

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: P880867

Luminaire Tested: **24CZ2-40VHE-SQR-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: P880867  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P474669)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-40VHE-SQR-B2750-W2D-2700K  
Description: 2X4 4000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 2700K CCT AND SQR LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

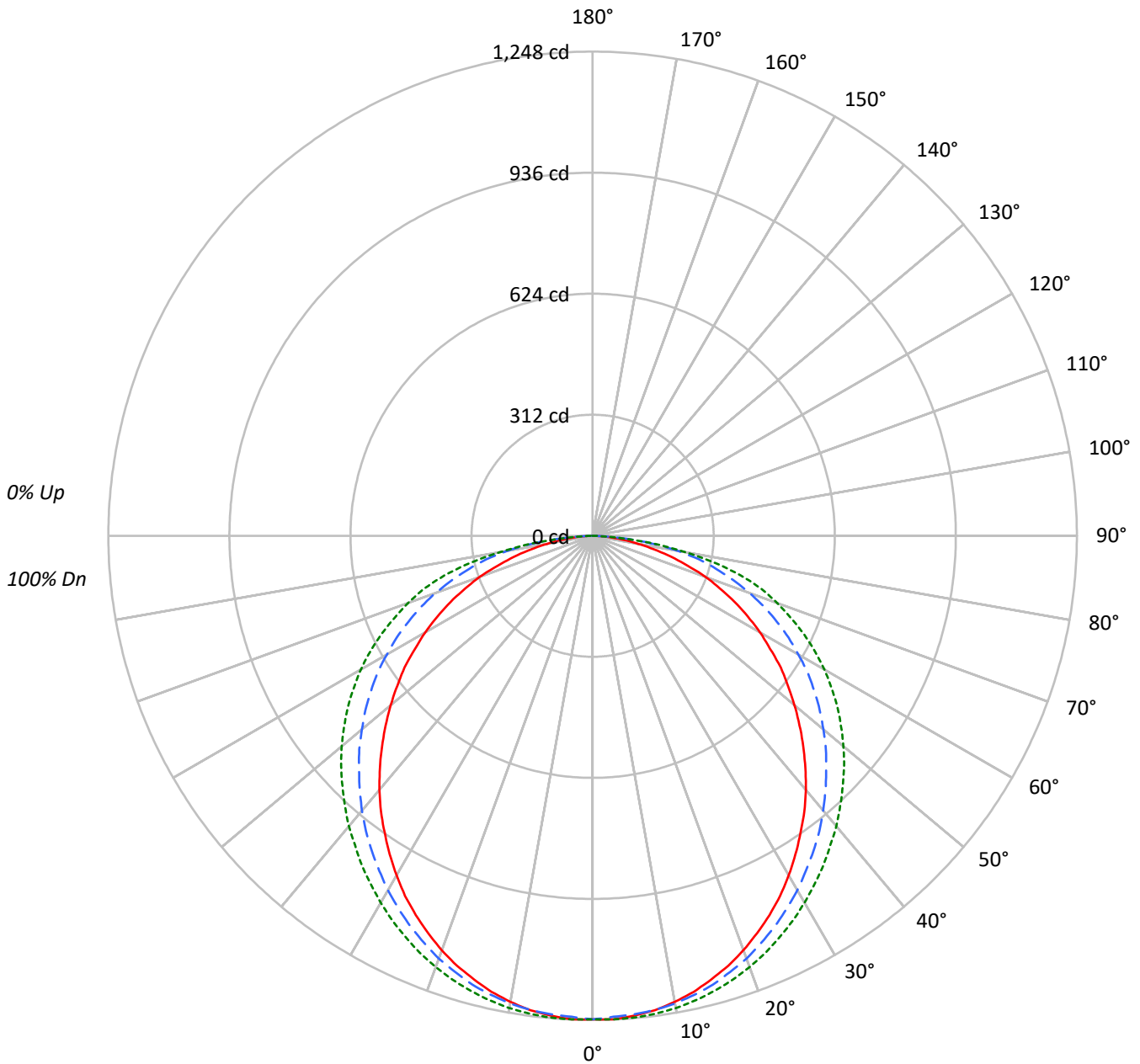
Lumens per Lamp: N/A  
Luminaire Lumens: 3795.0 lumens  
Efficiency: N/A  
Efficacy: 126.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

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	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56			
4	81	69	59	53	79	67	59	52	65	57	51	62	56	51	60	55	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	39	50	43	38	49	43	38	36			
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31			
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28			
9	55	42	33	28	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	25	35	29	24	23			

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

	0°	45°	90°
0°	1759	1759	1759
5°	1759	1754	1766
10°	1748	1754	1772
15°	1729	1750	1774
20°	1707	1742	1776
25°	1680	1730	1777
30°	1647	1719	1779
35°	1610	1709	1786
40°	1575	1703	1801
45°	1532	1699	1820
50°	1491	1704	1853
55°	1456	1716	1895
60°	1407	1729	1947
65°	1350	1750	2006
70°	1281	1774	2087
75°	1147	1798	2156
80°	966	1804	1955
85°	717	1363	1286



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.1	3.1
10°-20°	338.5	8.9
20°-30°	512.5	13.5
30°-40°	620.0	16.3
40°-50°	654.4	17.2
50°-60°	617.1	16.3
60°-70°	508.8	13.4
70°-80°	333.8	8.8
80°-90°	91.8	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°	969.2	25.5
0°-40°	1589.1	41.9
0°-60°	2860.7	75.4
0°-90°	3795.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3795.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1247	1247	1247	1247	1247	
5°	1242	1242	1238	1247	1247	118
15°	1184	1190	1198	1212	1214	334
25°	1079	1092	1111	1134	1141	497
35°	934	958	992	1026	1037	585
45°	768	802	851	897	912	592
55°	592	634	697	749	770	527
65°	404	453	524	580	601	399
75°	210	264	330	382	395	222
85°	44	76	84	82	79	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1246.6	1246.6	1246.6	1246.6	1246.6
2.5°	1247.7	1246.6	1241.1	1248.3	1247.7
5°	1241.6	1241.6	1238.1	1246.6	1246.6
7.5°	1233.2	1233.8	1232.5	1242.3	1242.3
10°	1219.9	1222.3	1224.1	1235.1	1236.2
12.5°	1204.1	1208.4	1211.9	1225.3	1226.6
15°	1183.5	1190.2	1198.0	1211.9	1214.4
17.5°	1162.2	1170.2	1178.7	1196.9	1199.9
20°	1136.8	1145.9	1159.8	1178.0	1182.8
22.5°	1108.4	1121.0	1135.5	1157.4	1163.5
25°	1078.6	1091.9	1110.8	1133.8	1141.0
27.5°	1046.5	1062.2	1083.4	1110.1	1118.0
30°	1010.7	1028.8	1055.0	1083.4	1091.9
32.5°	973.1	994.3	1023.4	1055.0	1064.6
35°	934.4	958.5	991.9	1025.9	1036.8
37.5°	896.0	920.3	959.8	995.6	1005.8
40°	854.8	881.5	924.6	962.8	977.4
42.5°	811.2	842.8	888.2	930.7	944.6
45°	767.6	802.1	851.3	896.7	911.8
47.5°	723.3	761.5	815.5	861.5	879.1
50°	679.0	719.6	776.0	825.7	843.9
52.5°	634.2	676.6	737.8	790.6	807.0
55°	591.8	633.5	697.3	749.4	770.0
57.5°	542.6	589.9	657.2	710.0	730.0
60°	498.3	544.5	612.4	668.2	689.9
62.5°	450.4	497.7	569.3	625.1	646.3
65°	404.4	453.0	523.9	579.7	600.8
67.5°	354.7	405.7	478.4	532.4	553.0
70°	310.4	358.4	429.8	485.1	505.7
72.5°	256.4	311.1	379.5	434.1	456.5
75°	210.4	264.3	329.8	382.0	395.3
77.5°	161.9	215.9	280.7	314.6	323.7
80°	118.9	169.7	221.9	240.1	240.6
82.5°	80.0	124.9	154.7	163.8	162.5
85°	44.3	76.4	84.2	81.8	79.4
87.5°	18.2	25.4	20.6	14.5	11.5
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)