

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: P881005

Luminaire Tested: **24CZ2-70VHE-HRP-B2750-W2D-4000K**

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: P881005  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P474369)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-70VHE-HRP-B2750-W2D-4000K  
Description: 2X4 7000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND HRP LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

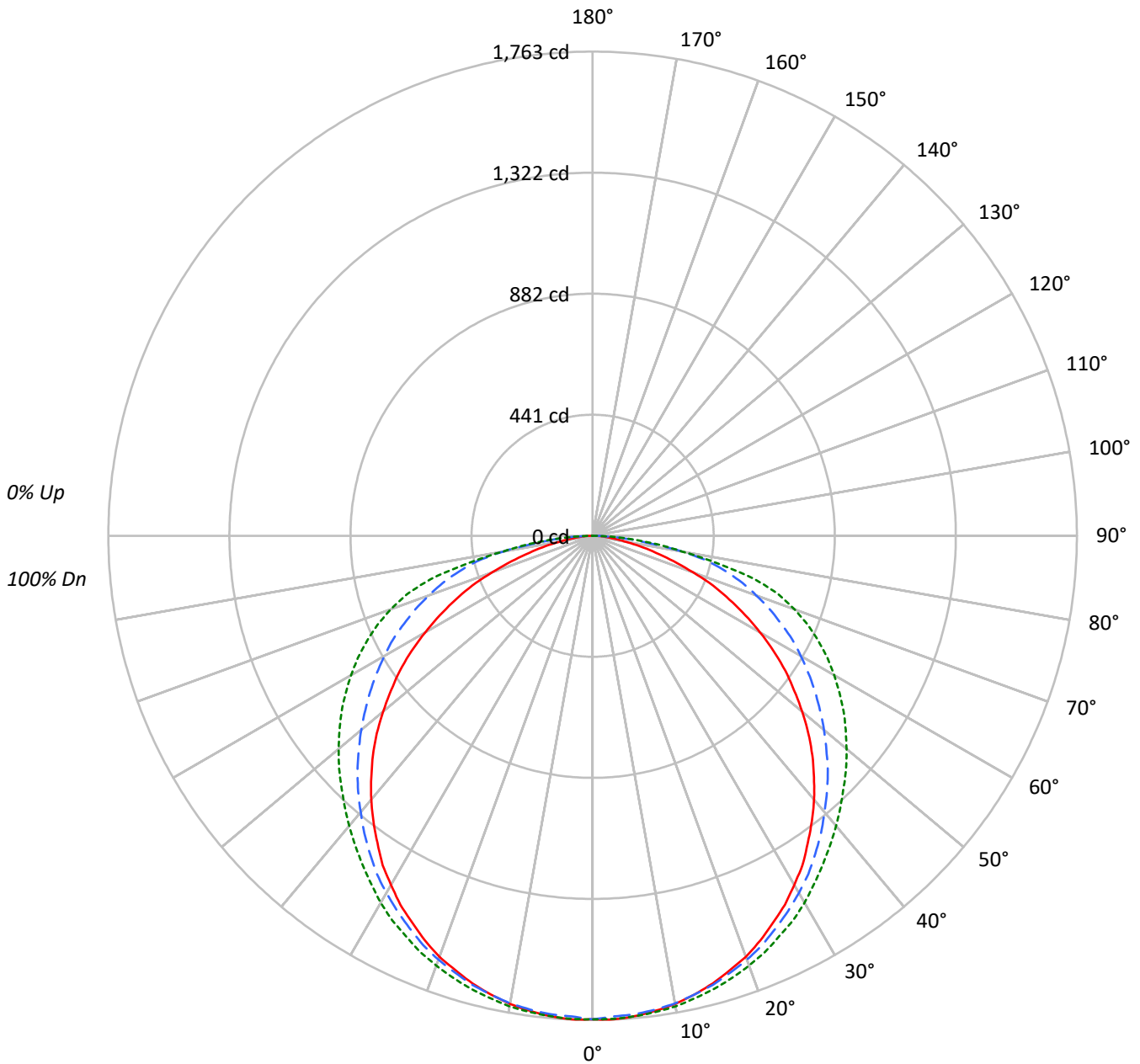
Lumens per Lamp: N/A  
Luminaire Lumens: 5427.0 lumens  
Efficiency: N/A  
Efficacy: 96.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 56  
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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82																			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67																			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56																			
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	50	48																			
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41																			
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	42	38	36																			
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31																			
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30	28																			
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27	25																			
10	52	38	30	25	50	38	30	25	37	30	25	36	29	24	35	29	24	23																			

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

	0°	45°	90°
0°	2485	2485	2485
5°	2488	2478	2488
10°	2481	2478	2494
15°	2466	2473	2496
20°	2450	2467	2501
25°	2420	2455	2505
30°	2392	2447	2514
35°	2353	2434	2517
40°	2310	2420	2541
45°	2258	2417	2580
50°	2185	2415	2649
55°	2108	2432	2745
60°	1988	2469	2866
65°	1836	2527	3028
70°	1603	2615	3225
75°	1301	2750	3332
80°	961	2698	2698
85°	737	1987	2244



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.8	3.1
10°-20°	479.0	8.8
20°-30°	729.2	13.4
30°-40°	885.4	16.3
40°-50°	935.5	17.2
50°-60°	882.7	16.3
60°-70°	733.9	13.5
70°-80°	482.9	8.9
80°-90°	131.6	2.4
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°	1375.0	25.3
0°-40°	2260.4	41.7
0°-60°	4078.6	75.2
0°-90°	5427.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5427.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1761	1761	1761	1761	1761	
5°	1756	1756	1749	1756	1756	167
15°	1688	1690	1693	1709	1709	476
25°	1554	1563	1577	1604	1608	717
35°	1366	1381	1413	1450	1461	855
45°	1131	1154	1211	1270	1293	871
55°	856	893	988	1082	1116	763
65°	550	614	757	868	907	543
75°	238	348	504	598	611	257
85°	46	100	123	136	139	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1760.8	1760.8	1760.8	1760.8	1760.8
2.5°	1763.0	1760.8	1751.6	1760.8	1760.8
5°	1756.3	1756.3	1749.4	1756.3	1756.3
7.5°	1744.9	1744.9	1740.2	1749.4	1749.4
10°	1731.2	1731.2	1729.0	1740.2	1740.2
12.5°	1710.9	1712.9	1710.9	1724.3	1724.3
15°	1688.0	1690.2	1692.7	1708.6	1708.6
17.5°	1658.7	1663.2	1667.6	1685.8	1688.0
20°	1631.4	1633.4	1642.6	1663.2	1665.4
22.5°	1595.1	1601.8	1613.2	1633.4	1640.5
25°	1553.9	1563.1	1576.7	1604.0	1608.5
27.5°	1515.4	1522.3	1540.4	1570.0	1579.2
30°	1467.7	1479.1	1501.7	1531.3	1542.7
32.5°	1422.2	1433.6	1460.9	1492.5	1501.7
35°	1365.5	1381.4	1413.0	1449.5	1460.9
37.5°	1310.9	1326.8	1365.5	1406.3	1420.2
40°	1254.0	1272.2	1313.4	1360.8	1379.0
42.5°	1192.7	1217.8	1263.2	1315.4	1336.0
45°	1131.3	1154.2	1210.8	1269.9	1292.8
47.5°	1065.7	1093.0	1154.2	1224.7	1252.0
50°	995.2	1029.2	1099.7	1176.8	1206.6
52.5°	924.8	963.4	1042.9	1129.1	1161.1
55°	856.5	892.8	988.2	1081.6	1115.6
57.5°	781.5	827.2	931.6	1031.4	1065.7
60°	704.3	754.4	874.7	979.0	1015.5
62.5°	627.0	683.9	820.0	924.8	963.4
65°	549.8	613.6	756.7	868.0	906.7
67.5°	474.7	545.3	697.6	808.8	847.4
70°	388.5	477.2	633.7	743.0	781.5
72.5°	309.0	411.4	572.4	674.9	709.0
75°	238.5	347.8	504.3	597.5	611.1
77.5°	174.9	283.9	434.0	465.6	468.0
80°	118.2	227.1	331.9	327.2	331.9
82.5°	77.3	170.4	208.9	234.0	236.2
85°	45.5	100.1	122.7	136.4	138.6
87.5°	22.6	34.0	43.2	45.5	49.9
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)