

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: P881004

Luminaire Tested: **24CZ2-70VHE-HRP-B2750-W2D-3500K**

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: P881004  
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-3500K  
Description: 2X4 7000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND HRP LENS  
  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

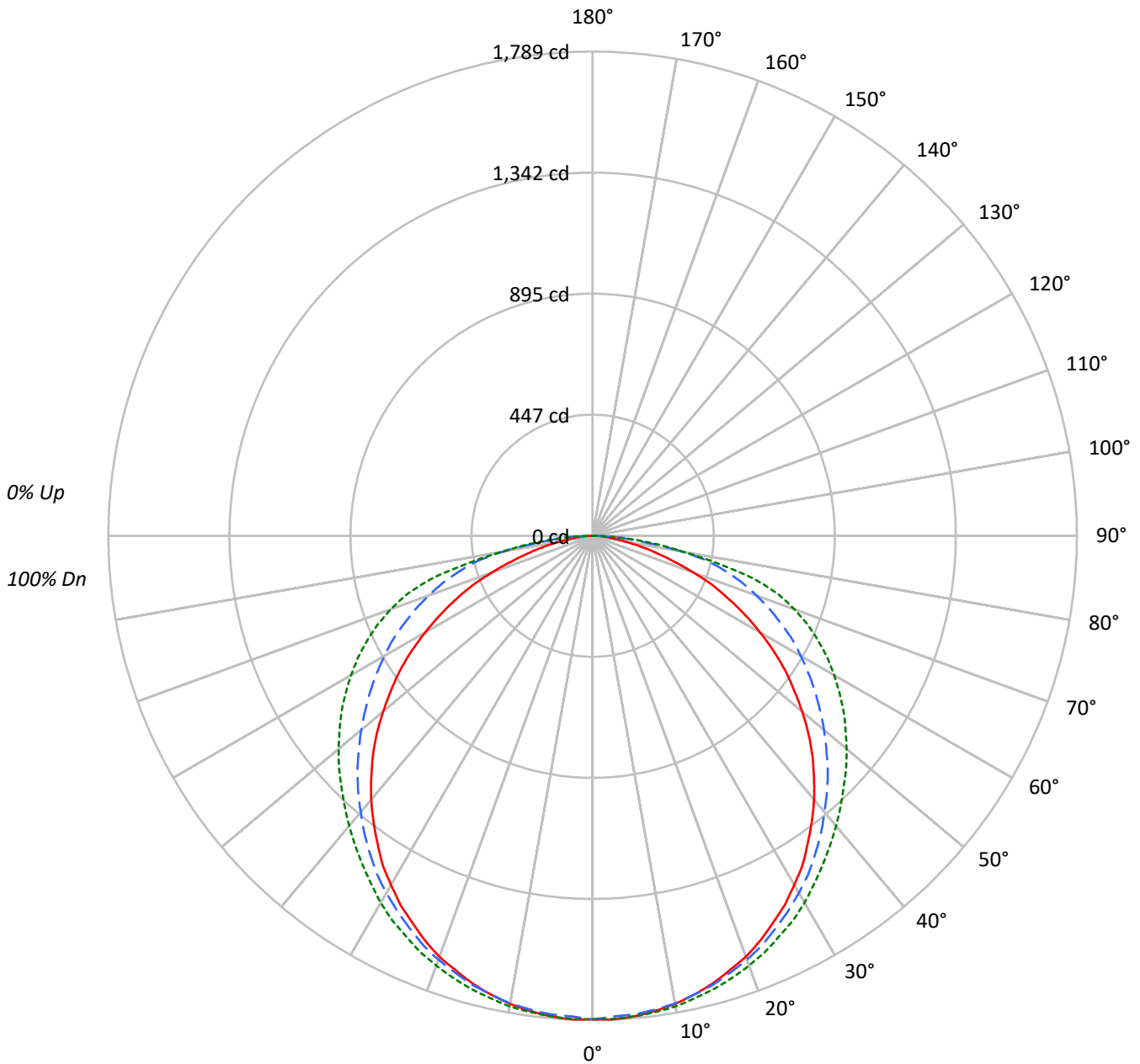
Lumens per Lamp: N/A  
Luminaire Lumens: 5507.0 lumens  
Efficiency: N/A  
Efficacy: 98.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

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°	2522	2522	2522
5°	2525	2515	2525
10°	2518	2514	2531
15°	2503	2510	2533
20°	2486	2503	2538
25°	2455	2492	2542
30°	2427	2483	2551
35°	2387	2470	2554
40°	2344	2455	2578
45°	2291	2452	2618
50°	2217	2450	2688
55°	2139	2467	2786
60°	2017	2505	2909
65°	1863	2564	3073
70°	1627	2654	3272
75°	1320	2790	3381
80°	975	2737	2737
85°	747	2016	2278



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	169.3	3.1
10°-20°	486.0	8.8
20°-30°	740.0	13.4
30°-40°	898.5	16.3
40°-50°	949.2	17.2
50°-60°	895.7	16.3
60°-70°	744.8	13.5
70°-80°	490.0	8.9
80°-90°	133.6	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°	1395.3	25.3
0°-40°	2293.7	41.7
0°-60°	4138.7	75.2
0°-90°	5507.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5507.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1787	1787	1787	1787	1787	
5°	1782	1782	1775	1782	1782	169
15°	1713	1715	1718	1734	1734	483
25°	1577	1586	1600	1628	1632	727
35°	1386	1402	1434	1471	1482	867
45°	1148	1171	1229	1289	1312	884
55°	869	906	1003	1098	1132	774
65°	558	623	768	881	920	551
75°	242	353	512	606	620	261
85°	46	102	124	138	141	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1786.7	1786.7	1786.7	1786.7	1786.7
2.5°	1789.0	1786.7	1777.4	1786.7	1786.7
5°	1782.2	1782.2	1775.2	1782.2	1782.2
7.5°	1770.6	1770.6	1765.8	1775.2	1775.2
10°	1756.7	1756.7	1754.5	1765.8	1765.8
12.5°	1736.1	1738.1	1736.1	1749.7	1749.7
15°	1712.9	1715.2	1717.7	1733.8	1733.8
17.5°	1683.1	1687.7	1692.2	1710.6	1712.9
20°	1655.4	1657.4	1666.8	1687.7	1689.9
22.5°	1618.6	1625.4	1637.0	1657.4	1664.7
25°	1576.8	1586.1	1600.0	1627.7	1632.2
27.5°	1537.7	1544.7	1563.1	1593.1	1602.5
30°	1489.3	1500.9	1523.8	1553.8	1565.4
32.5°	1443.2	1454.8	1482.5	1514.5	1523.8
35°	1385.7	1401.8	1433.8	1470.9	1482.5
37.5°	1330.2	1346.4	1385.7	1427.0	1441.1
40°	1272.5	1290.9	1332.7	1380.9	1399.3
42.5°	1210.3	1235.7	1281.8	1334.8	1355.7
45°	1148.0	1171.2	1228.7	1288.6	1311.8
47.5°	1081.4	1109.1	1171.2	1242.7	1270.5
50°	1009.8	1044.4	1115.9	1194.1	1224.3
52.5°	938.5	977.6	1058.2	1145.7	1178.2
55°	869.2	906.0	1002.8	1097.5	1132.1
57.5°	793.0	839.4	945.3	1046.6	1081.4
60°	714.7	765.6	887.6	993.5	1030.5
62.5°	636.3	694.0	832.1	938.5	977.6
65°	557.9	622.6	767.8	880.8	920.1
67.5°	481.7	553.3	707.8	820.8	859.9
70°	394.3	484.2	643.1	754.0	793.0
72.5°	313.6	417.4	580.8	684.9	719.4
75°	242.0	352.9	511.7	606.3	620.1
77.5°	177.5	288.1	440.4	472.4	474.9
80°	120.0	230.4	336.8	332.0	336.8
82.5°	78.4	172.9	212.0	237.5	239.7
85°	46.1	101.6	124.5	138.4	140.7
87.5°	23.0	34.5	43.9	46.1	50.7
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)