

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: P880915

Luminaire Tested: **24CZ2-50VHE-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: P880915  
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: 24CZ2-50VHE-S-B2750-W2D-4000K  
Description: 2X4 5000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SMOOTH LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

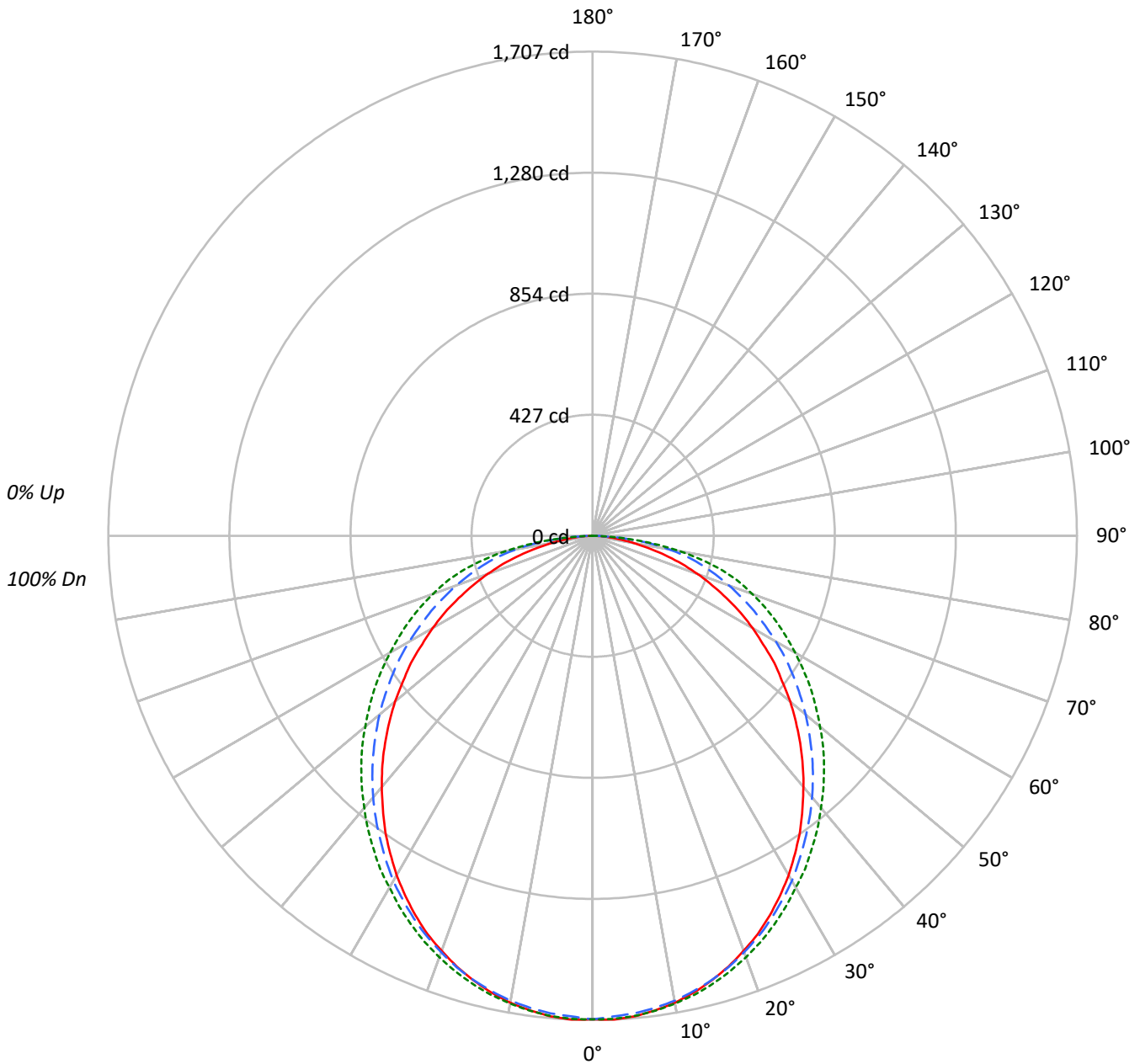
Lumens per Lamp: N/A  
Luminaire Lumens: 4884.0 lumens  
Efficiency: N/A  
Efficacy: 128.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 38  
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									
RC	80									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°	2406	2406	2406
5°	2410	2395	2407
10°	2396	2386	2399
15°	2371	2370	2390
20°	2339	2346	2375
25°	2300	2320	2356
30°	2251	2291	2334
35°	2195	2250	2321
40°	2130	2217	2307
45°	2066	2182	2303
50°	1996	2153	2297
55°	1925	2126	2310
60°	1836	2106	2325
65°	1739	2098	2382
70°	1622	2109	2466
75°	1443	2170	2598
80°	1180	2216	2537
85°	832	1937	1976



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.2	3.3
10°-20°	459.0	9.4
20°-30°	688.1	14.1
30°-40°	819.5	16.8
40°-50°	845.0	17.3
50°-60°	771.1	15.8
60°-70°	616.6	12.6
70°-80°	402.7	8.2
80°-90°	120.9	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°	1308.3	26.8
0°-40°	2127.7	43.6
0°-60°	3743.8	76.7
0°-90°	4884.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4884.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1705	1705	1705	1705	1705	
5°	1701	1697	1690	1701	1699	161
15°	1623	1624	1622	1636	1636	457
25°	1477	1479	1490	1511	1513	680
35°	1274	1283	1306	1339	1347	796
45°	1035	1053	1093	1139	1154	798
55°	782	805	864	921	939	697
65°	521	556	628	690	713	516
75°	265	309	398	462	476	281
85°	51	92	120	122	122	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1704.8	1704.8	1704.8	1704.8	1704.8
2.5°	1707.2	1704.8	1695.8	1706.4	1704.8
5°	1700.8	1697.4	1690.2	1700.8	1699.2
7.5°	1687.8	1686.2	1679.0	1691.0	1689.4
10°	1671.8	1670.2	1664.6	1676.6	1674.2
12.5°	1649.4	1648.6	1644.6	1659.0	1657.4
15°	1622.8	1623.6	1622.0	1635.8	1635.8
17.5°	1592.4	1591.6	1594.8	1611.6	1610.0
20°	1557.1	1557.9	1561.9	1581.2	1581.2
22.5°	1520.3	1519.5	1528.3	1547.5	1549.1
25°	1476.9	1479.3	1489.7	1511.4	1513.0
27.5°	1430.3	1434.5	1447.3	1472.1	1474.5
30°	1381.5	1386.3	1405.5	1428.7	1431.9
32.5°	1327.7	1338.1	1355.7	1385.5	1393.5
35°	1273.9	1282.7	1306.1	1338.9	1346.9
37.5°	1214.5	1228.9	1255.5	1291.5	1302.1
40°	1156.0	1170.5	1203.3	1241.1	1252.3
42.5°	1096.6	1111.9	1149.6	1192.1	1204.1
45°	1034.9	1053.4	1093.4	1139.1	1153.6
47.5°	971.6	993.2	1036.5	1086.2	1102.3
50°	909.0	930.6	980.4	1031.6	1046.2
52.5°	841.6	868.8	921.8	977.2	991.6
55°	782.2	804.6	864.0	921.0	938.6
57.5°	712.4	742.8	806.2	864.0	880.8
60°	650.6	678.7	746.0	804.6	823.8
62.5°	588.1	616.9	684.3	750.8	768.6
65°	520.7	555.9	628.1	689.9	713.2
67.5°	456.5	493.3	567.3	632.9	657.0
70°	393.1	430.7	511.1	578.5	597.7
72.5°	330.5	369.9	453.3	519.1	541.5
75°	264.7	308.9	397.9	462.1	476.5
77.5°	203.0	251.9	341.7	385.1	395.5
80°	145.2	199.0	272.7	304.1	312.1
82.5°	95.4	147.6	203.8	220.6	218.2
85°	51.4	92.2	119.6	122.0	122.0
87.5°	20.0	37.0	37.8	28.8	27.2
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)