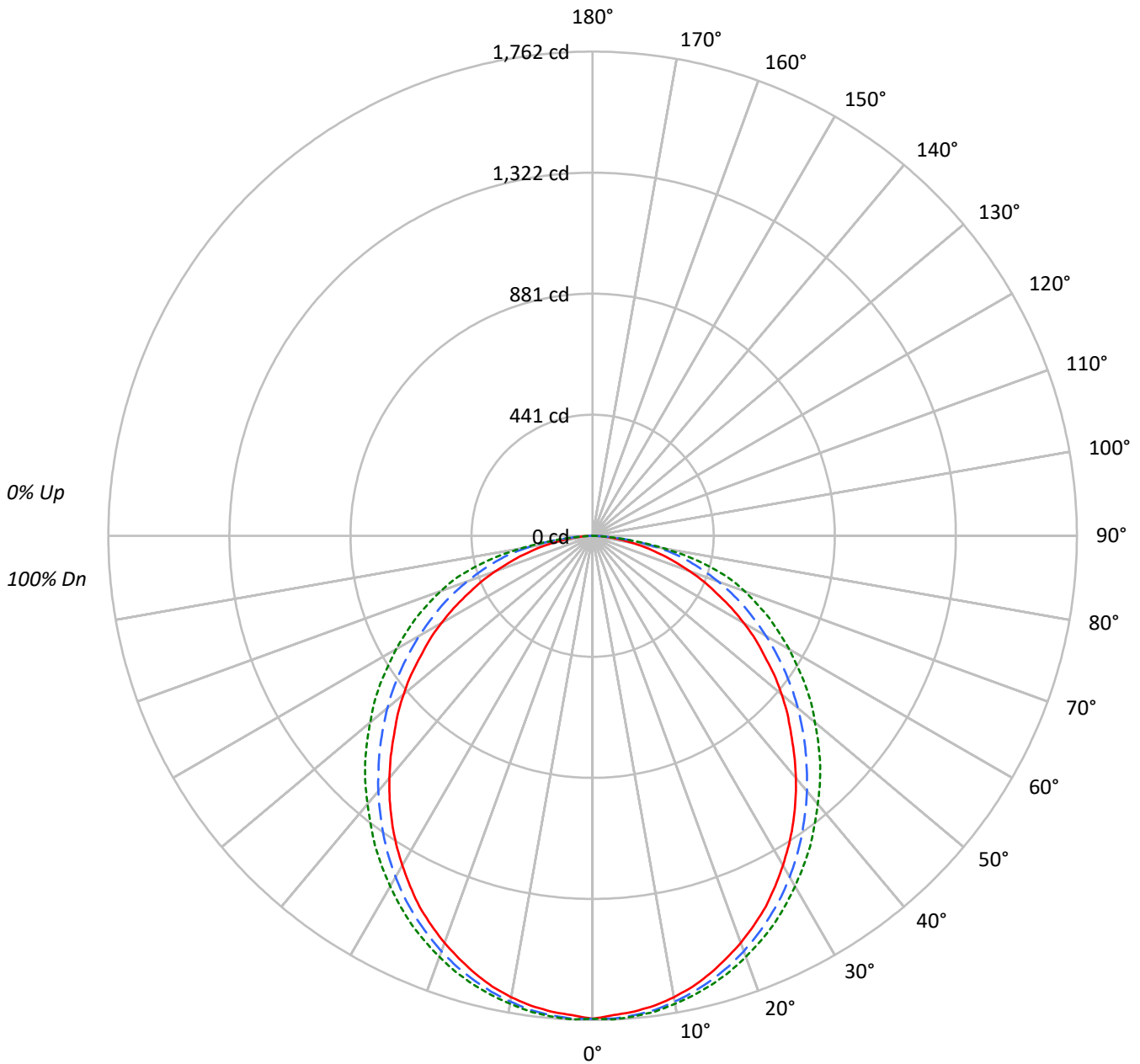
Lumens per Lamp: N/A  
Luminaire Lumens: 4846.0 lumens  
Efficiency: N/A  
Efficacy: 115.4 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33  
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 42  
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°	4987	4987	4987
5°	4950	4988	5000
10°	4913	4960	4984
15°	4847	4916	4961
20°	4759	4858	4924
25°	4665	4784	4884
30°	4537	4698	4825
35°	4409	4598	4779
40°	4261	4496	4719
45°	4097	4393	4697
50°	3965	4304	4661
55°	3779	4210	4671
60°	3609	4138	4685
65°	3355	4084	4759
70°	3101	4026	4877
75°	2775	4009	4907
80°	2325	3799	4283
85°	1804	2605	2432



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.0	3.4
10°-20°	471.3	9.7
20°-30°	702.8	14.5
30°-40°	829.6	17.1
40°-50°	845.5	17.4
50°-60°	762.5	15.7
60°-70°	599.3	12.4
70°-80°	375.2	7.7
80°-90°	93.6	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°	1340.1	27.7
0°-40°	2169.8	44.8
0°-60°	3777.8	78.0
0°-90°	4846.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4846.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1758	1758	1758	1758	1758	
5°	1738	1742	1751	1755	1755	165
15°	1650	1657	1674	1686	1689	465
25°	1490	1501	1528	1552	1560	685
35°	1273	1289	1327	1364	1380	795
45°	1021	1044	1095	1148	1170	790
55°	764	788	851	916	944	686
65°	500	530	608	676	709	498
75°	253	291	366	431	448	269
85°	55	71	80	80	75	67
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1757.5	1757.5	1757.5	1757.5	1757.5
2.5°	1746.1	1750.4	1758.5	1761.6	1761.6
5°	1737.9	1742.0	1751.3	1755.4	1755.4
7.5°	1724.6	1728.6	1740.1	1745.1	1746.1
10°	1705.2	1710.3	1721.5	1729.8	1729.8
12.5°	1680.7	1685.7	1700.0	1710.3	1711.2
15°	1649.9	1657.0	1673.5	1685.7	1688.8
17.5°	1614.0	1625.3	1643.6	1659.2	1662.3
20°	1576.1	1587.3	1608.8	1626.2	1630.5
22.5°	1534.1	1544.3	1569.9	1591.6	1596.6
25°	1490.1	1501.4	1528.1	1551.5	1559.9
27.5°	1437.9	1451.2	1483.0	1509.5	1517.8
30°	1384.6	1401.1	1433.8	1463.4	1472.7
32.5°	1330.4	1345.7	1382.5	1414.2	1426.6
35°	1272.9	1289.4	1327.3	1364.1	1379.6
37.5°	1212.5	1229.0	1270.0	1311.8	1326.1
40°	1150.2	1169.5	1213.7	1258.6	1274.1
42.5°	1086.7	1107.0	1153.1	1203.4	1223.7
45°	1021.0	1043.5	1094.8	1148.0	1170.5
47.5°	961.6	980.0	1033.5	1091.7	1113.2
50°	898.1	915.5	975.0	1033.5	1055.9
52.5°	833.6	850.1	913.6	975.0	1002.7
55°	763.9	787.6	851.1	916.5	944.2
57.5°	702.6	724.1	789.7	856.1	882.8
60°	636.0	658.4	729.1	796.9	825.5
62.5°	569.4	594.0	665.6	738.4	765.1
65°	499.7	530.5	608.3	675.8	708.8
67.5°	440.5	470.1	546.9	617.6	646.2
70°	373.8	408.7	485.3	557.2	587.8
72.5°	311.3	346.2	424.9	496.8	527.4
75°	253.1	290.8	365.7	431.1	447.6
77.5°	196.7	232.5	307.2	345.2	362.6
80°	142.3	177.1	232.5	258.1	262.1
82.5°	96.2	126.0	157.8	165.0	160.9
85°	55.4	70.7	80.0	80.0	74.7
87.5°	22.4	22.4	19.6	12.2	7.2
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)