

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: P843122

Luminaire Tested: **24CZ2-50HE-S-UNV-B40**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P843122  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P272125)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-50HE-S-UNV-B40  
Description: 2X4 5000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SMOOTH LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

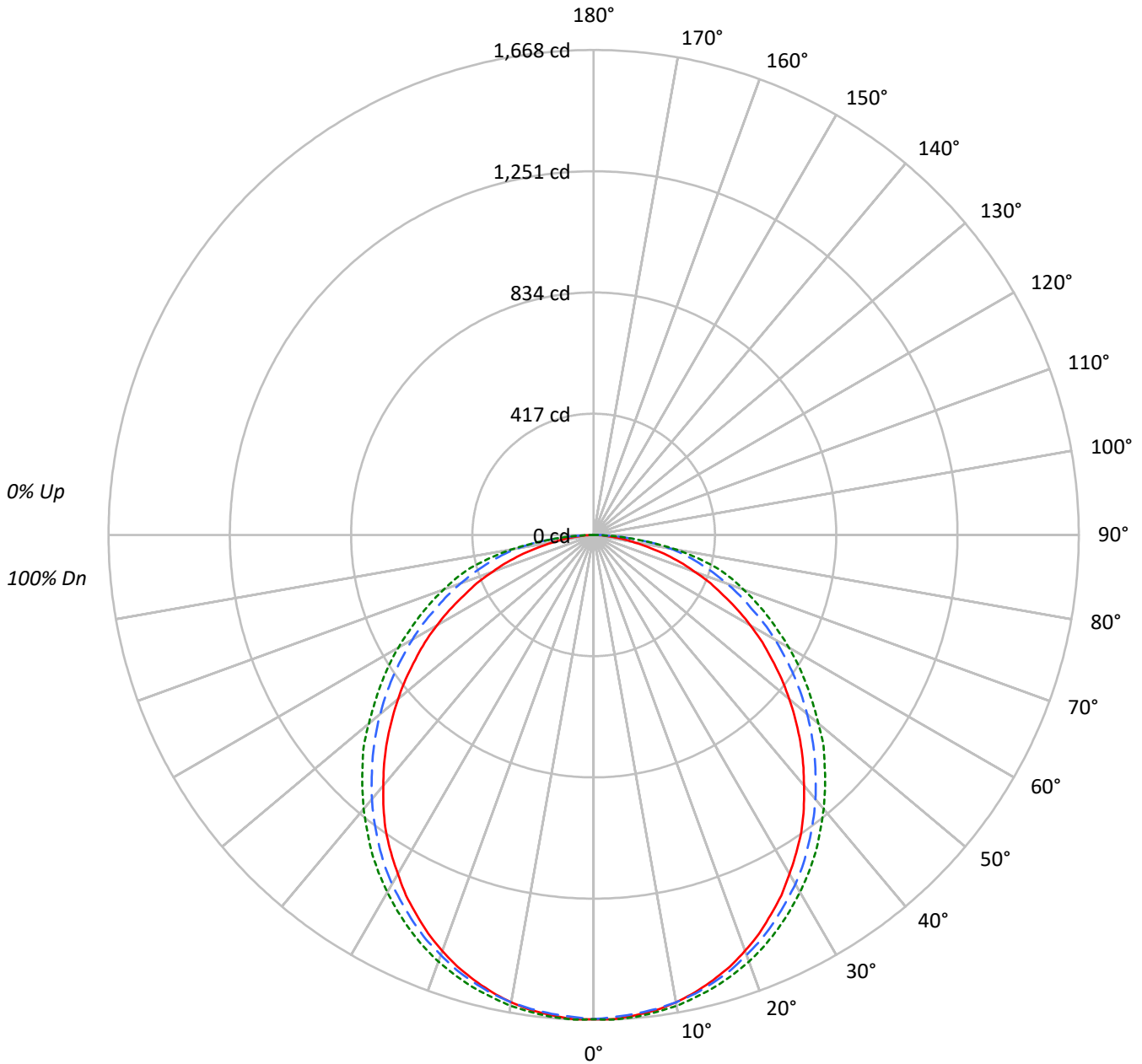
Lumens per Lamp: N/A  
Luminaire Lumens: 4741.0 lumens  
Efficiency: N/A  
Efficacy: 128.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 37  
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	106	101	97	93	97	93	90	93	90	88	89	87	85	83																			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69																			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58																			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49																			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42																			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37																			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33																			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29																			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26																			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24																			

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

	0°	45°	90°
0°	2351	2351	2351
5°	2349	2343	2357
10°	2339	2339	2357
15°	2317	2328	2352
20°	2287	2309	2346
25°	2244	2286	2331
30°	2194	2260	2312
35°	2146	2224	2294
40°	2072	2186	2267
45°	2005	2143	2242
50°	1928	2103	2215
55°	1842	2064	2194
60°	1756	2032	2189
65°	1644	1996	2202
70°	1522	2007	2262
75°	1363	2045	2390
80°	1101	2166	2337
85°	829	1901	1854



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.7	3.3
10°-20°	450.5	9.5
20°-30°	677.3	14.3
30°-40°	806.7	17.0
40°-50°	825.7	17.4
50°-60°	743.3	15.7
60°-70°	583.8	12.3
70°-80°	378.9	8.0
80°-90°	117.2	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°	1285.5	27.1
0°-40°	2092.2	44.1
0°-60°	3661.2	77.2
0°-90°	4741.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4741.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1666	1666	1666	1666	1666	
5°	1658	1661	1654	1662	1664	158
15°	1586	1590	1593	1607	1610	447
25°	1441	1453	1468	1492	1497	664
35°	1245	1260	1291	1322	1331	777
45°	1004	1029	1074	1114	1124	774
55°	748	782	839	882	892	671
65°	492	530	598	648	660	490
75°	250	298	375	426	438	265
85°	51	95	117	114	114	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1665.6	1665.6	1665.6	1665.6	1665.6
2.5°	1667.1	1667.1	1659.5	1667.1	1668.5
5°	1658.0	1661.1	1653.5	1662.5	1664.0
7.5°	1648.9	1648.9	1644.4	1653.5	1655.1
10°	1632.4	1633.9	1632.4	1642.9	1644.4
12.5°	1611.4	1614.3	1615.9	1626.4	1627.9
15°	1585.8	1590.3	1593.2	1606.8	1609.9
17.5°	1557.1	1561.7	1569.1	1584.2	1587.2
20°	1522.5	1528.5	1537.5	1557.1	1561.7
22.5°	1484.9	1490.9	1506.0	1523.9	1531.5
25°	1441.2	1453.2	1468.2	1492.3	1496.9
27.5°	1397.5	1408.0	1427.6	1453.2	1459.3
30°	1346.3	1362.8	1386.9	1412.5	1418.5
32.5°	1296.6	1313.1	1341.8	1369.0	1376.4
35°	1245.4	1260.5	1290.6	1322.2	1331.2
37.5°	1186.6	1206.2	1239.4	1271.0	1280.1
40°	1124.9	1149.1	1186.6	1219.8	1230.3
42.5°	1066.1	1091.7	1129.5	1165.6	1177.5
45°	1004.5	1028.6	1073.8	1114.4	1123.5
47.5°	941.1	968.3	1016.4	1057.1	1072.1
50°	878.0	906.7	957.8	999.9	1009.0
52.5°	814.7	844.8	899.0	944.2	948.8
55°	748.4	781.6	838.8	882.5	891.6
57.5°	688.2	716.9	778.6	823.7	834.3
60°	622.0	653.5	719.8	762.0	775.5
62.5°	558.7	591.9	661.2	703.3	715.2
65°	492.4	530.2	597.8	647.6	659.5
67.5°	435.3	471.4	543.6	591.9	603.8
70°	368.9	409.7	486.4	536.2	548.1
72.5°	311.7	353.8	430.7	478.8	497.0
75°	250.0	298.1	375.0	426.2	438.2
77.5°	189.8	245.5	323.7	362.9	362.9
80°	135.5	194.3	266.5	284.7	287.6
82.5°	88.9	146.1	197.2	195.8	195.8
85°	51.2	94.9	117.4	114.5	114.5
87.5°	19.6	39.2	42.1	42.1	40.6
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)