

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: P881015

Luminaire Tested: **24CZ2-70VHE-S-B2750-W2D-4000K**

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: P881015  
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: 24CZ2-70VHE-S-B2750-W2D-4000K  
Description: 2X4 7000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SMOOTH LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

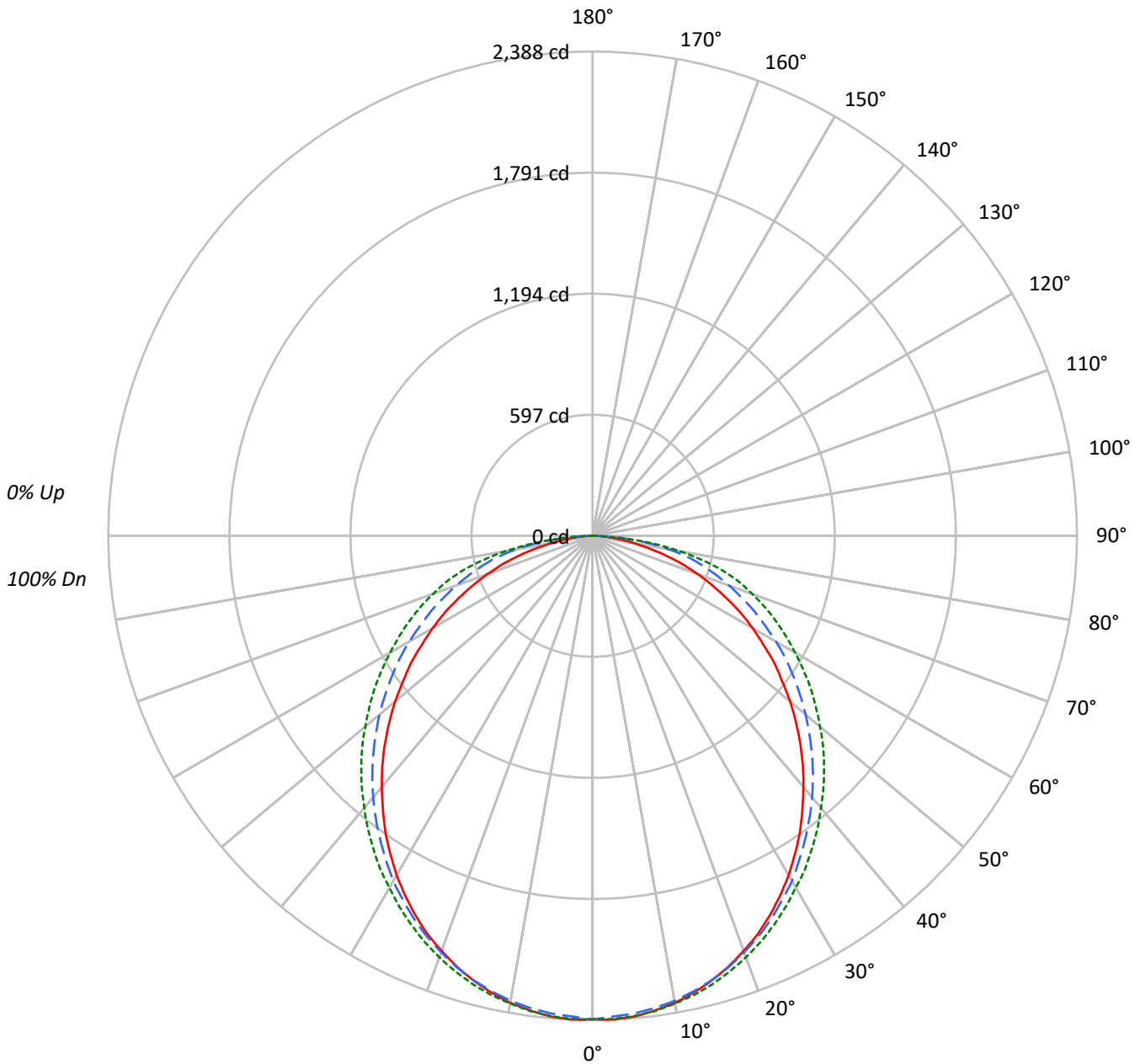
Lumens per Lamp: N/A  
Luminaire Lumens: 6833.0 lumens  
Efficiency: N/A  
Efficacy: 122.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 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				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°	3366	3366	3366
5°	3371	3350	3368
10°	3352	3338	3357
15°	3317	3316	3344
20°	3272	3282	3323
25°	3218	3245	3296
30°	3150	3205	3265
35°	3071	3148	3247
40°	2979	3102	3228
45°	2890	3053	3221
50°	2792	3012	3214
55°	2693	2974	3231
60°	2569	2946	3253
65°	2433	2934	3332
70°	2270	2950	3451
75°	2020	3036	3635
80°	1651	3101	3549
85°	1164	2709	2763



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	225.5	3.3
10°-20°	642.2	9.4
20°-30°	962.6	14.1
30°-40°	1146.5	16.8
40°-50°	1182.2	17.3
50°-60°	1078.8	15.8
60°-70°	862.6	12.6
70°-80°	563.5	8.2
80°-90°	169.2	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°	1830.3	26.8
0°-40°	2976.8	43.6
0°-60°	5237.8	76.7
0°-90°	6833.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6833.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2385	2385	2385	2385	2385	
5°	2380	2375	2365	2380	2377	226
15°	2270	2272	2269	2289	2289	640
25°	2066	2070	2084	2115	2117	951
35°	1782	1795	1827	1873	1884	1113
45°	1448	1474	1530	1594	1614	1117
55°	1094	1126	1209	1288	1313	975
65°	728	778	879	965	998	722
75°	370	432	557	646	667	394
85°	72	129	167	171	171	91
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2385.1	2385.1	2385.1	2385.1	2385.1
2.5°	2388.5	2385.1	2372.6	2387.4	2385.1
5°	2379.5	2374.8	2364.7	2379.5	2377.3
7.5°	2361.4	2359.1	2349.1	2365.9	2363.6
10°	2339.0	2336.7	2328.9	2345.7	2342.3
12.5°	2307.6	2306.5	2300.9	2321.1	2318.8
15°	2270.5	2271.6	2269.3	2288.6	2288.6
17.5°	2227.9	2226.8	2231.3	2254.8	2252.5
20°	2178.4	2179.5	2185.1	2212.2	2212.2
22.5°	2126.9	2125.8	2138.1	2165.0	2167.2
25°	2066.2	2069.6	2084.1	2114.6	2116.8
27.5°	2001.1	2006.9	2024.8	2059.5	2062.9
30°	1932.8	1939.5	1966.4	1998.8	2003.3
32.5°	1857.5	1872.1	1896.7	1938.4	1949.6
35°	1782.3	1794.6	1827.3	1873.2	1884.4
37.5°	1699.2	1719.4	1756.5	1806.9	1821.7
40°	1617.2	1637.6	1683.5	1736.4	1752.1
42.5°	1534.2	1555.7	1608.3	1667.9	1684.7
45°	1448.0	1473.7	1529.7	1593.7	1613.9
47.5°	1359.3	1389.5	1450.2	1519.6	1542.2
50°	1271.7	1301.9	1371.6	1443.3	1463.6
52.5°	1177.4	1215.5	1289.6	1367.1	1387.3
55°	1094.4	1125.7	1208.8	1288.5	1313.1
57.5°	996.7	1039.3	1128.0	1208.8	1232.3
60°	910.3	949.5	1043.8	1125.7	1152.6
62.5°	822.7	863.0	957.3	1050.5	1075.3
65°	728.5	777.7	878.7	965.2	997.8
67.5°	638.7	690.2	793.6	885.4	919.2
70°	550.0	602.6	715.0	809.3	836.2
72.5°	462.4	517.5	634.2	726.2	757.6
75°	370.4	432.2	556.7	646.5	666.6
77.5°	283.9	352.5	478.1	538.8	553.3
80°	203.1	278.3	381.6	425.5	436.7
82.5°	133.5	206.5	285.1	308.6	305.2
85°	71.9	129.0	167.3	170.6	170.6
87.5°	28.0	51.7	52.8	40.3	38.1
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)