

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: P881224

Luminaire Tested: **24CZ2-50VHE-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: P881224  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P473819)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-50VHE-UNV-B35  
Description: 2X4 5000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND RIBBED LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

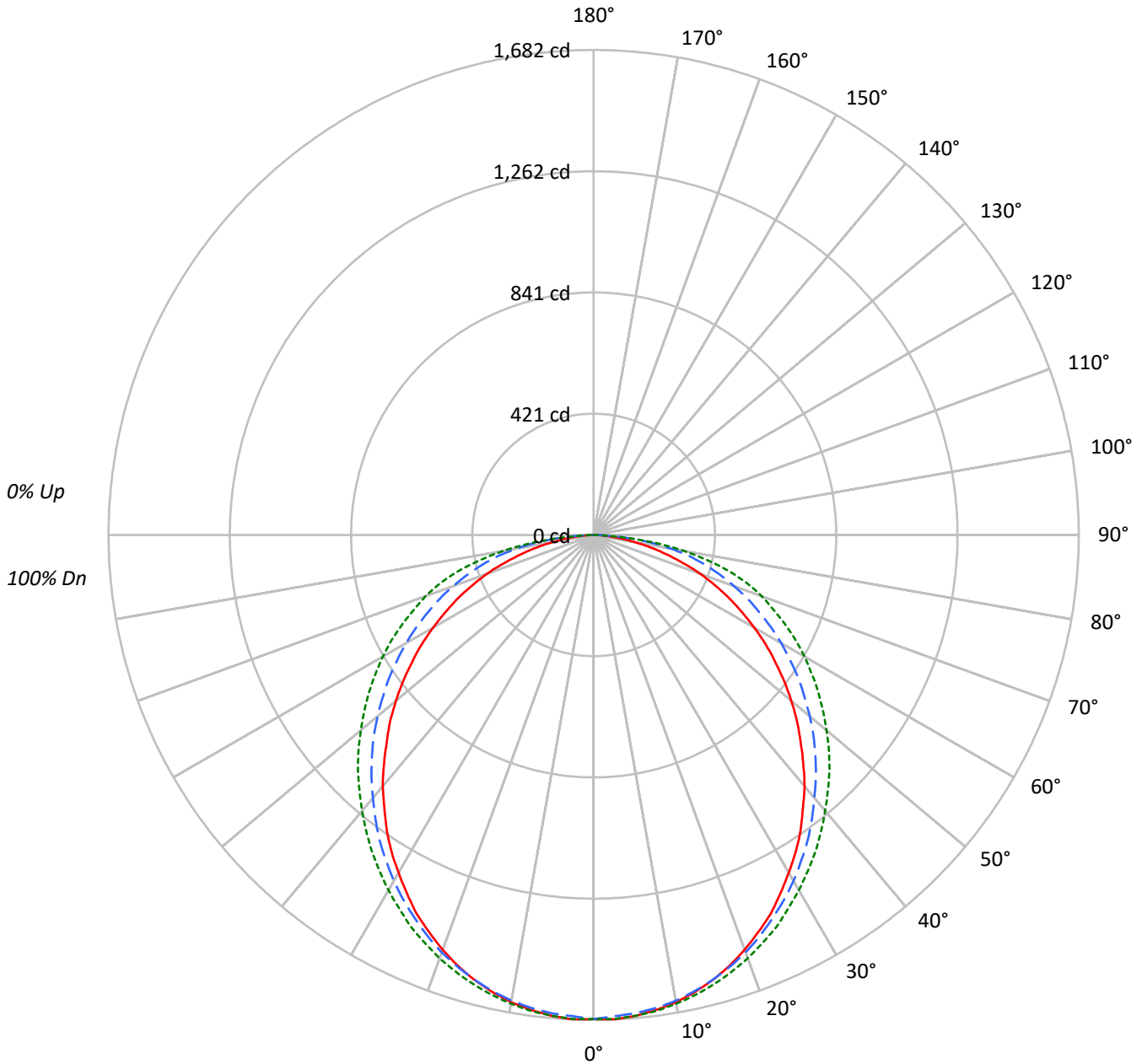
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4860.0 lumens  
Efficiency: N/A  
Efficacy: 127.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 38  
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	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83																			
2	98	89	82	76	95	88	81	75	84	78	74	81	76	72	78	74	70	68																			
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57																			
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48																			
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42																			
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	37																			
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32																			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29																			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26																			
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	30	25	23																			

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

	0°	45°	90°
0°	2370	2370	2370
5°	2371	2359	2371
10°	2358	2351	2366
15°	2334	2333	2357
20°	2300	2314	2347
25°	2260	2285	2335
30°	2205	2258	2319
35°	2155	2229	2309
40°	2096	2193	2300
45°	2024	2170	2307
50°	1964	2146	2314
55°	1891	2131	2340
60°	1813	2121	2383
65°	1728	2114	2444
70°	1626	2135	2556
75°	1430	2179	2659
80°	1194	2195	2565
85°	853	1882	1906



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.8	3.3
10°-20°	452.2	9.3
20°-30°	678.4	14.0
30°-40°	809.9	16.7
40°-50°	838.9	17.3
50°-60°	772.3	15.9
60°-70°	623.0	12.8
70°-80°	407.1	8.4
80°-90°	119.3	2.5
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°	1289.4	26.5
0°-40°	2099.3	43.2
0°-60°	3710.6	76.3
0°-90°	4860.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4860.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1679	1679	1679	1679	1679	
5°	1674	1672	1665	1675	1674	159
15°	1598	1598	1597	1613	1613	450
25°	1451	1454	1467	1494	1500	667
35°	1251	1262	1294	1329	1340	781
45°	1014	1040	1087	1136	1156	784
55°	769	802	866	930	951	688
65°	517	553	633	705	732	512
75°	262	312	400	469	488	280
85°	53	91	116	123	118	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1679.4	1679.4	1679.4	1679.4	1679.4
2.5°	1681.7	1679.4	1670.8	1681.0	1680.2
5°	1673.9	1672.3	1665.3	1674.7	1673.9
7.5°	1661.4	1660.6	1655.1	1665.3	1665.3
10°	1645.7	1644.1	1640.2	1652.0	1651.2
12.5°	1623.7	1623.0	1620.6	1634.7	1633.9
15°	1597.7	1597.7	1596.9	1612.8	1612.8
17.5°	1566.4	1567.1	1570.3	1588.3	1589.1
20°	1531.1	1534.2	1540.5	1560.9	1562.4
22.5°	1491.0	1497.2	1505.8	1528.7	1531.1
25°	1451.0	1454.1	1467.4	1494.1	1499.6
27.5°	1402.2	1410.2	1427.5	1454.9	1460.4
30°	1352.8	1363.8	1385.8	1414.1	1422.8
32.5°	1304.1	1313.6	1339.5	1371.6	1381.8
35°	1250.8	1261.7	1293.9	1329.3	1340.3
37.5°	1191.8	1209.1	1242.9	1283.7	1295.5
40°	1137.7	1153.4	1190.3	1235.9	1248.4
42.5°	1075.6	1095.2	1140.1	1186.3	1202.0
45°	1014.3	1039.6	1087.4	1136.2	1155.8
47.5°	957.1	977.5	1034.1	1089.0	1106.2
50°	894.3	917.8	977.5	1035.7	1053.7
52.5°	832.3	860.6	920.9	982.2	1001.8
55°	768.7	801.6	866.0	929.7	950.9
57.5°	707.4	740.5	807.1	874.7	896.6
60°	642.3	677.6	751.4	816.5	844.1
62.5°	579.4	614.7	692.5	763.2	789.1
65°	517.4	552.8	632.9	705.0	731.8
67.5°	453.1	491.5	577.1	647.0	672.9
70°	394.1	431.0	517.4	592.0	619.4
72.5°	326.6	370.6	458.6	532.3	558.3
75°	262.3	311.7	399.6	468.8	487.6
77.5°	202.6	252.1	339.9	391.8	403.5
80°	146.9	197.1	270.1	306.2	315.6
82.5°	95.0	146.9	195.5	219.8	222.9
85°	52.7	91.1	116.2	123.2	117.7
87.5°	18.8	34.5	33.7	27.4	21.9
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)