

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: P880866

Luminaire Tested: **24CZ2-40VHE-S-B2750-W2D-5000K**

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: P880866  
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-5000K  
Description: 2X4 4000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND SMOOTH LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

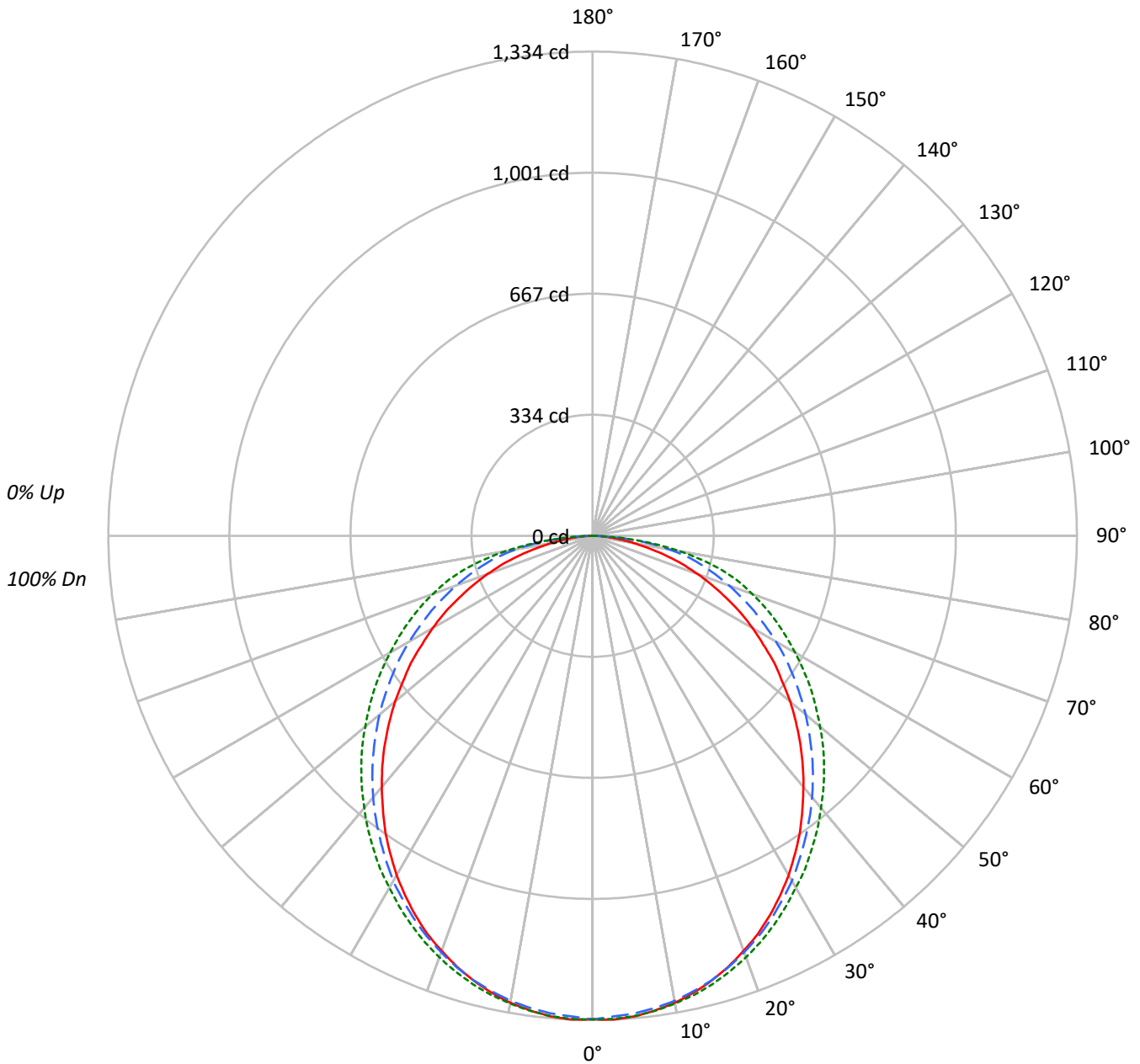
Lumens per Lamp: N/A  
Luminaire Lumens: 3817.0 lumens  
Efficiency: N/A  
Efficacy: 127.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

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°	1880	1880	1880
5°	1883	1872	1881
10°	1873	1864	1875
15°	1853	1852	1868
20°	1828	1833	1856
25°	1797	1813	1841
30°	1760	1790	1824
35°	1715	1759	1814
40°	1664	1733	1803
45°	1614	1706	1799
50°	1560	1682	1795
55°	1504	1661	1805
60°	1435	1646	1817
65°	1359	1639	1861
70°	1268	1648	1927
75°	1128	1696	2031
80°	922	1733	1982
85°	651	1512	1543



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.0	3.3
10°-20°	358.7	9.4
20°-30°	537.7	14.1
30°-40°	640.5	16.8
40°-50°	660.4	17.3
50°-60°	602.6	15.8
60°-70°	481.8	12.6
70°-80°	314.8	8.2
80°-90°	94.5	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°	1022.4	26.8
0°-40°	1662.9	43.6
0°-60°	2925.9	76.7
0°-90°	3817.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3817.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1332	1332	1332	1332	1332	
5°	1329	1327	1321	1329	1328	126
15°	1268	1269	1268	1278	1278	358
25°	1154	1156	1164	1181	1182	531
35°	996	1002	1021	1046	1053	622
45°	809	823	854	890	902	624
55°	611	629	675	720	734	544
65°	407	434	491	539	557	403
75°	207	241	311	361	372	220
85°	40	72	93	95	95	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1332.4	1332.4	1332.4	1332.4	1332.4
2.5°	1334.2	1332.4	1325.3	1333.6	1332.4
5°	1329.2	1326.6	1321.0	1329.2	1328.0
7.5°	1319.1	1317.8	1312.2	1321.6	1320.3
10°	1306.6	1305.3	1301.0	1310.3	1308.5
12.5°	1289.1	1288.4	1285.3	1296.6	1295.3
15°	1268.3	1268.9	1267.7	1278.4	1278.4
17.5°	1244.5	1243.9	1246.4	1259.6	1258.3
20°	1216.9	1217.5	1220.6	1235.8	1235.8
22.5°	1188.1	1187.5	1194.4	1209.4	1210.6
25°	1154.2	1156.1	1164.2	1181.2	1182.5
27.5°	1117.8	1121.1	1131.1	1150.5	1152.3
30°	1079.7	1083.4	1098.4	1116.6	1119.1
32.5°	1037.6	1045.8	1059.5	1082.8	1089.1
35°	995.6	1002.5	1020.8	1046.4	1052.6
37.5°	949.2	960.5	981.2	1009.4	1017.6
40°	903.4	914.8	940.4	970.0	978.7
42.5°	857.0	869.0	898.4	931.7	941.1
45°	808.8	823.2	854.5	890.3	901.5
47.5°	759.3	776.2	810.1	848.9	861.5
50°	710.4	727.3	766.2	806.2	817.6
52.5°	657.7	679.0	720.4	763.7	774.9
55°	611.3	628.8	675.2	719.8	733.5
57.5°	556.8	580.6	630.1	675.2	688.4
60°	508.5	530.4	583.1	628.8	643.8
62.5°	459.6	482.1	534.8	586.8	600.7
65°	406.9	434.4	490.9	539.1	557.4
67.5°	356.8	385.5	443.3	494.6	513.5
70°	307.2	336.6	399.4	452.1	467.1
72.5°	258.3	289.1	354.3	405.7	423.2
75°	206.9	241.4	311.0	361.1	372.4
77.5°	158.6	196.9	267.1	301.0	309.1
80°	113.5	155.5	213.2	237.7	243.9
82.5°	74.6	115.3	159.2	172.4	170.5
85°	40.2	72.1	93.4	95.3	95.3
87.5°	15.6	28.9	29.5	22.5	21.3
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)