

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: P881241

Luminaire Tested: **24CZ2-55VHE-UNV-B50**

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: P881241  
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: 24CZ2-55VHE-UNV-B50  
Description: 2X4 5500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND RIBBED LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

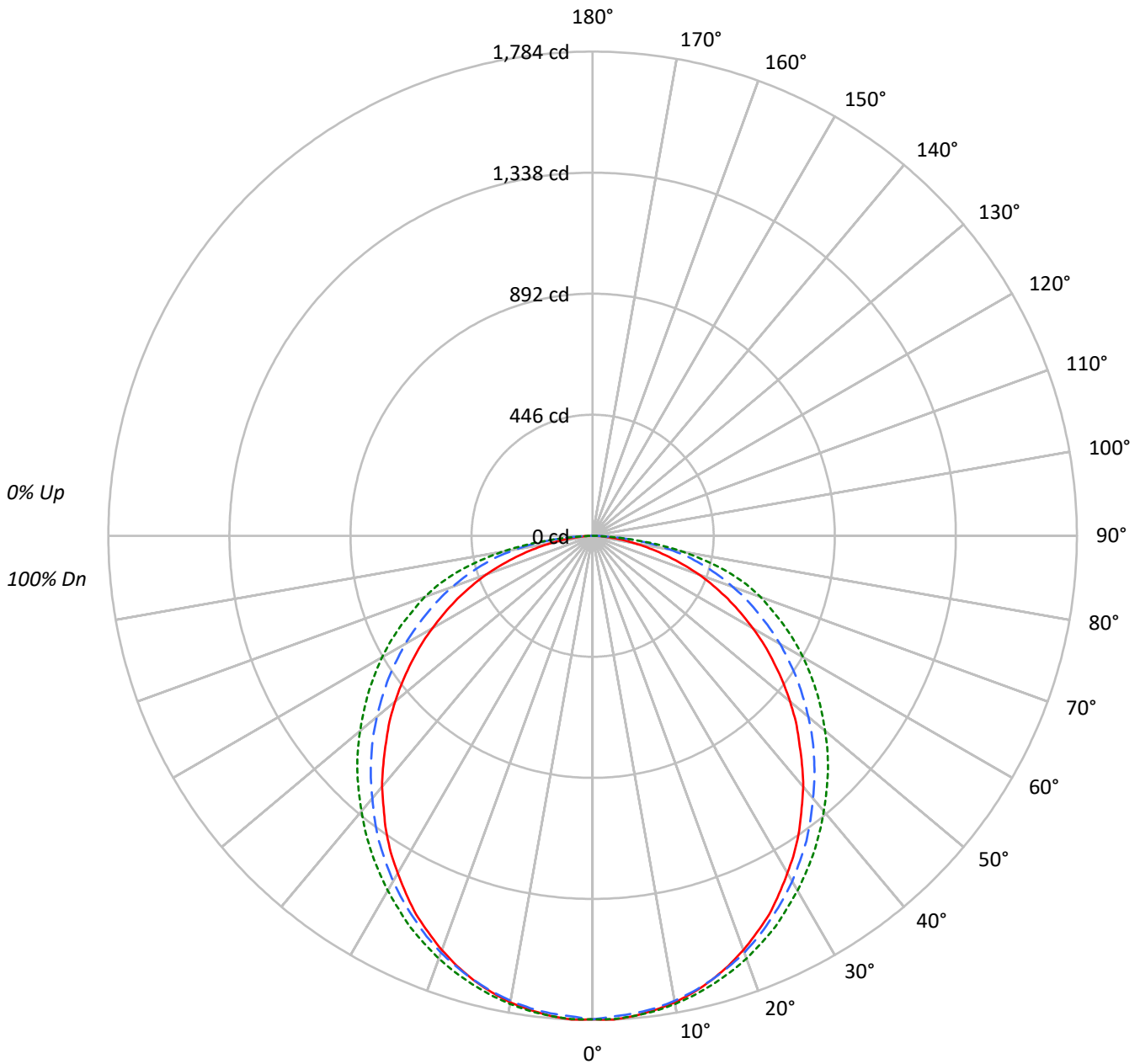
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5156.0 lumens  
Efficiency: N/A  
Efficacy: 119.9 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): 43  
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				20				
RC	80				70				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°	2515	2515	2515
5°	2516	2503	2516
10°	2502	2494	2510
15°	2477	2475	2500
20°	2440	2455	2490
25°	2397	2424	2477
30°	2339	2396	2460
35°	2286	2365	2450
40°	2224	2326	2440
45°	2148	2303	2447
50°	2083	2277	2455
55°	2007	2261	2482
60°	1923	2250	2528
65°	1833	2242	2593
70°	1725	2265	2712
75°	1518	2312	2821
80°	1266	2329	2721
85°	905	1995	2023



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	168.4	3.3
10°-20°	479.7	9.3
20°-30°	719.7	14.0
30°-40°	859.3	16.7
40°-50°	890.0	17.3
50°-60°	819.4	15.9
60°-70°	661.0	12.8
70°-80°	431.9	8.4
80°-90°	126.6	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°	1367.9	26.5
0°-40°	2227.2	43.2
0°-60°	3936.6	76.3
0°-90°	5156.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5156.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1782	1782	1782	1782	1782	
5°	1776	1774	1767	1777	1776	169
15°	1695	1695	1694	1711	1711	478
25°	1539	1543	1557	1585	1591	708
35°	1327	1339	1373	1410	1422	829
45°	1076	1103	1154	1205	1226	832
55°	816	850	919	986	1009	730
65°	549	586	672	748	776	543
75°	278	331	424	497	517	297
85°	56	97	123	131	125	69
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1781.7	1781.7	1781.7	1781.7	1781.7
2.5°	1784.2	1781.7	1772.5	1783.3	1782.5
5°	1775.9	1774.2	1766.7	1776.7	1775.9
7.5°	1762.6	1761.7	1755.9	1766.7	1766.7
10°	1745.9	1744.3	1740.1	1752.6	1751.7
12.5°	1722.6	1721.8	1719.3	1734.3	1733.4
15°	1695.0	1695.0	1694.2	1711.0	1711.0
17.5°	1661.8	1662.6	1665.9	1685.0	1685.9
20°	1624.3	1627.7	1634.3	1655.9	1657.6
22.5°	1581.8	1588.4	1597.6	1621.8	1624.3
25°	1539.3	1542.7	1556.8	1585.1	1590.9
27.5°	1487.6	1496.1	1514.4	1543.5	1549.3
30°	1435.2	1446.9	1470.2	1500.3	1509.4
32.5°	1383.5	1393.6	1421.1	1455.2	1466.0
35°	1326.9	1338.6	1372.7	1410.3	1421.9
37.5°	1264.4	1282.7	1318.6	1361.9	1374.4
40°	1207.0	1223.7	1262.7	1311.1	1324.5
42.5°	1141.2	1162.0	1209.5	1258.6	1275.2
45°	1076.1	1102.9	1153.6	1205.4	1226.2
47.5°	1015.4	1037.0	1097.1	1155.3	1173.6
50°	948.7	973.7	1037.0	1098.7	1117.9
52.5°	883.0	913.0	977.0	1042.0	1062.8
55°	815.5	850.4	918.8	986.3	1008.8
57.5°	750.5	785.6	856.2	927.9	951.2
60°	681.4	718.9	797.2	866.2	895.5
62.5°	614.7	652.2	734.7	809.7	837.1
65°	548.9	586.5	671.5	748.0	776.4
67.5°	480.7	521.4	612.2	686.4	713.9
70°	418.1	457.2	548.9	628.0	657.2
72.5°	346.5	393.2	486.5	564.7	592.3
75°	278.3	330.7	424.0	497.3	517.3
77.5°	214.9	267.5	360.6	415.6	428.1
80°	155.8	209.1	286.6	324.8	334.8
82.5°	100.8	155.8	207.4	233.2	236.5
85°	55.9	96.6	123.2	130.7	124.9
87.5°	20.0	36.6	35.8	29.1	23.3
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)