

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: P880862

Luminaire Tested: **24CZ2-40VHE-S-B2750-W2D-2700K**

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: P880862  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P473969)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-40VHE-S-B2750-W2D-2700K  
Description: 2X4 4000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 2700K CCT AND SMOOTH LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

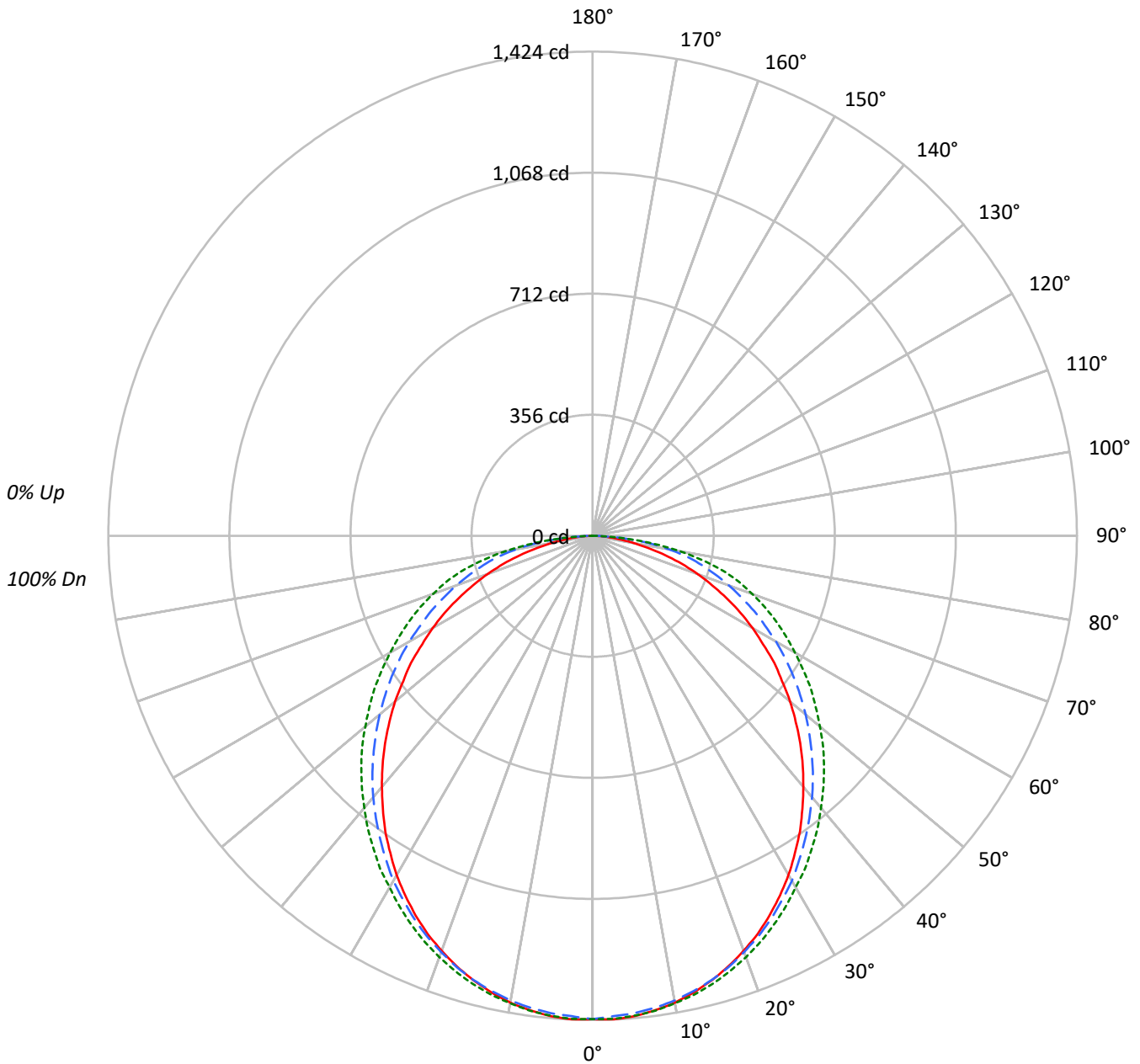
Lumens per Lamp: N/A  
Luminaire Lumens: 4073.0 lumens  
Efficiency: N/A  
Efficacy: 135.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 30  
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	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	59	57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	55	51	49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32			
8	60	46	38	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26			
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24			

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

	0°	45°	90°
0°	2007	2007	2007
5°	2009	1997	2008
10°	1998	1989	2001
15°	1977	1976	1993
20°	1950	1956	1981
25°	1918	1935	1965
30°	1878	1910	1946
35°	1830	1877	1935
40°	1776	1849	1924
45°	1723	1820	1920
50°	1664	1795	1915
55°	1605	1773	1926
60°	1532	1756	1939
65°	1450	1749	1986
70°	1353	1759	2057
75°	1204	1809	2167
80°	984	1849	2116
85°	693	1614	1647



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.4	3.3
10°-20°	382.8	9.4
20°-30°	573.8	14.1
30°-40°	683.4	16.8
40°-50°	704.7	17.3
50°-60°	643.0	15.8
60°-70°	514.2	12.6
70°-80°	335.9	8.2
80°-90°	100.8	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°	1091.0	26.8
0°-40°	1774.4	43.6
0°-60°	3122.1	76.7
0°-90°	4073.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4073.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1422	1422	1422	1422	1422	
5°	1418	1416	1410	1418	1417	135
15°	1353	1354	1353	1364	1364	382
25°	1232	1234	1242	1260	1262	567
35°	1062	1070	1089	1117	1123	664
45°	863	878	912	950	962	666
55°	652	671	720	768	783	581
65°	434	464	524	575	595	431
75°	221	258	332	385	397	235
85°	43	77	100	102	102	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1421.7	1421.7	1421.7	1421.7	1421.7
2.5°	1423.7	1421.7	1414.2	1423.0	1421.7
5°	1418.4	1415.6	1409.6	1418.4	1417.0
7.5°	1407.6	1406.2	1400.2	1410.2	1408.9
10°	1394.2	1392.9	1388.2	1398.2	1396.2
12.5°	1375.5	1374.9	1371.5	1383.5	1382.2
15°	1353.4	1354.0	1352.7	1364.2	1364.2
17.5°	1328.0	1327.3	1330.0	1344.0	1342.7
20°	1298.5	1299.2	1302.5	1318.7	1318.7
22.5°	1267.8	1267.1	1274.5	1290.5	1291.8
25°	1231.6	1233.6	1242.3	1260.5	1261.8
27.5°	1192.8	1196.3	1206.9	1227.6	1229.6
30°	1152.1	1156.1	1172.1	1191.5	1194.1
32.5°	1107.2	1115.9	1130.6	1155.4	1162.1
35°	1062.4	1069.7	1089.2	1116.6	1123.2
37.5°	1012.9	1024.9	1047.0	1077.1	1085.9
40°	964.0	976.2	1003.5	1035.0	1044.4
42.5°	914.5	927.3	958.7	994.2	1004.2
45°	863.1	878.4	911.8	950.0	962.0
47.5°	810.2	828.3	864.4	905.8	919.3
50°	758.0	776.1	817.6	860.3	872.4
52.5°	701.8	724.5	768.7	814.9	826.9
55°	652.3	671.0	720.5	768.1	782.7
57.5°	594.1	619.5	672.3	720.5	734.5
60°	542.6	566.0	622.2	671.0	687.0
62.5°	490.4	514.4	570.6	626.2	641.0
65°	434.2	463.6	523.8	575.3	594.8
67.5°	380.7	411.4	473.1	527.8	547.9
70°	327.8	359.2	426.2	482.4	498.4
72.5°	275.6	308.5	378.0	432.9	451.6
75°	220.8	257.6	331.8	385.4	397.4
77.5°	169.3	210.1	285.0	321.2	329.8
80°	121.1	165.9	227.5	253.6	260.3
82.5°	79.6	123.1	169.9	183.9	181.9
85°	42.8	76.9	99.7	101.7	101.7
87.5°	16.7	30.8	31.5	24.0	22.7
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)